



ST Series Outdoor Fitness Equipment
Installation Guide

INDEX

1. Equipment Overview	3
2. Standards and Technical Specifications	4-5
3. Installation method	6- 11
4. Equipment Illustration and mounting diagrams	12-43
4.1 Tai chi Pushing Apparatus (ST-T01X)	12-14
4.2 Air Walker (ST-M04X)	15-17
4.3 Surfboard (ST-C01X)	18-20
4.4 Massager (ST-A03X)	21-23
4.5 Pull Down Trainer (ST-Z04X)	24-26
4.6 Waist Movement Machine (ST-Z05X)	27-29
4.7 Shoulder Joint Healing Implement (ST-J01X)	30-32
4.8 Seated Pedal Machine (ST-Z01X)	33-35
4.9 Rider (ST-J02X)	36-38
4.10 Elliptical Cross Trainer (ST-T08X)	39-41
4.11 Parallel Bars (ST-S03X)	41-43

Equipment Overview

The "ST" series equipment is presented in a high quality red and yellow powder coated finish. The units are constructed from a column of hot dipped galvanized steel 140mm in diameter, and 3.5mm thick steel plate. The equipment is manufactured using high quality steel, providing unrivaled robustness and durability, ensuring that regular maintenance should not be necessary.

The body of the equipment is made of a steel structure, using Q215 and Q235 graded steel. They are manufactured using a casting and sandblast technique that helps prevent the oxidation of the components of the apparatus, the external finish is applied using electrostatic powder coating, and this ensures a durable long lasting and ultra violet stable finish, facilitating the outdoor use of our equipment in all types of weather and climates.

The unique design and excellent quality of the components, and the strict quality control of the manufacturing processes, guarantees the durability of the equipment. The absence of external elements such as nuts, screws and other fasteners reduces the possibility of damage from vandalism, making the unit safer overall.

Each piece of equipment carries a plate with easy to understand instructions for the correct use of the unit.

DynamX strongly recommend that the area around the equipment is finished with a product which allows the user safe and adequate access to mount and dismount the equipment. In areas of high use natural grass can deteriorate. Some suitable alternatives may include a synthetic grass, safety bark or a rubber surface.

Standards and Technical Specifications

Material Specifications

MATERIAL NAME	OPERATION STANDARD	MATERIAL GRADE
Drawn out steel pipe	GB8162-1999 GB8163-1999	20
Welded steel pipe	GB/T3091-2001 GB/T3092-2001	Q215, Q235
Square pipe	GB/T13793-92	Q235
Plate Steel	GB3274-88 GB/T704-1998	Q235
Other Steel elements	GB780-88 GB/T14929-93	20, 45 Q235
Casting	Not applicable	Ductile cast iron, iron moulds in different processes
Plastics	Not applicable	Polypropylene, polyethylene, Polyvinyl chloride (PVC) Rubber

FINISHING – Electrostatic Plastic Coating

FINISHING PROCESSES

POWDER TYPE	OPERATION STANDARD		Process sequence	Name	Description
Polyester layer	GB/T5374-2004 HG/T259-94		1	Antioxidant cleanup	Compressed air sandblast
			2	Cleanup	Air wash
Epoxy polyester layer	GB/T5374-2004 HG/T259-94		3	Electrostatic spraying	Filtered compressed air Plastic Electrostatic spray guns
			4	High temperature solidification	Furnace

INSTALLATION

Preparation for the Assembly

Site Conditions

Before digging make sure that the location of underground pipes and services is established.

Different soils vary in their ability to support secure foundations, the installation diagrams in this manual are suitable to use with Type II Soil with a fastening coefficient over 0.7

Soil Type II with coefficient over 0.7 can be usually identified by the level of difficulty when carrying out the excavation with pick and shovel. As a rule of thumb a trench floor that needs to be dug with pick and shovel is considered type II with a coefficient over 0.7. A wooden peg 50mm square will be difficult to drive beyond 150mm.

Remember if the water level is less than 1m below the foundation the bearing capacity is halved

If in any doubt about the quality of the soil, it is recommended that a specialist is consulted as deeper or special foundation solutions may be required.

General Precautions

A safe distance between the equipment and high or low Voltage electrical cables should be maintained

During the installation process, the surface of the equipment should not be damaged or deformed.

Remember to observe the safety zone around each piece of equipment, this is displayed at the bottom of the pages under the pictures later in this manual

Materials

To assure the integrity of the concrete foundation, It is suggested that a 25N Mix should be used with a mix designation of C20/25. Concrete must be sufficiently workable to allow full compaction after placing, Concrete of medium workability can be readily compacted using a compacting beam in an up-and-down motion. In cold weather, a polythene sheet covered with straw helps provide protection against frost.

