



**DIKTISAITEK
BERDAMPAK**

PANDUAN KONTES ROBOT INDONESIA 2026



Diterbitkan oleh:
Direktorat Pembelajaran dan Kemahasiswaan
Direktorat Jenderal Pendidikan Tinggi
Kementerian Pendidikan Tinggi, Sains, dan Teknologi
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SAMBUTAN DIREKTUR JENDERAL PENDIDIKAN TINGGI KEMENDIKTISAINTEK

Salah satu tujuan pendidikan tinggi adalah mengembangkan serta memperkaya khazanah ilmu pengetahuan dan teknologi untuk meningkatkan kemakmuran dan kesejahteraan bangsa. Dalam hal ini, upaya penumbuhan dan pengembangan kreativitas serta inovasi mahasiswa menjadi kata kunci utama untuk mendukung pencapaian tujuan tersebut. Selain wacana teoritis dan konseptual yang telah diberikan di lingkungan kampus kepada mahasiswa, perlu difasilitasi wacana untuk melatih mahasiswa dalam menerapkan ide dan gagasan mereka di dunia nyata. Kegiatan pengembangan kreativitas dan inovasi melalui penerapan teknologi tersebut harus dirancang sedemikian rupa agar menarik, dinamis, dan tidak membosankan, dengan melibatkan dosen dan mahasiswa secara multidisiplin. Direktorat Jenderal Pendidikan Tinggi berkomitmen untuk mencapai target rencana strategis tersebut. Salah satu kegiatannya adalah pembinaan mahasiswa yang inovatif, kreatif, dan berprestasi melalui Kontes Robot Indonesia.

Sehubungan dengan itu, saya menyambut baik penyelenggaraan Kontes Robot Indonesia (KRI), karena dalam pertandingan ini setiap peserta harus mengeksplorasi kemampuannya dalam perancangan, implementasi, dan strategi, serta mengembangkan ide-idenya untuk dapat membuat dan merancang wahana bergerak berbentuk robot dengan berbagai bentuk dan struktur serta kecerdasan, agar dapat memenuhi tema dan aturan main yang telah ditentukan, sehingga mahasiswa dapat berkompetisi secara sportif dalam arena yang telah ditentukan. Di sinilah pentingnya pengembangan kemampuan kreativitas, inovasi dan strategi oleh setiap tim peserta. Oleh sebab itu, sejak awal dimulainya KRI, Direktorat Jenderal Pendidikan Tinggi telah memberikan dukungan penuh dan berkelanjutan terhadap pelaksanaan KRI tersebut.

Dalam kesempatan ini, Direktorat Jenderal Pendidikan Tinggi mengundang seluruh perguruan tinggi di Indonesia untuk berpartisipasi dalam Kontes Robot Indonesia 2026. Selamat berpartisipasi. Semoga dengan KRI 2026, kemampuan mahasiswa dan kualitas pendidikan tinggi di Indonesia dapat ditingkatkan.

Jakarta, Maret 2026

Direktur Jenderal Pendidikan Tinggi Kemendiktisaintek

Prof. Dr. Khairul Munadi, S.T., M.Eng.

SAMBUTAN DIREKTUR PEMBELAJARAN DAN KEMAHASISWAAN

Direktorat Pembelajaran dan Kemahasiswaan melaksanakan berbagai upaya untuk mendukung pencapaian visi Kementerian Pendidikan Tinggi, Sains, dan Teknologi, yaitu: “Terwujudnya pendidikan tinggi yang bermutu serta kemampuan iptek dan inovasi untuk mendukung daya saing bangsa”. Upaya untuk menumbuhkembangkan ilmu pengetahuan dan teknologi serta meningkatkan mutu pendidikan tinggi di Indonesia perlu difasilitasi dengan kegiatan yang dapat mendukung penumbuhan dan pengembangan kreativitas dan inovasi dosen serta para mahasiswa, baik dari segi teoritis maupun penerapan praktis. Dalam hal ini, Kontes Robot Indonesia (KRI) dapat menjadi kegiatan yang sangat menarik bagi mahasiswa untuk mengimplementasikan gagasan dan ide-ide mereka menjadi robot yang fungsional dengan memanfaatkan pengetahuan multidisiplin. Robot-robot tersebut harus dirancang dan dibuat sendiri, menggunakan sistem sensor dan aktuator, serta rangkaian elektronika dan mikrokomputer yang tersedia, dan harus diprogram untuk menyelesaikan misi sesuai dengan tema kontes tahun ini. Selain itu, kerja sama yang baik antara anggota tim peserta dan gagasan strategi terbaik juga akan menjadi faktor pendukung suksesnya suatu tim dalam kontes ini, sehingga dapat menimbulkan suasana kompetisi yang kondusif di kalangan mahasiswa, dosen, maupun perguruan tinggi yang berpartisipasi dalam kontes tersebut.

Kontes Robot Indonesia (KRI) tahun 2026 diharapkan mampu menjadi wahana untuk unjuk prestasi dalam perancangan, implementasi, dan strategi dari mahasiswa Indonesia, sekaligus sebagai tontonan dan hiburan yang menarik serta sarat dengan ide-ide pengembangan ilmu pengetahuan dan teknologi. Dalam kesempatan ini, Direktorat Pembelajaran dan Kemahasiswaan, Direktorat Jenderal Pendidikan Tinggi, Kementerian Pendidikan Tinggi, Sains, dan Teknologi RI mendorong seluruh perguruan tinggi di Indonesia untuk berpartisipasi dalam KRI 2026 ini. Selamat berpartisipasi. Semoga dengan KRI 2026 kemampuan mahasiswa dan dosen serta kualitas pendidikan tinggi di Indonesia dapat terus ditingkatkan.

Jakarta, Maret 2026

Direktur Pembelajaran dan Kemahasiswaan,
Ditjen Dikti Kemendikisaintek

Dr. Beny Bandanadjaja, S.T., M.T.

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BAGIAN 1. PANDUAN UMUM

1. Latar Belakang

Pemerintah telah menetapkan Visi Indonesia 2045, yang tidak hanya menandai 100 tahun kemerdekaan Indonesia, tetapi juga memproyeksikan Indonesia pada tahun tersebut menjadi negara dengan perekonomian terbesar keempat di dunia, berbasis inovasi dan teknologi. Pada tahun tersebut, Indonesia diproyeksikan memiliki populasi sebesar 309 juta orang, dengan pertumbuhan ekonomi sebesar 6% dan produk domestik bruto (PDB) sebesar USD 9,1 triliun.

Kontes Robot Indonesia (KRI) menjadi ajang untuk menguji kecanggihan teknologi serta sarana untuk mengasah kreativitas generasi muda, khususnya mahasiswa di Indonesia. Kontes Robot Indonesia merupakan salah satu kesempatan untuk menerapkan pengetahuan dan keterampilan teknis dalam menghadapi tantangan nyata.

Pentingnya kegiatan KRI dalam konteks pertumbuhan ekonomi terletak pada beberapa aspek kunci. Pertama, kontes ini menjadi ajang unggulan untuk menghasilkan inovasi baru di bidang teknologi. Peserta yang terlibat dalam kontes dihadapkan pada permasalahan dunia nyata yang membutuhkan solusi teknologi yang canggih. Dengan demikian, melalui proses pengembangan solusi, mereka tidak hanya meningkatkan kemampuan teknis, tetapi juga menciptakan produk atau sistem yang dapat diterapkan di sektor industri. Kedua, kontes robot memberikan dorongan kepada sektor pendidikan dan penelitian di Indonesia. Keterlibatan perguruan tinggi dalam persiapan tim untuk kontes robot berdampak positif pada kurikulum dan pembelajaran di tingkat akademis. Inovasi-inovasi yang muncul dari kontes tersebut juga dapat menjadi landasan bagi penelitian lebih lanjut, sehingga menciptakan lingkungan yang mendukung pengembangan teknologi di tingkat nasional. Ketiga, kontes robot juga menjadi platform yang efektif untuk meningkatkan daya saing tenaga kerja Indonesia di pasar global. Dengan melibatkan diri dalam kontes internasional, peserta memiliki kesempatan untuk berinteraksi dan bersaing dengan peserta dari berbagai negara. Hal ini membuka peluang bagi para peserta untuk belajar, berbagi pengalaman, dan memperluas jejaring internasional mereka, yang pada akhirnya dapat mendukung pertumbuhan ekonomi nasional.

Seiring berjalannya waktu, keberhasilan Indonesia dalam kegiatan kontes robot menciptakan lingkungan yang mendukung pengembangan teknologi, memotivasi generasi muda, dan memperkuat daya saing di pasar global. Kontes robot bukan hanya sekadar ajang kompetisi, tetapi juga investasi jangka panjang untuk mencetak sumber daya manusia yang unggul dan berinovasi, serta menjadi pilar utama dalam mewujudkan pertumbuhan ekonomi yang berkelanjutan bagi Indonesia.

KRI adalah kegiatan kompetisi tahunan mahasiswa dalam bidang rancang bangun dan rekayasa robotika. KRI 2026 diselenggarakan oleh Direktorat Pembelajaran dan Kemahasiswaan, Direktorat Jenderal Pendidikan Tinggi, Kementerian Pendidikan Tinggi, Sains, dan Teknologi RI. KRI tahun 2026 ini merupakan penyelenggaraan ke-24 sejak pertama

kali diselenggarakan pada tahun 2003 di bawah Direktorat Jenderal Pendidikan Tinggi, Departemen Pendidikan dan Kebudayaan pada saat itu.

KRI tahun 2026 menyelenggarakan satu divisi, yaitu Kontes Robot ABU Indonesia (KRAI). Pelaksanaan KRAI tahun 2026 diselenggarakan dalam 2 (dua) tahap, yaitu Tahap Seleksi dan Tahap Kontes Tingkat Nasional. Tim yang dinyatakan lolos Tahap Seleksi akan diundang untuk bertanding pada KRAI Tingkat Nasional. Tim peserta KRAI Tingkat Nasional menampilkan dan mempertandingkan robotnya secara langsung di lapangan pertandingan tempat pelaksanaan KRAI Tingkat Nasional tahun 2026.

2. Dasar Hukum

Kegiatan Kontes Robot Indonesia diselenggarakan dengan berdasarkan pada:

1. Undang-Undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional;
2. Undang-Undang Nomor 12 Tahun 2012 tentang Pendidikan Tinggi;
3. Peraturan Pemerintah Republik Indonesia Nomor 4 Tahun 2014 tentang penyelenggaraan Pendidikan Tinggi dan Pengelolaan Perguruan Tinggi;
4. Peraturan Pemerintah Republik Indonesia Nomor 189 Tahun 2024 tentang Kementerian Pendidikan Tinggi, Sains, dan Teknologi;
5. Peraturan Menteri Pendidikan Tinggi, Sains, dan Teknologi Nomor 1 Tahun 2024 tentang Organisasi dan Tata Kerja Kementerian Pendidikan Tinggi, Sains, dan Teknologi;
6. Peraturan Menteri Pendidikan Tinggi, Sains, dan Teknologi Nomor 39 Tahun 2025 tentang Penjaminan Mutu Pendidikan Tinggi.

3. Tujuan

Tujuan dari penyelenggaraan KRAI adalah:

1. Menumbuhkembangkan dan meningkatkan kreativitas mahasiswa di perguruan tinggi;
2. Mengaplikasikan ilmu pengetahuan dan teknologi ke dalam dunia nyata;
3. Meningkatkan kemampuan mahasiswa dalam pengembangan bidang teknologi robotika;
4. Meningkatkan kepekaan mahasiswa dalam menyelesaikan masalah bangsa dengan menggunakan teknologi robotika;
5. Membudayakan iklim kompetitif di lingkungan perguruan tinggi; dan
6. Memilih wakil Indonesia untuk bertanding dalam kompetisi robot internasional ABU Asia Pacific Robot Contest.

4. Tahapan Pelaksanaan

Pelaksanaan kegiatan KRAI tahun 2026 terdiri dari tahapan dengan urutan:

1. **Pendaftaran** dan pengiriman berkas proposal calon peserta KRAI 2026;
2. **Seleksi Dokumen dan Visitasi Daring**, berupa seleksi evaluasi administrasi, penilaian proposal, evaluasi video kemajuan, serta kegiatan **visitasi** ke tim peserta **secara daring** menggunakan *Zoom meeting* untuk menilai kesiapan robot tim peserta untuk menentukan calon peserta yang lolos mengikuti KRI Tingkat Nasional;
3. **KRAI Tingkat Nasional** diikuti oleh sejumlah tim yang dinyatakan lolos seleksi dokumen dan visitasi daring. KRAI Tingkat Nasional diselenggarakan secara luring. Seluruh tim peserta KRAI Tingkat Nasional menampilkan robotnya secara langsung di lapangan pertandingan KRAI.

Keputusan tim juri pada setiap tahapan evaluasi ini bersifat mutlak dan tidak dapat diganggu gugat.

5. Persyaratan Peserta

KRAI 2026 dapat diikuti oleh tim mahasiswa dari institusi atau perguruan tinggi negeri dan perguruan tinggi swasta yang berada di lingkungan Kementerian Pendidikan Tinggi, Sains, dan Teknologi RI.

Persyaratan sebagai peserta KRI 2026 adalah:

1. Calon peserta KRI berstatus mahasiswa aktif yang terdaftar pada Pangkalan Data Pendidikan Tinggi (<https://pddikti.kemdikbud.go.id/>), yang ditunjukkan dengan Kartu Tanda Mahasiswa masing-masing yang masih berlaku;
2. Perguruan tinggi peserta terdaftar pada Pangkalan Data Pendidikan Tinggi;
3. Tim calon peserta KRI mendapat persetujuan dari Pimpinan Perguruan Tinggi, yang ditunjukkan dengan surat pengantar dari Pimpinan Perguruan Tinggi;
4. Setiap perguruan tinggi hanya diperkenankan mengirim 1 (satu) tim peserta KRAI.
5. Setiap tim peserta KRAI terdiri dari maksimal 6 (enam) mahasiswa dan 1 (satu) dosen pembimbing.

Tim peserta sudah termasuk *pit crew* (mekanik). Pada pelaksanaan KRAI Tingkat Nasional yang akan diselenggarakan secara luring, hanya tim peserta yang terdaftar yang dapat memasuki area peserta (*pit stop*) dan area pertandingan. Tim pendukung tidak dapat memasuki area peserta, hanya dapat mengakses dari area penonton dan merupakan bagian dari penonton KRAI.

6. Pengiriman Proposal dan Video Kemajuan

Calon tim peserta KRAI membuat dan mengirimkan proposal dengan kriteria sebagai berikut:

1. Setiap tim calon peserta mengajukan proposal yang dikirimkan secara daring (*online*) kepada Direktorat Pembelajaran dan Kemahasiswaan Ditjen Dikti Kemendikisaintek, c.q. Panitia Pusat KRI 2026;

2. Mekanisme pengiriman proposal sesuai petunjuk pada Buku Panduan ini dan laman Kontes Robot Indonesia;
3. Proposal harus mendapat persetujuan pimpinan perguruan tinggi masing-masing;
4. Borang pendaftaran/proposal (*Application Form*) dapat dilihat pada Lampiran Bagian 1 Buku Panduan ini;
5. Proposal dikirimkan melalui tautan <https://kontesrobotindonesia.id/>;
6. Proposal yang lolos Tahap Evaluasi akan diumumkan melalui surat pemberitahuan resmi Direktorat Pembelajaran dan Kemahasiswaan Ditjen Dikti Kemendikristek serta laman Kontes Robot Indonesia, sesuai jadwal yang telah ditentukan.
7. Tim calon peserta yang telah lolos Tahap Seleksi mempersiapkan diri untuk mengikuti Kontes Robot ABU Indonesia (KRAI) Tingkat Nasional.

Isi dan format proposal KRI adalah sebagai berikut:

1. Proposal berisi: (a) Informasi lengkap tentang nama ketua dan anggota tim, nama pembimbing, institusi, alamat lengkap, nomor telepon, email dan nomor telepon selular ketua tim yang akan dimasukkan pada *whatsapp group*; (b) Informasi lengkap tentang robot yang akan dibuat meliputi desain struktur robot, perangkat keras (sistem sensor, sistem kendali, sistem penggerak) dan perangkat lunak (strategi dan algoritma); (c) Informasi tentang kemajuan rancang bangun robotnya; (d) Video demonstrasi robot. Rincian lebih lanjut lihat Lampiran Bagian 1 Buku Panduan ini;
2. Video demonstrasi robot dibuat dengan durasi maksimum 8 menit dan disimpan pada kanal Youtube masing-masing tim. Tautan URL video tersebut dituliskan pada proposal;
3. Jumlah halaman proposal maksimum 30 (tiga puluh) halaman, termasuk surat pengantar, daftar isi, gambar, dan lampiran.
4. Proposal dalam format PDF termasuk pindaian (*scan*) kopi surat pengantar resmi dari Pimpinan Perguruan Tinggi (disatukan dalam satu file dokumen);
5. Aturan penamaan file: **KRAI <Nama PT> <Nama Tim>.pdf**. Penamaan yang tidak sesuai dapat menyebabkan dokumen tidak terfilter untuk masuk ke folder proposal KRI 2026 pada sistem penerimaan proposal ini.

7. Evaluasi Proposal dan Visitasi Daring

Calon tim peserta KRI yang telah mengirimkan proposal dan video, dapat mempersiapkan robotnya untuk melaksanakan demonstrasi robot secara daring melalui Zoom Meeting sesuai jadwal yang telah ditentukan, dengan rincian sebagai berikut:

1. Proses evaluasi dokumen proposal dan video demonstrasi, serta demonstrasi robot dapat dilihat pada Bagian 2 Buku Panduan ini.
2. Juri melakukan visitasi ke masing-masing tim peserta secara daring untuk melihat demonstrasi robot dan menilai kesiapan robot untuk bertanding pada KRAI 2026.
3. Tim calon peserta yang dinyatakan lolos Tahap Seleksi ini akan diundang untuk mengikuti Kontes Robot ABU Indonesia (KRAI) Tingkat Nasional.

Secara umum, kriteria evaluasi yang digunakan adalah:

1. Kemajuan rancang bangun robot;

2. Kerja robot yang memperlihatkan sistem kendali, sistem sensor, dan sistem penggerakannya;
3. Strategi yang digunakan;
4. Kemampuan maksimal yang dapat ditunjukkan untuk melakukan gerakan dasar sesuai tema dan fungsinya, seperti pergerakan robot untuk berpindah tempat, menembak bola, mendribble dan mengoper bola.

8. Fasilitas Peserta

Peserta yang diundang/ mengikuti KRAI Tingkat Nasional akan mendapat:

1. *Name tag*/ tanda pengenal untuk mengakses area pertandingan (untuk mahasiswa dan pembimbing);
2. Area persiapan robot (*pit stop*) yang dilengkapi dengan *power outlet* AC 220W;
3. Sertifikat peserta KRI Tingkat Nasional tahun 2026.

Panitia KRAI tahun 2026 tidak menyediakan:

1. Konsumsi/ makan selama pelaksanaan KRAI;
2. Transportasi/ biaya perjalanan/ tiket ke tempat pelaksanaan KRAI;
3. Akomodasi/ penginapan selama pelaksanaan KRAI;
4. Bantuan biaya pembuatan robot.

9. Penghargaan

Panitia menyediakan penghargaan bagi tim robot yang menjadi pemenang. Selain penghargaan untuk juara, juga akan diberikan penghargaan khusus yang akan ditentukan kemudian oleh panitia KRAI tahun 2026.

10. Jadwal Kegiatan

Jadwal kegiatan KRAI tahun 2026 adalah sebagai berikut:

NO	KEGIATAN	TANGGAL (*)	LOKASI / MEKANISME
1	Sosialisasi Pendaftaran Proposal KRAI 2026	24 April 2026	Daring, Zoom meeting
2	Batas waktu pendaftaran KRAI 2026, Proposal dan Video Kemajuan	5 Juni 2026	Submisi daring (online submission)
3	Penilaian Proposal dan Video Kemajuan	8 - 9 Juni 2026	Belmawa
4	Visitasi Daring/ Demonstrasi Robot	10 - 13 Juni 2026	Daring, Zoom meeting
5	Pengumuman hasil Seleksi dan Peserta KRAI Tingkat Nasional 2026	16 Juni 2026	Melalui laman Kemendiktisaintek dan KRI
6	Pelaksanaan KRI Tingkat Nasional 2026	9-12 Juli 2026	Akan diumumkan kemudian

(*) Waktu Pelaksanaan tentatif, akan diumumkan pada laman resmi Kementerian Pendidikan Tinggi, Sains, dan Teknologi, serta laman Kontes Robot Indonesia

11. Unsur Penyelenggara

KRAI Tahun 2026 diselenggarakan melalui kerja sama/kolaborasi antara Direktorat Pembelajaran dan Kemahasiswaan, Ditjen Dikti Kemendiktisaintek, dan Perguruan Tinggi. Unsur penyelenggara KRAI Tahun 2026:

1. Panitia Pusat;
2. Panitia Perguruan Tinggi;
3. TVRI;
4. Juri dan Wasit;
5. Penyedia aplikasi dan platform kontes;
6. Tim pendukung (tim media dan publikasi, tim medis, dll.).

12. Pembiayaan

Sumber pembiayaan penyelenggaraan KRAI tahun 2026 berasal dari DIPA Direktorat Pembelajaran dan Kemahasiswaan Ditjen Dikti, Anggaran dan Belanja Perguruan Tinggi Pelaksana, Anggaran dan Belanja Perguruan Tinggi peserta, sponsor, serta sumber dana lain yang tidak mengikat dan sesuai dengan peraturan yang berlaku.

13. Alamat Penyelenggara

Panitia Kontes Robot ABU Indonesia 2026,
Direktorat Pembelajaran dan Kemahasiswaan
Direktorat Jenderal Pendidikan Tinggi
Kementerian Pendidikan Tinggi, Sains, dan Teknologi RI
Jl. Jenderal Sudirman, Gedung D, Senayan
Jakarta 10270

Laman: <https://kemdiktisaintek.go.id/>
<https://kontesrobotindonesia.id/>

14. Informasi Lanjut

Informasi teknis lebih lanjut tentang pelaksanaan Kontes Robot Indonesia (KRI) tahun 2026 dapat diakses melalui laman <https://kontesrobotindonesia.id> serta laman host pelaksana KRI tahun 2026 yang akan diumumkan kemudian.

15. Penutup

Semua hal yang menyangkut penyelenggaraan KRAI 2026 yang diatur dalam panduan ini dapat berubah sesuai dengan kondisi dan perkembangan kebijakan di masa mendatang. Untuk itu, Direktorat Pembelajaran dan Kemahasiswaan c.q. Panitia Pusat KRI 2026 akan memberitahukannya pada saat perubahan itu sudah ditetapkan dan akan disampaikan secepatnya melalui mekanisme tertentu atau dokumen tersendiri yang terpisah dari buku panduan ini.

Keberhasilan penyelenggaraan KRI tahun 2026 ditentukan oleh semua unsur yang terlibat dalam pelaksanaan kegiatan seleksi secara tertib, teratur, disiplin, dan dengan rasa tanggung jawab yang tinggi. Dengan memahami panduan ini, diharapkan panitia, peserta, juri, tim pendukung dan semua pihak yang terkait dapat melaksanakan tugas dengan sebaik-baiknya, sehingga mencapai hasil yang optimal.

Menyadari masih banyak kekurangan dalam panduan ini, kritik dan saran kami harapkan sebagai bahan masukan bagi penyelenggaraan seleksi di tahun-tahun mendatang.

BORANG PENDAFTARAN KRAI 2026

INFORMASI RINCI TIM

1. TIM PESERTA

Divisi: KRAI	
Nama Tim (Maksimum 15 huruf, gunakan nama yang mudah dibaca.):	
Nama Ketua Tim (mahasiswa):<Nama dan No Induk Mahasiswa> No. HP. (no ini akan dimasukkan ke WAG KRAI 2026) Email. Nama Anggota Tim (mahasiswa): 1<Nama dan No Induk Mahasiswa> ... 2 3 4 5	Nama Pembimbing: NIDN/NIDK/NIP. No. HP. Email.

2. INSTITUSI

Nama lengkap Perguruan Tinggi	
Alamat Lengkap dan Jelas, dengan nama Kota:	
Nomor Telepon:	Nomor Mobile/HP/Whatsapp :
Alamat e-mail :	

3. Alamat lengkap kontak yang mudah dihubungi, hp, telepon, e-mail. (contact person address)

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INFORMASI DETIL ROBOT

1. NAMA TIM : _____
(gunakan nama tim yang mudah dibaca, maks. 15 karakter)

2. INFORMASI UMUM ROBOT

Gambaran umum robot yang dibangun

Penjelasan umum robot dan bentuk rekaan seluruh robot yang akan dirancang dan dibangun. Gambarkan secara umum cara kerja robot R1 dan robot R2.

3. DESAIN ROBOT

Desain/bentuk rekaan robot yang dibuat mencakup ukuran/dimensi robot, berat robot, struktur mekanik, dan bahan. Dilengkapi dengan sketsa dan gambar bagian-bagian robot.

Gambar dan penjelasan rancangan dasar robot yang mudah dibaca dan dievaluasi. Sketsa gambar desain lengkap dengan ukuran/dimensi masing-masing robot R1 dan R2.

4. SISTEM KENDALI DAN PENGGERAK

Penjelasan sistem prosesor/ mikrokontroler, sistem kendali, pergerakan, aktuator/ motor, effektor, dan lain-lain

Gambarkan rangkaian kendali robot. Jelaskan aktuator/ motor, efektor, dan komponen-komponen yang digunakan. Jelaskan mekanisme pergerakan robot untuk berpindah tempat, memasang senjata, mengambil *kungfu scrolls*, dan meletakkan scrolls pada masing-masing *row rack*.

5. SISTEM SENSOR

Penjelasan tentang sistem sensor yang digunakan

Mencakup kebutuhan informasi yang perlu diketahui oleh robot untuk dapat bergerak dengan aman serta menyelesaikan misi. Pemilihan dan penggunaan sensor untuk mendeteksi objek di lapangan, mengenal kungfu scrolls, serta memenuhi kebutuhan informasi lainnya.

6. DESAIN ALGORITMA / STRATEGI

Penjelasan strategi yang digunakan untuk mendapatkan nilai selama kontes

Misalnya, penjelasan secara singkat tentang strategi permainan, algoritma gerakan, strategi sinkronisasi antarrobot, strategi mengenal pola pada *kungfu scrolls*, dan strategi lainnya yang diperlukan untuk menyelesaikan misi.

7. KEMAJUAN HASIL IMPLEMENTASI ROBOT

Jelaskan hasil implementasi yang telah dilakukan. Tampilkan foto-foto hasil implementasi yang telah dicapai. Foto-foto dan penjelasannya dikelompokkan sesuai fitur, fungsi, kemampuan robot (kemampuan R1 dan R2 dalam melaksanakan tugasnya).

8. FOTO TIM DAN ROBOT

Tampilkan foto anggota tim bersama robotnya

9. VIDEO KEMAJUAN/ DEMONSTRASI ROBOT

Tim membuat video kemajuan atau video demonstrasi robot yang memperlihatkan kemampuan dasar robot dalam menjalankan fungsi-fungsi yang telah dicapai. Video dengan durasi maksimum 8 menit, disimpan pada kanal Youtube masing-masing tim. Tuliskan tautan URL-nya di sini.

Gunakan halaman tambahan bila dibutuhkan.

BAGIAN 2. PANDUAN SELEKSI KONTES ROBOT ABU INDONESIA (KRAI)

1. Pendahuluan

Kontes Robot ABU Indonesia (KRAI) 2026 akan diselenggarakan dengan mengacu pada tema dan panduan ABU Asia-Pacific Robot Contest 2026 yang akan bertempat di Queen Elizabeth Stadium, Wan Chai, Hong Kong. KRAI terbagi menjadi dua kegiatan utama, yaitu Seleksi KRAI dan KRAI Nasional. Peserta yang berhasil lolos dari tahap Seleksi KRAI akan melanjutkan kompetisi pada KRAI Nasional. Pemenang tingkat nasional akan ditunjuk sebagai perwakilan Republik Indonesia dalam ABU Asia-Pacific Robot Contest 2026.

ABU Robocon 2026 mengusung tema "Kung Fu Quest". Tema ini terinspirasi dari seni bela diri Kung Fu dan melambangkan perjalanan seorang murid untuk mencapai penguasaan ilmu melalui disiplin, strategi, dan kerja sama tim. Dalam kompetisi ini, tim yang terdiri dari dua robot, yaitu Robot 1 (R1) dan Robot 2 (R2), akan berlomba untuk merakit senjata, mengumpulkan Kung-Fu Scrolls (KFS) suci, dan terlibat dalam pertarungan strategis Tic-Tac-Toe di Arena.

Permainan dimulai dengan R1 dan R2 bekerja sama di zona Martial Club untuk mengumpulkan sumber daya berupa Staff dan Spearhead guna membangun senjata rakitan (Assembled Weapons). Selanjutnya, robot bergerak ke Meihua Forest untuk mengumpulkan KFS. Pertandingan mencapai puncaknya di Arena melalui permainan Tic-Tac-Toe. Tim yang berhasil menempatkan tiga KFS milik mereka dalam satu kolom vertikal atau garis diagonal di rak Tic-Tac-Toe akan meraih gelar "Kung Fu Master" dan langsung memenangkan pertandingan. Kompetisi ini menekankan pada ketepatan, strategi, dan kerja sama antar robot.

2. Seleksi KRAI 2026

Seleksi KRAI adalah tahap awal yang krusial untuk menentukan tim-tim mana yang akan melaju ke KRAI Nasional. Proses seleksi ini terdiri dari 2 tahap utama, yaitu seleksi berkas dan video, serta demonstrasi melalui Zoom. Hasil akumulasi dari kedua tahap seleksi ini akan digunakan sebagai dasar untuk menentukan tim-tim terbaik yang akan diundang secara resmi untuk berkompetisi di ajang KRAI Nasional.

2.1. Seleksi Berkas dan Video

Pada tahap awal ini, setiap tim peserta diwajibkan mengumpulkan serangkaian berkas pendaftaran yang telah ditetapkan oleh panitia penyelenggara. Berkas-berkas ini mencakup

berbagai dokumen penting seperti formulir pendaftaran yang telah diisi lengkap, proposal desain robot yang menjelaskan konsep dan rancangan robot yang akan dibangun, kemajuan perkembangan robot hingga saat proposal ini dibuat, yang dilengkapi dengan foto-foto dokumentasinya, serta dokumen-dokumen administratif lainnya yang diperlukan untuk keperluan verifikasi dan validasi tim.

Selain pengumpulan berkas, tim juga harus mengirimkan video demonstrasi robot yang memperlihatkan kemampuan dasar robot dalam menjalankan fungsi-fungsi yang relevan dengan tema kontes. Video ini menjadi sarana bagi tim untuk menunjukkan potensi robot mereka dalam aksi nyata. Durasi video tidak lebih dari 8 menit.

Video demonstrasi yang dikirimkan oleh tim harus memenuhi kriteria berikut:

- **Mobilitas:** Video harus memperlihatkan kemampuan robot dalam melakukan pergerakan yang stabil dan andal. Pergerakan yang stabil dan andal dianggap sebagai fondasi bagi semua fungsi robot lainnya.
- **Kemampuan Merakit Senjata:** Robot harus mampu mendemonstrasikan proses perakitan senjata dengan menempatkan Spearhead ke atas Staff di area Martial Club.
- **Mengumpulkan dan Menempatkan KFS:** Video harus menunjukkan robot bermanuver untuk mengumpulkan Kung-Fu Scroll (KFS) di area Meihua Forest dan menempatkannya pada rak Tic-Tac-Toe di Arena.
- **Kepatuhan Terhadap Aturan:** Robot yang didemonstrasikan dalam video harus sepenuhnya mematuhi semua aturan yang berlaku dalam kompetisi. R1 (robot manual atau otomatis) dan R2 (robot otomatis penuh) tidak boleh melebihi batas dimensi maksimum saat berekspansi di lapangan (R1 maksimal W1000 x L1800 x H1300 mm, dan R2 maksimal W800 x L1300 x H1300 mm).

Panitia akan melakukan proses verifikasi yang teliti terhadap kelengkapan dan kesesuaian setiap berkas yang masuk, memastikan bahwa semua persyaratan administratif telah dipenuhi dengan baik. Selain itu, panitia juga akan mengevaluasi video demonstrasi yang dikirimkan oleh tim, dengan menilai aspek-aspek seperti kreativitas desain robot, fungsionalitas robot dalam menjalankan tugas-tugas yang diberikan, serta kualitas produksi video.

Tim-tim yang berhasil lolos dari tahap ini adalah mereka yang berkasnya dinyatakan lengkap dan memenuhi semua syarat administratif yang ditetapkan, serta memiliki video demonstrasi yang memenuhi kriteria penilaian yang telah ditentukan.

2.2. Demonstrasi Melalui Media Zoom

Tahap terakhir dalam proses seleksi adalah demonstrasi langsung yang dilakukan melalui platform komunikasi daring, Zoom. Setiap tim yang lolos dari tahap sebelumnya akan diberikan kesempatan untuk mempresentasikan robot mereka secara virtual di hadapan dewan juri.

Ketentuan Demonstrasi Zoom

Untuk memastikan kelancaran dan keadilan dalam penilaian, demonstrasi melalui Zoom dilakukan dalam durasi 10-15 menit dan akan mengikuti ketentuan detail berikut:

- **Akun Zoom:**
 - Setiap tim wajib menggunakan 4 akun Zoom selama sesi demonstrasi.
 - **Akun 1 - Ketua Tim:** Akun ini digunakan secara eksklusif oleh ketua tim. Ketua tim akan menggunakan akun ini untuk berkomunikasi dengan dewan juri, mempresentasikan desain robot, menjelaskan strategi tim, serta menjawab pertanyaan.
 - **Akun 2, 3, dan 4 - Kamera Lapangan:** Ketiga akun ini difokuskan untuk menampilkan visual dari lapangan demonstrasi. Setiap akun terhubung dengan kamera yang ditempatkan secara strategis di sekitar lapangan.

- **Pengaturan Kamera:**
 - **Kamera 1 - Statis (Tampilan Keseluruhan):** Kamera ini harus ditempatkan pada posisi yang tinggi dan stabil untuk memberikan tampilan menyeluruh atas lapangan demonstrasi. Tujuannya adalah agar juri dapat melihat pergerakan robot secara keseluruhan, interaksi antarrobot, serta dinamika permainan.
 - **Kamera 2 dan 3 - Dinamis (Tampilan Detail):** Kedua kamera ini harus dioperasikan secara dinamis untuk mengikuti aksi permainan. Satu kamera dapat difokuskan untuk terus mengikuti pergerakan robot yang sedang menyelesaikan tugas utamanya. Misalnya, memperlihatkan dari dekat jarak dan mekanisme capit saat R1 mengambil Staff dan R2 mengambil Spearhead, atau menyorot proses perakitan senjata (Assembled Weapon) di Martial Club untuk membuktikan tidak ada kontak fisik antar-robot. Kamera ini juga bisa mengikuti bodi robot saat bernavigasi untuk mengambil Kung-Fu Scroll (KFS) di area Meihua Forest. Kamera lainnya dapat bersiap dan menyorot area-area kritis tempat misi diselesaikan. Contoh utamanya adalah menyorot secara jelas Arena saat robot memasukkan KFS ke dalam baris bawah, tengah, atau atas rak Tic-Tac-Toe, atau menyorot area sasaran ketika R1 sedang menggunakan senjatanya untuk menjatuhkan KFS lawan.