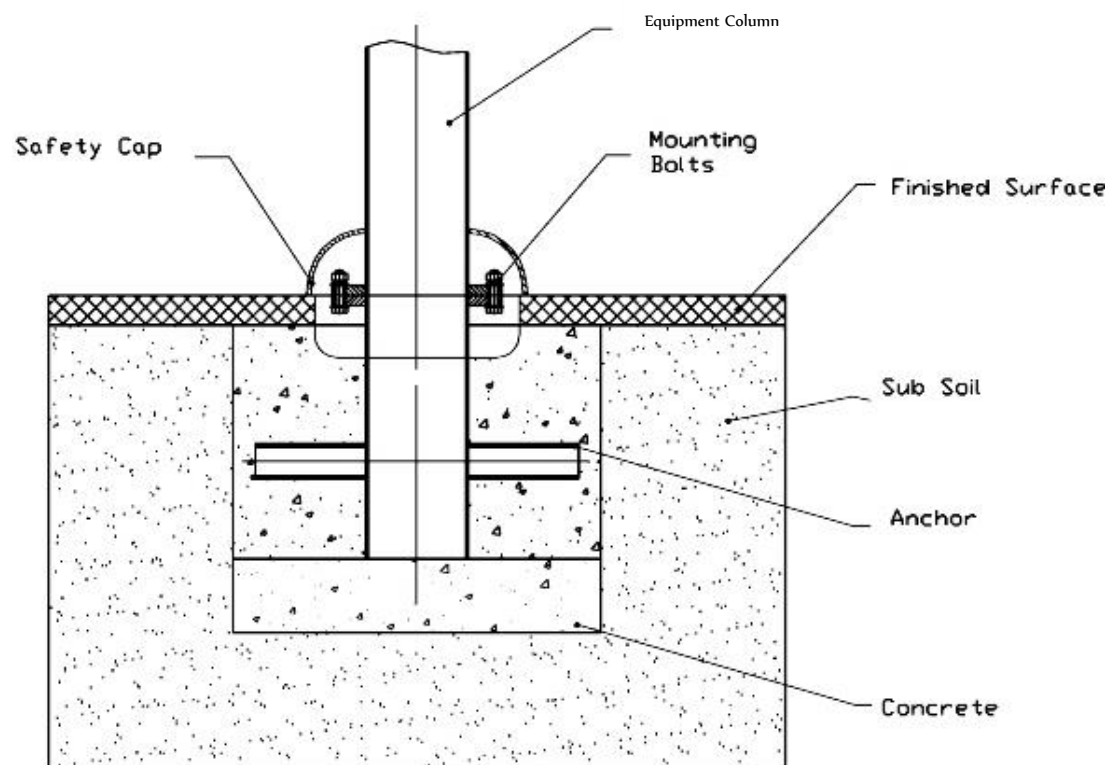
Using a Ground Anchor

The lower part of the column shown in the picture below is placed in concrete.

Lower column anchor



The Diagram below is a cross section through the centre of the equipment column and mounting anchor



Step By Step

- Mark the location of the foundation, and dig a square hole following the dimensions indicated in the diagram for the specific apparatus remember to observe the required safety clearances between stations.
- Some of the equipment requires two holes. Ensure that the holes are correctly located from each other as shown in the diagrams for the specific piece of equipment.
- Ensure the foundations are vertically square (They should have the same dimensions in the upper and lower part.)



- Pour the prepared concrete in the hole and spread it evenly. Remember to compact using a compacting beam in an up-and-down motion
- The surface of the concrete foundation has to be at least 70 mm below the intended surface finish, to leave enough space for the anchoring bolts.
- Introduce the lower part of the column anchor into the centre of the hole until the upper edge of the flange is aligned with the intended finished surface level.
- Use a post levelling tool to ensure the column anchor is vertical.
- The holes in the flange on the top of the anchor have to be correctly orientated so that the equipment will face in the desired direction.
- Allow to cure for 5 to 7 days.
- **To install the apparatus, it is necessary to assure that it is in a vertical position, with a deviation under 1/200. The apparatus should be fixed to the column anchor with Stainless steel bolts of the type M12.**

Installing the Equipment to the Anchor

- A clearance of diameter 280 mm from the centre of the flange, needs to be maintained in order to fit the safety cap correctly.
- Line up the mounting holes of the apparatus with the corresponding holes in the anchor, fit the bolts, ensuring a stainless steel washer is present between the nut and base plate of the apparatus.
- We suggest using a sand cement mix to finish off the area where the cap will sit.
- Wipe away any cement residue from the apparatus with a soft damp cloth.
- Fit Safety cap.

Installing the Equipment using Anchor Bolts on a Concrete Raft

The concrete used is to conform to the durability requirements in accordance with IS EN 206-1:2002 and having minimum cube strength of 30N/mm²

Raft Specification

Minimum 200mm Soil to be removed. Further excavation may be required if ground is not adequate for bearing. 50mm minimum 804 stone to be laid and compacted using a compactor plate.

Minimum 200mm Concrete containing 2No. x 2m long 12mm Diameter Reinforcing bars to be placed in the raft 250mm each side of centre

Surface finish: Bull nose and non slip brush finish

To Anchor Equipment directly to Concrete Slab

The concrete must be allowed to cure for 28 Days to achieve adequate strength to support wedge type concrete anchors

Unwrap and centre exercise equipment on concrete slab, Check Orientation of exercise equipment.

Mark 4 drilling locations spaced evenly around the equipment mounting flange.

Remove the exercise unit and place carefully aside.

Mark the drill bit to ensure adequate depth to accommodate anchor bolt, allow some extra depth to accommodate a minor amount of concrete cuttings which may not be able to be cleaned from the hole.

Drill 4 holes to the prescribed depth ensure holes are drilled plumb.

Clear Drilling debris from the area..

Check holes are at sufficient depth and are free from debris.

Prepare anchor bolts ensuring large washer is placed as per illustration with the large washer closest to the equipment flange.

Adjust the nut on the anchor bolt to the top of the thread, The nut should be below the hammering nipple on the anchor bolt to prevent damage to the nut or thread.

Place the equipment back onto the concrete slab and align with the holes.

Using a Hammer drive the anchor bolts home into the concrete.

Moving around the flange tighten the bolts evenly with a socket and half inch ratchet set until secure.

Use a 2 foot breaking bar to torc the nuts a further 1.5 to 2 revolutions.

Fit the Safety Cap supplied to cover the anchor bolts

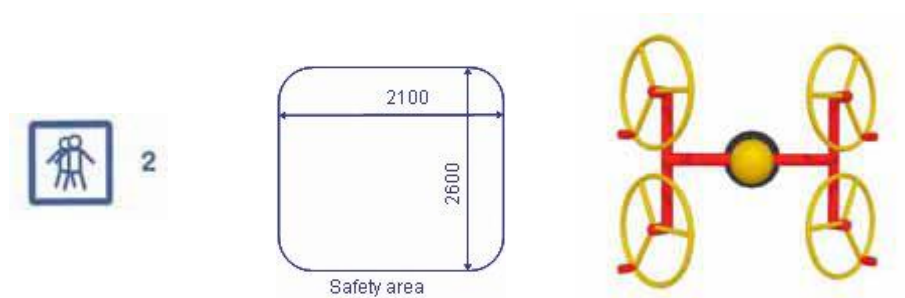


EQUIPMENT

4.1 TAI-CHI PUSHING APPARATUS (ST-T01X)

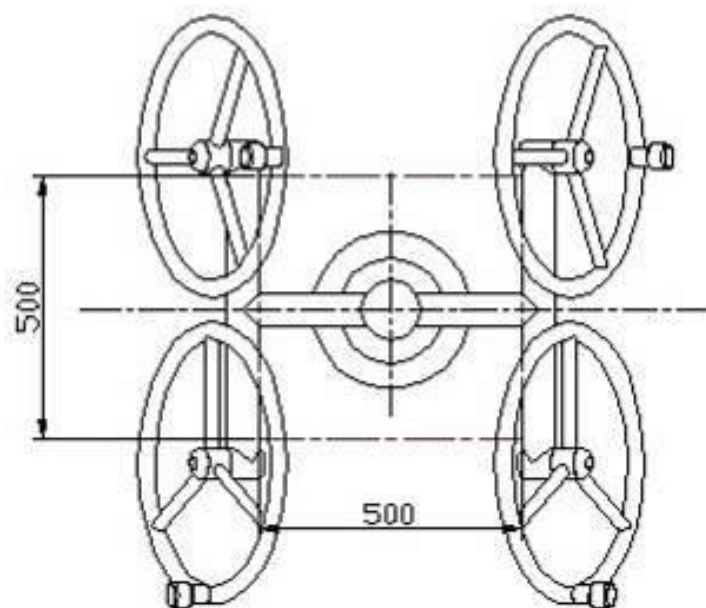
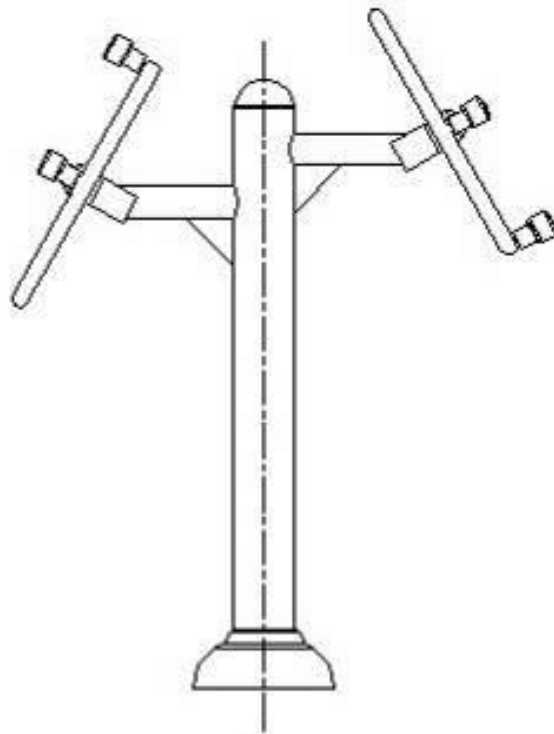
DIMENSIONS: 660x950x1790 mm