- **Lapangan Demonstrasi:**
 - Mengingat keterbatasan ruang dan kemudahan pengaturan, tim diizinkan menggunakan separuh lapangan pertandingan sebagai area demonstrasi.
 - Ukuran dan tata letak separo lapangan harus proporsional dengan ukuran lapangan sebenarnya, dengan tetap mempertahankan garis-garis penting.
 - Tim harus memastikan bahwa area demonstrasi cukup jelas dan bebas dari gangguan visual agar juri dapat dengan mudah mengamati robot dan bola.

- **Pelaksanaan Demonstrasi:**

- Selama sesi demonstrasi, tim harus mendemonstrasikan kemampuan robot sesuai dengan persyaratan tema kompetisi, seperti perakitan senjata, pergerakan di Meihua Forest, dan penyusunan formasi di Arena.
- Tim harus memastikan pencahayaan yang cukup di area demonstrasi agar visual terlihat jelas pada kamera.
- Komunikasi yang jelas dan efektif antara ketua tim dan operator kamera sangat penting untuk memastikan juri mendapatkan tampilan demonstrasi yang optimal.

Selama sesi demonstrasi ini, tim akan menjelaskan desain robot, menunjukkan kemampuan robot dalam menjalankan tugas-tugas spesifik yang diberikan dalam kontes, memaparkan strategi permainan yang akan diterapkan, serta menjawab pertanyaan-pertanyaan yang diajukan oleh dewan juri.

Fokus utama penilaian pada tahap ini adalah demonstrasi kemampuan robot dalam menjalankan tugas-tugas esensial yang relevan dengan tema kontes, serta kejelasan dan potensi keberhasilan strategi permainan yang diusulkan oleh tim.

BAGIAN 3. PANDUAN KONTES ROBOT ABU INDONESIA (KRAI) NASIONAL

Kontes Robot ABU Indonesia (KRAI) 2026 Nasional akan diorganisir dengan tema dan panduan yang digariskan oleh ABU Asia-Pacific Robot Contest 2026. Pertandingan internasional ini akan mengambil tempat di Queen Elizabeth Stadium, Wan Chai, Hong Kong, yang diselenggarakan dari tanggal 21 sampai 25 Agustus 2026. Penjelasan rinci tema dan panduan kontes sepenuhnya mengacu pada panduan internasional tersebut.

Kontes Robot ABU Indonesia KRAI 2026

Disusun berdasar tema dan panduan dari:

ABU Asia-Pacific Robot Contest 2026



ABU Asia-Pacific Robot Contest 2026 Hong Kong, China



Theme & Rules: “Kung Fu Quest”

September 2025 (V1.0)

Asia-Pacific Robot Contest 2026 Hong Kong, China
Organising Committee

[<https://www.rthk.hk/aburobocon2026>]



THEME

The theme for ABU Robocon 2026, “Kung Fu Quest”, invites teams to embark on an exhilarating robotic journey that celebrates the timeless art of Kung Fu and the pursuit of excellence. Set against the backdrop of an ancient martial arts tradition, this competition symbolizes the path of a Kung Fu disciple striving to achieve mastery through discipline, strategy, and teamwork. Each team, consisting of two robots, will navigate a dynamic arena where they must collaborate to assemble powerful weapons, collect sacred Kung-Fu Scrolls, and engage in a strategic Tic-Tac-Toe showdown. This journey mirrors the rigorous training and mental fortitude required to earn the title of a Kung Fu master, blending cultural heritage with cutting-edge technology.

The game begins with Robot 1 and Robot 2 working in unison to gather resources, reflecting the harmony and coordination essential in martial arts practice. As they construct weapons, teams demonstrate precision and ingenuity that are key virtues of Kung Fu. The quest for Kung-Fu Scrolls unfolds in the Meihua Forest, a multi-tiered test inspired by the iconic Meihua Blossom Poles, a cornerstone of Chinese Martial Arts training. Traversing these levels demands stability, precision, and foresight, much like a martial artist. In the game, Robot 2 must autonomously identify the correct Scrolls, chart an optimal path, and execute the task with confidence and agility. The climactic Tic-Tac-Toe match tests their strategic prowess, where every move counts, echoing the intellectual depth of martial arts philosophy. This theme not only honours the legacy of Kung Fu but also inspires innovation, encouraging participants to push the boundaries of robotics while respecting tradition.

This competition promises to be a celebration of skill, culture, and technological advancement, leaving a lasting legacy for future generations of robot enthusiasts.

THE IMPORTANCE OF SAFETY

Safety is the highest priority in ABU Robocon. Teams must prioritize safety during all stages, including robot design, manufacturing, and contest participation. Full cooperation with organizers is required to ensure a safe environment for everyone involved (team members, spectators, officials, and the surroundings). All team members must wear organizer-specified safety gear during games and practice sessions.

Contest

All domestic competitions selecting teams for ABU Robocon 2026 Hong Kong, China must adhere to the rules in this rulebook. However, if specified materials are unavailable for domestic contests, local organisers should use the best possible replacements available in their country/region.

Contest Dates

21/8/2026 (Fri)	Arrival
22/8/2026 (Sat)	Test-run, Rehearsal
23/8/2026 (Sun)	Contest Date
24/8/2026 (Mon)	ABU General Meeting
25/8/2026 (Tue)	Departure

Contest Venue: Queen Elizabeth Stadium, Wan Chai, Hong Kong



1 Game Field

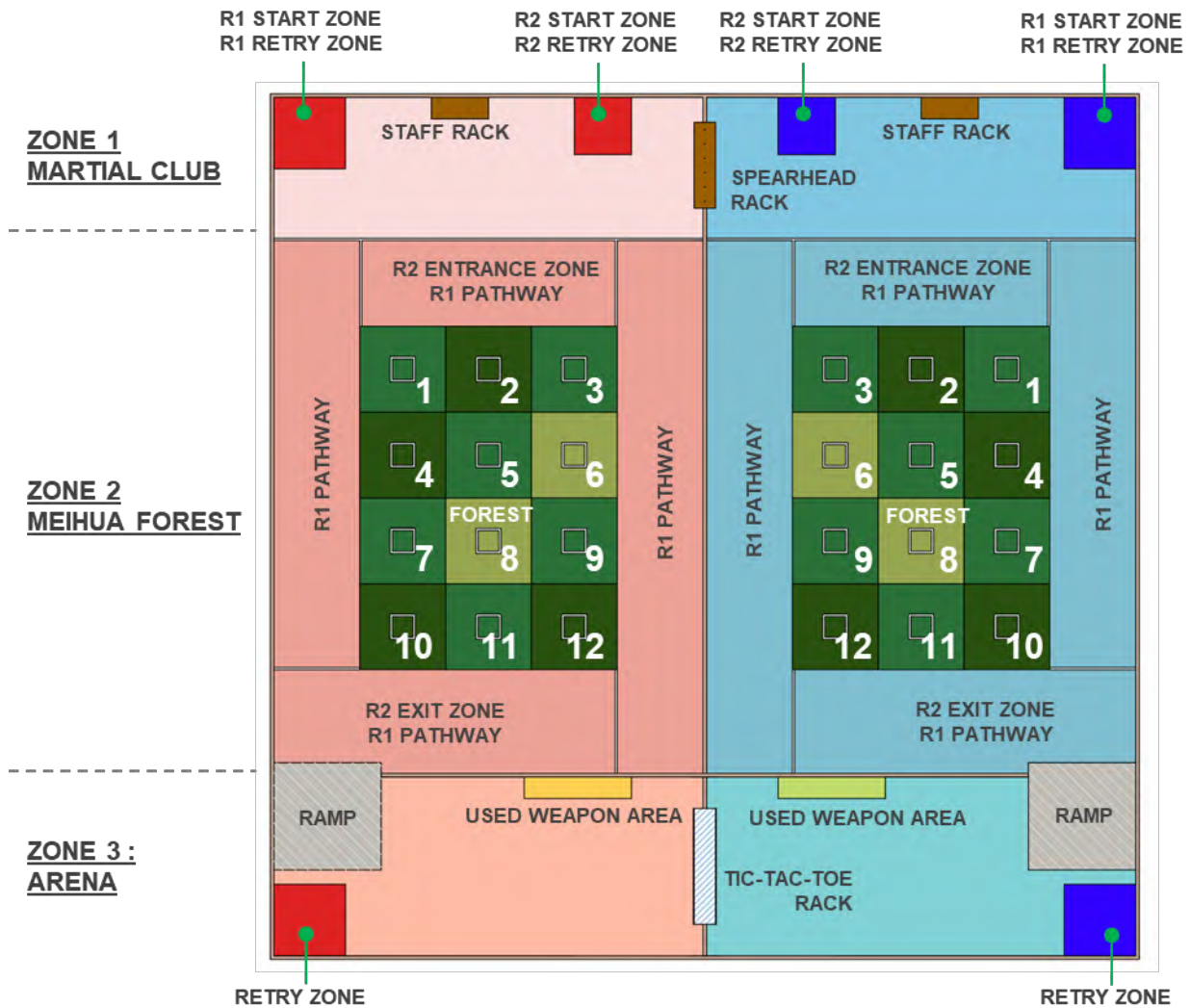


Figure 1: Game Field – Top View

*Detailed specifications for all Game Field components are provided in Section 16. The number shown in the Forest area is intended only to indicate location in the rulebook. This number may not appear on the actual game field.



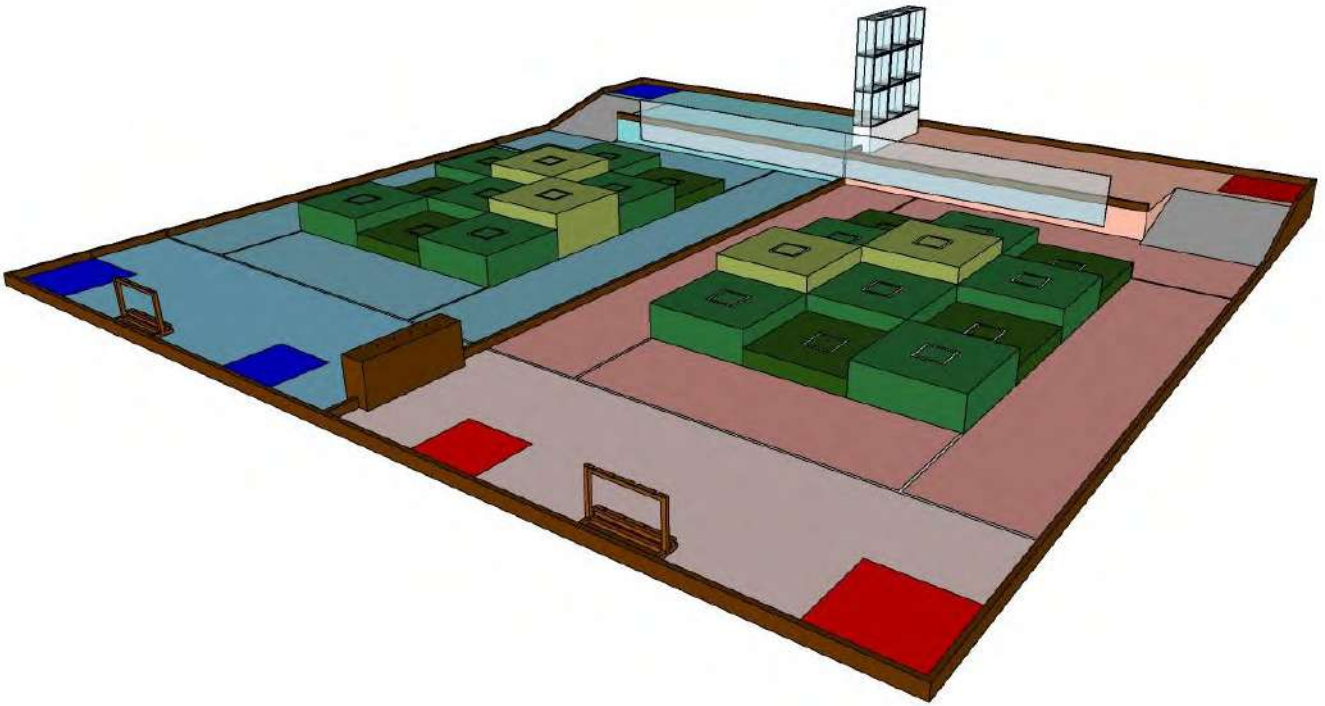


Figure 2: Game Field – Isometric View 1

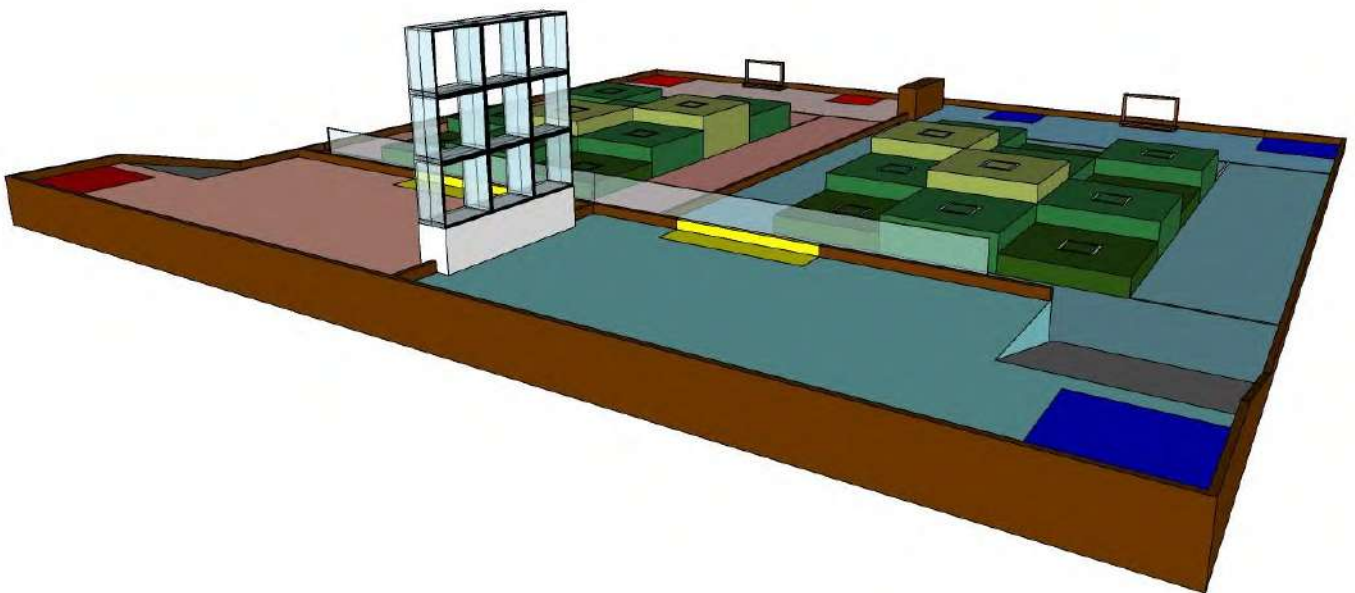


Figure 3: Game Field – Isometric View 2



2 Terms of Reference

Robot 1 (R1)	<ul style="list-style-type: none"> Operates only in the following areas: <ol style="list-style-type: none"> Martial Club; Meihua Forest – R1 Pathway; and Arena. Robot 1 is a Manual or Automatic Robot. It can be operated manually by a team member or autonomously without manual control.
Robot 2 (R2)	<ul style="list-style-type: none"> Operates only in the following areas: <ol style="list-style-type: none"> Martial Club; Meihua Forest – R2 entrance zone or R2 exit zone; Meihua Forest – Forest; and Arena. Robot 2 must be an Automatic Robot. It should operate autonomously without manual control once the game starts.
Martial Club	<ul style="list-style-type: none"> The area where robots assemble weapons. It contains: <ol style="list-style-type: none"> Start Zone: Where both robots begin the game and retry. Staff Rack: Holds initial Staffs and Assembled Weapons. <ul style="list-style-type: none"> At the start, four Staffs are placed in each team's Staff Rack. Spearhead Rack: A shared rack holding Spearheads. <ul style="list-style-type: none"> At the start, six Spearheads (three types with two pieces each) are positioned in the shared Spearhead Rack on the centre line.
Meihua Forest	<ul style="list-style-type: none"> The area where robots retrieve Kung-Fu Scrolls (KFS). Comprises: <ol style="list-style-type: none"> Forest: Area with twelve blocks per team side. Pathway: Perimeter path around the Forest blocks.
Kung-Fu Scroll (KFS)	<ul style="list-style-type: none"> Game pieces marked with a Chinese character from a specified dictionary. The dictionary contains fifteen unique characters for true KFS and fifteen unique characters for fake KFS. KFS allocation per team (placed by opponent during setup): <ol style="list-style-type: none"> Three R1 KFS: Robocon logo marked on 5 sides (excluding bottom). Four R2 KFS: Oracle Bone Characters marked on 5 sides (excluding bottom). One Fake KFS: Random patterns marked on 5 sides (excluding bottom), with a 15mm × 150mm ribbon attached to the bottom.
Arena	<ul style="list-style-type: none"> The final area where teams compete in Tic-Tac-Toe using collected KFS and Assembled Weapons. Contains: <ol style="list-style-type: none"> Ramp: Provides access for R1 and R2. Tic-Tac-Toe Rack: 3x3 Rack for KFS placement. Retry Zone: Designated area for retries initiated within the Arena. Used Weapon Area: Designated location for R1 to place weapons after an attack attempt.



Kung Fu Master	<ul style="list-style-type: none"> • A team achieves "Kung Fu Master" by placing three of their KFS in a vertical column or diagonal line in the Tic-Tac-Toe Rack. • This team wins immediately.
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3 Game Outline

- 3.1. A game between two teams (Red Team and Blue Team) takes place within three minutes. The two teams compete simultaneously. Each team has two robots, namely Robot 1 (R1) and Robot 2 (R2).
- 3.2. Game field is divided into three areas: Martial Club, Meihua Forest, and Arena.
- 3.3. Before the match starts:
 - In Martial Club:
 - 3.3.1. Four Staffs are placed in the Staff Rack;
 - 3.3.2. Six Spearheads are placed in the Spearhead Rack.
 - In Meihua Forest:
 - 3.3.3. Three R1 Kung-Fu Scrolls (R1 KFS) are placed by the opponent team onto any of the blocks set around the boundary of the Forest adjacent to the Pathway;
 - 3.3.4. Four R2 Kung-Fu Scrolls (R2 KFS) are placed on any of the vacant blocks within the Forest;
 - 3.3.5. One Fake Kung-Fu Scroll (Fake KFS) are placed on any of the vacant blocks within the Forest except the entrance blocks (1,2,3).
- 3.4. When the game starts, robots go to the Martial Club to assemble weapons using Staffs and Spearheads.
- 3.5. R1 must carry at least one Assembled Weapon before entering Meihua Forest. R2 follows.
- 3.6. In the Meihua Forest:
 - 3.6.1. R1 manoeuvres along Pathway to collect R1 KFS.
 - 3.6.2. R2 manoeuvres in Forest to collect R2 KFS.
 - 3.6.3. R1 and R2 are not allowed to touch or move Fake KFS.
 - 3.6.4. Both robots store their respective KFSs for the final Arena battle.
- 3.7. Upon first entry to the Arena: R1 must carry at least one Assembled Weapon, or one R1 KFS before entering Arena; R2 must carry at least one R2 KFS before entering Arena.
- 3.8. In the Arena:
 - 3.8.1. R1 places R1 KFS onto Tic-Tac-Toe Bottom Row slot(s).
 - 3.8.2. R2 places R2 KFS onto Tic-Tac-Toe Middle Row slot(s).
 - 3.8.3. R2, carried by R1, places R2 KFS onto Tic-Tac-Toe Top Row slot(s).
- 3.9. The game ends when a team successfully places three consecutive KFSs in the same vertical column or diagonally and is declared the "Kung Fu Master".
- 3.10. If there is no "Kung Fu Master" victory after three minutes, the team with the highest total score wins. In case of a tie, the result will be determined according to the Section 7.



4 Game Procedure

4.1 Set up (1 minute)

- 4.1.1. Each team move the robots into the Start Zone before the one-minute setup time begins.
- 4.1.2. Each team has one minute to set up and placed opponent KFS of the Meihua Forest.
- 4.1.3. Eight KFS (Three R1 KFS, Four R2 KFS, One Fake KFS) are placed onto the marked positions of Forest blocks in the Meihua Forest by the opponent team.
- 4.1.4. Fake KFS is not allowed to be placed at the entrance blocks (1,2,3) of the Meihua Forest.
- 4.1.5. KFS must be placed within the square box marking (350mm on each side), and on the centre area of the Forest block. KFS must be oriented so that the blank surface (without image) faces downward.
- 4.1.6. Three team members and up to three pit crew members are allowed to participate in the set-up.
- 4.1.7. Set-up time starts right after the signal from referee and ends right after one minute.
- 4.1.8. If a team fails to complete the setup of its own robots within the one minute set-up time, the team may continue the set-up after the game begins, but only with the referee's permission.
- 4.1.9. If the opponent team fails to complete the setup of the other team's KFS within the setup time, any unplaced KFS will be placed in the Forest by your own team within 30 seconds.
- 4.1.10. The robots (including the control unit) must remain within the Start Zone before extending.

4.2 Start of the Game

- 4.2.1. When the set-up time is over, referees will signal to start the game.
- 4.2.2. Teams that complete their set-up after the start of the game shall obtain permission from the referee to commence moving their robots.
- 4.2.3. Team members are not allowed to be on the field during the game. They must obtain permission from the referees to enter the field.
- 4.2.4. Pit crew members have to stand inside the pre-assigned area out of the game field.
- 4.2.5. Team members are not allowed to touch the robots without the permission of the referee.

4.3 Martial Club

This is the starting point where robots collaborate to assemble weapons for use in the Arena to displace the opponent's KFS in the Tic-Tac-Toe Rack.

- 4.3.1. Both robots are initiated simultaneously.
- 4.3.2. R1 picks up one or more Staffs from its team's Staff Rack.
- 4.3.3. R2 picks up a Spearhead from the central Spearhead Rack. This rack contains six Spearheads and is shared between both teams.
- 4.3.4. R2 can only touch, or pick up, or move one Spearhead at a time.
- 4.3.5. R1 and R2 collaborate to assemble a weapon by placing the Spearhead onto the Staff.
- 4.3.6. R1 shall hold its Staff during assembly, and R2 shall hold its Spearhead. During assembly, R1 cannot touch R2's Spearhead, and vice versa. R1 and R2 must not come into physical contact with each other throughout the entire assembly process.
- 4.3.7. R2 must complete the assembly of its current Spearhead with the Staff before touching another Spearhead.
- 4.3.8. Assembled Weapons can only be carried by R1 or stored back in the Staff Rack.
- 4.3.9. R1 must exit Martial Club to Meihua Forest with one or more Assembled Weapons.
- 4.3.10. R2 exits Martial Club to Meihua Forest only after R1 completely exits.
- 4.3.11. Any Staff or Spearhead that falls outside the game field cannot be reused.
- 4.3.12. Only R1 can pick up a Staff that has fallen within the team's Martial Club area.
- 4.3.13. Only R2 can pick up a Spearhead that has fallen within the team's Martial Club area.
- 4.3.14. Only R1 can pick up an Assembled Weapon that has fallen within the team's Martial Club area.



4.4 Meihua Forest

Robots collaborate to collect Kung-Fu Scrolls (KFS) for placement in the Arena final battle.

For R1:

- 4.4.1. R1 should only collect R1 KFS.
- 4.4.2. R1 moves along the Meihua Forest Pathway to collect R1 KFS.
- 4.4.3. R1 can pick up one or more KFS at a time.
- 4.4.4. R1 can go around the Meihua Forest Pathway as many times as needed.
- 4.4.5. The team decides how many R1 KFS are required for the Arena Tic-Tac-Toe game.
- 4.4.6. Dropped R1 KFS outside Meihua Forest cannot be reused.
- 4.4.7. R1 can pick up dropped R1 KFS inside Meihua Forest.
- 4.4.8. Dropped Assembled or Dismantled Weapons outside Meihua Forest cannot be reused.
- 4.4.9. R1 can pick up dropped Assembled Weapons inside Meihua Forest.
- 4.4.10. Dismantled Weapons cannot be reused.
- 4.4.11. The team can request R1 or both R1 and R2 when in Meihua Forest to retry and return to the Martial Club Retry Zone.

For R2:

- 4.4.12. R2 should only collect R2 KFS.
- 4.4.13. R2 must enter Forest via R2 Entrance Zone.
- 4.4.14. R2 can only pick up KFS from adjacent blocks of its current position. R2 cannot pick up R2 KFS that are not adjacent to the block it is on.
- 4.4.15. If blocks 1, 2, or 3 contain R2 KFS, R2 must collect its first KFS from the R2 Entrance Zone.
- 4.4.16. R2 must collect and carry at least one R2 KFS to exit Forest.
- 4.4.17. Dropped R2 KFS outside Forest cannot be reused.
- 4.4.18. R2 can pick up dropped R2 KFS inside Forest.
- 4.4.19. R2 must exit Forest via one of the designated blocks (10, 11 or 12).
- 4.4.20. The team decides how many R2 KFS are required for the Arena Tic-Tac-Toe game.
- 4.4.21. The team can request R2 or both R1 and R2 when in Meihua Forest to retry and return to the Martial Club Retry Zone.

4.5 Arena

Final battle grounds between the two teams. Robots collaborate to formulate attack with each team's Assembled Weapons and KFS to occupy any of the Tic-Tac-Toe vertical columns or diagonal slots with its KFS to declare as the ultimate "**Kung Fu Master**".

R1 and R2 must enter and exit Arena by the ramp.

For R1:

- 4.5.1. R1 enters the Arena under one of the following conditions:
 - 4.5.1.1. Carrying one or more Assembled Weapons without any R1 KFS;
 - 4.5.1.2. Carrying one or more R1 KFS;
 - 4.5.1.3. Both (a) and (b).
- 4.5.2. R1 can place R1 KFS onto vacant slots in the Tic-Tac-Toe bottom row.
- 4.5.3. R1 can only use an Assembled Weapon to attempt to remove an opponent's KFS occupying any Tic-Tac-Toe slot.
- 4.5.4. Each Assembled Weapon can only be used once.
- 4.5.5. Each weapon is regarded as "used" when it touches any KFS (own or opponent's) and releases.
- 4.5.6. When a weapon is used, R1 must place all parts of the Used Weapon in the "Used Weapon Area", before using the next Assembled Weapon to touch any KFS on the tic-tac-toe slot again.
- 4.5.7. Dismantled Weapon cannot be used.
- 4.5.8. R1 can pick up a fallen Assembled Weapon.
- 4.5.9. R1 can pick up fallen R1 KFS that land on its own side.



- 4.5.10. Fallen R1 KFS on the opponent's side cannot be reused.
- 4.5.11. R1 can pick up fallen R2 KFS and pass them to its own R2.

For R2:

- 4.5.12. R2 enters the Arena carrying one or more R2 KFS.
- 4.5.13. R2 can place R2 KFS onto vacant slots in the Tic-Tac-Toe middle row.
- 4.5.14. R2 can pick up fallen R2 KFS that land on its own side.
- 4.5.15. Fallen R2 KFS on the opponent's side cannot be reused.
- 4.5.16. R2 can pick up fallen R1 KFS and pass them to its own R1.
- 4.5.17. R2 must be lifted or carried by R1, and must not touch the ground while placing R2 KFS in the top row of the Tic-Tac-Toe.
- 4.5.18. R2 must place its KFS one at a time and cannot attempt to place R2 KFS in both the middle and top rows of the Tic-Tac-Toe simultaneously.

5 End Game

The game shall end when:

- 5.1. A team wins the "Kung Fu Master" title by filling a vertical or diagonal line in the Tic-Tac-Toe Rack with KFS; or
- 5.2. The three minute game time is over; or
- 5.3. One of the teams is disqualified.

6 Scoring Points

Points awarded are as follows:

- 6.1. Weapon Assembly: 10 points for each weapon assembled.
- 6.2. KFS collection: 10 points for each KFS successfully carried into Arena by R1 or R2. The robot must completely cross the ramp entry line to earn points.
- 6.3. Tic-Tac-Toe:
 - 6.3.1. Each KFS occupying the bottom row – 30 points;
 - 6.3.2. Each KFS occupying the middle row – 40 points;
 - 6.3.3. Each KFS occupying the top row – 80 points;
 - 6.3.4. Tic-Tac-Toe points will be counted after the game ends.

7 Deciding the Winner

The winning team is determined in the following order:

- 7.1. The team that achieves absolute victory as the "Kung Fu Master".
- 7.2. The team with the higher total score.
- 7.3. If two teams have the same score, the winner is decided in the following order:
 - 7.3.1. The team with the higher total score in Tic-Tac-Toe;
 - 7.3.2. The team with the higher total score from KFS on the Arena;
 - 7.3.3. The team with the higher total score in Martial Club;
 - 7.3.4. If still tied, the judges will decide the winner.

8 Violations

A forced retry is imposed for any violation, including:

- 8.1. R1 enters opponent game field areas.
- 8.2. R2 enters opponent game field areas.
- 8.3. R1 touches a Spearhead in the Martial Club area.
- 8.4. R2 touches a Staff in the Martial Club area.
- 8.5. R1's first exits from the Martial Club without carrying an Assembled Weapon.
- 8.6. R2's first exits from the Martial Club before R1 completely exits.



- 8.7. R1 touches R2 KFS, except in Arena.
- 8.8. R2 touches R1 KFS, except in Arena.
- 8.9. R1 or R2 touches Fake KFS.
- 8.10. R2 moves onto a Forest block when there is a KFS.
- 8.11. R2 violates the adjacent neighbouring pickup rule (refer to Section 4.4.14).
- 8.12. Upon first entry to the Arena, R1 enters without carrying an assembled weapon or a R1 KFS.
- 8.13. Upon first entry to the Arena, R2 enters without carrying a R2 KFS.
- 8.14. R1 use an Assembled Weapon more than once in the Arena.
- 8.15. R1 fails to dispose of a Used Weapon in the Used Weapon Area before using another Assembled Weapon to touch a KFS on the Tic-Tac-Toe grid.
- 8.16. R1 or R2 damages the game field.
- 8.17. A team member touches a robot without referee permission.
- 8.18. An attempt by R2 to place more than one of its KFS in both the middle and top rows of the Tic-Tac-Toe simultaneously.
- 8.19. If a team's own KFS is dropped into the opponent's Meihua Forest.
- 8.20. If a team's own R2 KFS is dropped in their own R1 Pathway.
- 8.21. A Used Weapon is not completely placed inside the Used Weapon Area.
- 8.22. Failure to follow any specified game rule

9 Retry

9.1 General Retry Rules

- 9.1.1. A retry can be requested by a team or imposed by a referee for robot violations. A team may request a retry at any time by calling out "Retry".
- 9.1.2. There is no limit to the number of retries.
- 9.1.3. During a retry, the game clock continues to run.
- 9.1.4. During a retry, team members may re-adjust the positions of game field items held by the robot, including:
 - 9.1.4.1. KFS; and
 - 9.1.4.2. Staff, Spearhead, Assembled Weapon.
- 9.1.5. During a retry, team members are not allowed to adjust any other items on the game field that are not held by the robot.
- 9.1.6. Retry commences upon the referee's signal.

9.2 Martial Club Retry

- 9.2.1. Team can request:
 - 9.2.1.1. R1 to Martial Club's R1 Retry Zone;
 - 9.2.1.2. R2 to Martial Club's R2 Retry Zone;
 - 9.2.1.3. Both R1 and R2 to their Martial Club's Retry Zones respectively.
- 9.2.2. Forced Retry: Violated robot(s) to its respective Martial Club's Retry Zone(s).

9.3 Meihua Forest Retry

- 9.3.1. Team can request:
 - 9.3.1.1. R1 to Martial Club's R1 Retry Zone;
 - 9.3.1.2. R2 to Martial Club's R2 Retry Zone;
 - 9.3.1.3. Both R1 and R2 to their Martial Club's Retry Zones respectively.
- 9.3.2. Forced Retry: Violated robot(s) to its respective Martial Club's Retry Zone(s).

9.4 Arena Retry

- 9.4.1. Team can request for:



- 9.4.1.1. R1 to Arena's Retry Zone or Martial Club's R1 Retry Zone;
- 9.4.1.2. R2 to Arena's Retry Zone or Martial Club's R2 Retry Zone;
- 9.4.1.3. R1 and R2 to Arena's Retry Zone or Martial Club's Retry Zones respectively. For the Arena, the team may decide which robot to retry first.
- 9.4.2. Forced Retry: Violated robot(s) to Arena's Retry Zone. If both robots require a forced retry, R1 must retry first, then R2.

10 Disqualifications

A team shall be disqualified if they are deemed to have committed the following actions intentionally:

- 10.1. The design and construction of the robot do not comply with the requirements of the competition rules.
- 10.2. Acts that pose danger to the game field, its surroundings, the robots, and/or people.
- 10.3. Acts that are not in the spirit of fair play.
- 10.4. The team fails to obey instructions or warnings issued by referees.
- 10.5. Intentional or attempt to damage the game field, facilities, equipment, or opponent's robots.
- 10.6. The use of drones, flying mechanisms, projectiles for locomotion, or any form of aerial movement.
- 10.7. Sending commands via wireless or Bluetooth to control R2 to complete any task after the game starts.

11 Teams

- 11.1. Each participating country or region shall be represented by one team. Hong Kong as the hosting region will be represented by two teams.
- 11.2. A team consists of three team members who are students and one instructor, all belonging to the same higher education organisation/university/college/polytechnic.
- 11.3. Three additional students from the same institution can be registered as pit crew members to assist during setup and in the pit area.
- 11.4. Postgraduates cannot participate.

12 Robots

- 12.1. Each team is allowed to bring two Robots: R1 (manual/automatic) and R2 (automatic).
- 12.2. R1 is manually controlled by an operator or automatic one capable of operating independently.
- 12.3. R2 must be an automatic robot capable of operating independently.
- 12.4. Dimensions of R1 should be within W1000 x L1000 x H1000 mm before game starts.
- 12.5. Dimensions of R2 should be within W800 x L800 x H800 mm before game starts.
- 12.6. During the game, when fully extended, dimension of R1 must not exceed W1000 x L1800 x H1300 mm.
- 12.7. During the game, when fully extended, dimension of R2 must not exceed W800 x L1300 x H1300 mm.
- 12.8. The total weight of both robots, including batteries, controllers, cables, must not exceed 50 kg.
- 12.9. For radio frequency communication, teams can use only Wi-Fi (IEEE 802.11), Zigbee (IEEE 802.15), and Bluetooth for the communications between controller and robot.
- 12.10. The organizer will not control the environment of Wi-Fi, Zigbee or Bluetooth.
- 12.11. R1 and R2 are not permitted to communicate with each other via wireless transmission during the game.
- 12.12. Teams can use only batteries, compressed air, and/or elastic force as power sources.



- 12.13. The nominal voltage of any battery used in the robot, controller, and any other devices during the game shall not exceed 24V. When connecting batteries in series, the total voltage must be 24V or less.
- 12.14. Power circuits of Robots should be designed so that any actual voltages in the circuits should be 42V or less. If the power supply system includes multiple isolated circuits voltage in each system must be 42V or less.
- 12.15. Teams using compressed air must use either a container made for the purpose or a plastic bottle in pristine condition prepared appropriately. Air pressure must not exceed 600 kPa.
- 12.16. The following devices are not permitted to be used:
 - 12.16.1. Lead-acid batteries, adhesive-sealed batteries, explosive and high temperature energy sources, and any items that can damage the game field or hinder the competition.
 - 12.16.2. When using lasers, the teams must use Class 1 or 2 products that comply with IEC 60825-1 and must take safety measures based on the standards.
- 12.17. Robot Transportation: The Organising Committee will arrange transportation of robots for all teams participating in ABU Robocon 2026. Each team can prepare two (2) transportation boxes with dimensions of 700 mm x 700 mm x 700 mm (L x W x H) per box and a maximum weight of 57 kg per box. Items exceeding the size or weight limits will not be accepted for transportation.