Weight 40KG



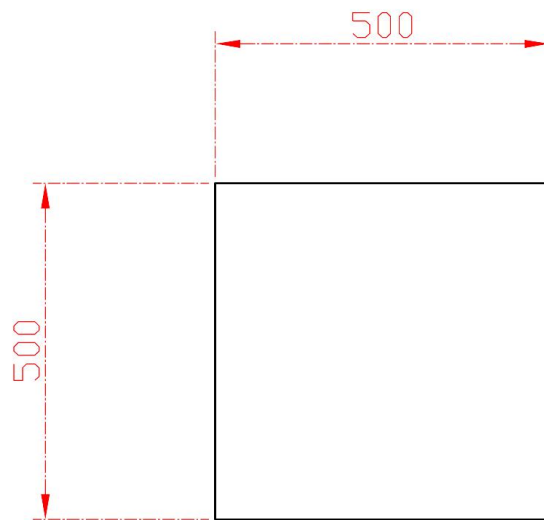
TAI-CHI PUSHING APPARATUS (ST-T01X)

ST-T01X

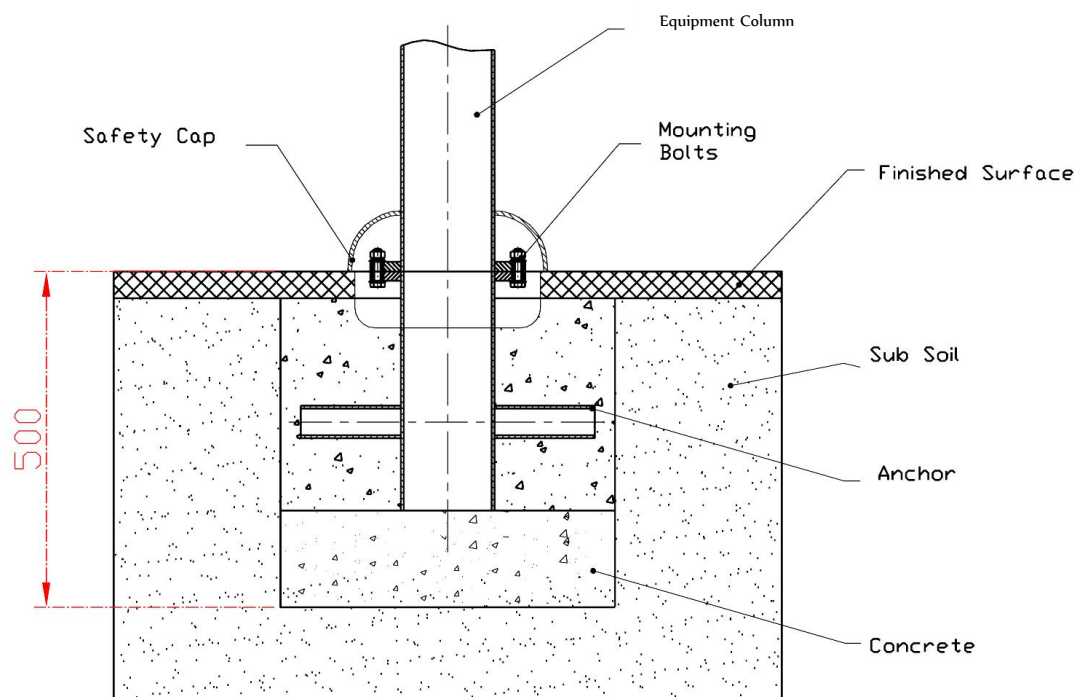


TAI-CHI PUSHING APPARATUS (ST-T01X)

TOP VIEW/PLAN VIEW



CROSS SECTION

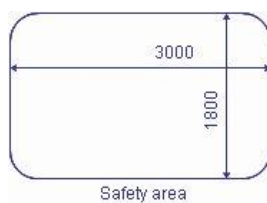


			Garcol Leisure Ltd T/A DynamX
Trench Dimensions	Millimeters	Apparatus	
Length	500	ST-C01X	
Breath	500	Rider	
Depth	500		