13 Safety















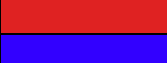

- 13.1. The design and build of robots should not pose any kind of danger to any person at the competition scene.
- 13.2. All robots must have a clearly visible red emergency “STOP” button.
- 13.3. Robots must be designed and manufactured to ensure the safety of team members, opposing teams, surrounding people, and the game field.
- 13.4. Team members must wear appropriate safety gear as mandated by the organiser during the games and test runs.
- 13.5. The use of dangerous power sources or mechanisms that could damage the field or harm participants will be prohibited.
- 13.6. The use of flying mechanisms or drones as part of the robot design is strictly prohibited due to safety concerns and conflict with intended game mechanics.

14 Others

- 14.1. Situations not mentioned in this Rule Book shall be subject to the decisions of the Panel of Judges and the Organising Committee.
- 14.2. The dimensions, weight, etc., of the game field described in this Rule Booklet may have a tolerance of $\pm 5\%$ unless otherwise specified.
- 14.3. All inquiries should be directed to the official website of ABU Robocon 2026 at [<https://www.rthk.hk/aburobocon2026>]. The FAQ section will be provided on the website of the contest.
- 14.4. Any changes to the Competition Rules will be updated on the official website of the ABU Robocon 2026 Organising Committee. [<https://www.rthk.hk/aburobocon2026>]
- 14.5. Teams must comply with the instructions of the Organising Committee and the referees to ensure the safety of the robots and/or humans involved.



15 Material* and colours of game field

Items	Color	Material	R-G-B	
Start Zone (Red)		Plywood, Water Paint	223-34-34	
Zone 1 (Red)			250-220-218	
Start Zone (Blue)			50-0-255	
Zone 1 (Blue)			128-199-226	
Staff Rack		Metal, Oil Paint	155-95-0	
Spearhead Rack		Plywood, Water Paint	155-95-0	
Guild line			255-255-255	
Fence			100-62-0	
Zone 2 Pathway (Red)			236-162-151	
Zone 2 Pathway (Blue)			128-191-209	
Forest (200mm)			41-82-16	
Forest (400mm)			42-113-56	
Forest (600mm)			152-166-80	
Ramp			Plywood, Water Paint	192-189-182
Zone 3 (Red)				254-186-163
Zone 3 (Blue)		129-210-214		
Used Weapon Area		255-255-0		
Retry Zone (Red)		223-34-34		
Retry Zone (Blue)		50-0-255		
Tic-Tac-Toe Rack		Base: Plywood, Water Paint Rack: Acrylic, Transparent Edge: Non-Shiny Vinyl Tape		255-255-25 - 0-0-0

***All items dimension and specification should refer to the APPENDIX Documents**



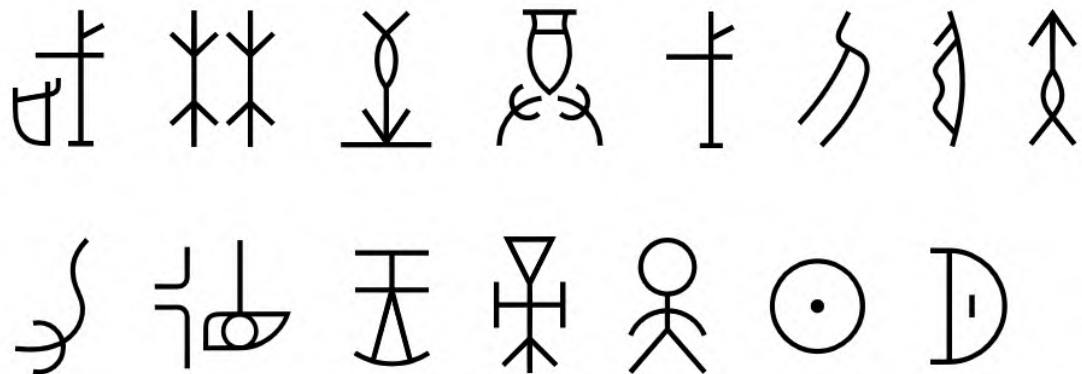
16 Texts/ Symbols on KFS

16.1. Symbols will be stick on R1 KFS:



16.2. Lists of texts/symbols will be stick on R2 KFS:

16.2.1. Real KFS [Oracle Bone Character(甲骨文)]:



16.2.2. Fake KFS [Random Pattern]:



ABU Asia-Pacific Robot Contest 2026 Hong Kong, China



Appendix V1.1 - “Kung Fu Quest”

2 February 2026

Asia-Pacific Robot Contest 2026 Hong Kong, China

Organising Committee

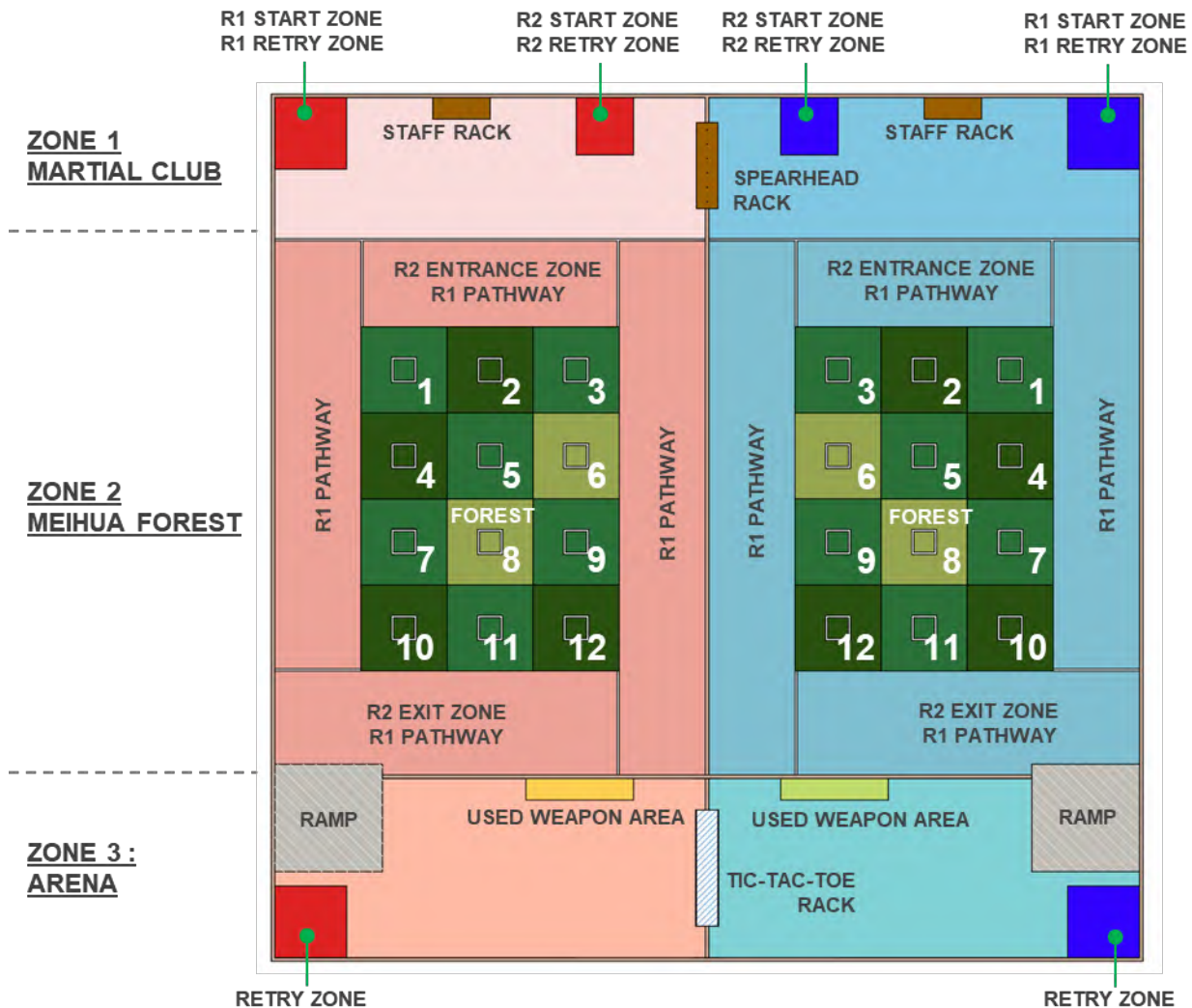
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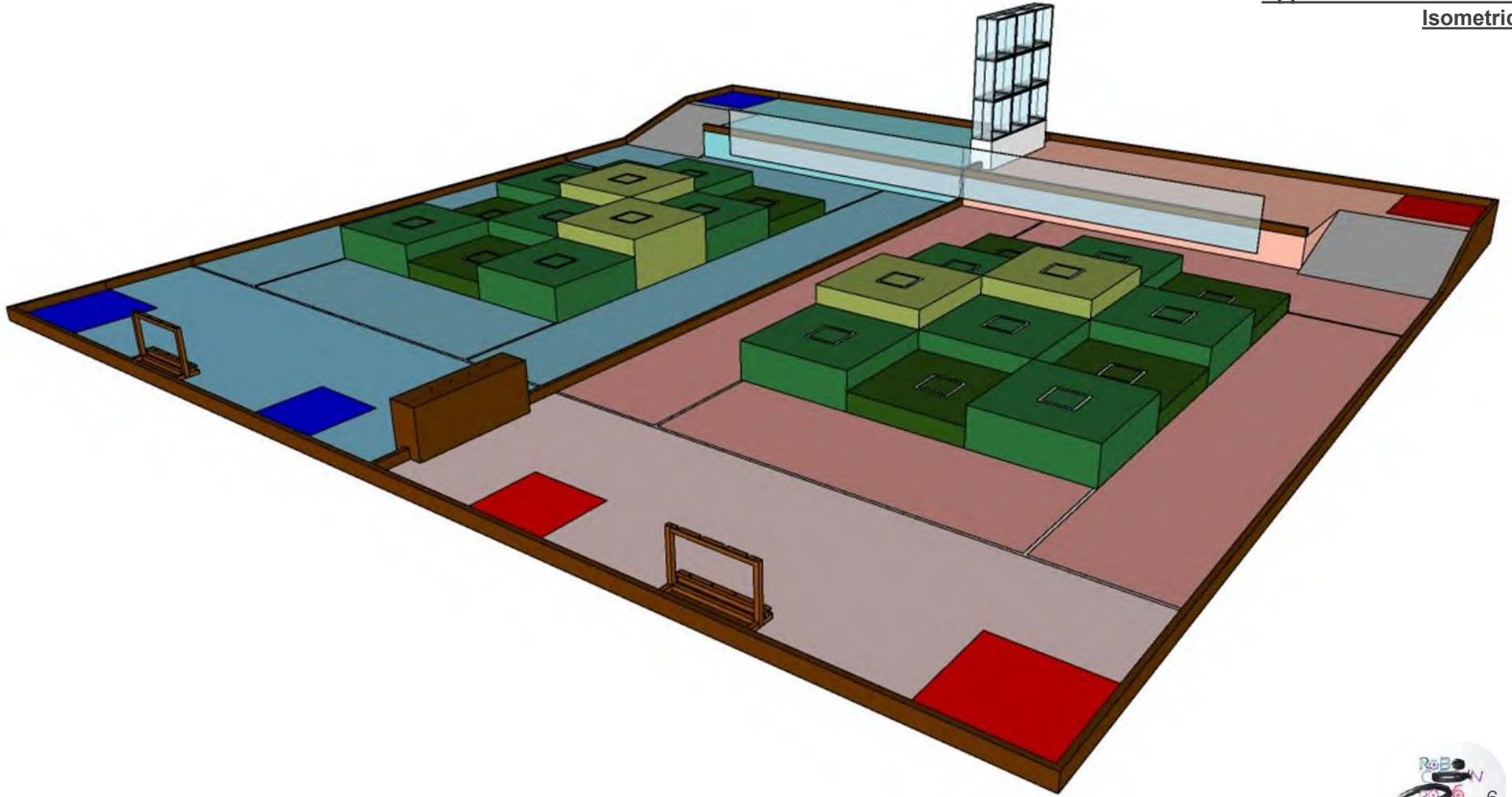
Appendix

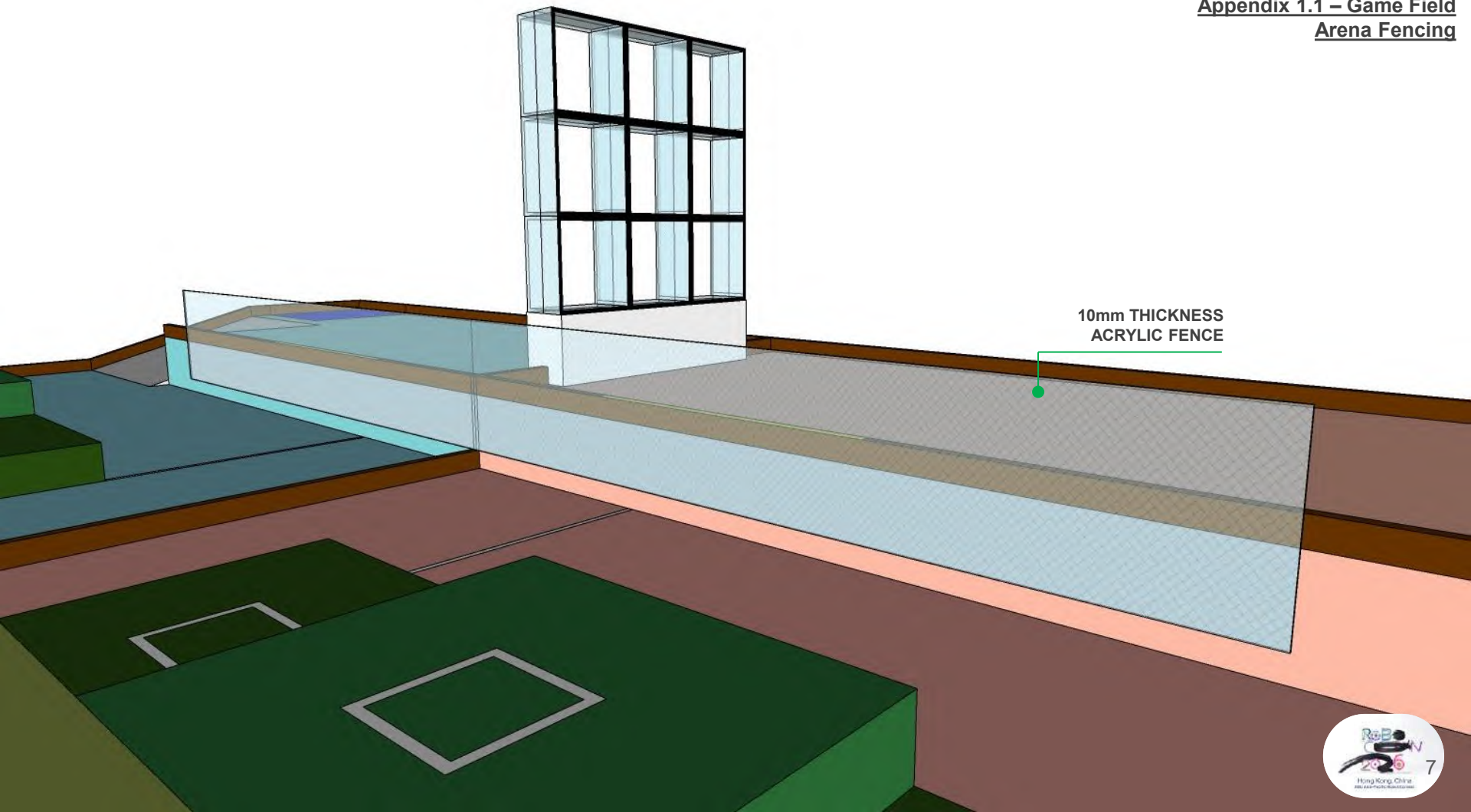
Version	Released Date	Summary	Approved By
0	2025/08/24	- Initial release with Rulebook	Organizing Committee
1.0	2025/10/9	- 2 nd release	Organizing Committee
1.1	2026/02/02	- 3 rd release	Organizing Committee

Content

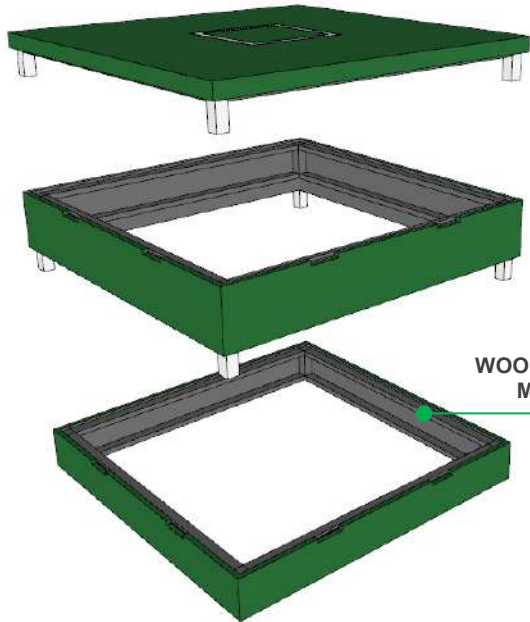
- Appendix 1 – Game Field
- Appendix 1 – Game Field Dimension
- Appendix 1 – Game Field Isometric
- Appendix 1.1 – Game Field Arena Fencing
- Appendix 1.2 – Meihua Forest
- Appendix 1.2 – Meihua Forest Isometric
- Appendix 2.1 – Staff
- Appendix 2.2.1 – Spearhead (Fist) **NEW**
- Appendix 2.2.1 – Spearhead (Palm) **NEW**
- Appendix 2.2.1 – Spearhead (Spear) **NEW**
- Appendix 2.2 – Assembled Weapon Length **NEW**
- Appendix 2.3 – Staff Rack
- Appendix 2.3 – Staff Rack Isometric
- Appendix 2.4 – Spearhead Rack
- Appendix 2.4 – Spearhead Rack Isometric
- Appendix 2.5 – Spearhead Orientation
- Appendix 3 – Tic-Tac-Toe Rack
- Appendix 3 – Tic-Tac-Toe Rack Isometric
- Appendix 4.1 – Kung Fu Scroll Carton **NEW**
- Appendix 4.3 – Kung Fu Scroll Recognition Patterns **NEW**





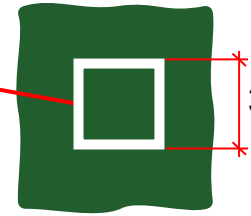
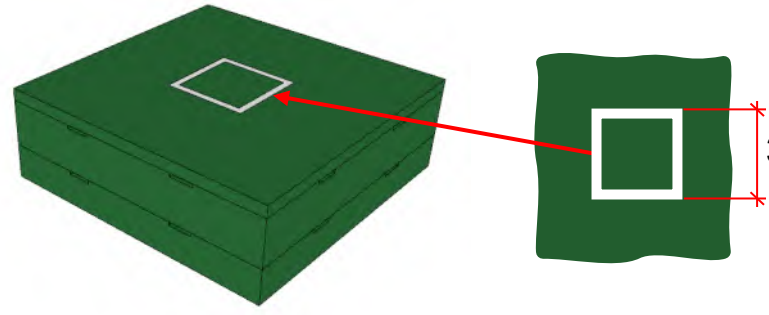


10mm THICKNESS
ACRYLIC FENCE



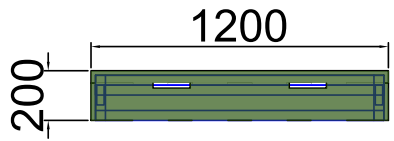
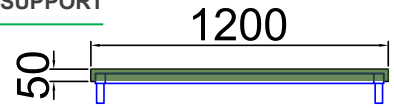
WOODEN BASE WITH METAL SUPPORT

EXPLODED VIEW
(400mmH)

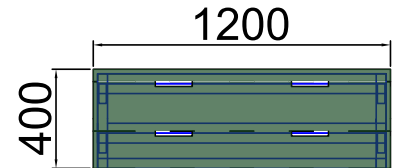
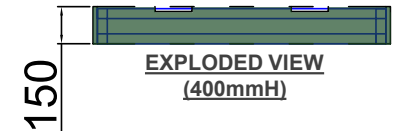
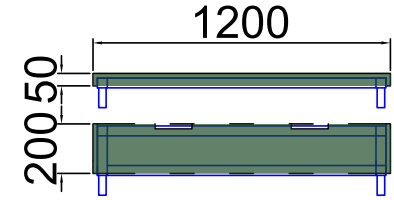


350x350mm

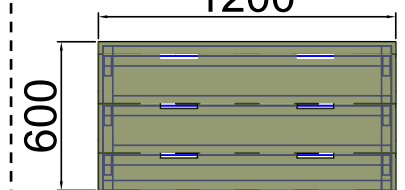
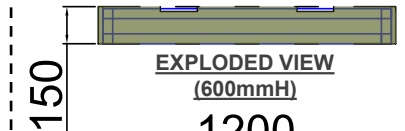
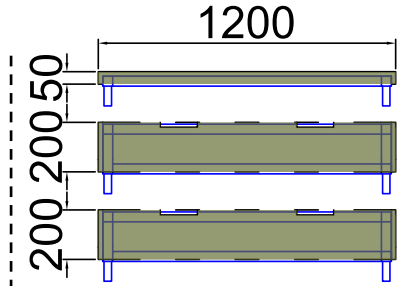
PREVIEW
(400mmH)



FRONT VIEW
(200mmH)

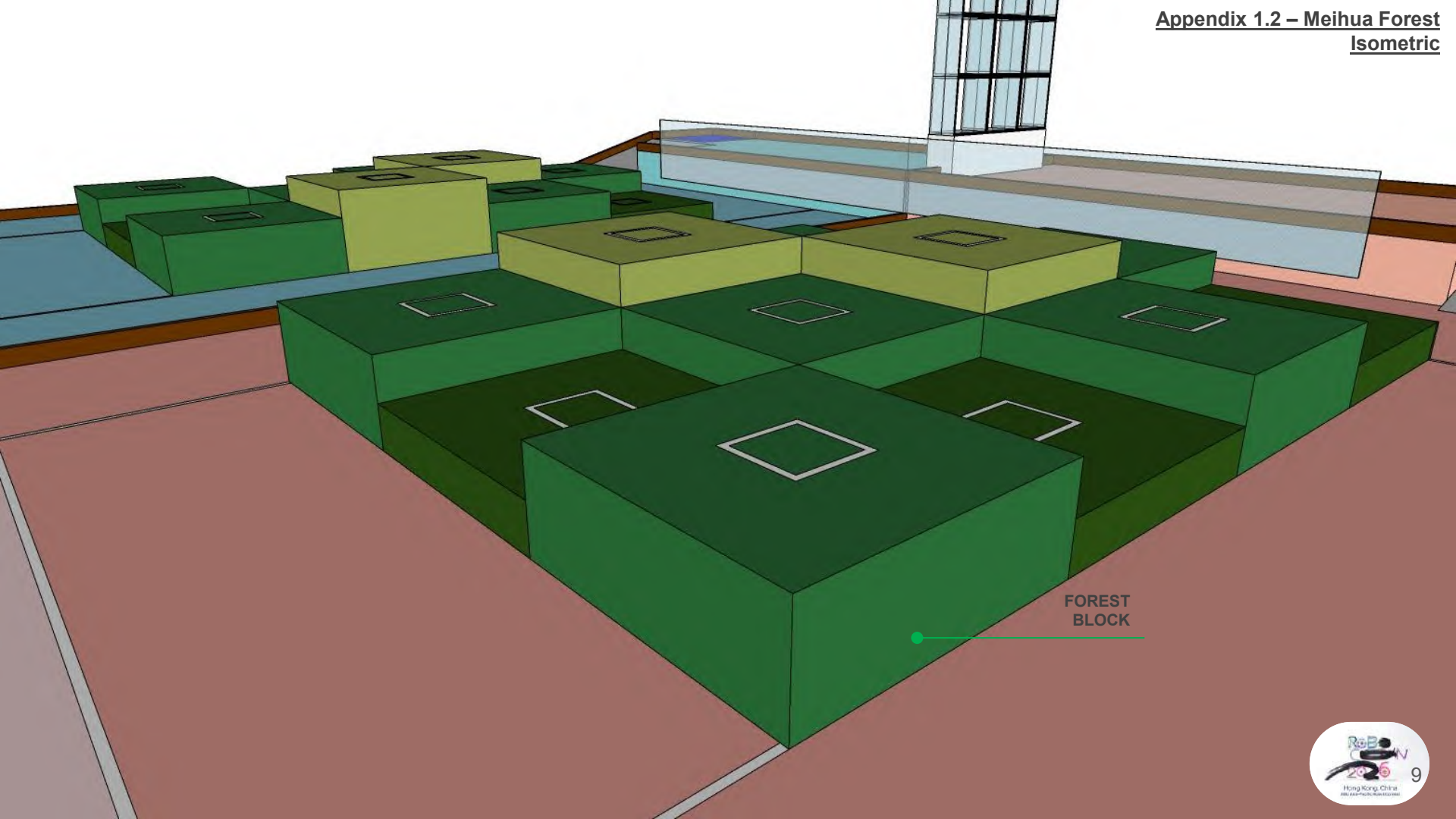


FRONT VIEW
(400mmH)



FRONT VIEW
(600mmH)

NOTE:
ALL DIMENSION IN MM.



FOREST
BLOCK



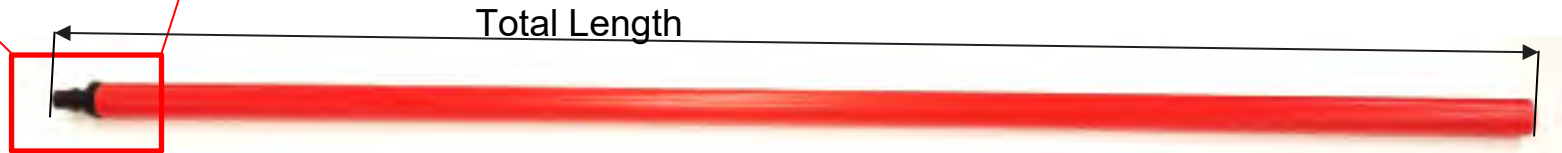
30PM Quick Coupler



PVC wall thickness



PVC Diameter



Assembled staff

Material: PVC pipe glued with assemble connector (POM Quick Coupler)

PVC Pipe: Length 1000mm, Outer Diameter 20.3mm ($\pm 1\%$); Wall thickness 2.0mm ($\pm 1\%$)

POM Quick Coupler: 30PM, Weight: 6g

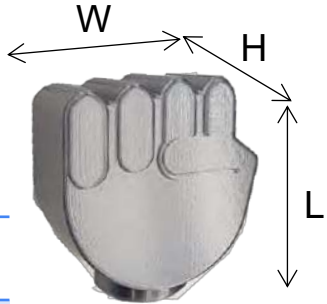
Total Length: 1027mm ($\pm 0.5\%$)

Total Weight: ~195g ($\pm 3\%$)



Assembled Item	Material	Assembled Length	Assembled Weight
Spearhead – Fist	PLA/ ABS assemble with connector (Plastic Quick Coupler)	128mm (±1%)	102g (±5%)

Items	Material	Model	Weight	Length
Connector (Quick Coupler)	POM	40SM	22g (±5%)	52.5mm (±0.5%)



Items	Methodology	Material	Wall Thickness	infill	Thread	Dimension (LxWxH)	Weight
Fist	3D printing	PLA ABS	1.6mm 1.52mm	10% 17%	G1/2-14	89x84x50mm (±5%)	80g (±5%)

The color, material, and configuration shown are illustrative. Dimensions and weight specifications take precedence.



Assembled Item	Material	Assembled Length	Assembled Weight
Spearhead – Palm	PLA/ABS assemble with connector (Plastic Quick Coupler)	80mm (±1%)	100g (±5%)

Items	Material	Model	Weight	Length
Connector (Quick Coupler)	POM	40SM	22g (±5%)	52.5mm (±0.5%)



Items	Methodology	Material	Wall Thickness	infill	Thread	Dimension (LxWxH)	Weight
Palm	3D printing	PLA ABS	1.6mm 1.52mm	10% 17%	G1/2-14	133.6x84x41mm (±5%)	78g (±5%)

The color, material, and configuration shown are illustrative. Dimensions and weight specifications take precedence.



Assembled Item	Material	Assembled Length	Assembled Weight
Spearhead – Spear	PLA/ABS assemble with connector (Plastic Quick Coupler)	288mm (±1%)	117g (±5%)

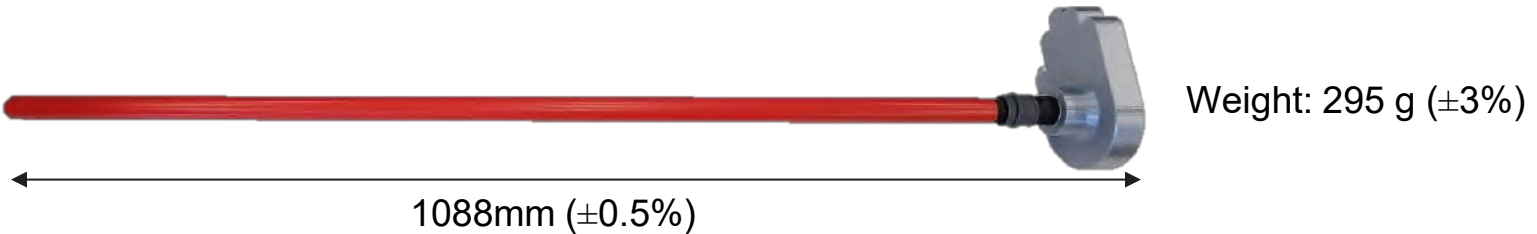
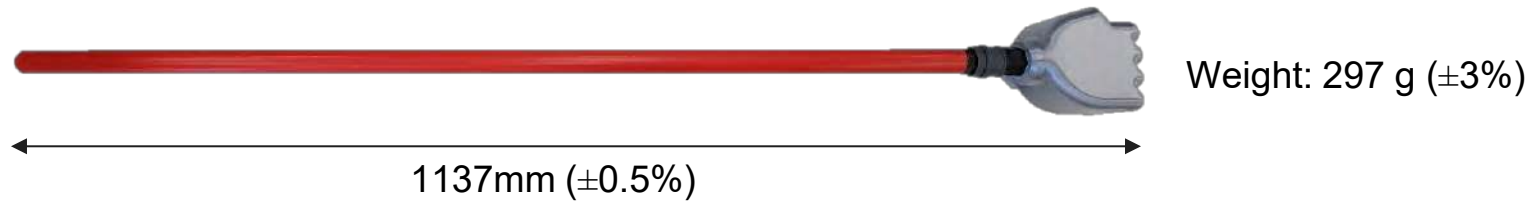
Items	Material	Model	Weight	Length
Connector (Quick Coupler)	POM	40SM	22g (±5%)	52.5mm (±0.5%)



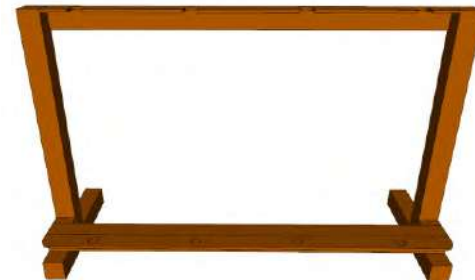
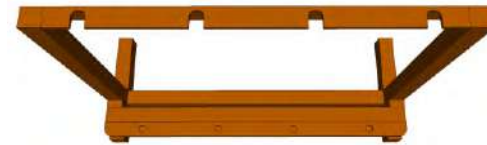
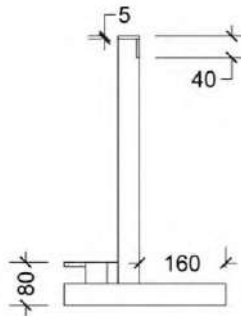
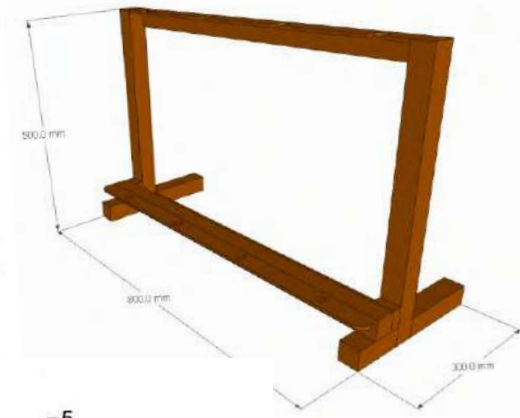
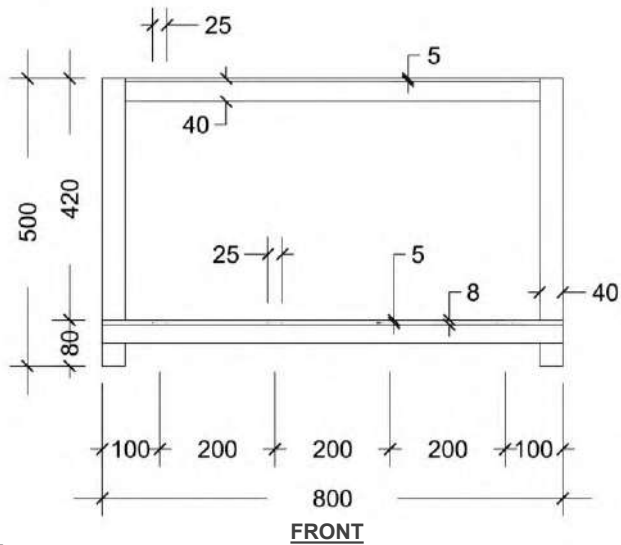
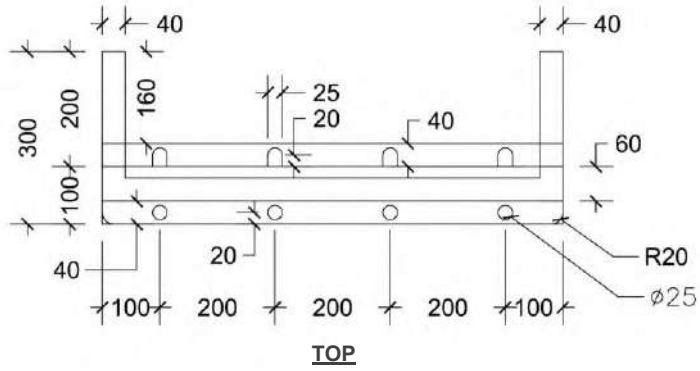
Items	Methodology	Material	Wall Thickness	infill	Thread	Dimension (LxWxH)	Weight
Spear	3D printing	PLA ABS	1.6mm 1.52mm	10% 17%	G1/2-14	251x77x35.8mm (±5%)	95g (±5%)



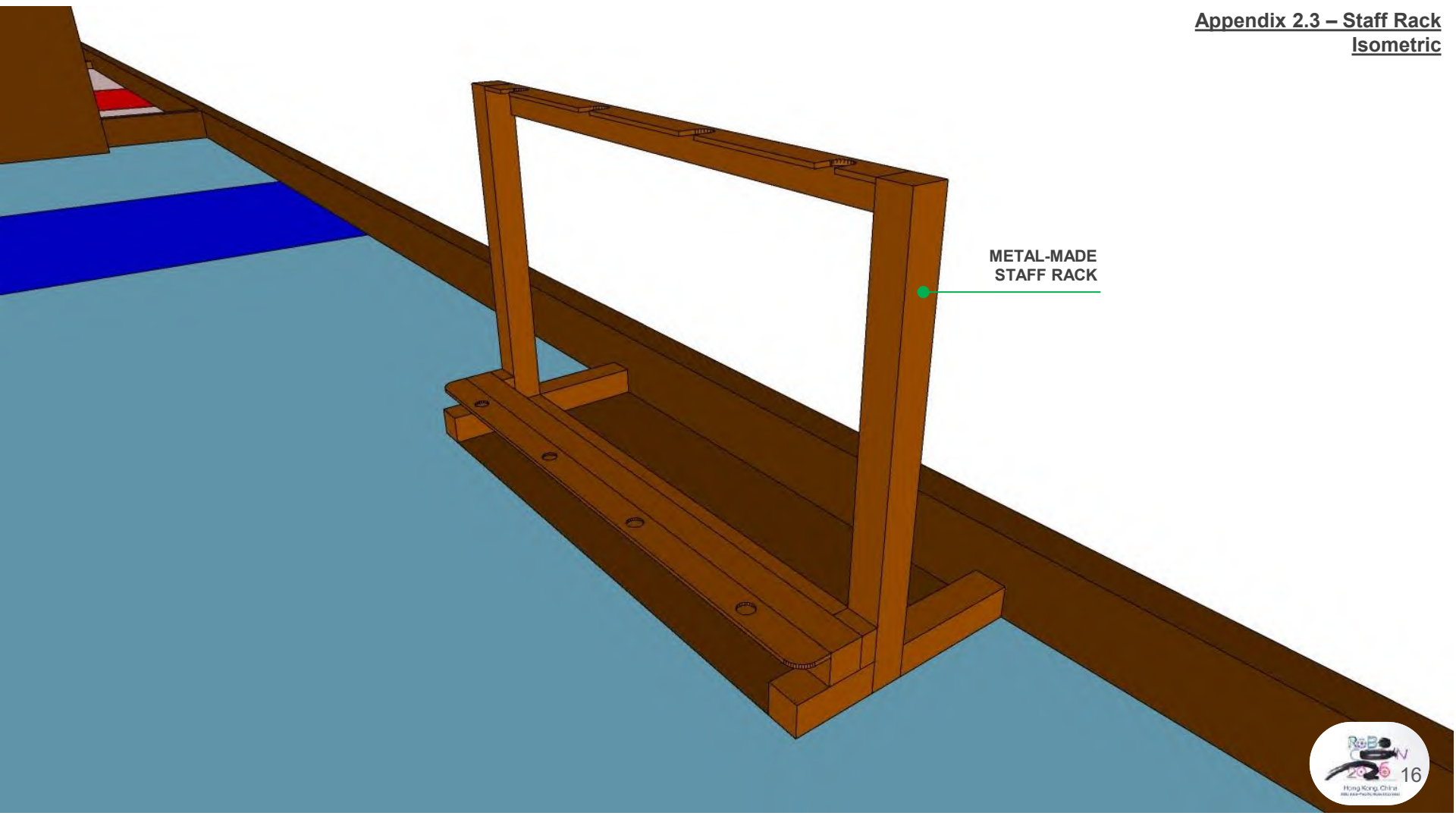
The color, material, and configuration shown are illustrative. Dimensions and weight specifications take precedence.



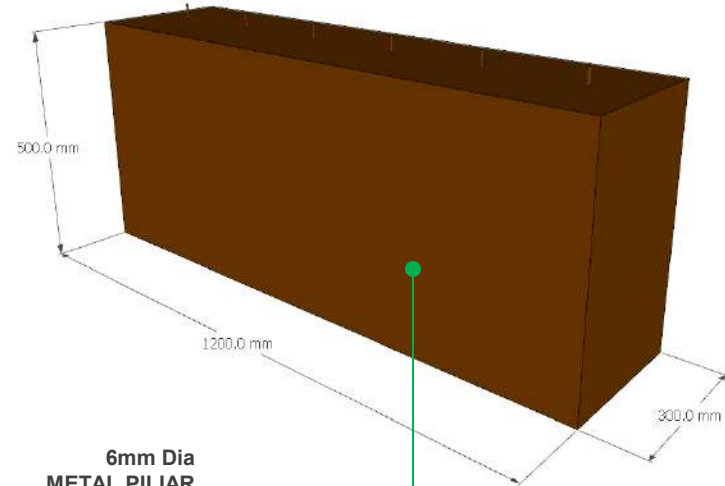
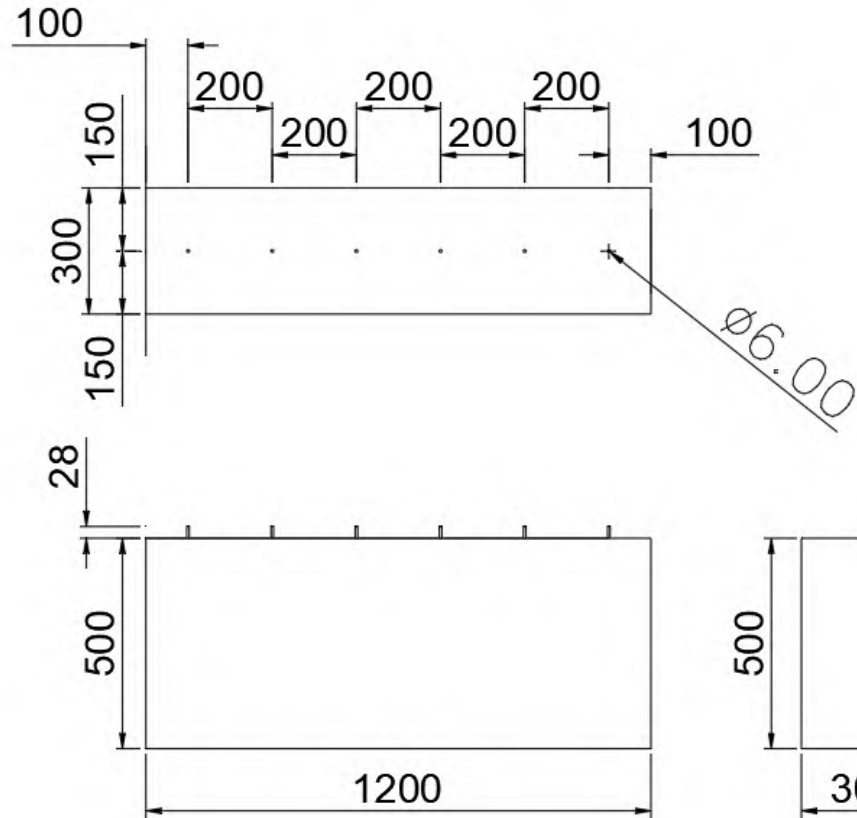
The color shown are illustrative. Dimensions and weight specifications take precedence.



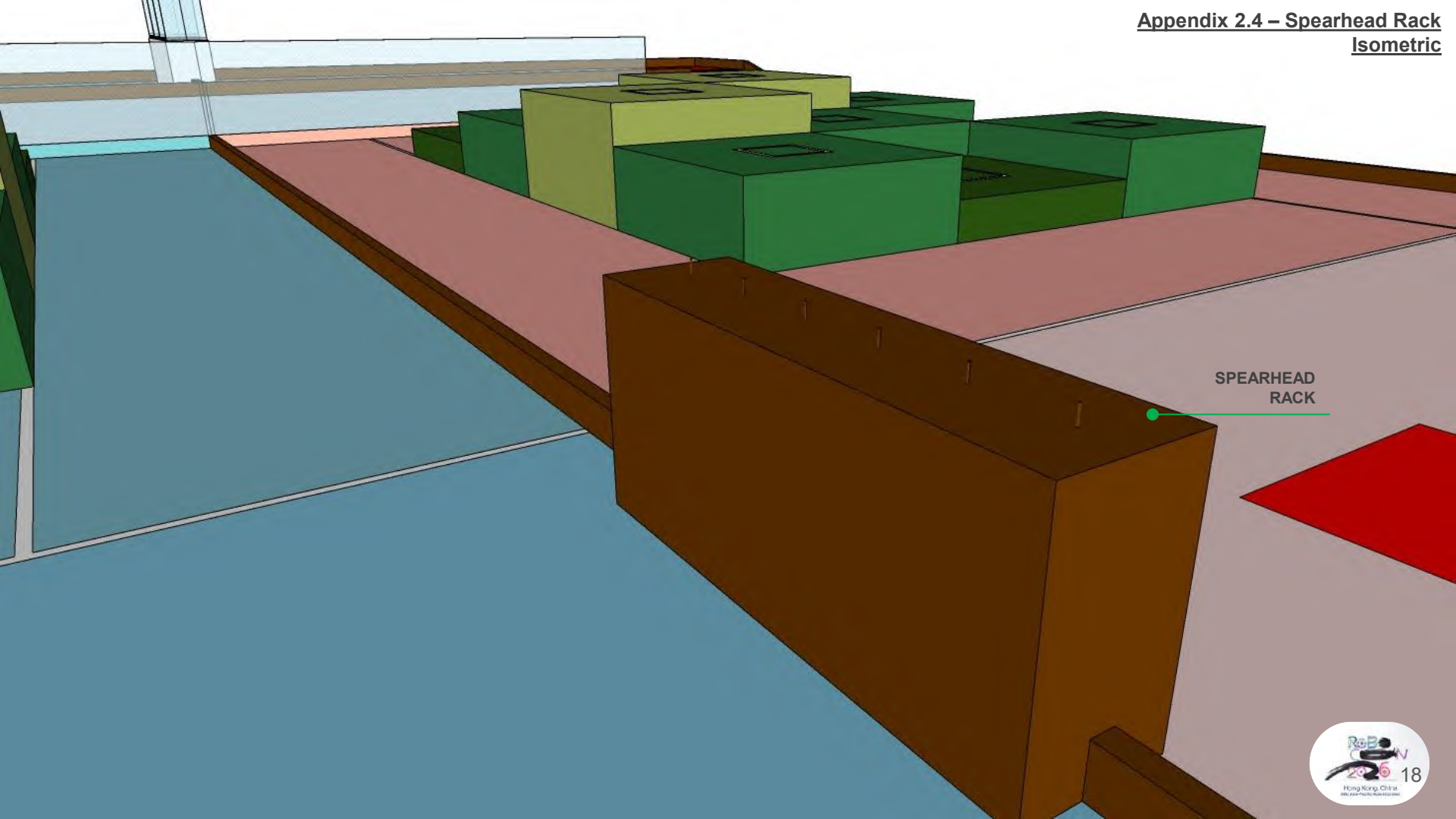
NOTE:
ALL DIMENSION IN MM.



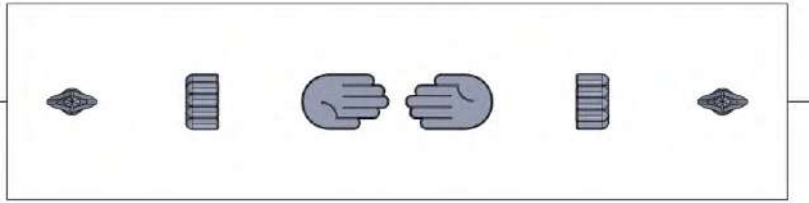
METAL-MADE
STAFF RACK



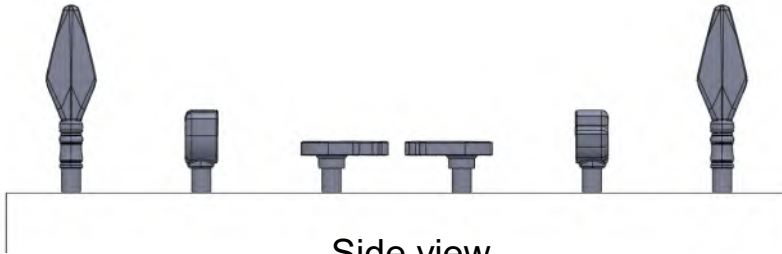
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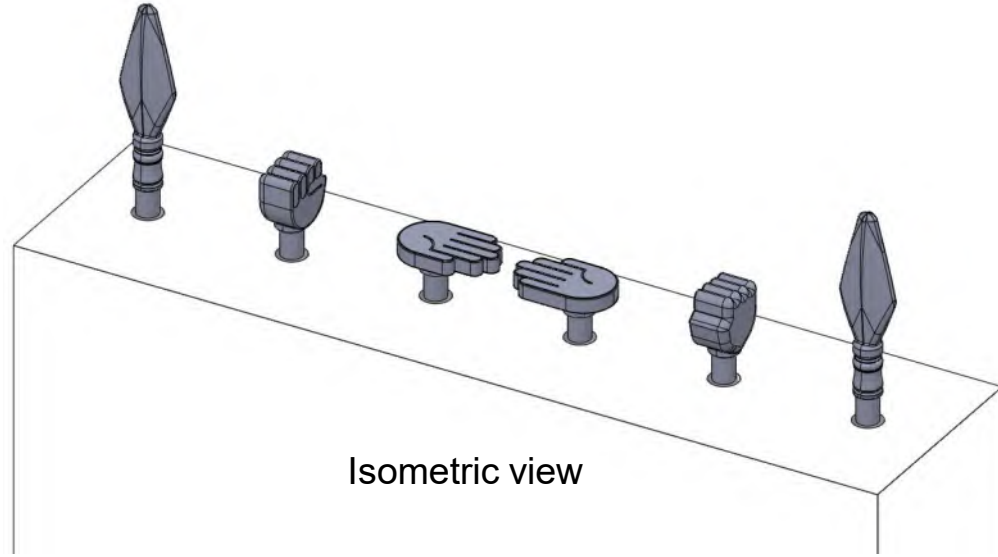
SPEARHEAD
RACK



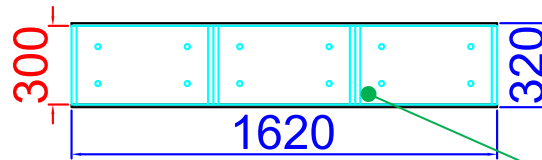
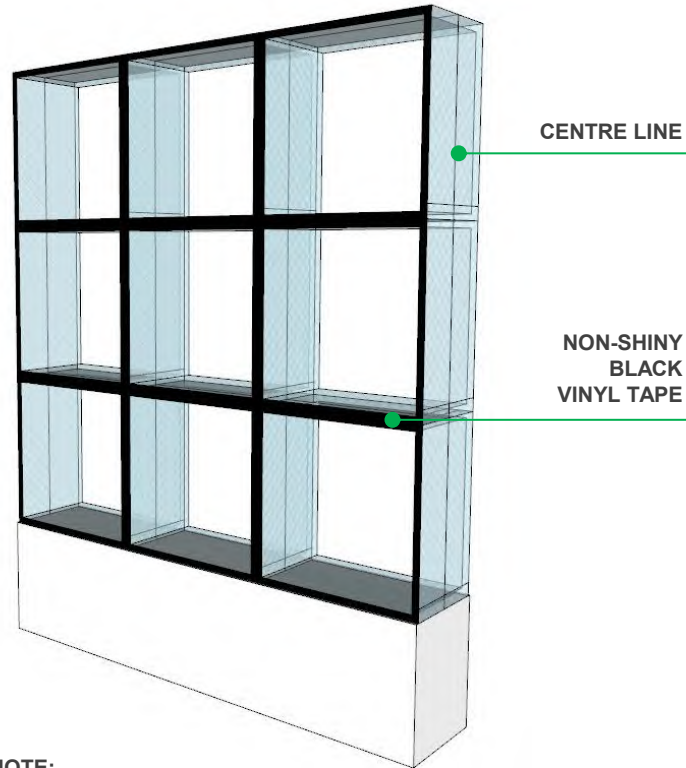
Top view



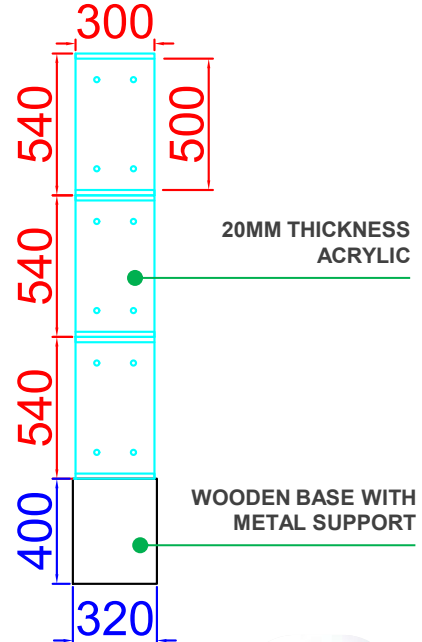
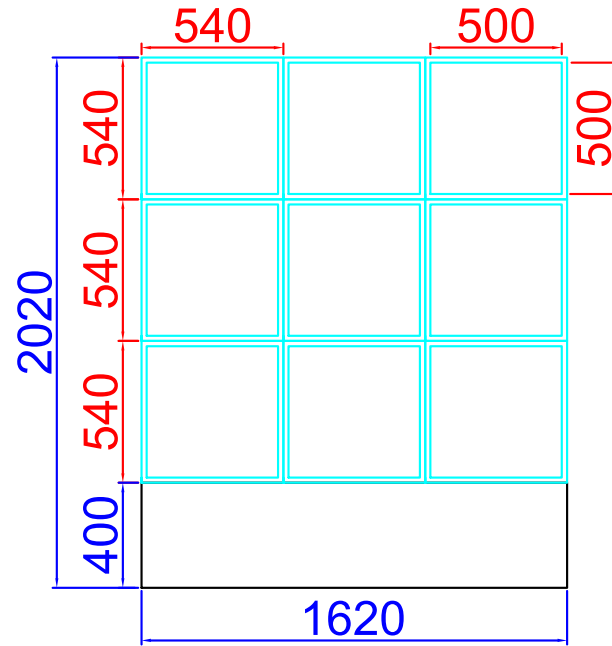
Side view



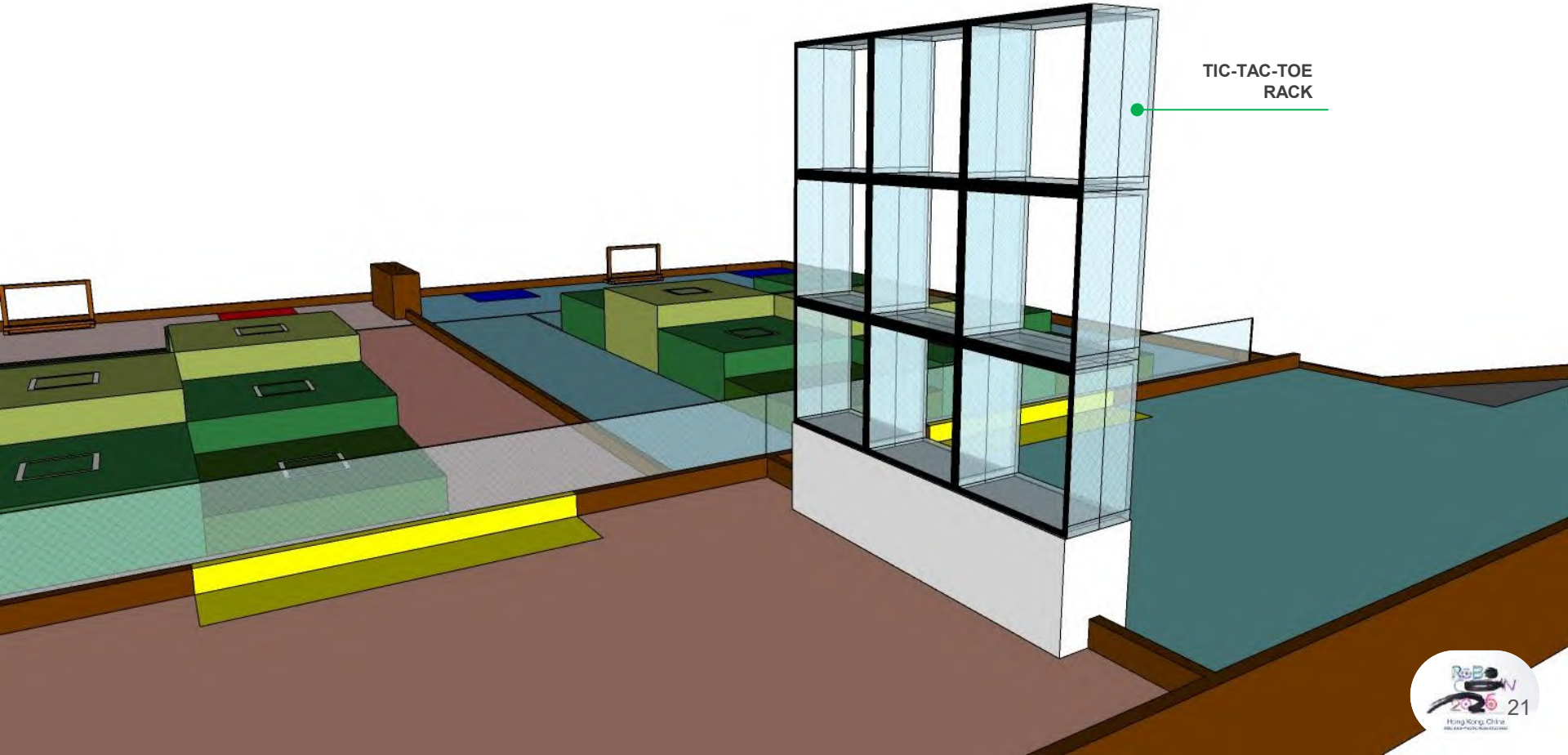
Isometric view



FIX WITH COACH BOLT



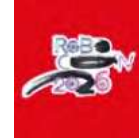
NOTE:
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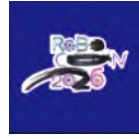
TIC-TAC-TOE
RACK



*Picture for reference

R1 KFS**Dimension:** 350mm x 350mm x 350mm(±5%)**Material:** 3 layers Carton Box, cover by 6 sides of sticker**Weight:** 630g (±20%)*The same symbolic texts/pictures are sticked on 5 sides of the KFS for recognition, no images on the bottom surface.**R2 Real KFS****Dimension:** 350mm x 350mm x 350mm(±5%)**Material:** 3 layers Carton Box, cover by 6 sides of sticker**Weight:** 630g (±20%)*The same symbolic texts/pictures are sticked on 5 sides of the KFS for recognition, no images on the bottom surface.**R2 Fake KFS****Dimension:** 350mm x 350mm x 350mm(±5%)**Material:** 3 layers Carton Box, cover by 6 sides of sticker**Weight:** 630g (±20%)*Different symbolic texts/pictures are sticked on 5 sides of the KFS for recognition, no images on the bottom surface. A ribbon will be applied on the bottom surface. A red ribbon will be applied on Blue team's Fake KFS, and vice versa.

Red



Blue



Red



Blue



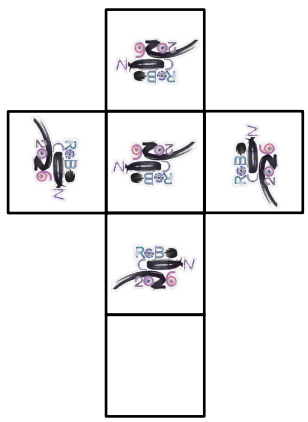
Red



Blue



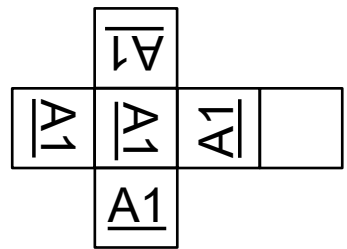
R1



R1 Pattern Orientation

R2 Real

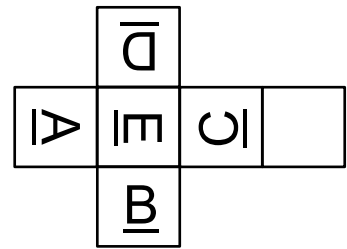
	A	B	C	D	E
1					
2					
3					



Real Pattern Orientation
(Example: A1)