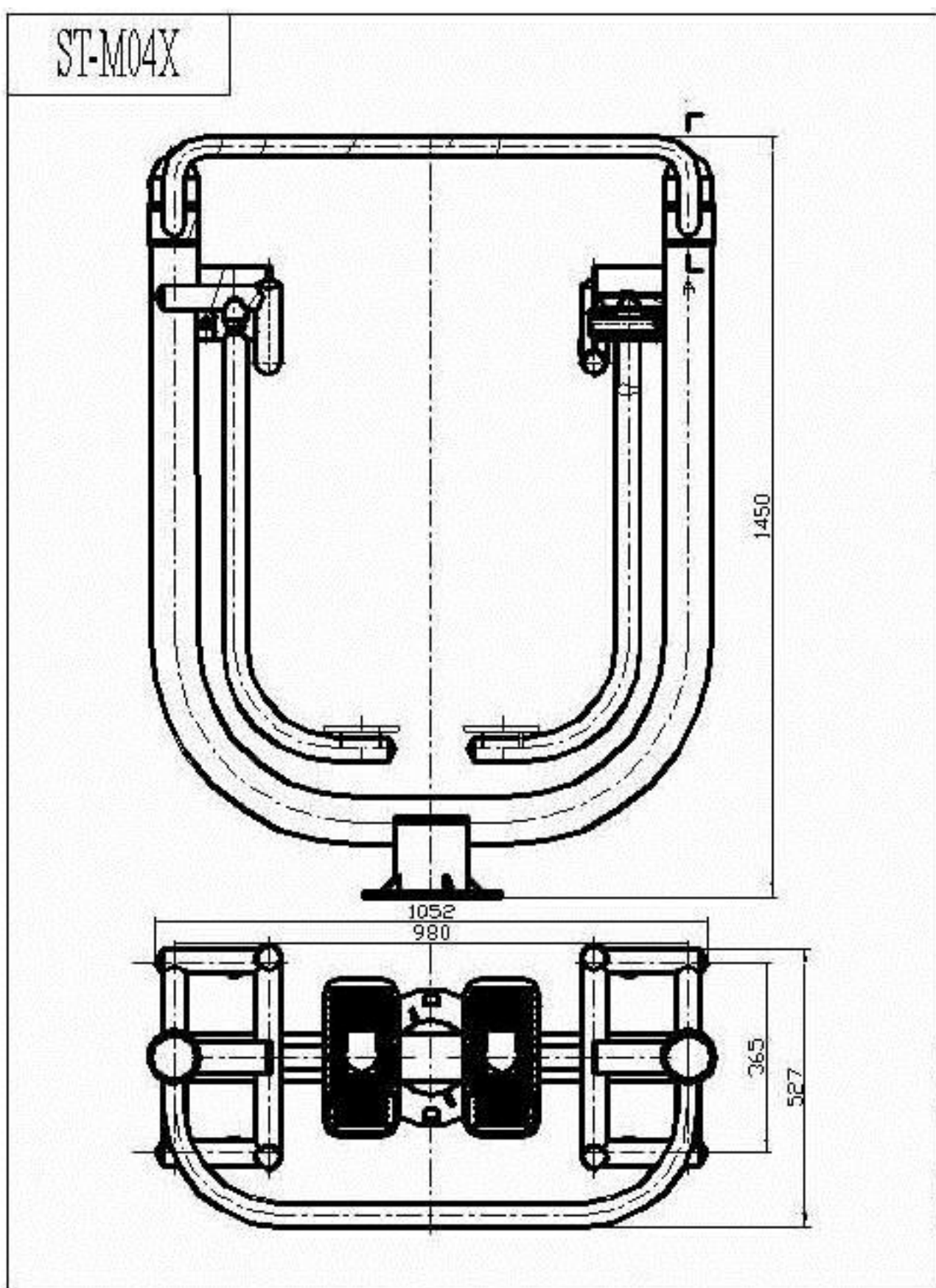
4.2 AIR WALKER (ST-M04X)

DIMENSIONS: 1075x535x1390 mm

Weight 50KG

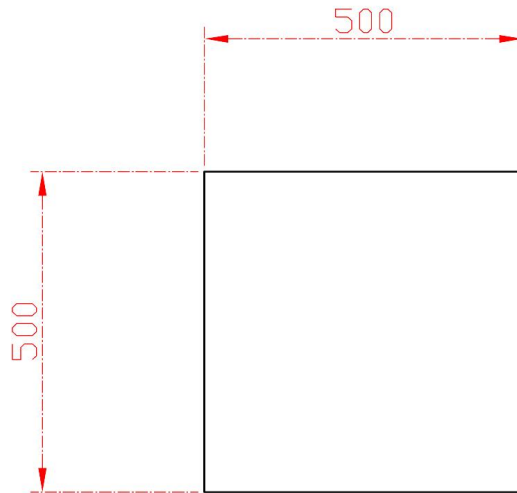


AIR WALKER (ST-M04X)

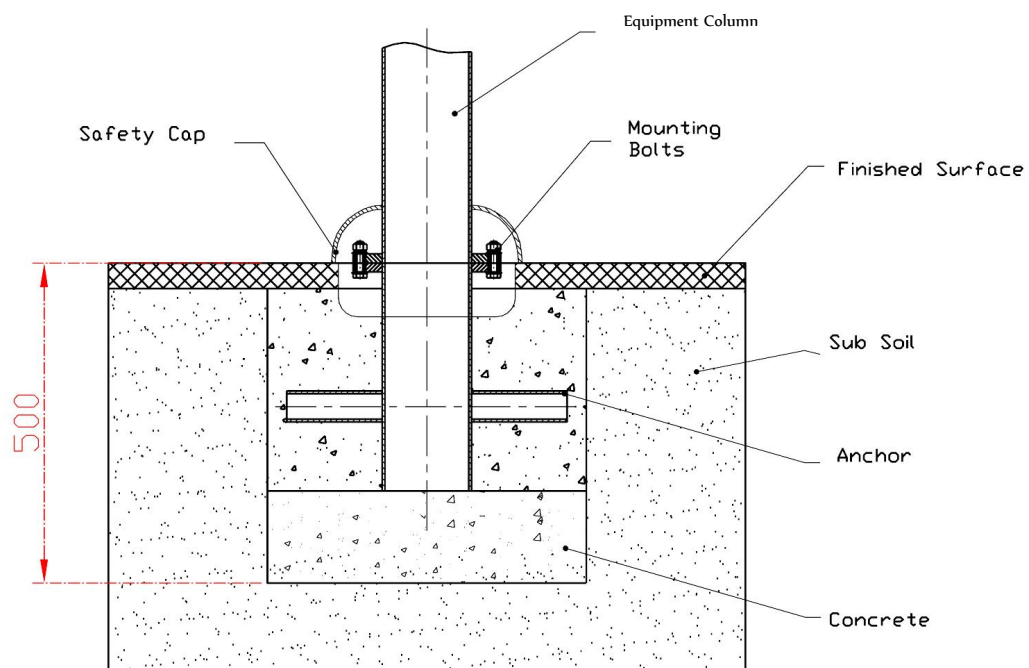


AIR WALKER (ST-M04X)

TOP VIEW/PLAN VIEW



CROSS SECTION

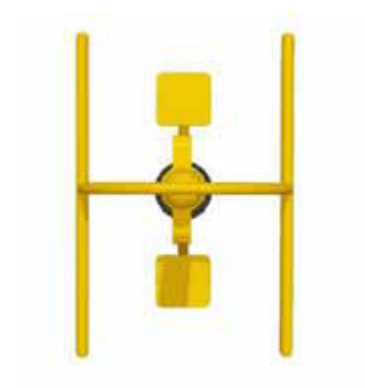
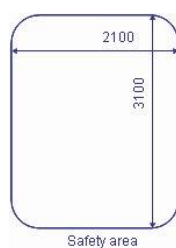


Trench Dimensions	Millimeters	Apparatus	Garcol Leisure Ltd T/A DynamX
Length	500	ST-C01X	
Breath	500	Rider	
Depth	500		