R2 Fake

	A	B	C	D	E
Set 1					
Set 2					
Set 3					

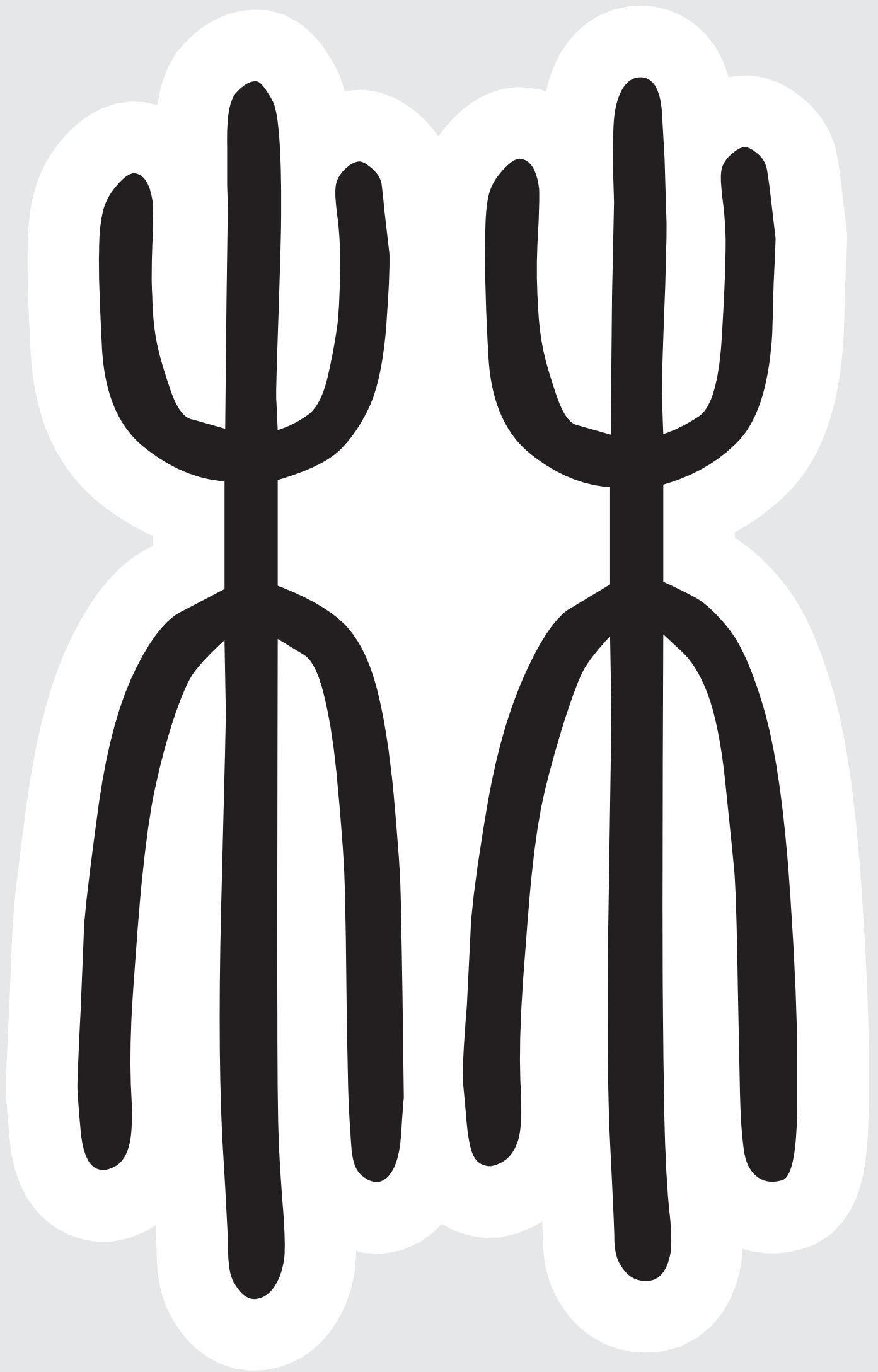


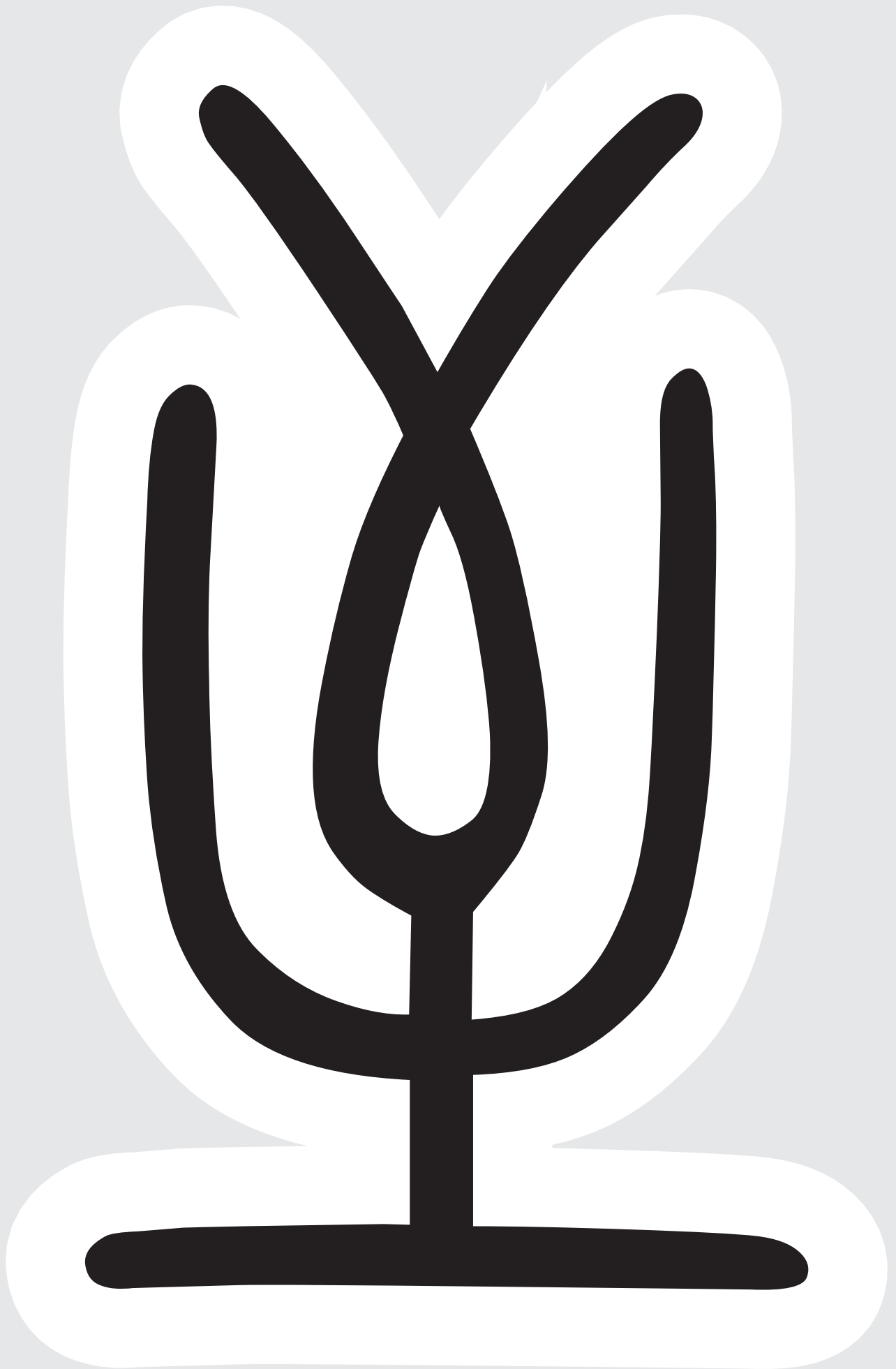
Fake Pattern Orientation

*Picture for reference

ROB
C
206

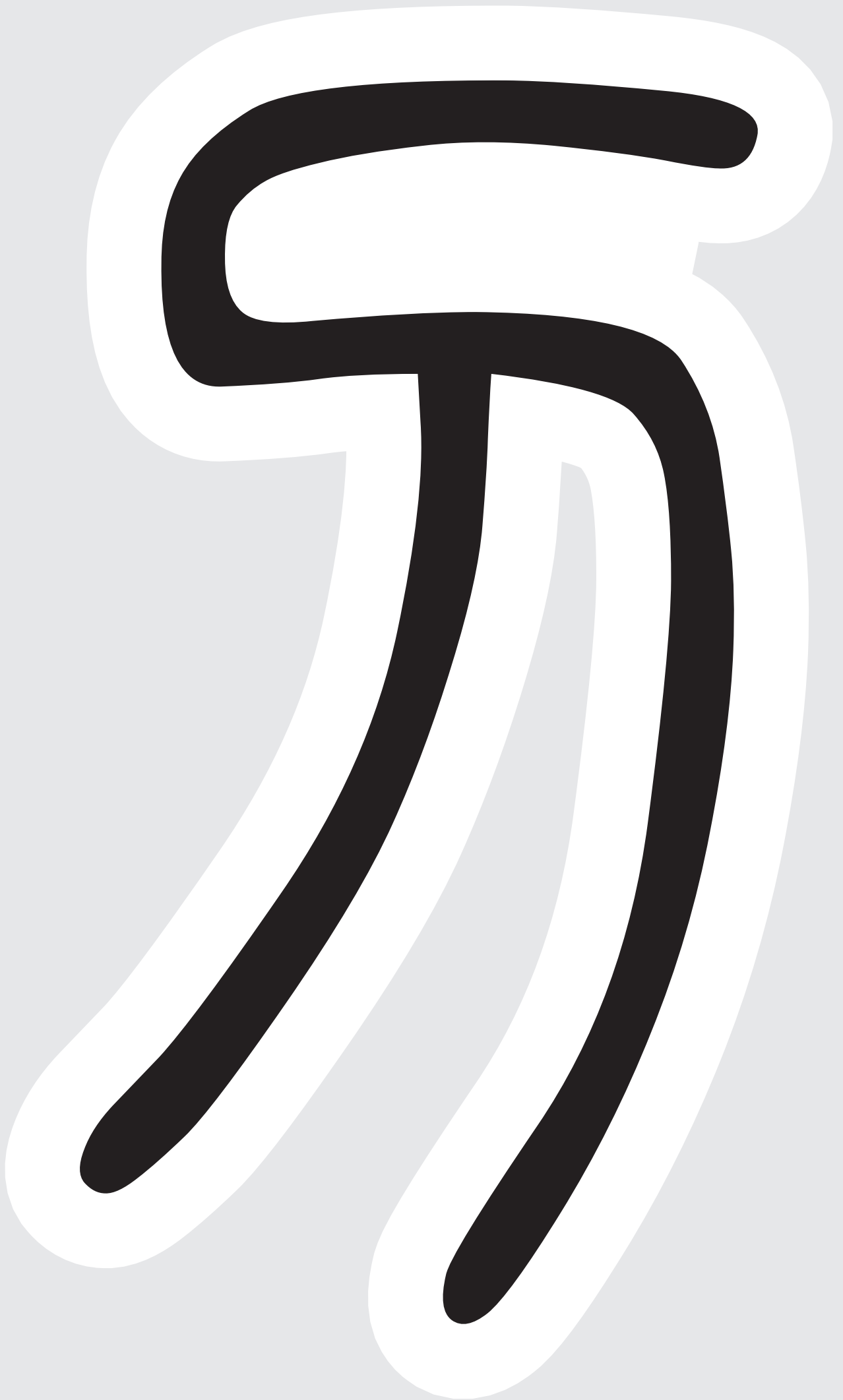




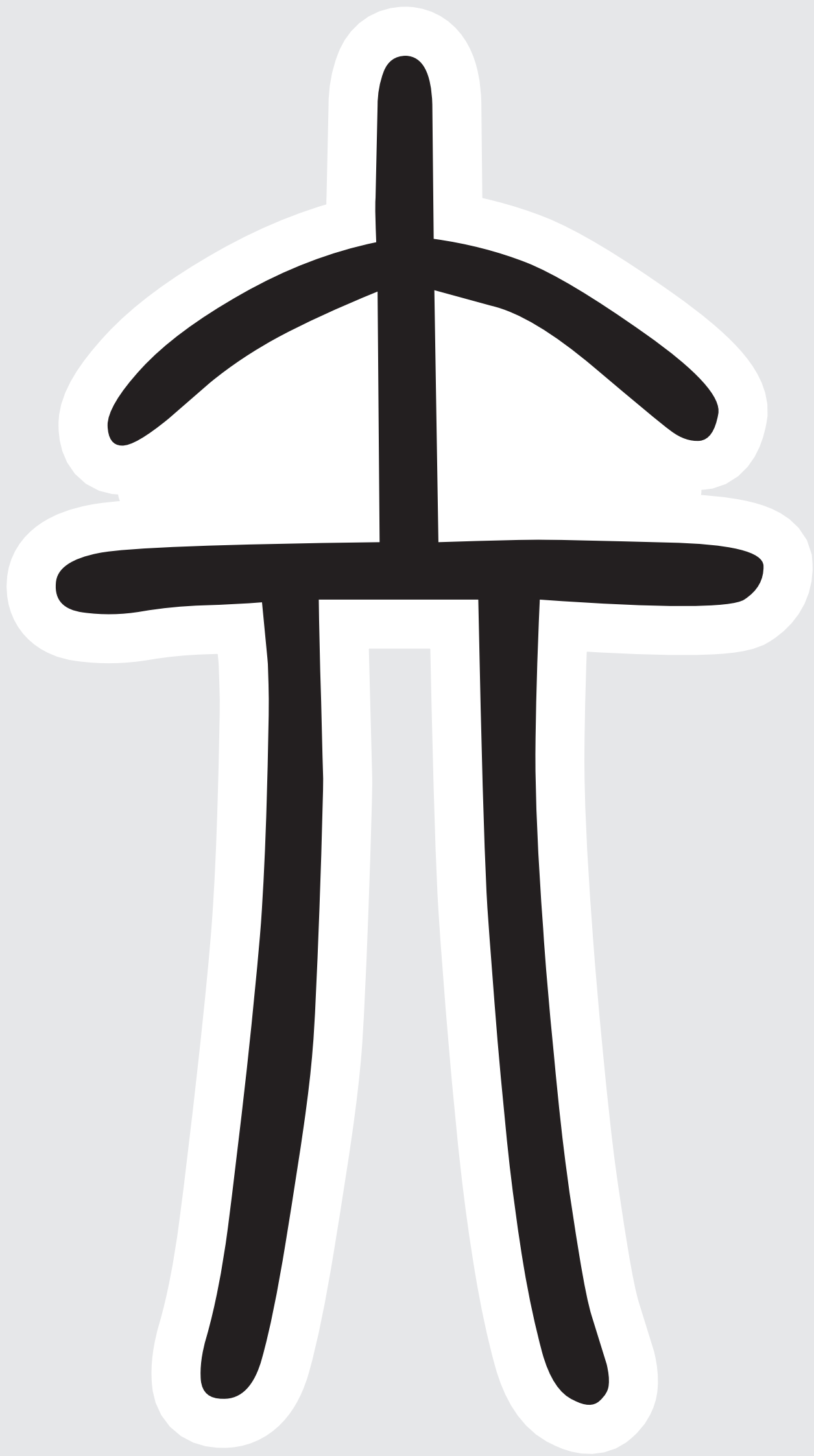






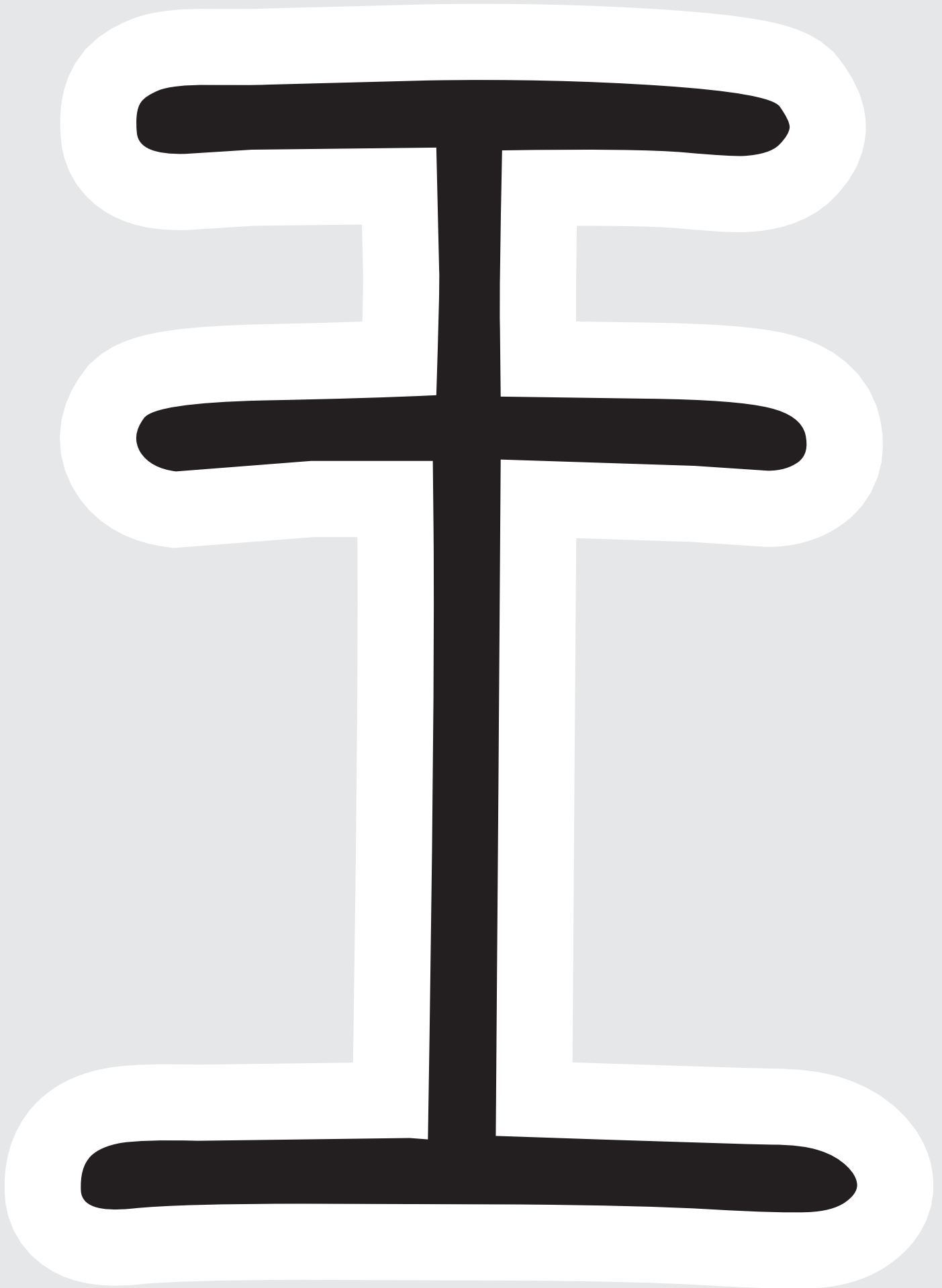






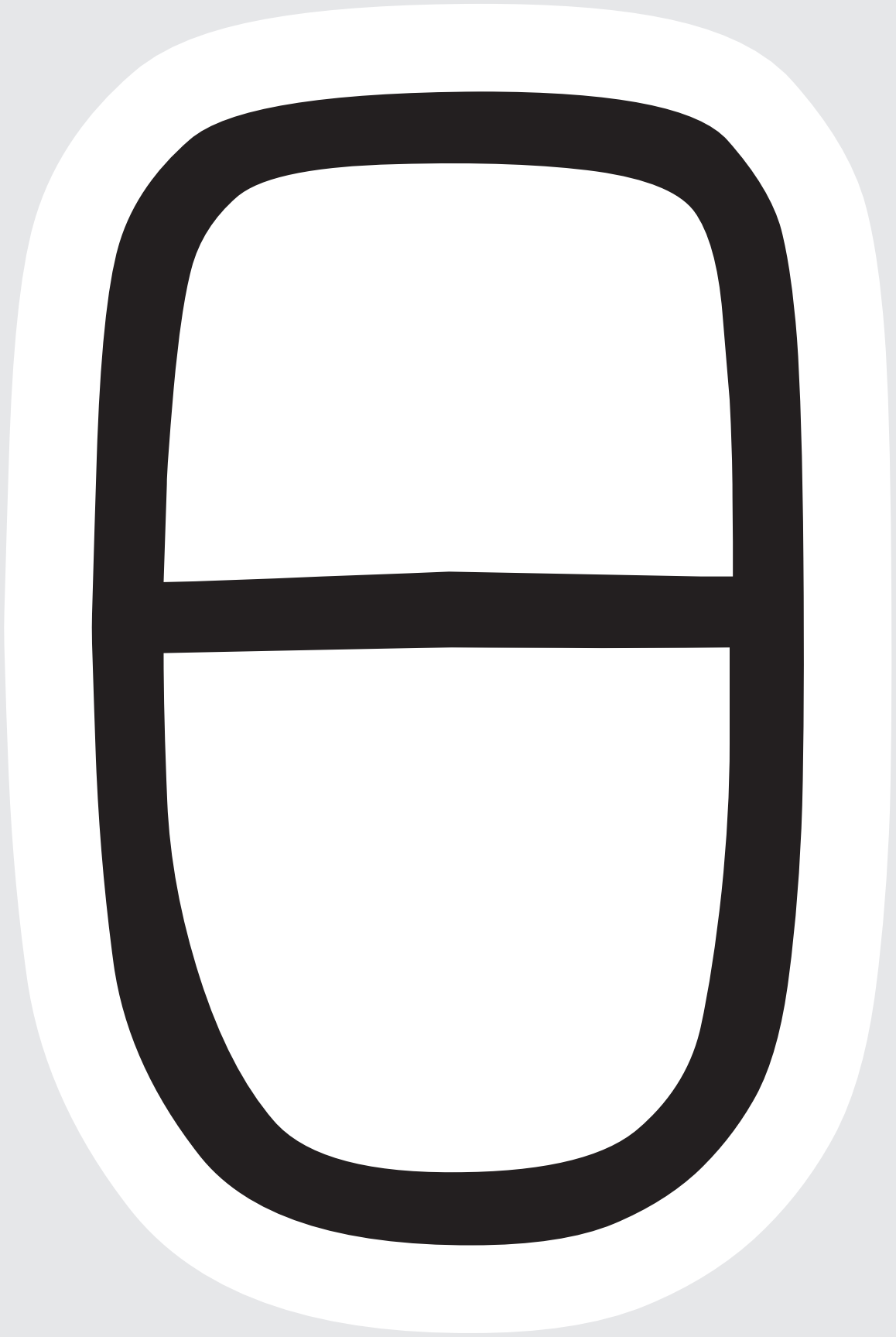


德





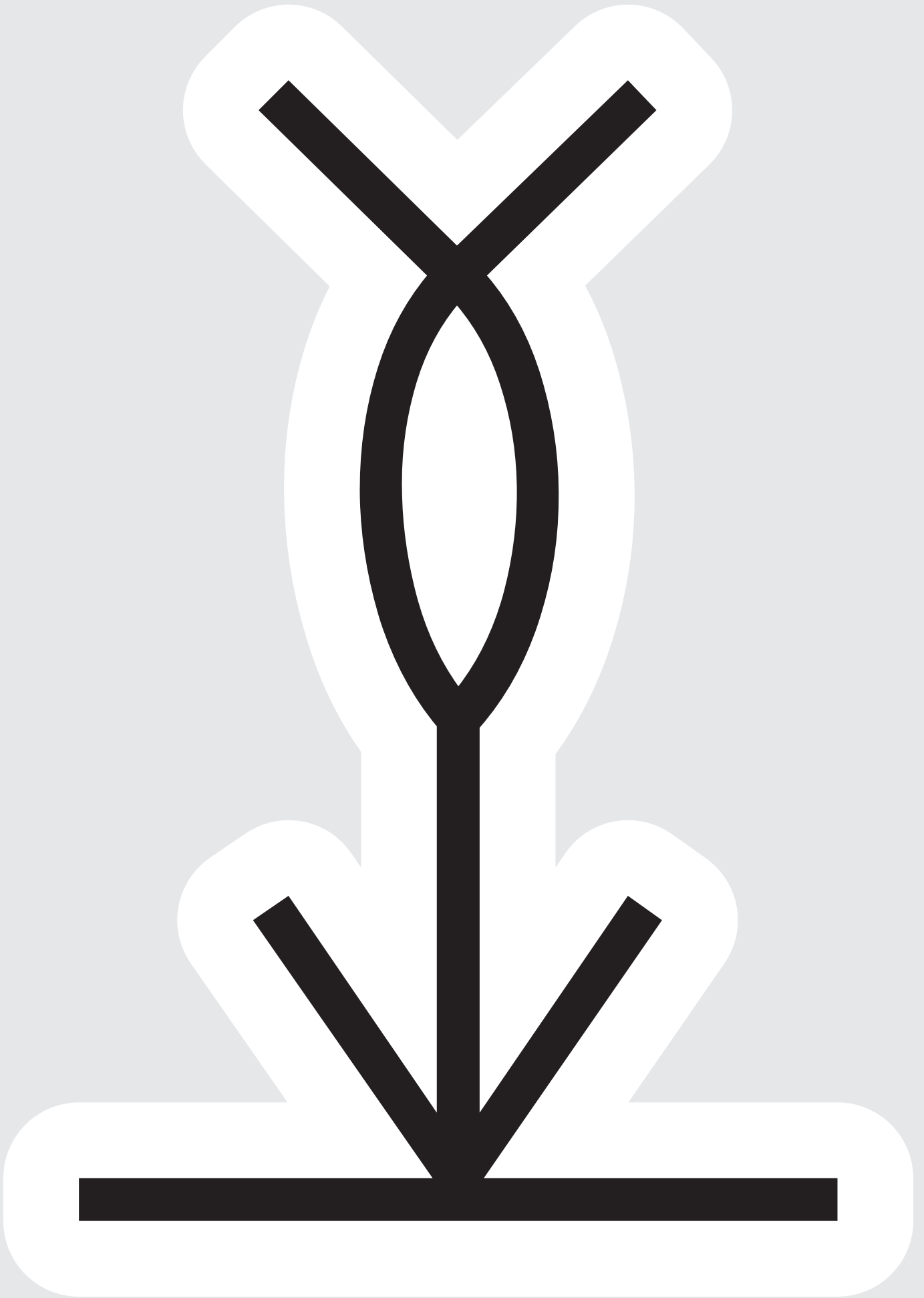


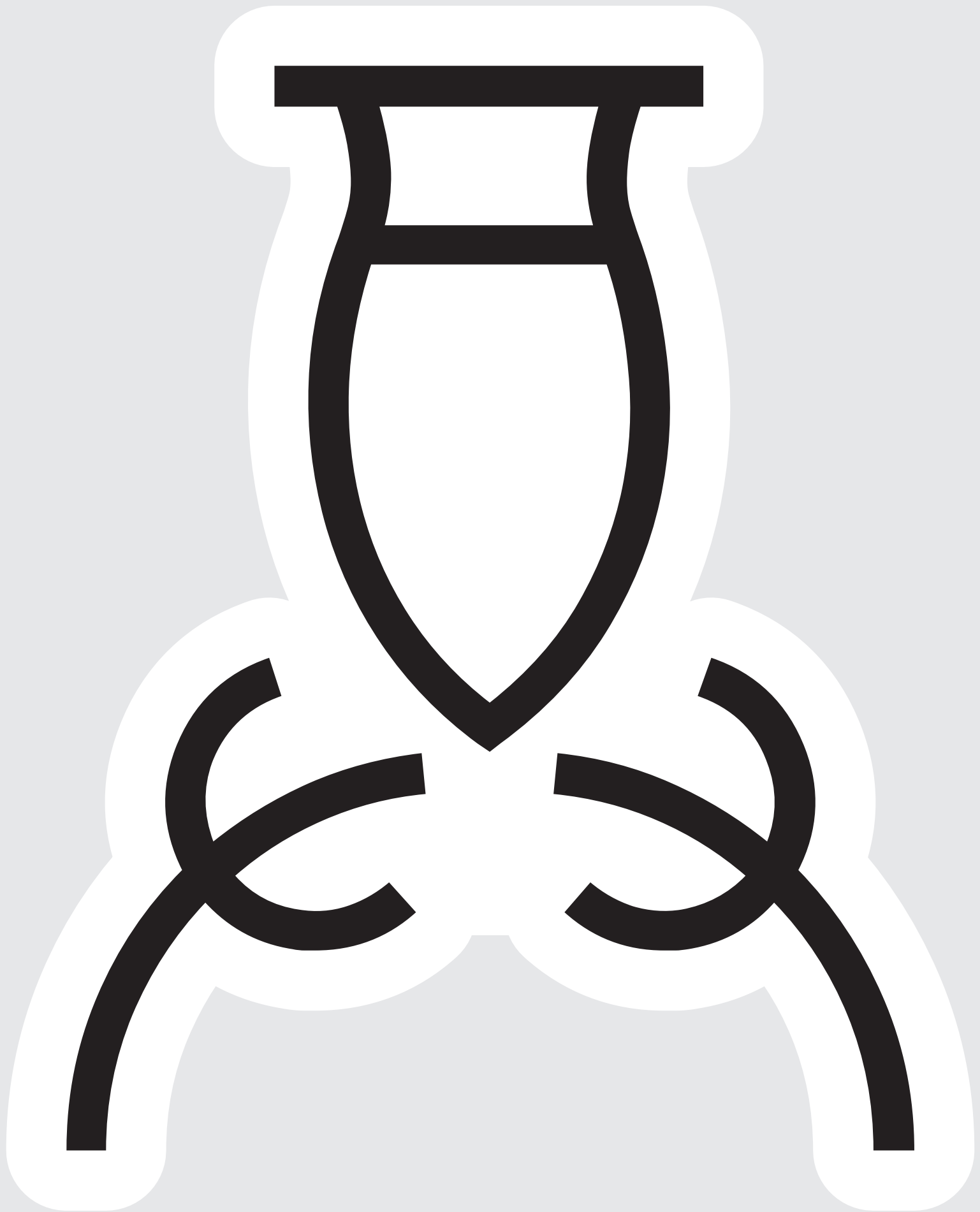








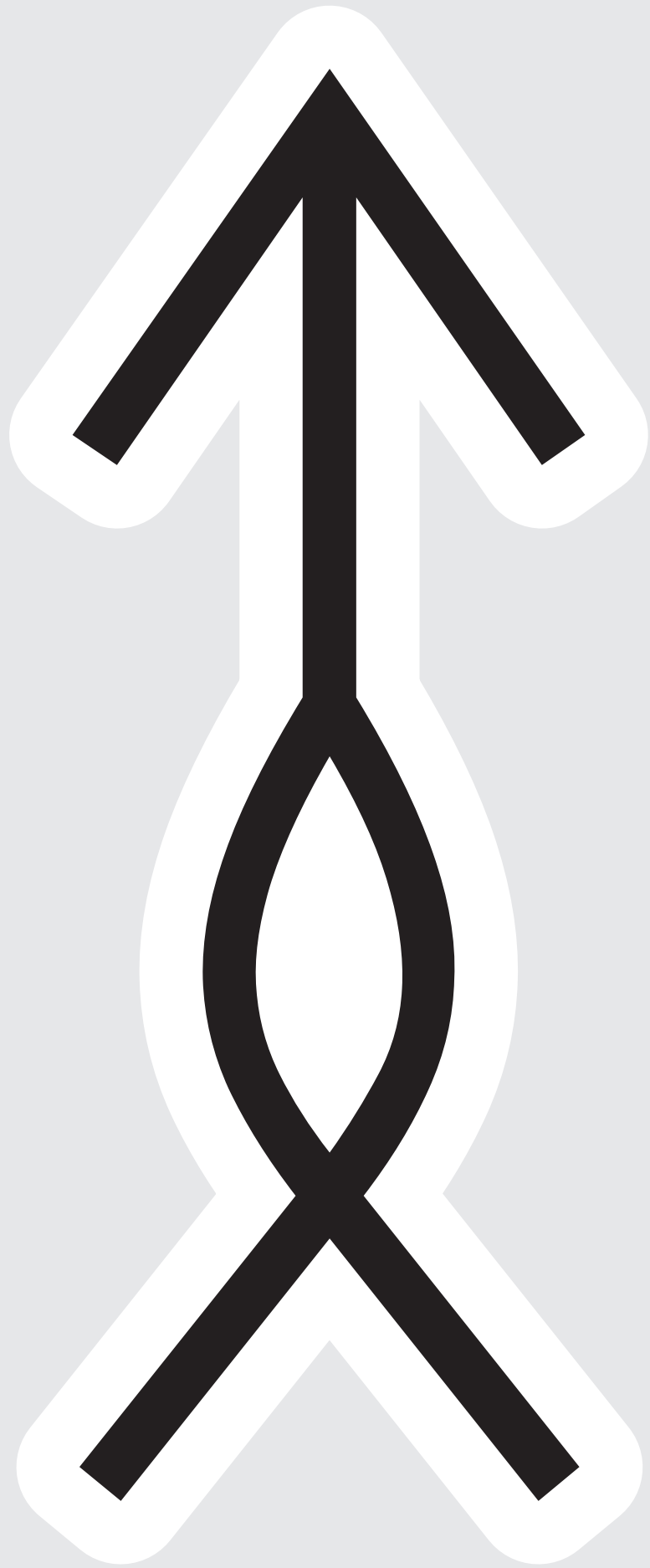




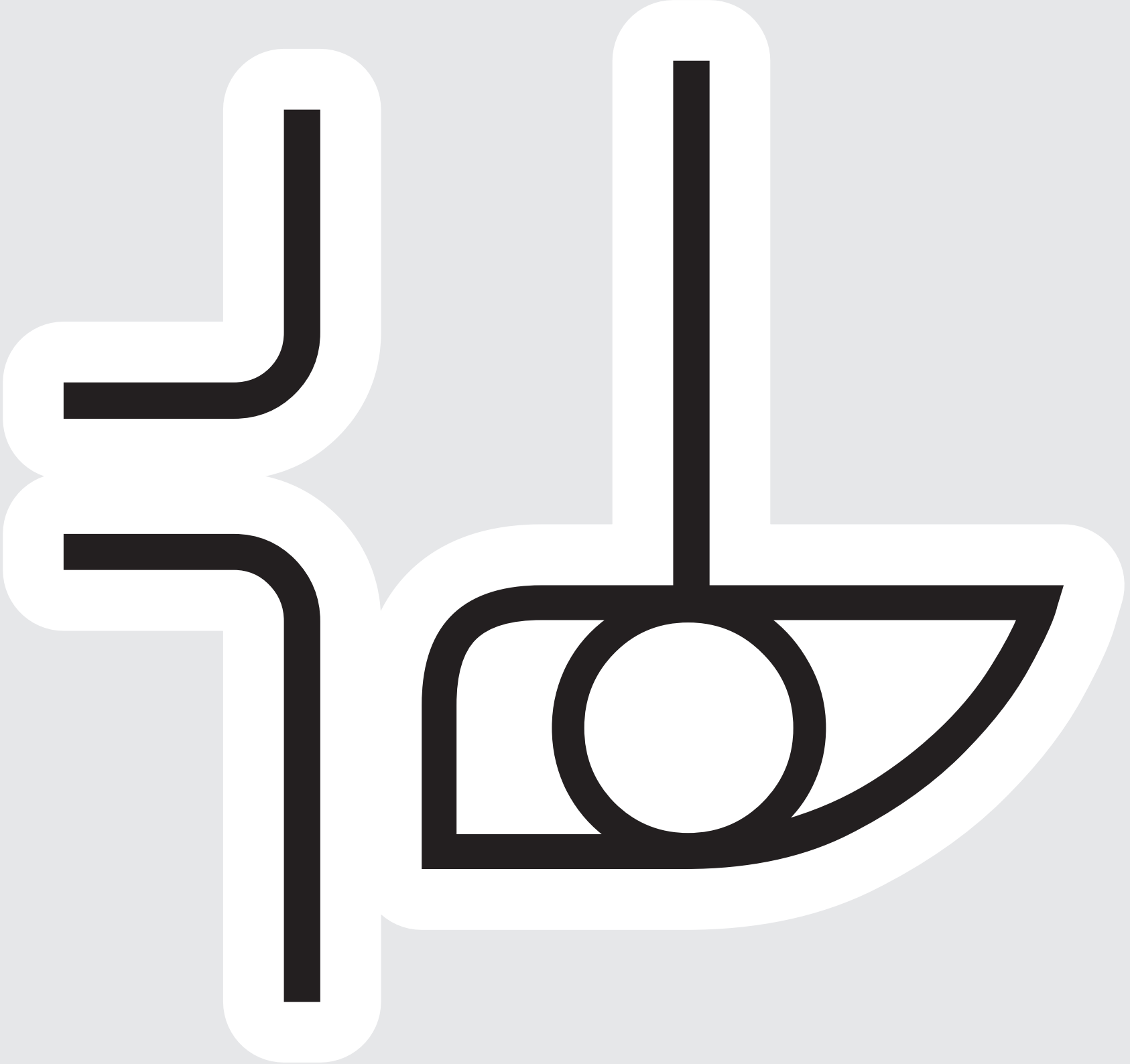


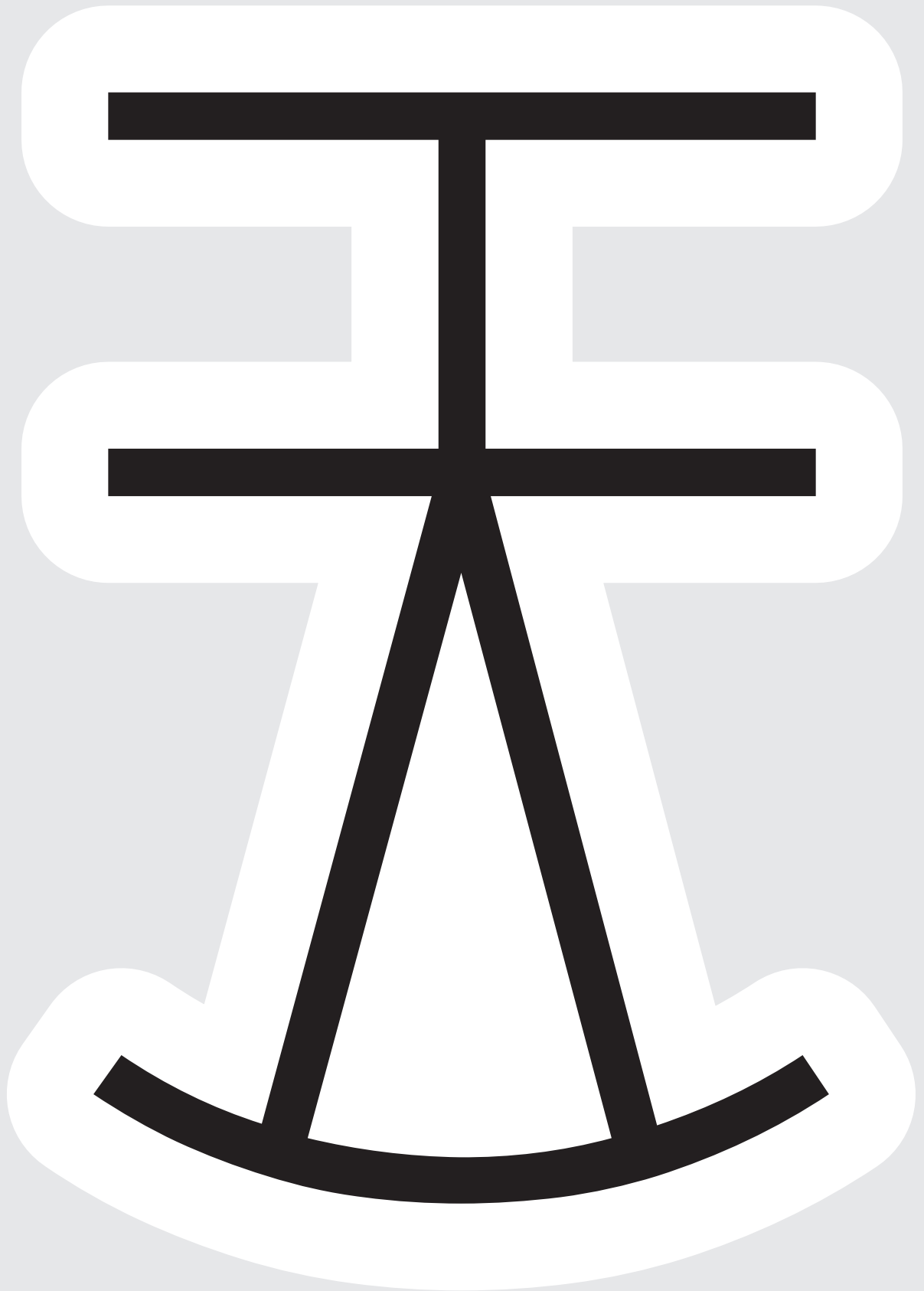




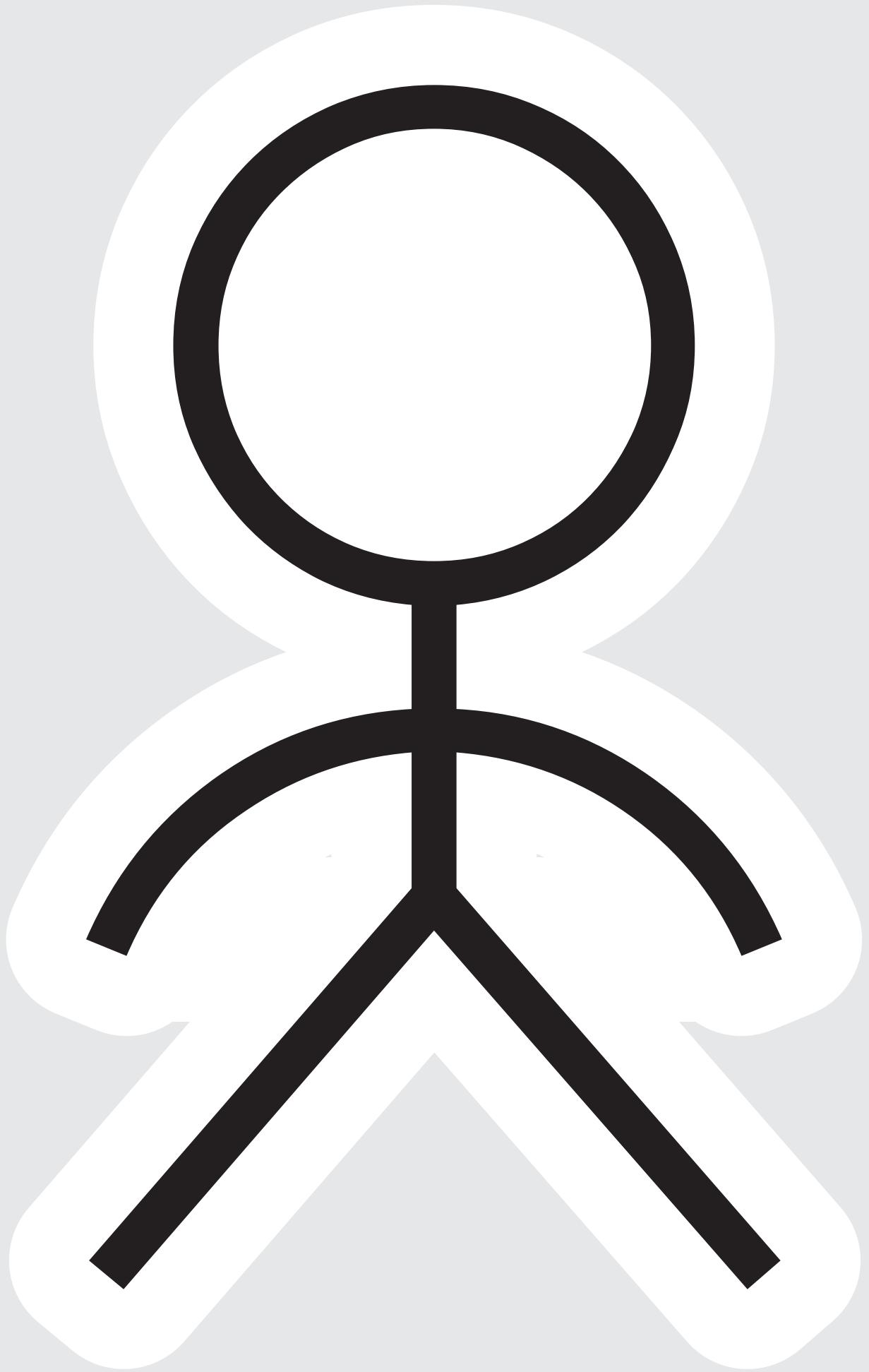
















ABU Asia-Pacific Robot Contest 2026 Hong Kong, China



Frequently Asked Questions (FAQs) - “Kung Fu Quest”

2 February 2026

Asia-Pacific Robot Contest 2026 Hong Kong, China

Organising Committee

[<https://www.rthk.hk/aburobocon2026>]

The FAQs

#	Released Date	Summary	Approved By
1	2025/12/17	<ul style="list-style-type: none">- Initial release- Clarification of Game Rule	Organizing Committee
2	2026/02/02	<ul style="list-style-type: none">- 2nd release- Clarification of Game Rule- Clarification of FAQ (Feb 2026)	Organizing Committee

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Rulebook Clarification (Dec 2025)

Update: 2025/12/15

3	<p>3.8 In the Arena:</p> <p>3.8.1 R1 places R1 KFS onto Tic-Tac-Toe Bottom Row slot(s).</p> <p>3.8.2 R2 places R2 KFS onto Tic-Tac-Toe Middle Row slot(s).</p> <p>3.8.3 R2, carried by R1, places R2 KFS onto Tic-Tac-Toe Top Row slot(s).</p>	<p>3.8 In the Arena:</p> <p>3.8.1 R1 places R1 KFS onto Tic-Tac-Toe Bottom Row slot(s) individually.</p> <p>3.8.2 R2 places R2 KFS onto Tic-Tac-Toe Middle Row slot(s) individually.</p> <p>3.8.3 R2, carried by R1, places R2 KFS onto Tic-Tac-Toe Top Row slot(s) perform by R1 and R2 combined.</p>
4	<p>4.3.9 R1 must exit Martial Club to Meihua Forest with one or more Assembled Weapons</p> <p>4.3.10 R2 exits Martial Club to Meihua Forest only after R1 completely exits.</p> <p>4.5.1 R1 enters the Arena under one of the following conditions:</p> <p>4.5.1.1.1 Carrying one or more Assembled Weapons without any R1 KFS;</p> <p>4.5.1.1.2 Carrying one or more R1 KFS;</p> <p>4.5.1.1.3 Both (a) and (b).</p> <p>4.5.3 R1 can only use an Assembled Weapon to attempt to remove an opponent’s KFS occupying any Tic-Tac-Toe slot.</p> <p>4.5.6 When a weapon is used, R1 must place all of the Used Weapon in the “Used Weapon Area”, before using the next Assembled Weapon to touch any KFS on the tic-tac-toe slot again.</p> <p>4.5.12 R2 enters the Arena carrying one or more R2 KFS.</p>	<p>4.3.9 R1 must exit Martial Club to Meihua Forest with one or more Assembled Weapons</p> <p>4.3.10 R2 exits Martial Club to Meihua Forest only after R1 completely exits.</p> <p>4.3.9 and 4.3.10 only applies to first exit of Martial Club</p> <p>4.5.1 R1 enters the Arena under one of the following conditions:</p> <p>4.5.1.1.1 Carrying one or more Assembled Weapons without any R1 KFS;</p> <p>4.5.1.1.2 Carrying one or more R1 KFS;</p> <p>4.5.1.1.3 Both (a) and (b).</p> <p>4.5.1 only applies to first entry of Arena</p> <p>4.5.3 R1 can only use an Assembled Weapon to attempt to remove an opponent’s KFS occupying any Tic-Tac-Toe slot. No part of R1, R2, KFS and Assembled Weapon can be used as the means of defend team’s KFS from being displaced</p> <p>4.5.6 When a weapon is used, R1 must place at least the Staff part of the Used Weapon in the “Used Weapon Area”, before using the next Assembled Weapon to touch any KFS on the tic-tac-toe slot again.</p> <p>4.5.12 R2 enters the Arena carrying one or more R2 KFS.</p> <p>4.5.12 only applies to first entry of Arena</p>
6	<p>6.2 KFS collection: 10 points for each KFS successfully carried into Arena by R1 or R2. The robot must completely cross the ramp entry line to earn points.</p>	<p>6.2 KFS collection: 10 points for each KFS successfully carried into Arena by respective robot. The robot must completely cross the ramp entry line to earn points.</p>

8	8.7 R1 touches R2 KFS, except in Arena.	8.7 R1 touches R2 KFS, except in Arena or the dropped R2, Fake KFS on the R1 Pathway.
	8.14 R1 fails to dispose a Used Weapon in the Used Weapon Area before using another Assembled Weapon to touch a KFS on the Tic-Tac-Toe grid.	8.14 R1 fails to dispose at least the Staff part of a Used Weapon in the Used Weapon Area before using another Assembled Weapon to touch a KFS on the Tic-Tac-Toe grid.
	8.21 A used Weapon is not completely placed inside the Used Weapon Area.	8.21 The Staff part of a used Weapon is not completely placed inside the Used Weapon Area.
10	10.6 The use of drones, flying mechanisms, projectiles for locomotion, or any form of <u>aerial</u> movement.	10.6 The use of drones, flying mechanisms, projectiles for locomotion, or any form of sustained aerial movement.