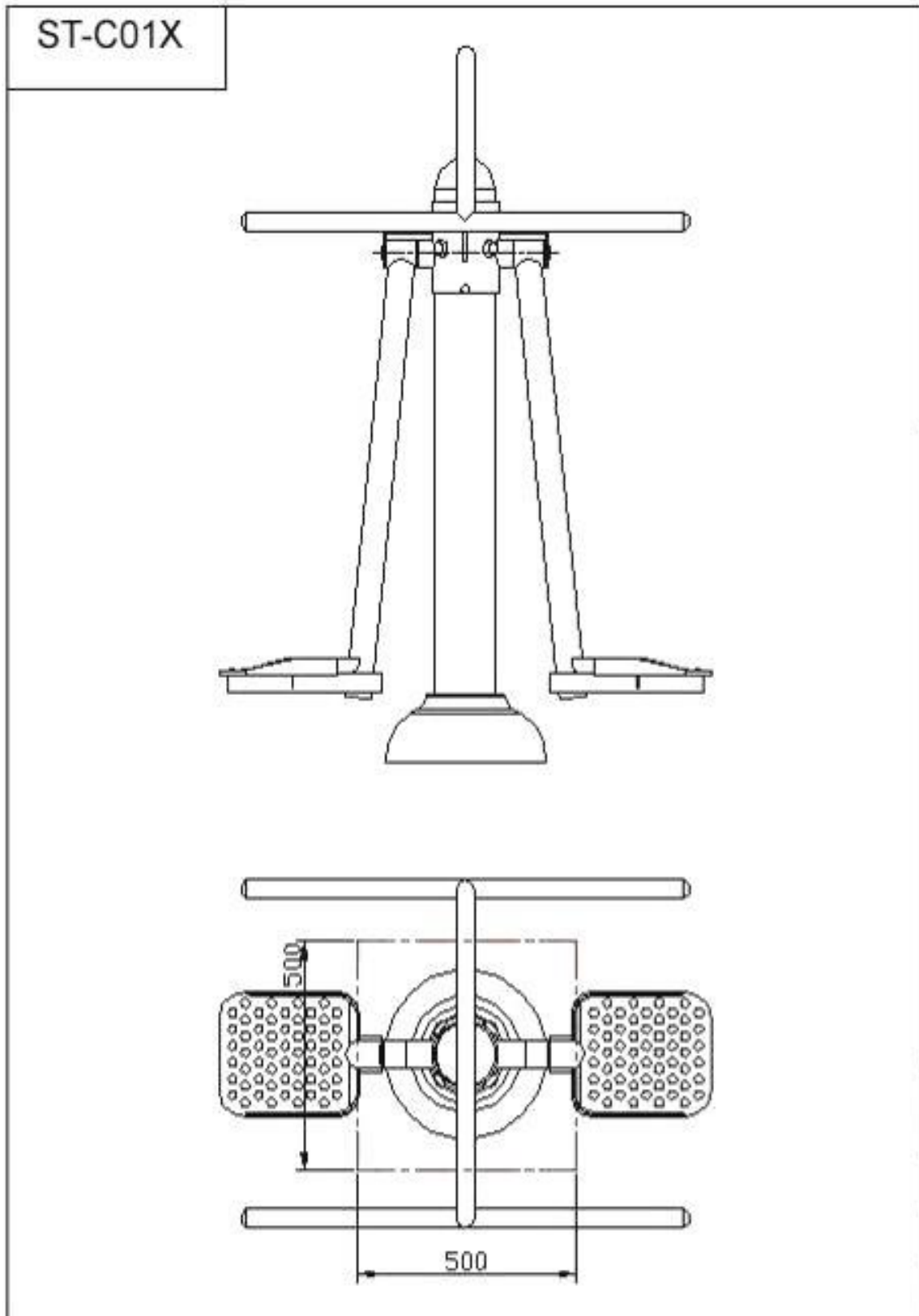
4.3 SURFBOARD (ST-C01X)

DIMENSIONS: 960x1110x1285 mm

Weight 60KG

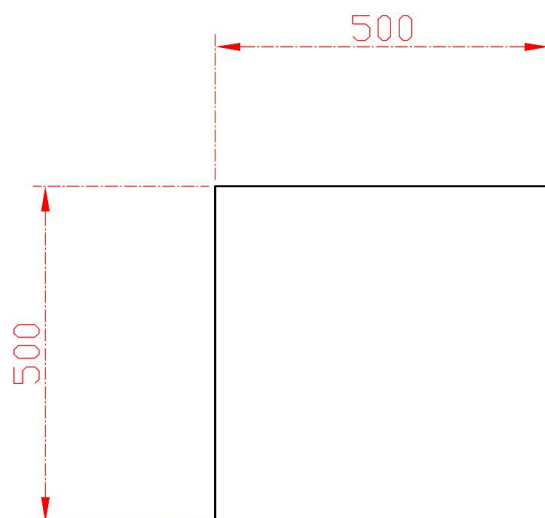


SURFBOARD (ST-C01X)