FAQ Clarification (Feb 2026)

Update: 2026/02/02

Item	Original	Clarification
4.3 g	Spearhead Rack is the common area for both teams. For other areas, Refer to Rule 8.1 and 8.2.	Spearhead Rack and Tic-Tac-Toe Rack are the common areas for both teams. For other areas, Refer to Rule 8.1 and 8.2.
4.4 d	a). No, not a violation if not intentional; b). Assembled weapon is the only means to remove opponent's KFS from Tic-Tac-Toe and can be used only once;	a). No, not a violation. Any KFS affected by another dropped KFS will remain as-is. b). Yes, violation; Unused assembled weapon is the only means to remove opponent's KFS from Tic-Tac-Toe and can be used only once;
4.5 ae	No part of R1, R2 and KFS can be used as the means of defend team's KFS from being displaced;	No part of R1, R2 and KFS can be used as the means of defend team's KFS from being displaced; Defensive action is violation, it defined as any action taken by the robot(s) in preventing its own team's KFS from falling out of the Tic-Tac-Toe slot;
4.5 ah	Refer to FAQ 4.3 - h;	Refer to FAQ 4.3 - h; Non-Initiator's KFS: Violation, KFS will return to game player by referee and retry together with the robot; Initiator's KFS: Will be restored to its previous state by the Referee if it was placed on the Tic-Tac-Toe rack; otherwise, it will remain as-is and can be reused;
4.5 as	Used weapons must be disposed after being used; Refer to FAQ 4.4 -d;	Used weapons require disposal before using another new weapon. Once the disposal action (i.e. dropping used weapon) has started, it must be completed else constitutes a violation;

8	aa	Violation; Assembled weapon is the only means to remove opponent's KFS from Tic-Tac-Toe and can be used only once;	Violation; Unused assembled weapon is the only means to remove opponent's KFS from Tic-Tac-Toe and can be used only once;
12	p	Yes, RF communication is prohibited and other forms of signaling such as light and semaphore are not RF communication;	Yes, dense communication is prohibited. Other forms of signaling such as light and semaphore are not dense communication.
12	q	Not permitted. Robot 2 must be an Automatic Robot. It should operate autonomously without manual control once the game starts.	Not permitted. Robot 2 must be an Automatic Robot. It should operate without manual control once the game starts.
12	x	Robot 1 is a Manual or Automatic Robot. It can be operated manually by a team member or autonomously without manual control; Robot 2 must be an Automatic Robot. It should operate autonomously without manual control once the game starts. Refer to FAQ 12 – w & FAQ 12 – s;	Robot 1 is a Manual or Automatic Robot. It can be operated manually by a team member or autonomously without manual control; Robot 2 must be an Automatic Robot. It should operate without manual control once the game starts. Refer to FAQ 12 – w & FAQ 12 – s;
14	e	1) Not permitted; Refer to Rulebook Clarification (Dec 2025) - 10.6; 2) Permitted to use KFS gripping by Vacuum Pads (Suction Cups), please refer to Rule Section 4: Game Procedure;	1) Not permitted; Refer to Rulebook Clarification (Dec 2025) - 10.6; 2) Vacuum is not permitted;

Section 1 Game Field

Update: 2025/12/05

Item	Rule	Questions	Reply	
1	a	1	Where is the operator zone?	2 meter offset area surrounding the game field;
1	b	Fig.1	Seen from Figure 1, after completing the task at MC, R2 can only enter MF through the Entrance, pass through the Forest, climb the Ramp through the Exit Zone, and enter the Arena. If R2 wants to return to the MC from the Arena, it cannot travel back along this route in the opposite direction. Does this mean that R2 cannot return to the MC after leaving it?	Refer to Rule 9.4.1.2;

Section 2 Terms of Reference

Update: 2025/12/05

Item	Rule	Questions	Reply	
2	a	2	What is the purpose of the 15mm × 150mm strip attached to the bottom surface of the fake KFS? How is it attached	For Referee recognition, serves as a marking/identification sign; Staple on the bottom surface of the KFS;
2	b	2	There are only 4 R2 KFS so out of 15 logos, only any 4 distinct will be used per team?	Yes and refer to Rule 4.1.3;
2	c	2	will the Fake KFS be announced only on the competition day? If earlier, when?	Refer to Rule 16.2.2;
2	d	2	According to the description of "Kung Fu Master" in Section 2, a team can earn the title of " Kung Fu Master" if it places its 3 KFS in a vertical column or a diagonal line on the Tic-Tac-Toe Rack. This description does not specify whether these three KFS are R1 KFS or R2 KFS. However, according to Rule 4.5, at least two of these 3 KFS must be R2 KFS, correct?	Refer to Rule 3.8;

Update: 2026/02/02

2	e	2	is it violance if our weapon is dropped when our robot picking up	Refer to Rule 4.4.9 & FAQ 4.3 - d;
2	f	2	What kind of robots are allowed? Is it restricted to wheeled robots or legged robots are also allowed for Robot 1 and Robot 2 both with arm to handle spears and scrolls.	Refer to Rulebook & FAQ Section 12

Section 3 Game Field

Update:2025/12/04

Item	Rule	Questions	Reply
3	a	3.3. the 8 KFSs were placed by the opposing team members during the setup time. So, are these Staffs and Spearheads also placed on the corresponding racks during the setup time also?	Staffs and Spearheads are placed by Game field Helper before the set-up time count down begins;
3	b	3.3.1. Rulebook v.1, section 3.3.1 states, "Four staffs are placed in the Staff Rack." However, I couldn't find any description in the rulebook on how these staffs are placed in the rack. Specifically, is the end of the staff with the coupler placed facing up or facing down?	The coupler placed facing up; Refer to FAQ 3 - a;

Update:2026/02/02

3	d	3.6 For moving. 4.5.9/4.5.11/ 4.5.14/4.5.16 Is it possible for the robots to drop off scrolls purposefully in the arena to use when solving tiktak phase? Or once the robot enters a particular zone it is not allowed to go back?	Robots are allowed to go back; Refer to Rulebook Clarification (Dec 2025) - 4.3.9, 4.3.10 & 4.5.1;
3	e	3.8 In the Arena zone (tic tac toe), it is written: 3.8.2. R2 places R2 KFS onto Tic-Tac-Toe Middle Row slot(s). 3.8.3. R2, carried by R1, places R2 KFS onto Tic-Tac-Toe Top Row slot(s). Is it possible for R2 to place KFS into the middle slot while being carried by R1?	No; Refer to Rulebook Clarification (Dec 2025) - 3.8;
3	f	3.8 If R1 and R2 are carried together, can R1 place the KFS in the first row while being carried, and after R1 finishes placing it, can R2 place it in the middle row while being carried? Is this allowed—yes or no?	No; Refer to Rulebook Clarification (Dec 2025) - 3.8;
3	g	3.8 When R2 is placing blocks in the Arena, it can continuously cooperate with R1. When R2 is placing the second column, it is already connected to or being lifted by R1. Is this action allowed?	No; Refer to Rulebook Clarification (Dec 2025) - 3.8;

Section 4 Game Field

Update: 2025/12/15

Item	Rule	Questions	Reply
4.1 Set up (1 minute)			
4.1	a	4.1.2 Can the KFS overlap when placing on the forest block?	Each forest block can only accommodate one KFS;

4.1	b	4.1.4	Fake scroll cannot be placed on entrance block (1,2,3), but can it be placed on exit block? (10,11,12)	Refer to Rule 3.3.5 & 4.1.4;
4.1	c	4.1.5	a). What is the orientation of the marked square boundary, is it parallel to the forest block edges? b). Does the placed KFS need to fully cover the square box marking? c). Will the symbols stuck on the four sides of the KFS be upright, such that their orientation is perpendicular to the bottom as shown in Appendix 4.3?	a). Parallel; b). Mandatory during set-up; c). Symbols are upright;
4.1	d	4.1.7	After the 1-minute setup time, will referees first spend some time verify that all KFS on both team's are placed correctly, before the game starts?	Yes, referee will verify KFS placements;
4.1	e	4.1.9	If opponent fails to finish placing KFS on our side during 1-minute setup time (thus Rule 4.1.9 is triggered) and afterwards, our team also fails to finish placing our KFS during 30 seconds, a). what happens? b). For the 30s, is it additional clock time? c). That is, can commands be sent to R2 during the 30s?	a). Set up by Game Field Helper; b.) Refer to Rule 4.1.9 - The 30s are not included in the game time; c). No;
4.1	f	4.1.9	Will the game begin if the opponent team fails to place KFS in our MF-Forest blocks?	Refer to FAQ 4.1 – e;
4.1	g	4.1.9	Can a team intentionally refuse to place KFS on the opponent's side during 1-minute setup time, in order to trigger Rule 4.1.9?	No, Refer to Rule 4.1.2, 4.1.9, 8.22 & 10.3;
4.1	h	4.1.10	We would like to ask what is “control unit” mentioned in the rulebook (V1.0) 4.1.10, and does it include followings? (a) A controller. (b) A Wi-Fi router, not mounted on the robot, that relays communications between the controller and the robot. (c) Power supply of the Wi-Fi router. (d) A device, not mounted on the robot, that relays communications between the controller and the Wi-Fi router (There would be no input or other operations on this device). (e) A visualizer that displays the robot's status (e.g., position in the field, speed, etc.). This is not used to control the robot, but provides information to team members.	(a)-(e) all included, Refer to Rule 12.8.

Update: 2026/02/02

4.1	i	4.1.1	Can R2 change its code before each game?	Yes;
4.1	j	4.1.3	Is there any condition for the team to place the R1 KFS in the forest blocks of the Meihua Forest?	Refer to Rule 3.3.3 & 4.1.3;
4.1	k	4.1.9	The rule states that if the opponent fails to place our KFS in time, our own team places the remaining KFS "within 30 seconds." Does this 30-second placement period occur before the game timer starts, or does it consume the first 30 seconds of the match time? Furthermore, is the opponent penalized in any other way for failing to complete setup?	Refer to FAQ 4.1- e;

4.1	i	FAQ 4.1c	Regarding the top face of KFS, is there any orientation requirement (viewed from the start zone) when placing it during setup time? That is, can the top face Oracle Bone Character/Logo face any of (upright/upside-down /left/right), when viewed from the start zone? If there is an orientation requirement, some oracle bone characters possess rotational symmetry and it is difficult to identify which side is upright. Then how can we place KFS correctly?	No orientation requirement for the top surface, and refer to FAQ 4.1 - c;
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Update: 2025/12/15

4.2 Start of the Game

4.2	a	4.2.3	a). Does the referees allowed to be on the field during the game? b). if yes, which area and when?	a). Yes; b). Referee can access all game field areas;
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Update: 2026/02/02

4.2	b	4.2.4	Can adjustments be made to robots by the team when the robot is in the retry area.	Yes;
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Update: 2025/12/15

4.3 Martial Club

4.3	a	4.3	If both teams' R2s simultaneously grab the same one spearhead in the Spearhead Rack, resulting in a standoff even damage to the spearhead, what should be done?	Referee judgment - Robot that first grab the Spearhead is the initiator. Opponent interference results in violation and Forced Retry. If intentional damage occurs, it may end up with Rule 10.5;
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4.3	b	4.3	Rule 4.3.14 states that "Only R1 can pick up an assembled weapon that has fallen within the team's MC area". a). What is the definition of " within the team's MC area"? b). If only a part of the weapon is within the team's MC area, does that count as "within the within the team's MC area"? There are also other similar situations including but not limited to c). "all the components of the weapon are placed in the used weapon area" as described in Rule 4.5.6; d). "Fallen R1 KFS on the opponent's side" in Rule 4.5.10, e). "land on its own side" in Rule 4.5.14, etc..	a). Refer to Fig.1 of rulebook for definitions of areas of Martial Club and Arena; b). Completely inside; c). Refer to Rulebook Clarification (Dec 2025) - 4.5.6 & 8.21; d). KFS touch opponent side's ground; e). KFS Completely inside;
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4.3	c	4.3	Is it permissible for robot 2 to have 2 grippers to pick up spearheads, when the first gripper has attached 1 spearhead to the staff, then the second gripper is ready to immediately pick up the next spearhead?	Refer to Rule 4.3.4 and Rule 4.3.7;
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4.3	d	4.3	<p>What is the procedure to use the fallen spearhead in the following conditions:</p> <ol style="list-style-type: none"> 1. While R2 was picking up the spearhead, it fell into the opponents' team area (caused by our R2). 2. While R2 was picking up the spearhead, it fell into our team area (caused by our R2). 3. While the opposing R2 was picking up the spearhead, it fell into our team area. 	<p>a) Own item dropped outside game field designated areas cannot be re-used</p> <p>b) Own item dropped within own game field areas, options:</p> <ul style="list-style-type: none"> - Designated robot to pick up - Retry to retrieve item dropped within its own side and be placed back original position by referee (MC only) <p>c) Opponent item dropped by opponent team onto own game field areas</p> <ul style="list-style-type: none"> - Opponent team Forced retry – back to MC retry zone - Team may request cleanup during opponent team robot(s) transport to MC retry zone; Cleanup lasts 10 seconds from the referee's signal, whether completed or not, clean up by referee <p>d) Own items dropped within own game field areas initiated by opponent</p> <ul style="list-style-type: none"> - Restore to its previous state by referee <p>e) Dropped spearhead within common area</p> <ul style="list-style-type: none"> - Restore to its previous state in Spearhead Rack by referee - To be removed from Tic-Tac-Toe Rack by referee
4.3	e	4.3.3	<p>Shall we assume that preventing opponent from taking spearheads by covering 6 spearheads with robot's mechanism or taking more than 4 spearheads will be prohibited, since the team chose to do this strategy will win by 10-0 only if they assemble one weapon while covering the other spearheads. Is our assumption correct? Also, would there be any rule to prohibit this?</p>	<p>Referee judgment; If deliberate obstruction occurs, it may end up with Rule 10.3;</p>
4.3	f	4.3.3	<p>There are 6 spearheads on rack. Include: 3 types with 2 pieces each so what is their order on rack, and does the order fixed or change each match, and is it placed by host or opponent team?</p>	<p>Refer to Appendix Document - Appendix 2.5; Place by Referee;</p>
4.3	g	4.3.3	<p>Regarding the Rulebook (v.1) 4.3.3, we have a question. We assumed that when R2 picks up a Spearhead from the central Spearhead Rack, a mechanism of R2 can enter the space above entire Spearhead Rack including opponent team's side of Spearhead Rack. In the other word, it is a violation if the mechanism of R2 enters the space above the</p>	<p>Spearhead Rack is the common area for both teams. For other areas, Refer to Rule 8.1 and 8.2.</p> <p>According to Clarification, please find the update: 2026/02/02.</p>

			opponent team's field, except for the space above opponent team's side of Spearhead Rack.	
4.3	h	4.3.3, 4.5.13, 4.5.17, 4.5.2	Both teams' robots might collide or come into contact near the Spearhead Rack and the Tic-Tac-Toe Rack. Which of the following measures applies in this situation? (a) violation for both robots (b) violation for a robot that is moving faster (c) violation for a robot that is crossing the centre line of the game field (d) Disqualifications for a team when a robot destroys the opponent's robot even if collide happens by chance, not intended to do it. (e) nothing in particular	Violation is determined by robot sequence: <u>For Spearhead Rack</u> , refer to FAQ4.3 – a; <u>For Arena Tic-Tac-Toe Rack</u> : KFS that first gain entrance to slot is the KFS initiator. Violation cases are as follows: - If team attempts to place its KFS while its opponent has initiated placing its KFS; - If team attempts to displace opponent's placed KFS; - If both teams are attempting to place its respective KFS at the same time onto the same slot, the non KFS initiator (Judge by Referee).
4.3	i	4.3.4	Can an R2 touch a spearhead that has already been gripped by the opponent's R2?	Refer to FAQ 4.3 – a;
4.3	j	4.3.6	Can both R1 and R2 touch staff rack/ Spearhead rack/ tic tac toe rack/ Game field wall?	R1 and R2 are allowed, individually, to touches it's own side of the wall of Staff Rack/ Spearhead Rack/ Tic-Tac-Toe Rack/ Game Field;
4.3	k	4.3.6	If the R1 and R2 accidentally contact while manoeuvring to align for assembly, but not during the actual attachment, a). is this considered a violation? b). When does the "assembly" starts and ends?	a). Refer to FAQ 4.3 – l; b). Refer to Rule 4.3.2 - 4.3.7;
4.3	l	4.3.6	can R1 and R2 touch each other in MC or MF when not assembling a weapon?	R1 and R2 are not permitted to make physical contact with each other in the Martial Club area and Forest;
4.3	m	4.3.6	According to rulebook 4.3.6, does the “...vice versa” implies that the staff cannot touch any parts of R2?	Cannot, also Refer to Rule 8.4;
4.3	n	4.3.6	According to rulebook 4.3.6, “... R1 and R2 must not come into physical contact ...”, does the staff held by R1 count as a part of the robot? Can the staff touch R2?	Refer to FAQ 4.3 - m;
4.3	o	4.3.6	on robot 2 when giving the spreadhead Can it be given to robot 1 without being assembled and just attached to the end of the stick?	No, refer to Rule 4.3.6 & Rule 4.4.8;
4.3	p	4.3.7	If R2 drops a spearhead in Martial Club when a team tries to assemble their first weapon, and it has no mechanism to pick it up, then 9.1.4. of the rulebook(V 1.0) prohibits replacing it in the spearhead rack and readjust it	Incorrect; Refer to FAQ 4.3 - d;

			when we retry. Even in this case, 4.3.7. of the rulebook(V 1.0) precludes R2 from picking up the next spearhead, also 4.3.9. and 4.3.10. of the rulebook(V 1.0) prohibits R1 and R2 from entering Meihua Forest before assembling a weapon, meaning they must waste the remaining game time in Martial Club. Is this correct? In relation to this, if R2 drops a spearhead outside of the game field, 4.3.11. of the rulebook(V 1.0) forbids reusing spearhead. For the same reason with the above, the team will just watch them lose for the rest of the game. If R2 drops a spearhead in opponent field, which rule applies: when it's dropped in Martial Club, or when it's dropped off the field?	
4.3	q	4.3.8	Can completed weapon be passed to R2 be held by it in Meihua Forest and Arena?	Refer to Rule 4.4.12; R2 should only collect R2 KFS and Rule 4.5.12-17;
4.3	r	4.3.8/ 4.3.9/ 4.4.2	Can the assembled weapons carried by R1 touch the game field floor when R1 is moving along the game field area, or do the assembled weapons have to be carried without touching the floor?	Yes, provided the assembled weapon is carried by R1; Refer to Rule 4.3.8;
4.3	s	4.3.9	If R1 is holding one or more assembled weapons, is it possible to exit Martial club with holding another unassembled weapon(staff)?	Refer to Rule 4.3.9; Unassembled weapon is not an assembled weapon;
4.3	t	4.3.10	In the regulation, R1 must come out before R2. If R1 carries R2 with R2 behind him, is that valid? If the regulation states that robot 2 comes out after robot 1?	Refer to FAQ 4.3 - l and Rule 4.3.10;
4.3	u	4.3.10	R1 carry R2 and exit Martial Club at same time, will it permitted?	Refer to FAQ 4.3 - t;
4.3	v	4.3.12	What is this stick like? Can robot 1 touch it then retry and the stick will be taken by the operator or a third person (like at Aburobocon 2021)	No; Refer to Rule 9.1.4;

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4.3	g	4.3.3	Regarding the Rulebook (v.1) 4.3.3, we have a question. We assumed that when R2 picks up a Spearhead from the central Spearhead Rack, a mechanism of R2 can enter the space above entire Spearhead Rack including opponent team's side of Spearhead Rack. In the other word, it is a violation if the mechanism of R2 enters the space above the opponent team's field, except for the space above opponent team's side of Spearhead Rack.	Spearhead Rack and Tic-Tac-Toe Rack are the common areas for both teams. For other areas, Refer to Rule 8.1 and 8.2.
4.3	w	4.3 MC	If a team is unable to combine any weapons at all, does that mean the game will continue without any resistance from that team?	Yes;
4.3	x	4.3.2	Is it mandatory for a team to pick one spearhead of each shape, or can a team choose any combination of spearhead shapes?	No, team may choose any spearhead; Refer to Rule 4.3.4;

4.3	y	4.3.3	Can R2 carry Spearhead in Mehiua forest and arena?	No, only assembled weapon(s) is/are carried by R1 out of Martial Club;
4.3	z	4.3.4	Is there a maximum limit on the total number of spearheads a team can pick? For example, is it allowed for a team to collect more than three out of the six available spearheads?	Since there are 4 Staffs, the maximum number of assembled weapons is four; If attempt to grab more spearhead after assembled four weapon may end up with Rule 10.3;
4.3	aa	4.3.5.	Can R1 and R2 assemble a weapon in the Meihua Forest or Arena, assuming they have met the entry requirements for those areas?	No, weapon can only be assembled in MC;
4.3	ab	4.3.5, Appendix 2.1	The weapon assembly involves connecting a Staff to a Spearhead using a Quick Coupler. Could you provide the technical specification for the insertion force (in Newtons) required to successfully snap the Quick Coupler into place? This data is critical for designing the assembly mechanism for R1 and R2	Teams to determine the necessary force to placement the Spearhead onto the Staff; Refer to Rule 4.3.5;
4.3	ac	4.3.6	in rule (4.3.6) R1 shall hold its Staff during assembly, and R2 shall hold its Spearhead. During assembly, R1 cannot touch R2's Spearhead and vice versa. R1 and R2 must not come into physical contact with each other throughout the entire assembly process. Our question is as follows. 1). Fully define the entire assembly process; 2). Can R2 and R1 come into physical contact before actually assembling Spearhead and Staff, then separate while both holding/carrying their designated Staff and Spearhead.	1). Refer to Rulebook Section 4.3; 2). No, Refer to FAQ 4.3 - l;
4.3	ad	4.3 Martial Club	Can R1 touch R2 when not in Martial Club, for example R1 helps R2 climb Meihua Forest and when R2 exits Meihua Forest R2 can climb onto R1's waist?	No, R1 cannot help R2 to climb or exit the Forest, Refer to FAQ 4.5 - ay;
4.3	af	4.3.6	During assembly, could a part of R1 or R2 be able to touch "Zone 2 - Meihua Forest"? Does "exits" mean all robot parts are outside that area?	No. The assembly should be completed inside the Martial Club; Refer to Rule 4.3.10;
4.3	ag	4.3.7	If R2 is unable to pick up the current Spearhead after it lands in the game field. Does R2 need to "Retry" and team return it to the central Spearhead Rack according to section 9.1.4, or does it need to pick up a different Spearhead from the central Spearhead Rack?	Team has the following options: 1). Retry; 2). R2 pick up the dropped spearhead; Refer to FAQ 4.3 -d; R2 cannot touch another spearhead until the dropped spearhead had been dealt with;

4.3	ah	4.3.8	can only sphere head / only shaft (dismantled) be carried by R1 out of the Martial Club?	No, only assembled weapon(s) is/are carried by R1 out of MC and refer to Rulebook Clarification (Dec 2025) - 4.3.9;
4.3	ai	4.3.9	Suppose R1 gets a retry from the start zone while R2 is in the forest blocks of the Meihua Forest, and the assembled weapon from R1 has already been placed in its assigned position. In this situation, how can R1 move from the Martial Club to the Meihua Forest without the weapon? Does this imply that both robots must take a retry to fulfill the conditions mentioned in Sections 4.3.9 and 4.3.10?	Refer to Rulebook Clarification (Dec 2025) - 4.3.9, 4.3.10 & FAQ 4.5 -b;
4.3	aj	N/A	During the assembly of weapons in the Martial Club, if one team's R2 drops a spearhead on the ground, intentional or not, can it pick up another spearhead on the rack to proceed with weapon assembly?	No; Refer to FAQ 4.3 - ag;

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4.4 Meihua Forest				
4.4	a	4.4 R1 carry R2	Can R1 has arm to carry/ lifted R2 over forest, while R1 still move along pathway and R2 is carried moving in the airspace above block in forest, will it be permitted?	No, R2 enters Forest by itself; Refer to Rule 4.4.13;
4.4	b	4.4	When robot 2 has reached the final forest blocks of Meihua Forest, can robot 1 immediately lift robot 2 to take it to the arena and place KFS directly on the top row of tic tac toe?	Refer to FAQ 4.3 – l;
4.4	c	4.4	Can R1 carry R2 when: a) in the Martial Club before assembling the weapon? b) in the Martial Club after assembling the weapon? c) in the R2 entrance zone in the Meihua Forest? d) in the R2 exit zone in the Meihua Forest? e) on the ramp connecting Meihua Forest and Arena? f) in the Arena, and R2 attempts to place KFS into the middle row of Tic-Tac-Toe? g) in the Arena, and R1 attempts to place KFS into the bottom row of Tic-Tac-Toe?"	Refer to FAQ 4.3 - l;
4.4	d	4.4 Fake KFS	What if the fake KFS is being hit by another dropped KFS, and it is moved. a). Does it count as a violation? b). If R1 comes into contact with the Fake KFS only using the holding weapon, not the robot itself, and does not move it also, will this be considered a violation?	a). No, not a violation if not intentional; b). Assembled weapon is the only means to remove opponent's KFS from Tic-Tac-Toe and can be used only once; According to Clarification, please find the update: 2026/02/02.
4.4	e	4.4 Touching	R2 is not allowed to collect R1 KFS in Rule 4.4.12 Then, can R2 touches R1 KFS? Can R1 touches R2 KFS?	Not allowed; Refer to Rule 4.4.1. & 4.4.12.

		vs collecting		
4.4	f	4.4 Touch KFS using KFS	a). Can a KFS touch another KFS in the Meihua Forest ? b). If it is allowed then can KFS be placed on top of each other in the opponent's Meihua Forest during the setup time and once the game begins can our team stack KFS in our Meihua Forest?	a). Not allowed - stacking; Each robot can carry one or more KFS, each pickup action can collect one KFS; b). KFS can only be placed onto vacant block during set-up time;
4.4	g	4.4	According to Rule 4.4.19, R2 can pick up the R2 KFS that has fallen in the MF forest. If a R2 KFS falls on the FM block where R2 is currently located, is it counted as " R2 moves onto an MF block when there is a KFS", as stated in Rule 8.10?	No, R2 occupied the block before KFS fallen;
4.4	h	4.4	while moving through the forest, can R2 run over (e.g, the R1/Fake KFS lies under the R2 chassis) or touch the R1 and Fake KFSs?	Refer to FAQ 4.4 -e & Rule 8.9;
4.4	i	4.4	Rule 4.4.11 states "The team can request R1 or both R1 and R2 when in MF to retry and return to the Martial Club Retry Zone (RZ)". Then, can the team request R2 only when in MF to retry and return to the RZ?	Refer to Rule 4.4.11 & 4.4.21;
4.4	j	4.4.5.	What is the meaning of deciding how many? If you have taken 3, can you only bring 2?	The team decides the number of R1 KFS required for the Arena Tic-Tac-Toe game.
4.4	k	4.4.6/ 4.4.8/ 4.4.17	a) Definition of outside and inside Meihua Forest. What is the precise boundary of "inside Meihua Forest" (line inclusive/exclusive)? b) If a KFS/weapon is dropped partially outside (touching the line), is it considered outside of the Meihua Forest?	a). Line is inclusive as part of Meihua Forest; b). Refer to Rule 4.4.6, 4.4.8 & 4.4.17;
4.4	l	4.4.10	Where should the disassembled weapons in Meihua Forest be placed?	As-is;
4.4	m	4.4.11.	a). After robot 2 has taken the KFS and when descending from Meihua Forest, the KFS falls, will it be brought back during the retry or will it be retrieved from the beginning? b). Then can robot 2 help to retrieve the KFS from robot 1 because according to the regulations, the length of the robot only extends up to 1800 so if there is a KFS R1 in the middle of the forest, it cannot be retrieved because it is too far away.	a). Refer to Rule 4.4.17 and 4.4.18; b). Refer to Rule 3.3.3, 3.3.4 and 3.3.5 for placements of KFS;
4.4	n	4.4.13	After R2 has already exited the Meihua Forest once, if it wishes to re-enter, can it enter again from blocks 11, 12, and 13 (the blocks through which it previously exited), or must it re-enter only from the designated entry blocks 1, 2, and 3?	No, refer to Rule 4.4.13;

4.4	o	4.4.14 definition of Adjacent	When the term "adjacent" is used in the context of the Meihua Forest (MF), does it also include the diagonal blocks connected to the block on which R2 is currently located? Kindly clarify the intended meaning and applicability of these terms in all instances/rules where "adjacent" is referenced.	No, refer to Figure 1. Game Field diagram. - block 2,4,6 and 8 are regarded as adjacent to block 5; Refer to Rule 4.4.14;
4.4	p	4.4.14	If R2 steps on the boundary of two blocks, does it mean we can pick up KFS from the adjacent blocks of both blocks it is currently on? Or R2 must be fully within one block in the Forest?	R2 can only occupy one forest block at one time;
4.4	q	4.4.14	If robot 2 already pick up a r2 kfs, is it allow to stack it on another r2 kfs before took both of them up?	Refer to FAQ 4.4 - f;
4.4	r	4.4.15	According to the rulebook(V.1.) 4.4.15, "If blocks 1, 2, or 3 contain R2 KFS, R2 must collect its first KFS from the R2 Entrance Zone". Regarding this, we would like to ask following questions: (a) Can R2 collect its second KFS from the R2 Entrance Zone? Consider the situation that R2 KFS is placed on block 1 and 2, and then R2 pick up the R2 KFS on block 1 from the Entrance Zone. In this situation, can R2 pick up R2 KFS on block 2 from the Entrance Zone? Or does R2 need to move to block 1 before picking up R2 KFS on block 2? (b) Is it allowed to pick up R2 KFS on blocks 10, 11, or 12 from the R2 Exit Zone?	a). No, only collect its first KFS; Refer to Rule 4.4.15; b). No, R2 can only pick up other R2 KFS while occupying adjacent forest block; Refer to Rule 4.4.14;

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4.4	d	4.4 Fake KFS	What if the fake KFS is being hit by another dropped KFS, and it is moved. a). Does it count as a violation? b). If R1 comes into contact with the Fake KFS only using the holding weapon, not the robot itself, and does not move it also, will this be considered a violation?	a). No, not a violation. Any KFS affected by another dropped KFS will remain as-is. b). Yes, violation; Unused assembled weapon is the only means to remove opponent's KFS from Tic-Tac-Toe and can be used only once;
4.4	s	4.4	In the Meihua Forest, can Robot R2 partially touch or rest on the next step while picking up the box, or must R2 remain fully on its current step until the box is picked?	Yes, R2 can partially touch or rest on the next step while picking up the KFS. Robot detaches the surface of ground/original block will count as 'moving/climbing onto'. Violation if R2 loses contact with the surface of its original block before it successfully gripped and lifted the KFS off the surface of an adjacent block.

4.4	t	4.4.19	As said in reference rule number (4.4.19) R2 must exit Meihua Forest via one of the designated blocks (10, 11 or 12). Will it be violation if R2 gets directly on top of R1 and is carried to the Arena from Meihua forest from these designated blocks without ever touching ground?	Refer to FAQ 4.3 - ad;
4.4	u	4.4	R2 can touch the R1 KFS in Meihua Forest ?	Refer to Rule 8.8;
4.4	v	4.4.1/ 4.4.7	What is meant by rules number 4.4.1 and 4.4.17, that you can take the KFS by sliding or pulling it without having to lift it from the surface of the forest?	Refer to FAQ 4.5 - bj;
4.4	v	4.4.1/ 4.4.7	What is meant by rules number 4.4.1 and 4.4.17, that you can take the KFS by sliding or pulling it without having to lift it from the surface of the forest?	Refer to FAQ 4.5 - bj;
4.4	w	4.4	Can Robot R2 maintain a continuous contact with the forest blocks as a physical reference to move straight in the Meihua Forest, such that the robot does not touch the Fake KFS/R1 KFS by accident?	Refer to FAQ 4.4 - s;
4.4	x	FAQ 4.4 f	With reference to 4.4 (f), stacking R2 KFS on top of each other is disallowed. Stacking, by definition, means to place objects on top of each other such that both of them come "in contact" with each other. So, if there's an intentional gap between two R2 KFS such that there's no contact between them, will this still be counted as "stacking"?	1. No, stacking KFS on forest block is not allowed 2. Yes, stacking in own robot is allowed
4.4	y	FAQ 4.4 f	1. Can we stack kfs one over other in mehuia forest blocks. 2. Can we stack KFS one over other in our robot (R1 and R2) , in full arena.	Refer to FAQ 4.4 - x;

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4.5 Arena				
4.5	a	4.5	During the transmission of KFS from Meihua Forest to Arena, do R1 and R2 must be carrying the KFS? Can they simply throw the KFS to Arena, or can they transmit them by just pushing the KFS on the floor to get through the ramp?	Refer to Rule 3.7, 4.5.1, 4.5.12, 6.2;
4.5	b	4.5	Can R2 and R1 return to the martial club or Meihua forest without taking a Retry?	Refer to Rulebook Clarification (Dec 2025) - 4.3.9, 4.3.10; The rules below remain valid for robots after first exit of Martial Club: - 4.4.13. R2 must enter Forest via R2 Entrance Zone

				R1 exits with one or no assembled weapon; - No sequencing exit rule for R1 and R2; - R2 is not allowed to touch R1 Pathway if it goes through Meihua Forest;
4.5	c	4.5	To prevent the opponent from placing a KFS. Can we extend a robots mechanism or use a weapon to occupy a slot and block the opponent from placing a KFS in that slot?	No; Refer FAQ 4.4 - d; If deliberate obstruction occurs, it may end up with Rule 10.3;
4.5	d	4.5	KFS can be carried inside the Arena. Then, can they be put on the ground in Arena?	Yes; Refer to Rule 6.2;
4.5	e	4.5	Will the referee signal a successful placement of a KFS?	Yes once KFS success placement; Successful placement is a stationary KFS placed onto slot without falling or robot intervention;
4.5	f	4.5	Is there any orientation required on putting the kfs on tictactoe rack	Refer to FAQ 4.5 - e;
4.5	g	4.5	If R1 places its R1 KFS in the middle or top row of the Tic-Tac-Toe Rack, or if R2 places its R2 KFS in the bottom row of the Rack, are these actions considered violations? If so, why were not such violations listed in Section 8?	Each placement must comply with 3.8.1 for R1, 3.8.2 for R2 and 3.8.3 for R1 and R2 together. 3.8.1.- R1 places R1 KFS onto Tic-Tac-Toe Bottom Row slot(s). Perform by R1 individually. 3.8.2.- R2 places R2 KFS onto Tic-Tac-Toe Middle Row slot(s). Perform by R2 individually. 3.8.3.- R2, carried by R1, places R2 KFS onto Tic-Tac-Toe Top Row slot(s). Perform by R1 and R2 combined.
4.5	h	4.5	Is there any particular order to follow in scrolls placing in tic-tac-toe	No specific order; Refer to FAQ 4.5 -g
4.5	i	4.5	When R1 and R2 enter the Arena through the Ramp, can R1 push R2?	Refer to FAQ 4.3 - l;
4.5	j	4.5	If I collect KFS by going back and forth from the arena to the MF, then store the KFS in the arena until all of them are gathered and only then arrange them in the tic-tac-toe slot, is that allowed?	Refer to FAQ 4.5 - d; Refer to Rule 6.2;
4.5	k	4.5	Can we replace KFSs which is already placed on the Tic-Tac-Toe Rack onto another slot?	Yes; Refer to FAQ 4.5 - g;
4.5	m	4.5	We have noticed that in Rules 4.5.2 and 4.5.17, all KFS are in the singular form. Does it mean that R1/R2 can only place one KFS into a vacant slot in the Tic-Tac-Toe Rack each time?	Yes; Refer to FAQ 4.5 - g;
4.5	n	4.5	Can R1's kfs be used to displace R2's kfs in tic-tac-toe?	Not permitted; Refer to FAQ 4.4 -d;

4.5	o	4.5	In Rule 4.5.17, there is no specific stipulation that the KFS must be R2 KFS. So, when R2 is raised by R1, can R2 place R1 KFS into the Top of the Tic-Tac-Toe Rack?	No, refer to FAQ 4.5 - g;
4.5	p	4.5	Explain the conditions for R1 and R2 to enter the arena as mentioned for both R1 and R2 during their entry in MF.	Refer to Rule 3.7, 4.5.1 & 4.5.12;
4.5	q	4.5	According to rules 4.5.2 and 4.5.13, there can only be two teams' R1 KFSs in the bottom row of the Tic-Tac-Toe Rack, only two teams' R2 KFSs in the middle row, and only two teams' R2 KFSs in the top row, right?	Refer to FAQ 4.5 -g; Each slot in the Tic-Tac-Toe is allowed to have ONE KFS;
4.5	r	4.5	What is the definition of "vacant slot" in Rules 4.5.2 and 4.5.17?	A "vacant slot" means a slot where no team's KFS has yet gained entrance;
4.5	s	4.5.1	According to this rule, R1 has already placed two R1 KFS in the Tic-Tac-Toe rack inside the Arena and then returns to the Meihua Forest (MF) to collect the third R1 KFS. However, while attempting to pick it up, R1 accidentally drops the KFS. In this situation, considering that R1 has already used all the assembled weapons it previously brought, will it be considered a violation if R1 re-enters the Arena a second time without carrying either a KFS or an assembled weapon ?	Refer to Rule book clarification Dec 2025 - 4.5.1 & 4.5.12:
4.5	t	4.5.2.	When a robot's hand holding a KFS is kept in Tic-Tac-Toe rack, is this classified as "placed" or "vacant" as described in sections 4.5.2 and 4.5.13 of the rule book(V 1.0)? If it's "placed," it becomes very difficult to use a weapon to remove such KFSs stored on the rack. Though, even if it's "vacant," the opponent cannot place a KFS onto the slot because the KFS is in the way. So, if our robots keep its hands holding KFSs entered to the three slots in a single column, and the robot simultaneously releases KFSs, it fulfills the requirements for "Kung Fu master". Is this understanding correct? In this case, there are no time to use weapons before "Kung Fu master" victory. If these situations are not intended, we would like to see restrictions put in place, such as prohibiting the KFS from being kept in the Tic-Tac-Toe rack for a certain number of seconds.	Refer to FAQ 4.3 – h, FAQ 4.5 -e, FAQ 4.5 -g, FAQ 4.5 -r;

4.5	u	4.5.2	Can R1 place multiple KFS in the tic-tac-toe rack simultaneously?	No, refer to FAQ 4.5 - g; R1 should place KFS in the Tic-Tac-Toe one at a time. R2 should also place KFS one at a time.
4.5	w	4.5.3 Weapon usage	A fully assembled weapon has two ends, End A and End B. End A has a spearhead, while End B does not. When R1 uses a weapon to remove an opponent's KFS in the Tic-Tac-Toe Rack, must it use the End A, or can either the End A or B end be used?	Must use the Spearhead;
4.5	x	4.5.3	Can multiple opponent blocks be pushed simultaneously by using two different weapons? Instead of pushing, is it permissible to pull an opponent's KFS into our area?	Not permitted, refer to Rule 8.15; Not permitted, refer to Rule 10.3;
4.5	y	4.5.3	If our team's KFS has been placed in the Tic-Tac-Toe Rack and the opposing team attempts to use its weapon to make our KFS fall out of the Rack, how should we prevent the KFS from falling? Can a weapon ,a part of the robot or an KFS be used to block the KFS from falling? If an Assembled Weapon is to defend our KFS, will that weapon still be judged as "used" based on rulebook v.1 sections 4.5.4 and 4.5.5?	Not permitted; Refer to FAQ 4.4 - d;
4.5	z	4.5.3	Can R1 use weapon carrying R2?	No, weapon is not the part of R1; Refer to Rule 3.8.3;
4.5	aa	4.5.3	In Tic Tac Toe Rack, when R1 attacks and the weapon disassembles (spearhead leaves the staff). Is it still required for R1 to return all parts of the weapon, including spearhead to the used weapon zone?	Refer to Rulebook Clarification (Dec 2025) - 4.5.6 & 8.21;
4.5	ab	4.5.3	Can an assembled weapon or part of the robot pass through the Tic Tac Toe Rack and reach the opponent side of the Arena?	No.
4.5	ac	4.5.3	Can an Assembled Weapon touches an opponent's Assembled Weapon? If this accident happened, how will the following situations be judged? a) Both Assembled Weapon remain the same. b) One of the Assembled Weapon was dismantled, and another one remains the same. c) Both Assembled Weapon were dismantled.	Refer to FAQ 4.4 -d; Referee judgment;
4.5	ad	4.5.3	Are KFS on the Tic Tac Toe Rack invalid upon touched by an opponent's assemble weapon?	No, Refer to FAQ 4.5 - e;
4.5	ae	4.5.3.	When opponent's robot tries to remove our KFS by an Assembled weapon, if our robot prevent a KFS from being removed by supporting the KFS by the robot, is a violation imposed on our team? If our robots	No part of R1, R2 and KFS can be used as the means of defend team's KFS from being displaced; According to Clarification, please find the update: 2026/02/02.

			support the KFS and prevent the KFS from being fallen on purpose, we think a violation should be imposed on our team. If a violation is not imposed, it becomes very difficult for an opponent's robot to remove our KFS. On the other hand, if opponent's robot uses an Assembled weapon right after our robot places the KFS, our robot's hand is still near the KFS and might prevent the KFS from being fallen unintentionally. In this case we think violation should not be imposed.	
4.5	af	4.5.3.	Section 8, the violation section, does not define a violation for R1 removing an opponent's KFS by means other than an Assembled Weapon. Given this, would removing an opponent's KFS using something other than an Assembled Weapon—for example, a part of our robot's mechanism or our own KFS— be considered a violation?	Yes, it is violation; Refer to Rule 8.22, Rule 4.5.3 & FAQ 4.4 - d;
4.5	ag	4.5.3.	Can R1 use an assembled weapon to drop the opponent's KFS to our side and make it unusable as stated in Rulebook(V.1) 4.5.10 and 4.5.15? If this is permitted, we believe that if the opponent's KFS is dropped to our side, and is then put into our Meihua Forest, the opponent would be forced to retry based on Rulebook v.1, 8.19: "If a team's own KFS is dropped into the opponent's Meihua Forest." Is such an action permitted?	Not permitted; Refer to Rule 10.3;
4.5	ah	4.5.3.	Regarding rulebook(V.1.) 4.5.3, we have a question when robots place KFS. When both teams' robots tried to place KFS on the same slot simultaneously, how is it handled? To be specific: (a) Team A holds its KFS in the tic-tac-toe slot first, and team B also tried to place KFS afterward. Then, if team A released KFS before team B releases KFS, and that KFS released by team A falls from tic-tac-toe rack because of the contact with the KFS of team B, is team B considered to have committed a violation? (b) Team A and team B come to the tic-tac-toe rack and tried to place KFS simultaneously. Then, if team A released KFS before team B releases KFS, and that KFS released by team A falls from tic-tac-toe rack because of the contact with the KFS of team B, is team B considered to have committed a violation? (c) Team A holds its KFS in the tic-tac-toe slot first, and team B also tried to place KFS afterward. Then, a robot of the team B pushes a robot of team A via its	Refer to FAQ 4.3 - h; According to Clarification, please find the update: 2026/02/02.

			KFS, and KFS held by the robot of team A goes out of tic-tac-toe rack. Is this action done by team B allowed?	
4.5	ai	4.5.3.	When we displace an opponent's KFS blocks, will their points deducted?	Refer to Rule 6.3.4;
4.5	aj	4.5.3	How does "release" mean, is it mean when the robot drop the weapon? or the weapon not touching the kfs anymore after its first touch with kfs? If opponent robot pull their kfs back right after our weapon touch kfs to create a gap between will the weapon considered used?	Assembled weapon is declared as “Used Weapon” once the weapon moves the KFS from its initial position; Refer to FAQ 4.5 - ae;
4.5	ak	4.5.3.	When our KFS is pushed by the opponent and falls, can it be taken back? Conversely, if the opponent's KFS is dropped, can they use it again?	Refer to Rule 4.5.14. & 4.5.9;
4.5	al	4.5.5	R1 attempted to remove and touch the opponent's KFS in Tic Tac Toe Rack, but the KFS did not fall. Can the weapon be still used and push the same KFS until it has fallen?Is R1 attempt finished?	Refer to FAQ 4.5 - aj;
4.5	am	4.5.5	Before the opponents keep their KFS in the tic tac toe rack, can R1 point its weapon inside it?	No, Refer to FAQ 4.5 – n & FAQ 4.4 -d;
4.5	an	4.5.5	The opponent pushed/placed the KFS and touched our team’s assembled weapon, does that count as used after our weapon has left the KFS?	Referee judgment; Refer to FAQ 4.4 -d;
4.5	ao	4.5.5	Rule 4.5.6 stipulates that R1 must place all parts of the used weapon in the “Used Weapon Area”. Does it mean that the vertical projection of the used weapon is not allowed to exceed the Used Weapon Area?	Refer to FAQ 4.5 - aa;

4.5	ap	4.5.5	According to rulebook 4.5.5, when is the weapon regarded as released from KFS? Are the following scenarios counted as released from KFS, after the weapon touched KFS? 1. The weapon stopped moving while KFS moved and left the weapon, then the weapon start to move again and touch same KFS? 2. The weapon spins/moves and leaves KFS momentarily (KFS not fallen), then touch the same KFS again	Refer to FAQ 4.5 - aj; If the team deliberately not to retract the weapon - team will be disqualified by POJ; Refer to Rule 10.3;
4.5	aq	4.5.5	In Rulebook v.1 section 4.5.5, it states, "Each weapon is regarded as 'used' when it touches any KFS (own or opponent's) and releases." However, is it permitted for a weapon to simultaneously touch two KFSs with both its spearhead and its staff before the weapon releases from the KFS? If permitted, is it allowed to attempt to drop two of the opponent's KFSs simultaneously by doing so, or to block two of one's own KFSs from being dropped?	Not Permitted; Refer to FAQ 4.4 - d;
4.5	as	4.5.6	If our R1 only uses one weapon throughout the entire game, does that weapon have to be disposed in the Used Weapon Area after use? (as rule 4.5.6 only mentions disposing is only needed when another weapon is to be used)	Yes, used weapons must be disposed after being used; Refer to FAQ 4.4 - d; According to Clarification, please find the update: 2026/02/02;
4.5	at	4.5.6	Dismantled definition. Is it dismantled if we break a little part of the weapon during transportation? Can the component of the weapon be considered "dismantled" for reuse during the match?	Dismantled weapon cannot be used;
4.5	au	4.5.7	Does the term "to land on its own side" require the KFS to make direct contact with the game field floor? Can a robot touch the falling KFS before it hits the ground? Especially, if a KFS is removed from the Tic-Tac-Toe rack by an opponent's weapon and comes to rest on top of another KFS that is already lying on the floor on our side of the field (without the removed KFS touching the floor directly), is it still considered to have "landed on our side" and thus can be picked up?	Yes; Refer to Rule 6.2;
4.5	av	4.5.9.	can there be physical contact between r1 and r2 when passing fallen kfs to each other in arena?	Yes; Refer to FAQ 4.3 -l;
4.5	aw	4.5.11 and 4.5.16	Does the KFS count as successfully placed, as long as it is not falling? What if the KFS falls down spontaneously after placement of KFS, without obstructions from the opposing team (i.e. not using any assembled weapon?)	Successful placement is a stationary KFS placed onto slot without falling or robot intervention;

4.5	ax	4.5.13	Assume the Tic-Tac-Toe board compartments are numbered 1 to 3 from left to right in the top row; 4 to 6 from left to right in the middle row; and 7 to 9 from left to right in the bottom row. If the opponent has placed their KFS in compartment 5 of the rack, and we have placed our KFS in compartment 4, and we use a weapon to push the opponent's KFS out of compartment 5, are we then allowed to move our KFS from compartment 4 into compartment 5?	Yes, refer to FAQ 4.5 -k;
4.5	ay	4.5.1, 4.5.1, 4.5.3	a). Can R1 provide a "step" or "platform" that R2 uses to climb, with R2's own power? Or a system is needed, driven by R1 to get R2 on? Or both situations are ok?	No; Yes; No; Refer to FAQ 4.3 - l and Rule 4.5.17;
4.5	az	4.5.17	Regarding the Rulebook(V 1.0) 4.5.13. and 4.5.17., is it permissible for R2 lifted by R1 to place R2 KFSs in the Tic-Tac-Toe middle row?	No; Refer to FAQ 4.5 - g;
4.5	ba	4.5.17.	Regarding rulebook(V.1.) 4.5.17, we assumed that the sentence "R2 must be lifted" means that "R2 does not touch ground" and "R2 is in touch with R1". Is our assumption correct?	Yes;
4.5	bb	4.5.17.	a) After R1 lifts R2, is it required for R1 to lower R2 to the ground after each KFS placement on the top row of the Tic-Tac-Toe? Or, is it permissible for R2 to place multiple KFS onto the top row of the Tic-Tac-Toe sequentially, while being carried continuously by R1 during a single lift? 2) While R2 is being lifted by R1, is R2 also permitted to place a KFS onto a vacant slot in the middle row of the Tic-Tac-Toe? 3) While R1 is lifting R2, is R1 permitted to place a KFS onto a vacant slot in the bottom row of the Tic-Tac-Toe?	Refer to FAQ 4.5 - g;
4.5	bc	4.5.18	Simultaneously definition. Is it counted as placed once the KFS touches the Tic-Tac-Toe slot? What if R2 is holding two KFS at a time, and holds the position on the top and middle row at the same time, it has released and placed a KFS in the top row, and immediately releases the second KFS and places it on the middle row, does this action count as a violation?	Refer to FAQ 4.5 - g;
4.5	bd	4.5.18	Does this rule prohibit the team from placing multiple KFS in the Tic-Tac-Toe Rack at the same time, provided the placement actions are: (a) performed by different robots (R1 and R2), AND (b) target different rows (e.g., R1 places a KFS in the bottom row horizontally while R2 places a KFS in the middle or top row)?	Refer to FAQ 4.5 - g;

4.5	be	4.5.18	What counts as a successful placement of a KFS in the tic tac toe rack? 1. The KFS is within the dimension of a slot, but still has contact with the robot. 2. The KFS is within the dimensions of a slot, does not have contact with the robot, but it is not still (it is moving). 3. The KFS is within the dimensions of a slot, has no contact with the robot and is still	Refer to FAQ 4.5 - aw;
4.5	bf	4.5.18	According to the rulebook (V 1.0) 4.5.18., we would like to know which of the followings are allowed ? (A) R2 holds more than two R2 KFSs in the Arena, while R1 is lifting R2. (B) R2 holds more than two R2 KFSs in the Arena, while R1 is lifting R2. R2 complete placing one R2 KFS into a slot, before R2 insert another KFS. (C) R2 holds more than two R2 KFSs in the Arena, while R1 is lifting R2. R2 completely inserts a R2 KFS, and then R2 inserts next R2 KFS before R2 releases former KFS. (D) R2 holds more than two R2 KFSs in the Arena, while R1 is lifting R2. R2 place multiple KFS at nearly the same time into different slots of the Tic-Tac-Toe Rack. Also, if (D) is permitted, is it permitted to insert KFS into the slot at any interval, no matter how small (e.g. around 0.001 seconds) ? If not, how many seconds exactly is needed?	Refer to FAQ 4.5 - g;
4.5	bg	4.5.18	We would like to clarify the precise definition of the word "attempt" in this context. We are considering two possible interpretations: (A) The "attempt" refers to the robot's simultaneous physical position. The rule only prohibits R2's mechanism (or the KFS it holds) from being physically inside both a middle row slot and a top row slot at the same time. (B) The "attempt" refers to the robot's state. Since Rule 4.5.17 requires R2 to be carried by R1 to place a KFS in the top row, this interpretation considers that being in the "carried state" itself constitutes an "attempt" for the top row. Therefore, this rule (4.5.18) would prohibit R2 from placing a KFS in the middle row while it is carried by R1. Which of these interpretations is correct? If neither is correct, could you please provide the detailed definition of a prohibited "attempt"?	Refer to FAQ 4.5 - g;

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4.5	ae	4.5.3.	When opponent's robot tries to remove our KFS by an Assembled weapon, if our robot prevent a KFS from being removed by supporting	No part of R1, R2 and KFS can be used as the means of defend team's KFS from being displaced;
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			the KFS by the robot, is a violation imposed on our team? If our robots support the KFS and prevent the KFS from being fallen on purpose, we think a violation should be imposed on our team. If a violation is not imposed, it becomes very difficult for an opponent's robot to remove our KFS. On the other hand, if opponent's robot uses an Assembled weapon right after our robot places the KFS, our robot's hand is still near the KFS and might prevent the KFS from being fallen unintentionally. In this case we think violation should not be imposed.	Defensive action is violation, it defined as any action taken by the robot(s) in preventing its own team's KFS from falling out of the Tic-Tac-Toe slot;
4.5	ah	4.5.3.	Regarding rulebook(V.1.) 4.5.3, we have a question when robots place KFS. When both teams' robots tried to place KFS on the same slot simultaneously, how is it handled? To be specific: (a) Team A holds its KFS in the tic-tac-toe slot first, and team B also tried to place KFS afterward. Then, if team A released KFS before team B releases KFS, and that KFS released by team A falls from tic-tac-toe rack because of the contact with the KFS of team B, is team B considered to have committed a violation? (b) Team A and team B come to the tic-tac-toe rack and tried to place KFS simultaneously. Then, if team A released KFS before team B releases KFS, and that KFS released by team A falls from tic-tac-toe rack because of the contact with the KFS of team B, is team B considered to have committed a violation? (c) Team A holds its KFS in the tic-tac-toe slot first, and team B also tried to place KFS afterward. Then, a robot of the team B pushes a robot of team A via its KFS, and KFS held by the robot of team A goes out of tic-tac-toe rack. Is this action done by team B allowed?	Refer to FAQ 4.3 - h; Non-Initiator's KFS: Violation, KFS will return to game player by referee and retry together with the robot; Initiator's KFS: Will be restored to its previous state by the Referee if it was placed on the Tic-Tac-Toe rack; otherwise, it will remain as-is and can be reused;
4.5	as	4.5.6	If our R1 only uses one weapon throughout the entire game, does that weapon have to be disposed in the Used Weapon Area after use? (as rule 4.5.6 only mentions disposing is only needed when another weapon is to be used)	Used weapons require disposal before using another new weapon. Once the disposal action (i.e. dropping used weapon) has started, it must be completed else constitutes a violation;
4.5	bh	4.5 Arena	Is it possible to place the KFS horizontally on the bottom row simultaneously using robot 1?	No, FAQ 4.5 -u;
4.5	bi	4.5 Arena	Can the robot place multiple KFS pieces horizontally at the same time?	No, FAQ 4.5 -u;

4.5	bj	4.5.1.2	Can the R1 robot throw other boxes directly from The Meihua forest to Arena zone before entering the Arena zone with one box?	No, violation, items (KFS, Assembled weapon) must be carried by designated robot to Arena. Refer to Rule 3.7, 4.5.1, 4.5.12, 6.2;
4.5	bl	4.5.17	The article said "R2 must be lifted or carried by R1, and must not touch the ground while placing the KFS in the top row of the Tic-Tac-Toe." So my question is Can R1 create a ramp for R2 to climb onto the R1 body? Does it count as a lift?	No, R1 initiates lifting or carrying R2 while R2 maintains its current stabilized position on the ground (i.e. without any climbing or movement actions by R2) until R2 detaches the surface of ground, ways to lift/carry/unload must be powered by R1 and it is up to the robot design;
4.5	bo	4.5.17	Can R1 lift or carry R2 in the Meihua Forest?	Yes, only in R2 Entrance Zone/Exit Zone. Refer to FAQ 4.5 - bl;
4.5	bp	4.5.18	Can R2 place kfs in the second row of tic-tac-toe while picked up by R1?	No, refer to Rulebook Clarification (Dec 2025) - 3.8;
4.5	bq	4.5.3	The article said "R1 can only use an assembled weapon to attempt to remove an opponent's KFS occupying any Tic-Tac-Toe slot." So my question is while the opponent is removing our occupied KFS, do any one of our robots have the right to defend our own KFS from falling off?	The defending action will cause violation; Refer to Rulebook Clarification (Dec 2025) - 4.5.3;
4.5	br	4.5.3	Can the robot's limbs / components be used to block my own team's KFS scrolls in the Tic-Tac-Toe slots, by positioning it in front of the slots to prevent the opponent from pushing it over?	No, Violation; Refer to Rulebook Clarification (Dec 2025) - 4.5.3;
4.5	bs	4.5.3	1). After removing opponent KFS occupying any Tic-Tac-Toe slot using an assembled weapon, while approaching the used weapon area, if the weapon falls in between and not in the used weapon area, is it necessary to pick it up from the ground and place it in the used weapon area before approaching for any other task? 2). In the above case if R1 continues for any other task without picking the fallen weapon and placing it in the used weapon area, will opponent's points for that KFS placing be considered or not?	1). Yes; 2). It is violation.
4.5	bt	4.5.3	The article said "R1 can only use an assembled weapon to attempt to remove an opponent's KFS occupying any Tic-Tac-Toe slot." So my question is while the opponent is removing our occupied KFS, do any one of our robots have the right to defend our own KFS from falling off?	Refer to Rulebook Clarification (Dec 2025) - 4.5.3;
4.5	bu	4.5.3	1). Can we confirm that each weapon is limited to a single KFS, but two separate weapons may remove two separate KFS at the same time?	1) No, refer to Rulebook Clarification (Dec 2025) - 4.5.6;

			2). Or can a robot remove only one opponent's KFS with 2 assembled weapons simultaneously?	2) No, refer to Rulebook Clarification (Dec 2025) - 4.5.3;
4.5	bv	4.5.3.	Can placing a Assembled Weapon in a Tic-Tac-Toe slot prevent the opponent from placing a KFS?	No, violation; Refer to Rulebook Clarification (Dec 2025) - 4.5.3;
4.5	bw	4.5.3 and 4.5.5	It is stated in 4.5.3 that R1 can only use an Assembled Weapon to remove an opponent's KFS on the Tic-Tac-Toe slot; however, can the Assembled Weapon be used to block my team's own scrolls from being removed from the slots, e.g. by positioning it horizontally at the bottom slots?	No, violation; Refer to Rulebook Clarification (Dec 2025) - 4.5.3;
4.5	bx	4.5.3	The rule states R1 can use an assembled weapon to "attempt to remove an opponent's KFS." Is R1 permitted to use the weapon defensively to block or parry an opponent's weapon attack to protect its own KFS, provided it does not intentionally damage the opponent's robot?	No, violation; Refer to Rulebook Clarification (Dec 2025) - 4.5.3;
4.5	by	4.5.4	After the Assembled Weapon is used, is it compulsory for the robot to immediately dispose of said weapon in the Used Weapon Area, or can it hold on to it without using it again, or without using any other Assembled Weapons?	Refer to Rule 4.5.6; It can hold the weapon if it does not require to use a new assembled weapon;
4.5	bz	4.5.4, 4.5.5	What if dismantled weapon touches KFS in arena?	Violation;
4.5	cb	4.5	In the Arena, if your team's robot accidentally prevents your team's KFS from falling (e.g., if the arm or body accidentally hits the KFS as it falls from the rack, preventing it from hitting the ground), is this considered a violation? Also, if it is done intentionally, is it a violation?	Yes, violation; Refer to FAQ 4.5 – ae;
4.5	cc	4.5	Once a team successfully places a KFS (R1 KFS or R2 KFS) into a vacant slot on the Tic-Tac-Toe Rack (Rules 4.5.2, 4.5.13, 4.5.17), is that KFS considered permanently placed for the remainder of the game, or can R1 or R2 collect that KFS back and attempt to place it in a different vacant slot in the Tic-Tac-Toe Rack?	No, not permanently placed but occupied; Refer to FAQ 4.5 – k;
4.5	cd	4.5	can R1 pickup R2 right after R2 exit meihua forest	Refer to FAQ 4.5 - bo;
4.5	ce	N/A	What if a weapon ends up in a tic-tac-toe slot without any robot holding/touching it (intentional or not) and blocks KFS from being put in, 1). how will the weapon be handled? 2).Will the referee remove it? 3). Will a violation be triggered?	1). will be removed 2). removed by referee 3). Forced retry on the robot that left the weapon

4.5	cg	4.5.1	If R1 provides a ramp-like passive platform (non-actuated, fixed once deployed), and R2 initially extends vertically using its own power to position itself onto the ramp, after which R2 becomes completely passive/powerless, and then R1 uses its own actuated mechanism to pull R2 over the ramp, — would this configuration be considered permissible? In this case: R1 is not directly lifting or carrying R2, but only pulling it over a ramp. R2 uses its own power only for initial positioning, and does not actively climb. The final motion of R2 is entirely driven by R1. There is no simultaneous powered motion from both robots during the transfer. Kindly confirm whether such a hybrid passive–active interaction, where R1 assists R2 via a ramp and pulling mechanism, aligns with the competition rules.	Pulling R2 over the ramp is not allowed; Refer to FAQ 4.5 – bl;
4.5	ci	FAQ 4.5 as	In the time interval between "using the weapon" and "disposing the weapon", a). is R2 allowed to place KFS? b). Is R1 allowed to lift R2? c). Is R1 allowed to place other KFS? If KFS is allowed to be placed after "weapon use", and "dispose weapon" has not yet happened, and Kung Fu master is achieved, the game ends, and R1 no longer has the opportunity to dispose the weapon. What happens if "Kung Fu master" is achieved, but used weapon is not disposed? Which of "Kung Fu master game end" and "requiring to dispose weapon" takes precedence?	a, b, c). Yes, provided used weapon is not used in the process; "Kung Fu master game end" takes precedence over "requiring to dispose weapon";
4.5	cj	1	Is it violance if our robot block opponent robot when it push our kungfu scroll	Yes, violation; Refer to Rulebook clarification (Dec 2025) - 4.5.3;

Section 6 End Game

Update: 2025/12/05

Item	Rule	Questions	Reply	
6	a	6	Can KFS that falls into the opponent's Arena during the game still earn points after the game ends?	No, refer to Rule 6.3.4;
6	b	6	If the KFS placed in the Tic-Tac-Toe Rack contacts with the robots of its own team when the game ends, can it score points?	Successful placement is a stationary KFS placed onto slot without falling or robot intervention.
6	c	6	Each assembled weapon scores 10 points. If it is dismantled later, does it still score points?	Assembled weapon was counted once assembled successfully; Refer to Rule 6.1;

6	d	6.2	If KFS stored in Arena dropped outside Arena, will points be deducted?	Points scored would not be deducted provided Rule 6.2 is fulfilled
6	e	6.3	does the KFS need to be fully inserted and stably placed within the slot to be considered “occupying” it? Or would a KFS that is partially inserted or tilted but remains supported by the rack still be counted for points?	Refer to FAQ 6 – b & Rule 6.3;

Update: 2026/02/02

6	f	6.1	If the assembled weapon falls or is dismantled, then will the points be deducted or not?	Refer to FAQ 6 - c;
6	g	6.3	Scoring points are awarded for KFS "occupying" the rows. If a KFS is successfully placed but is later knocked off the rack by an opponent's weapon attack, are the points for that KFS retained, or are they deducted from the team's score immediately?	Only KFS that remains in slots Tic-Tac-Toe points will be counted after the game ends.

Section 7 Deciding the Winner

Update: 2025/12/15

Item		Rule	Questions	Reply
7	a	2	According to the Rulebook(V.1.) 2.Kung Fu Master, "A team achieves "Kung Fu Master" by placing three of their KFS in a vertical column or diagonal line in the Tic-Tac-Toe Rack." Consider the situation that opponent's two KFSs are placed on a bottom left slot and on a middle left slot. Then, our robot's Assembled Weapon touches the KFS placed on a bottom left slot (but the KFS is not fallen yet). Then, before the KFS which is placed on a bottom left slot starts falling, opponent's robot places KFS on a top left slot. Then, the KFS placed on a bottom left slot is completely pushed by Assembled Weapon and starts falling. In this case, is the opponent team considered to have achieved Kung Fu Master? In short, we would like to know the exact time when KFS is considered to be removed by an Assembled Weapon.	Referee judgment and POJ final decision;
7	b	4.5	If a team has already met the necessary requirements to become a "Kung Fu Master", but the opposing team disrupts these conditions before the referee declare the team wins the game, can the team still become a "Kung Fu Master"? Does the opposing team violate?	Referee judgment and POJ final decision;

Section 8 Violations

Update: 2025/12/05

Item	Rule	Questions	Reply	
8	a	8	According to Rules 8.1 and 8.2, if R1 or R2 enters the opponent's game field, it is a violation. Then, is it a foul to extend into the space above the opponent's game field?	Momentary unintended projection of the robot into the opponent's field after extension is allowed.
8	e	8.2	If part of R2 enters the opponent's game field area when picking up a Spearhead, is this considered a violation?	Violation if part of R2 enters opponent's game field; Momentary unintended projection of the robot into the opponent's field after extension is allowed; Referee judgment;
8	f	8.4	Let's say we R2 takes the spearhead and instead of picking it up, can it just rotate and keep it on the spearhead so that R1 can just connect the staff with it with R2 just holding it in place. Is that allowed?	Not Permitted; Refer to Rule: 4.3.3 and 4.3.6;
8	g	8.6	Must the robot team still maintain the R1-first, R2-second exit sequence when moving from the Martial Club back into the Meihua Forest after a mid-game retry?	Refer to FAQ 4.5 -b;
8	aa	8.22	In the Arena, will the used weapon touching the opponent robot be considered a violation? For example, the used weapon slipped off R1 after using it and touches the opponent robot.	Violation; Assembled weapon is the only means to remove opponent's KFS from Tic-Tac-Toe and can be used only once; According to Clarification, please find the update: 2026/02/02.
8	ac	8.22	If a robot pushes an opponent KFS out of the tic tac toe rack using its mechanisms instead of a weapon. Will this be considered a violation? Who will be responsible for putting the KFS back into the original slot?	Refer to Rulebook Clarification (Dec 2025) - 4.5.3;
8	ad	8.22	Is it allowed for any part of the robot or game field objects (KFS/staff/weapon) held by the robot to enter the air space outside of both team's game field momentarily? If it is allowed, please define the time duration of "momentarily".	Momentary unintended projection of the robot into the opponent's field after extension is allowed. Referee judgment;
8	ae	8.22, 4.5.3–4.5.5	If the opponent's robot makes contact with and displaces a block that has already been placed in position, how is this situation evaluated according to the competition rules?	Refer to FAQ 8 - aa;

Update: 2026/02/02

8	b	8	Is the use of suction on the field or on field objects permitted during the game?	No;
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8	c	8.1	Can the robot hover over the block before picking up the KFS	Refer to FAQ 4.4 - s;
8	d	8.2	Considering Rule 8.2, is the "opposite half" of the spearhead/tic-tac-toe rack included in the opponent's game field areas? Will it be a violation if a mechanism of our robot extrudes to the opposite half of the spearhead/tic-tac-toe rack?	<u>Spearhead</u> : To grab the spearhead, R2 is allow to cover over the midpoint of the rack based on referee's judgment. However intentional blocking or prolong coverage would result in forced retry; <u>Tic-Tac-Toe shelf</u> : Robot is allow to cover over the midpoint based on referee's judgment. However intentional blocking or prolong coverage would result in forced retry;
8	h	8.7 /8.8	Is R1 allowed to use R1 KFS to touch R2 KFS? Is R2 allowed to use R2 KFS to touch R1 KFS?	Not Permitted;
8	i	8.7/8.8	Are these rules effective in the ramp connecting Meihua Forest and Arena?	Yes. RAMP is part of Arena, refer to Rule 6.2;
8	j	8.9	Are robots allowed to move Fake KFS by means other than having the robot touching directly, such as by wind, or by pushing fake KFS using game field objects allowed to be held, such as weapon or R1/R2 KFS?	Not Permitted;
8	k	8.9	What happen if the fake KFS is moved out of its original block? Will it be placed back to its original position? If yes, by whom?	Refer to Rule 3.6.3. Any KFS affected by another dropped KFS will remain as-is, and this dropped KFS will be restored. If a team moves its own KFS (provided the moved KFS remains in the forest area) and calls for a retry, or if any fake KFS is moved in violation, the referee will restore the moved KFS to the white marking position of its original block. If that position is already occupied by another KFS, the moved KFS will be placed at the nearest edge of the same block, closest to where it was last positioned.
8	l	8.10	According to 8.10. of the rule book(V 1.0), violation will be taken when "R2 moves onto an MF block when there is a KFS". Which is the definition of "there is a KFS"? If it does not match with any of followings, we would like to know the precise definition. (1-A) A KFS that was originally there is touching the block (1-B) A part of KFS that was originally there is in the area above the block (1-C) All part of KFS that was originally there is in the area	Refer to Rule 8.10;

			above the block (1-D) A KFS that was originally there is in “the marked square boundary” mentioned in 4.1.5. of the rule book(V.0) (2-A) A KFS, including one originally placed on another block, is touching the block (2-B) A part of KFS, including one originally placed on another block, is in the area above the block (2-C) All part of KFS, including one originally placed on another block, is in the area above the block (3-A) A KFS that was originally there, held by R2, is touching the block (3-B) A part of KFS held by R2, including one originally placed on another block, is in the area above the block (3-C) All part of KFS held by R2, including one originally placed on another block, is in the area above the block	
8	m	8.11	Clarify the definition of “pick up”? If R2's arm grips the KFS (game block) while the KFS remains in contact with the Meihua Forest platform, does this situation qualify as “picking up”?	‘Pick up’ is defined as the KFS no longer being in contact with Forest block.
8	n	8.14	If R1 accidentally uses two separate Assembled Weapons to simultaneously make contact with a single opponent's KFS, how many of those weapons are counted as 'Used Weapons' that must be retired to the Used Weapon Area?	Refer to rule 8.15; Both weapons counted as Used Weapon;
8	o	8.15	If an assembled weapon continuously touches a KFS block without release, does it count as a "used weapon"?	While using the weapon to take out KFS from Tic-Tac-Toe rack, the weapon must be in motion or movement and cannot be idle. If the team deliberately not to retract the weapon - team will be disqualified by POJ; Refer to Rule 10.3;
8	p	8.16	What exactly does damage to the arena include? Does crashing into a wall count as damaging the arena?	Yes, if action causes game field damage;
8	q	8.18	If R2's manipulator or arm physically extends across both the middle and top rows, but it only places one KFS at a time, does this count as an “attempt to place in both rows simultaneously	Please clarify the question;
8	r		If own team's R2 KFSs dropped on both R1 pathways, according to 8.7, R1 cannot touch R2 KFS, can I call retry to clear R2 KFS obstructing R1 on R1 pathway?	Refer to Rulebook Clarification (Dec 2025) - 8.7;
8	s	8.19	Violation 8.19: "If a team's own KFS is dropped into the opponent's Meihua Forest". Is it a violation if a team's own KFS is dropped into the opponent's arena?	Yes, it is a violation;

8	u	8.20	From Rulebook(V1.0), the rule Violation 8.20 (R2 KFS dropped in R1 Pathway), is the resulting Forced Retry imposed on R1, R2, or both robots?	R2 is violation;
8	v	8.20	Regarding the definition of "drop", if R2 places down R2 KFS to touch R1 pathway while holding the R2 KFS, is it a violation?	Yes, it is a violation;
8	w	8.20	Are there any consequences if our team's R2 KFS is dropped 1). outside of the game field, or 2). in our team's zone 1, or 3). in our team's zone 3?	MF: 4.4.17. Dropped R2 KFS outside Forest cannot be reused; Arena: 4.5.15. Fallen R2 KFS on the opponent's side cannot be reused; Violation: 8.19. If a team's own KFS is dropped into the opponent's Meihua Forest; 8.20. If a team's own R2 KFS is dropped in their own R1 Pathway;
8	x	8.20	In the Meihua Forest, if an R1 KFS dropped in its own R1 pathway, will it be a violation?	No, refer to Rule 4.4.7 - R1 can pick up dropped R1 KFS inside Meihua Forest.;
8	y	8.21	If the placed "used weapon" rolled off the used weapon area after it is completely placed, is it a violation?	Yes it is violation; Team must continue to complete the disposal action else will be violation; Refer to FAQ Clarification (Jan 2026) – 4.5 - as;
8	z	8.21	Suppose the team attempts to dispose the used weapon and it falls, such that the weapon is not completely placed inside the Used Weapon Area. Does this immediately count as a violation? If not, can the team be able to fix the position until it is completely placed inside the Used Weapon Area?	Not immediately; Team must continue to complete the disposal action; Refer to FAQ Clarification (Jan 2026) – 4.5 - as;
8	aa	8.22	In the Arena, will the used weapon touching the opponent robot be considered a violation? For example, the used weapon slipped off R1 after using it and touches the opponent robot.	Violation; Unused assembled weapon is the only means to remove opponent's KFS from Tic-Tac-Toe and can be used only once;
8	ab	8.22	If our R1 only uses one weapon throughout the entire game, after the weapon is used to push away opponent's KFS from tic-tac-toe area, a). does the weapon have to be retracted from tic-tac-toe area? b).Or can the weapon remain in that tic-tac-toe slot for the remainder of the game? c). If the weapon must be retracted, please define the maximum time duration that a weapon can stay within a tic-tac-toe slot.	Refer to Rule: 4.5.3. a). Yes; b). No, must be retracted; c). must be retracted immediately;

				Unused assembled weapon is the only means to remove opponent's KFS from Tic-Tac-Toe and can be used only once
8	af	8	Can R2 climb on R1 and place 2 KFS boxes at the same time on the 2nd and top row while on R1's back?	Not permitted; Refer to Rulebook Clarification (Dec 2025) - 3.8;
8	ag	8	Can R2 communicate with R1 indirectly via sensor or image processing?	Sensor or image processing is not wireless communication and is acceptable;
8	ah	8	Can R2 extend to the right 1800mm, then retract its arm and extend to the opposite side 1800mm? That means both sides can extend 1800mm but not at the same time. You have to wait for one side to retract its arm before extending the other 1800mm.	The team must demonstrate that there is interlocking in R1 and R2 that at any time R1 and R2 when fully extended do not exceed the dimensions as stated in 12.6 and 12.7; Refer to FAQ 12 -j. The maximum extension for R2 is 1300mm.
8	ai	8	After R1 places the KFS scroll, can it stand right there to block it, to prevent the opponent from knocking down the KFS roll from the first row below?	No, it is violation; Refer to Rulebook Clarification (Dec 2025) - 4.5 3 & FAQ Clarification (Jan 2026) – 4.5 - ae;
8	ak	8.16	Whose violation is it when R2s of both team collide with each other during spearhead picking?	The one who touches the spearhead is the initiator and the one after is violation; Referee judgment;

Section 9 Retry

Update: 2025/12/05

Item	Rule	Questions	Reply	
9	a	9	<p>If both our robots R1 and R2 are in the Arena and need to retry, we require them to return to the corresponding Retry Zones in the Martial Club, as stipulated in rule 9.4.1(3). Then, after they restart, can they assemble weapons in the Martial Club? Must they assemble weapons in the Martial Club? Must R1 carry the assembled weapons when leaving the Martial Club? Must R1 go first and R2 follow when leaving the Martial Club? Must R2 pass through the Forest? Must R1 and R2 carry the KFSs and/or weapons when re-entering the Arena?</p>	<p>Yes; Refer to Rule 4.3, regarding assemble weapon in Martial Club; Refer to Rulebook Clarification (Dec 2025) - 4.3.9, 4.3.10, 4.5.1 & 4.5.12;</p>
9	b	9	<p>In Section 9 of the Rulebook, some provisions related general or mandatory retry are stipulated, but no conditions are set for ending the retry and restart. If one of our robots is forced to retry and returns to the retry area. However,</p>	<p>Yes, the team must wait for the referee's signal before restarting the game;</p>

			we do not need to perform any maintenance or adjustments on it at all. Can we immediately apply to the referee for a restart?	
9	d	9	In Rule 4.4, for R1, 4.4.11 states " The team can request R1 or both R1 and R2 when in MF to retry and return to the Martial Club Retry Zone (RZ)". This means that R1 can be retried independently, and R1 and R2 can also be retried simultaneously. However, for R2, the rules do not mention any retry. Does this mean that R2 cannot be retried independently?	Refer to Rule 4.4.21;
9	e	9.1	After the game has started, when a retry is taken, must the robot return to its unextended (initial) dimensions before the retry begins?	Yes;
9	o	9.4.1.2	If the team called on a retry in Arena for R2 to the Martial Club's R2 Retry Zone, does R2 have to walk its way back through the forest block?	Refer to FAQ 9 -a;
9	p	9.4.1.3	In the situation where R1 is carrying R2 in the Arena when a retry is declared: 1. In this state, is it possible to request a retry for only one of the robots? Or does a retry request in this situation automatically apply to both robots? 2. If we request a retry for both robots in this situation and choose to restart from the Arena's Retry Zone, is it permissible for R1 to restart in a state where it is lifting/carrying R2? Or is it necessary to separate R1 and R2 and restart them one by one?	1. Yes; Retry for one robot; 2. No; Need separate;

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9	f	9.1.4	Is it allowed to place a used weapon by a team member to the used weapon zone from R1 when doing Retry?	No;
9	g	9.1.4	Does it mean that even if the robot is just barely holding the game field item, we can help it re-adjust the game field item for a better grip for the robot?	Yes during retry.
9	h	9.1.4	If a game field object (KFS, spearhead, staff) is touched by the robot, will it be considered held by the robot and therefore can be moved? What is the difference between "touched" and "held" by the robot?	Refer to Rule 9.1.4: Only item(s) held by the robot during a retry can be re-adjusted. Item that merely touching the robot does not count as being held.
9	i	9.1.4	If R2 is holding a weapon head under retry, can R1 assemble the weapon while R2 is under retry conditions?	Refer Rulebook 9.1.4;
9	j	9.1.4.1	If R2's KFS falls onto the R1 pathway, where R2 cannot reach it, what is the condition to use it? 1. Can R1 pick up the KFS (from the MF) that is on the R1 pathway? 2. Do we need to perform a retry for that KFS?	1. No; Refer to Rulebook Clarification (Dec 2025) - 8.7; 2. Violation, refer to Rule 8.20;

9	k	9.1.4.2	While assembling the weapon — a combined task of both R1 and R2 — what is the procedure for a retry, and which robot should take the retry in the following conditions: 1. if Staff falls from R1 without any contact of staff and R1 With R2; 2. if Staff falls from R1 with either contact of staff and R1 With R2; 3. if spearhead fall on MC from R2 without any contact of staff and R1 With R2; 4. if spearhead fall on MC from R2 with either contact of staff and R1 with R2;	Items dropped in own side: The team may decide whether to request a retry; Refer to FAQ 4.3 - d;
9	l	9.1.4.2	What is the procedure for using an assembled weapon if it falls or if its assembly breaks?	Refer to Rule section 4.3 in Martial Club. Refer to Rule section 4.4 in Meihua Forest. Refer to Rule section 4.5 in Arena
9	m	9.1.5	Violation 8.19: "If a team's own KFS is dropped into the opponent's Meihua Forest". Retry 9.1.5: "During a retry, team members are not allowed to adjust any other items on the game field that are not held by the robot.". Does that mean the gamefield members do not have to remove their team's KFS from the opponent's gamefield?	Refer to FAQ 4.3 - d;
9	n	9.3.1.1	Situation: Our team has used all its Assembled Weapons in the Arena. R1 and R2 then proceed to the Meihua Forest (MF) to collect more KFS. Due to a technical issue, the team calls a retry, and R1 and R2 return to the Martial Club (MC) Retry Zone. Interpretation Question: Given that R1 no longer has any Staffs or Spearheads available to assemble a new weapon, is R1 permitted to exit the Martial Club and return to the Meihua Forest without carrying an Assembled Weapon, or does Rule 4.3.9 or (Violations)8.5 ('R1 must exit Martial Club to Meihua Forest with one or more Assembled Weapons') apply to every exit, forcing R1 to remain in the MC?	Refer to Rulebook Clarification 4.3.9 & 4.3.10;
9	q	9.1.4	1). If R2 is holding a spearhead that fell down during assembly and a team member asks for a retry, is the spearhead placed back onto the rack? 2). and the same question for the KFS, if a KFS is slightly moved by the robot (off-centered) and a team member asks for a retry, is the KFS put back in its original position (re-centered)? 3). and if the answer to the first question is No, then can the robot pick up another spearhead from the rack or does it have to pick up the fallen spearhead?	1). If R2 is holding the spearhead, no need to place back to the spearhead rack. 2). No, remain as-is.

Section 10 Disqualifications

Update: 2025/12/15

Item	Rule	Questions	Reply
10	a	10.3. What is considered "not in the spirit of fair play" specifically? For ex: Can R1/ R2 has LED Screen show fake KFS image or Spearhead while on Arena/ or in MC to distract opponent robot?	No, distracting opponent is not allowed; POJ judgment; Refer to Rule 10.3;
10	b	10.5. Since R2 is an automatic robot, what will happen when R2 from both teams attempt to pick up the same spearhead and collide? Will there be any procedure (violations, etc.) when two R2 make a collision at spearhead rack?	Refer to FAQ 4.3 -a;
10	c	10.6. Can we have shooting mechanism where we launch game props?	Not permitted;
10	d	10.6. If R2 moves by jumping off a block in the Meihua Forest—such that it momentarily leaves the surface before landing on another block—will this type of movement be considered as projectile motion under the rules?	Permitted to use jumping mechanism; Refer to Rulebook Clarification (Dec 2025) - 10.6;

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10	e	10.7. If a team called on a retry and changes the program of R2, which tells the path for it to walk through the game field area, a). is it counted as sending commands? b). But it is not via wireless. How will this action be judged?	a) No, it is not regarded as send command.
10	f	10.7. Rule 10.7 prohibits sending commands to control the robot R2. (a). How can we determine whether R1 or the team member sent an instruction to R2? (b). Does the R2 operator needs to put down his controller after the game starts?	Refer to Rule 10.7; (a). TAC will vet the design of R1 and R2 based on the specification and the vetting. If it is found R2 is controlled by anything throughout the game, the team will be disqualified. (b). Yes;

Section 12 Robots

Update: 2025/12/17

Item	Rule	Questions	Reply
12	a	12. Can compressed air be used to blow the KFS into the empty grid of the Tic-Tak-Toe Rack?	Not Permitted; Refer to Rulebook Clarification (Dec 2025) - 10.6;
12	b	12. Are the robots allowed to suction or stick the game field?	Not Permitted;
12	c	12.2. Please clarify what does mean the phrase "automatic one capable of operating independently" in Rule 12.2.	Means automatic;

12	d	12.3.	Are the following actions with R2 permitted during the setting time and at the start of the game? (a) Informing R2 the location of our KFS that the opponent placed in our MF, for example, by inputting the coordinates. (b) Inputting the types and locations of spearheads on the spearhead rack to R2. (c) Attaching multiple physical start switches to R2 to select a route in the MC or MF at the start of the game.	(a) Allow; (b) Allow; (c) It is open to the students to design their robot;
12	e	12.3.	Is it allowed to use a wireless controller to reconfigure R2 during retry? The wireless controller will be put aside and not operated during the game except for retry.	Allowed;
12	f	12.3.	Is it possible to use an remote emergency power stop for R2?	Not allowed;
12	g	12.4. - 12.7.	Does the KFS carried or held by the robot count as an extension of the robot's dimensions? For example, if the KFS temporarily extends beyond the robot's allowed size limit, will it be considered a violation?	Not count;
12	h	12.4. /12.5.	Are there any restrictions on the robot's size before the game starts (for example, during the 1-minute setup time)? The robot will stay within dimensions of Rule 12.4/12.5 when the game starts, and stay within Rule 12.6/12.7 during the game.	Refer to Rule 4.1.10, 12,4. 12.5;
12	i	12.5.	Are there any restrictions on the robots' dimension during setup time?	Refer to Rule 12.4;
12	j	12.6.	Suppose our robot has two mechanisms. When both are extended, it exceeds the size limitations. However, only one mechanism will be extended at a time during the game, so it complies with the maximum size during the game. Does the maximum size in the rule here refer to the maximum size of the robot that is physically possible? Or the maximum extension during the game?	Team must prove that only one mechanism is physically extended while the other mechanism is physically locked. If the referee observes that both mechanisms are extended simultaneously after the game starts, it will be treated as disqualification.
12	k	12.6.	The dimension limits apply only to the robot's body and do not include any game objects the robot is holding, such as a staff or assembled weapon. Is our assumption correct?	Refer to FAQ 12 - g;
12	l	12.6. - 12.7.	Will the robot inspection measure the full extension length or until where we programmatically limited one only?	Refer to FAQ 12- g & FAQ 12 - j;
12	m	12.6., 12.7.	Does the staff and KFS and weapons held by R1/R2 count as a part of the robot, and count in the dimension of the robot when fully extended?	No; Refer to FAQ 12 - g;
12	p	12.9.	The intention of Rule 12.9 seems to prohibit radio frequency communication between R1 and R2. R1 and R2 need to cooperate with	Yes, RF communication is prohibited and other forms of signaling such as light and semaphore are not RF

			each other, so can they use other communication methods, such as light, semaphore, etc.?	communication ; According to Clarification, please find the update: 2026/02/02.
12	q	12.11.	Can R1 communicate with R2 via physical touch like push a button?	Not permitted. Robot 2 must be an Automatic Robot. It should operate autonomously without manual control once the game starts. According to Clarification, please find the update: 2026/02/02.
12	r	12.11.	Is R2 allowed to communicate with R1 through wired communication	Refer to FAQ 12 - q;
12	s	12.11.	Consider whether the following actions are wireless transmissions, and do they cause violations. a) Scanning QR code. b) Using RGB/LED light. c) R1 touching R2 buttons.	Refer to FAQ 12 - p; c) Refer to FAQ 12 - q;
12	t	12.11.	Is R2 allowed to have status indicators (LEDs) that notify game field members?	Refer to FAQ 12 - s;
12	u	12.11.	Is R2 allowed to communicate with R1, before the game starts?	Yes;
12	v	12.11.	Are we allowed to set up cameras outside the gamefield, to communicate the positions of KFS to R2 before the game starts?	Not Permitted;
12	w	12.11.	Will there be any inspection, declaration form, or frequency monitoring to ensure that no wireless communication occurs between R1 and R2? Or is this rule intended to be based mainly on team integrity (“honour system”) rather than technical verification?	Refer to Rule 10.7; Require each team to specify it in the specification form, and verify it in vetting. If found violation during the game, the team will be disqualified
12	x	12.11.	According to the rule book(V 1.0) 12.11., the wireless communication between R1 and R2 is prohibited during the game. We would like to ask if the followings are permitted. (F) The R1 pilot controls R1 while looking at R2 (G) The R1 pilot inputs R2’s status into R1, and R1 moves automatically based on that. (H) R2 recognize R1 including R1’s position, status of the R1’s mechanism, movement of the R1’s mechanism, Strict communication limits between R1 and R2 hinder coordinated tasks like weapon assembly or KFS placement, and precise operation of R1 to match R2's movement become more important than robot design. If even (H) were not allowed, it would be almost impossible for the two robots to work in harmony. Also, we would like to ask how organizers judge whether teams violate this regulation or not.	Robot 1 is a Manual or Automatic Robot. It can be operated manually by a team member or autonomously without manual control; Robot 2 must be an Automatic Robot. It should operate autonomously without manual control once the game starts. Refer to FAQ 12 – w & FAQ 12 – s; According to Clarification, please find the update: 2026/02/02.
12	y	12.11	Although R2 is automatic, R2 somehow requires some judgement related to manual R1 to perform tasks (for example, to judge that R1 has left Zone 1, to comply with Rulebook 4.3.10). However, wireless communication between R1 and R2 is not allowed. What features of R1 can be used for	Refer to FAQ 12 - s;

			judgement by R2 (for example, LED on R1, position of R1, sign on R1)? Similar problem has also arised in previous Robocon.	
12	z	12.11.	What does "wireless transmission" and "communication" include ?	Refer to FAQ 12 -s;
12	aa	12.12.	Are we allowed to use electric compressor for vacuum	Installation on robot is not allowed;
12	ab	12.15.	The mentioned gas pressure is 600kPa, can we loop back the exhausted gas and reuse it?	Permitted;

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12	n	12.8.	Regarding to the game field, the Red and Blue game fields are mirror-symmetrical, meaning their layouts are left-right reversed. Based on this, we have the following questions regarding robot configuration. 1. Is it allowed to reconfigure our robot's mechanisms to suit the assigned field color before a game begins? 2. If 1 is allowed, how the total weight is calculated under 12.8 of rulebook(V1.0)? For example, if we swap a "right-side module" for a "left-side module," are both modules be included in the 50 kg total weight limit?	<ol style="list-style-type: none"> 1. Allowed; 2. Both left and right side modules must be included in the 50kg total weight limit; Refer to Rule 10.1 & 12.8;
12	o	12.8.	Regarding rulebook(V 1.0) 12.8, does the weight limit 50kg include the following? (a) A Wi-Fi router, not mounted on the robot, that relays communications between the controller and the robot. (b) Power supply of the Wi-Fi router. (c) A device, not mounted on the robot, that relays communications between the controller and the Wi-Fi router (There would be no input or other operations on this device). (d) A visualizer that displays the robot's status (e.g., position in the field, speed, etc.). This is not used to control the robot, but provides information to team members. (e) Walkie-talkie or other audio communication devices that allow team members to communicate with each other during the match. (f) A personal computer to remotely control the computer mounted on the robots, to be used only during setting time. (g) A personal computer to remotely control the computer mounted on the robots, to be used only during the robot reconfiguration. (h) Jigs to adjust the initial position of the robots, to be used only during setting time. Also regarding the weight limit, is our assumption below correct? (i) A "remote emergency stop button" that allows us to stop a robot remote are exempt from the weight limit since this is aimed to be used for safety.	(a) - (d), (g) & (i) - Included; (e), (f), (h)- NOT included;
12	p	12.9.	The intention of Rule 12.9 seems to prohibit radio frequency communication between R1 and R2. R1 and R2 need to cooperate with each other, so can they use other communication methods, such as light, semaphore, etc.?	Yes, dense communication is prohibited. Other forms of signaling such as light and semaphore are not dense communication.

12	q	12.11.	Can R1 communicate with R2 via physical touch like push a button?	Not permitted. Robot 2 must be an Automatic Robot. It should operate without manual control once the game starts.
12	x	12.11.	According to the rule book(V 1.0) 12.11., the wireless communication between R1 and R2 is prohibited during the game. We would like to ask if the followings are permitted. (F) The R1 pilot controls R1 while looking at R2 (G) The R1 pilot inputs R2's status into R1, and R1 moves automatically based on that. (H) R2 recognize R1 including R1's position, status of the R1's mechanism, movement of the R1's mechanism, Strict communication limits between R1 and R2 hinder coordinated tasks like weapon assembly or KFS placement, and precise operation of R1 to match R2's movement become more important than robot design. If even (H) were not allowed, it would be almost impossible for the two robots to work in harmony. Also, we would like to ask how organizers judge whether teams violate this regulation or not.	Robot 1 is a Manual or Automatic Robot. It can be operated manually by a team member or autonomously without manual control; Robot 2 must be an Automatic Robot. It should operate without manual control once the game starts. Refer to FAQ 12 – w & FAQ 12 – s;
12	ac	12.9	Is the rule only limited to IEEE standards, or any 2.4 GHz equipment that is FCC-Certified?	Only restricted to the standards mentioned in the rulebook, 802.11, 802.15.
12	ae	12.6, 12.7	Even if the robot changes its posture during the match and its vertical and horizontal dimensions are reversed, is it acceptable as long as it does not exceed the specified maximum dimensions (R1: 1000×1800×1300mm, R2: 800×1300×1300mm) at any given moment?	Allowed;
12	af	12.6., 12.7.	After extending, can the projection of the robot on the opponent field allowed?	Refer to FAQ 14 - b;
12	ag	12.11	Does "wireless transmission" as stated in Rule 12.11 (R1 and R2 are not permitted to communicate with each other via wireless transmission during the game) include communication methods such as visual signals (e.g., lights, flags, or other line-of-sight means)?	Refer to FAQ 12 -s;
12	ai	12.11	Can two robots determine each other's positions using positioning tools like ROS?	As long as the design of R1 and R2 complies with the game rule.
12	al	12.6	As mentioned in the FAQ, robots are allowed to extend only from one side at a time. We would like to seek clarification regarding a mechanism on R1 / R2 that operates as follows: At any given instance, the mechanism extends only from a single side, remaining within the permitted dimensional limits. After completing its operation, the mechanism retracts, the robot rotates, and then the same mechanism extends in a perpendicular direction (i.e., along the other axis). Although the robot alternately extends along length and width, at no point does it extend from more than one side	Refer to FAQ 12 - j;

			simultaneously, and it always remains within the allowed dimensions during each instance of extension. Kindly confirm whether such an alternating, single-side extension mechanism complies with the extension rules stated in the FAQ.	
12	am	12.6 and 12.7	After extension, the dimensions of R1 and R2 should be within W1000xL1800xH1300 (mm) and W800xL1300xH1300 (mm), respectively. The questions are, (a) Are these extension allowances from the centre of the robot? (In this case, R1 would be able to extend 400mm from either of the two parallel ends, and R2 would be able to extend 250mm from either of the two parallel ends). Or, are these allowances after the end of the robot sides (in this case, R1 can extend 800mm from a single side, and R2 can extend 500mm from a single side) (b) Can Robot R1 and Robot R2 extend asymmetrically? (i.e., either 250mm from either of the two parallel sides for an 800mmx800mm robot, such that it is a 1300mm centric extension, or 500mm from one of the four sides of the robot for an 800x800mm robot, such that it is a 1300mm one-side extension) (c) According to 12.4, 12.5, 12.6, and 12.7, we assume that when a robot needs to extend from the front/back direction to the right/left direction, it has to come within the 800x800mm start zone limit first and then extend in the needed direction (due to an extension limit in a single direction at a time). Is our assumption correct?	Refer to Rule 12.4, 12.5, 12.6, 12.7;
12	an	FAQ 12e	Regarding R2's wireless controller, 1: does the weight of this R2 controller count into the weight stipulated by Rule Book 12.8. / FAQ 4.1h? 2: Is this R2 controller counted within the ""control unit"" as stated in Rule Book 4.1.10? If yes, then it seems contradictory to FAQ 12e, since we need to touch the R2 control unit to move it outside of the start zone when the game starts, which counts as manually controlling R2.	1: Yes; 2: Yes, it is just similar to a reset button or power button, and it is not considered as a control.
12	ao	FAQ 12p	This FAQ states R1 is allowed to use visible LED light to send signals to R2, is this understanding correct? By this rule, R1 can adjust its light based on manual controller input, and R2 can read the light signal using a camera, thus R2 will be controlled by R1's manual controller indirectly. Is this allowed? This seems to go against the spirit of R2 being automatic. Thus, are there any additional rules governing the use of light communication from R1 to R2?	Permitted. It is a matter of action and reaction. If R1 sends a signal to R2 and instruct R2 to move, it is called control. If R2 reads a signal from R1 and then makes its next step, it is called automatic. Refer to FAQ 12 – p;
12	ap	FAQ 12s	Can R2 (the autonomous robot) track the ArUco Markers attach on R1 permitted or not permitted	Permitted;

Section 14 Others

Update: 2025/12/17

Item	Rule	Questions	Reply	
14	a	14	Are there any consequences for our team's spearhead/staff/weapon entering onto the opponent's game field, except for tic-tac-toe rack?	Refer to FAQ 4.3 -d.
14	b	14	After extending, can the projection of the robot on the opponent field allowed?	Momentary unintended projection of the robot into the opponent's field after extension is allowed. Referee judgment;
14	c	14	If there is a contradiction between the rule text, pictures and video, which one should be trusted first? In the figure below, the left picture is obtained from Appendix 4.1, the right one is obtained from the rule video. Which one is correct?	Refer to the ABU Robocon 2026 Rulebook and Appendix documents.
14	d	14.1.	Is it permissible for R2 to recognize the Forest and where KFSs are placed until the game starts after the setting time ends?	Please refer to Rule Section 4.2: Start of the Game; After setup time, team members are not allowed to touch the robot except the start button.
14	e	14.1.	We would like to clarify if the following mechanisms are permissible for gripping game objects such as KFS. 1. Suction by Airflow: A mechanism that generates continuous airflow (e.g., with a fan, propeller, or compressed air blower) to attract and hold an object. 2. Gripping by Vacuum Pads (Suction Cups): A mechanism that grips an object by sealing a pad (i.e., a suction cup) against its surface and creating a vacuum. This includes mechanisms using vacuum pumps powered by compressed air. Could you please provide answers for each method separately?	1) Not permitted; Refer to Rulebook Clarification (Dec 2025) - 10.6; 2) Permitted to use KFS gripping by Vacuum Pads (Suction Cups), please refer to Rule Section 4: Game Procedure; According to Clarification, please find the update: 2026/02/02.

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14	e	14.1.	We would like to clarify if the following mechanisms are permissible for gripping game objects such as KFS. 1) Suction by Airflow: A mechanism that generates continuous airflow (e.g., with a fan, propeller, or compressed air blower) to attract and hold an object. 2) Gripping by Vacuum Pads (Suction Cups): A mechanism that grips an object by sealing a pad (i.e., a suction cup) against its surface and creating a vacuum. This includes mechanisms using vacuum pumps powered by compressed air. Could you please provide answers for each method separately?	1) Not permitted; Refer to Rulebook Clarification (Dec 2025) - 10.6; 2) Vacuum is not permitted;
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Section 16 Texts/ Symbols on KFS

Update: 2026/02/02

Item	Rule	Questions	Reply
16	a	16. Texts / Symbol on KFS For kfs, is kfs real robot 2 always marked with a red box and kfs fake always marked with a blue box? If not, what determines whether kfs real and kfs fake can be red or blue?	The color of the KFS is determined by the team's color; Refer to 'Appendix V1.1.pdf';

Section Appendix

Update: 2025/12/17

Item	Rule	Questions	Reply
App.1	a	15 Are the staff rack and spearhead rack attached to the arena?	Not in ARENA section; Those racks will be fixed and attached to the MC game field;
App.2	b	Appendix 2.5 Is the arrangement of the spear heads on the spear head rack given in the appendix going to be the same in the actual matches?	Yes;
App.3	a	Appendix 3 How much are the length and diameter of the coach bolts used to fix the acrylic plates for the Tic Tac Toe Rack? How is the acrylic plate at the top of the Tic Tac Toe Rack fixed? Could you provide the dimension and/or the part name of the bolt, and show the length from the highest exposed part of the bolt to the surface of the acrylic?	Refer to Appendix 3 - Tic-Tac-Toe Rack;
App.3	c	Appendix 3 In Appendix 3, there is a "Centre line" on the acrylic sheet of the Tic Tac Toe Rack. Is it engraved onto the acrylic sheet? What is it used for? This Centre line was never mentioned in any Rule.	Any method to put the line; Was designed to assist referee judgment if needed;
App.3	d	Appendix 3 Regarding rulebook(V.1.) appendix 3 - Tic-Tac-Toe Rack, we have the question about a centre line on the tic-tac-toe rack. When a robot place KFS onto the tic-tac-toe rack, which of the followings are allowed: 1-a. A mechanism to place KFS goes over the centre line on the tic-tac-toe rack. 1-b. A mechanism to place KFS goes through the tic-tac-toe rack into the opponent side. When a robot use an assembled weapon to attempt to remove an opponent's KFS, which of the followings are allowed: 2-a. An assembled weapon goes over the centre line on the tic-tac-toe rack. 2-b. An assembled weapon goes through the tic-tac-toe rack into the opponent side.	Referee judgment and Refer to FAQ 4.5 - ap; Successful placement is a stationary KFS placed onto slot without falling or robot intervention;
App.4	b	Appendix 4.1 Could you please clarify the exact material used for the stickers covering the KFS? Specifically, are they paper-based, vinyl, laminated, or another type of sticker, and what is their approximate thickness or surface finish (matte or glossy)?	Matte vinyl sticker;

Update: 2026/02/02

App.2	a	Appendix 2 Assuming that the staffs on the staff Rack as described in Rule 4.3.2 have already been assembled with 30PM quick coupler, it can be seen from Appendix 2.1 that the connectors are glued into the PVC pipe. Is this bonding strong enough? What should be	Refer to Appendix 2.1 - Staff; PVC pipe glued with assemble connector;
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			done if the assembled weapon disintegrates at the glue during the game? The purchase link provided in the new Appendix V1.0 also includes information about thread taps. So, are the quick couplers glued into the PVC pipes or connected by threading?	
App.4	c	Appendix 4.1	We would like to ask about the detailed surface specifications of KFS. According to the Appendix 4.1 of the rulebook V1.0, it is stated that the KFS is a "Carton Box, cover by 6 sides of sticker" and that the "symbolic texts/pictures are sticked on 5 sides". 1. Regarding the sticker. (1.1) Is the sticker fully adhered to the entire surface of each face? To be more specific, does the adhesion cover the entire rear surface of the sticker, or is it only applied in certain areas (e.g., at the edges or in spots)? (1.2) Can we expect the surface to be free of significant wrinkles or air bubbles? (1.3) The photo in Appendix 4.1 shows very clean corners on the KFS. Could you clarify how the sticker or stickers are applied to the box? For example, is a single, continuous sticker wrapped around the box, or are six separate stickers used, and how are the seams at the edges treated?	Sticker size referring to 'KFS Image V1.0.pdf'; The sticker is a die-cut sticker, not cover the whole surface of the box;
App.4	d	Appendix 4.1	2. Regarding the Symbolic Texts/Pictures. We would like to clarify how the "symbolic texts/pictures" are sticked to the box. Which of the following methods is correct? (a). Printing. In other words, symbolic texts/pictures are printed directly onto a large, single-piece base sticker (e.g., a red or blue sticker), and this sticker is then applied to each face of the box. (b). Layered Stickers. In other words, a plain, base-color sticker is first applied to the box, and then symbolic texts/pictures are applied as a separate, die-cut sticker on top of that base-color sticker.	The stickers will be a die-cut sticker that is designed to be affixed to the surface of the base-color box; Refer to the 'KFS Image V1.0.pdf';
App.4	e	Appendix 4.1	Appendix 4.1 presents 15 recognition Patterns for R2 KFS and 15 recognition Patterns for fake KFS. We know that in the game, the numbers of R2 KFS for the red team and the blue team are 4 each, while the numbers of fake KFS for the red team and the blue team are only 1 each. So, are the Patterns on the R2 KFS of two teams the same for each pair? Are the Patterns on the fake KFS of two teams team the same? And, once these Patterns are determined, will they no longer change in the matches?	Refer to Appendix V1.1.pdf; 1. Each team may freely select and arrange any items from the 15 types of KFS. 2. Each team may choose and arrange items from the three types of fake books. 3. Once selected, the items cannot be changed.
App.4	f	Appendix 4.1	What is the size of the Oracle character and 2026 Robocon on KFS? As they are not provided in the Rulebook.	Sticker size referring to 'KFS Image V1.0.pdf' in size of A4;
App.4	g	Appendix 4.1	What is the combination of characters on fake KFS? Is there a specific combination for them?	Refer to 'Appendix V1.1.pdf';
App.4	h	Appendix 4.1	The KFS are described as carton boxes. Could the Committee provide specifications regarding the structural integrity or load-bearing capacity of these boxes? What is the maximum gripping force we can apply before the box is considered "damaged" or deformed, which might constitute a violation under Rule 8.17 (damage to game field/facilities)?	Teams to ensure their grippers can lift the specified KFS without causing damage that impacts gripping or structure.