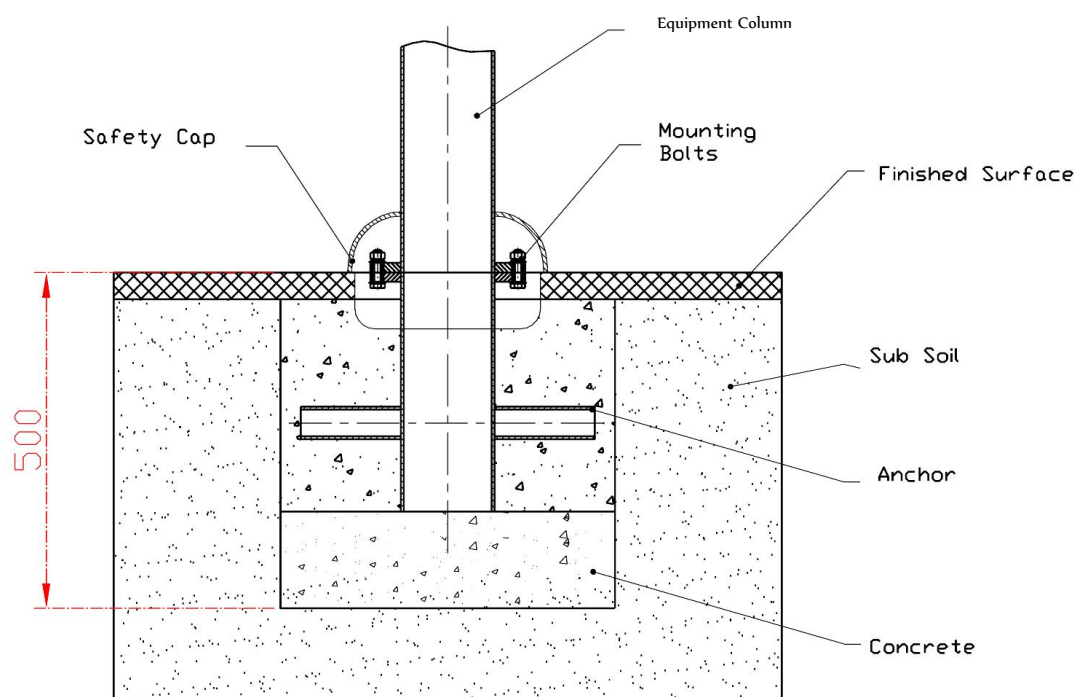


SURFBOARD (ST-C01X)

TOP VIEW/PLAN VIEW



CROSS SECTION



			Garcol Leisure Ltd T/A DynamX
Trench Dimensions	Millimeters	Apparatus	
Length	500	ST-C01X	
Breath	500	Rider	
Depth	500		

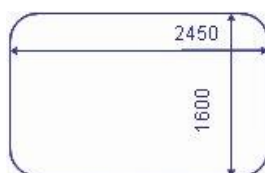
4.4. MASSAGER (ST-A03X)

DIMENSIONS: 1290x680x1700 mm

Weight 55KG



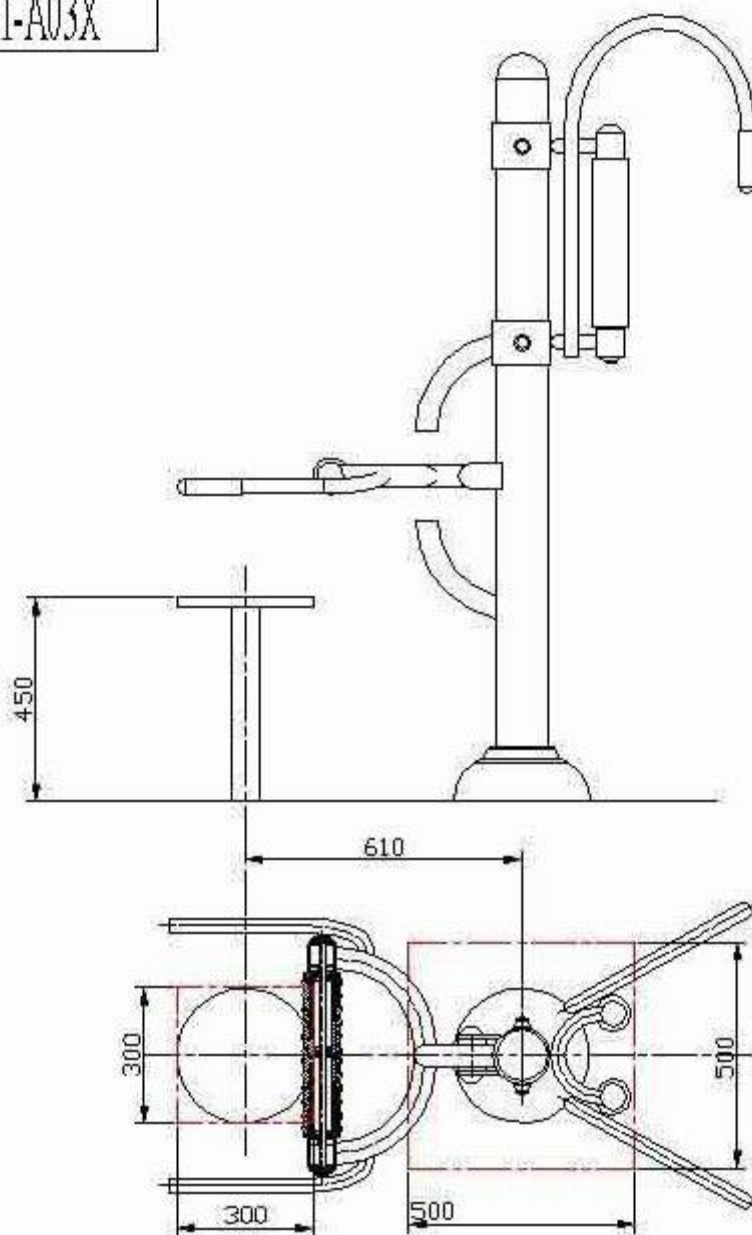
2



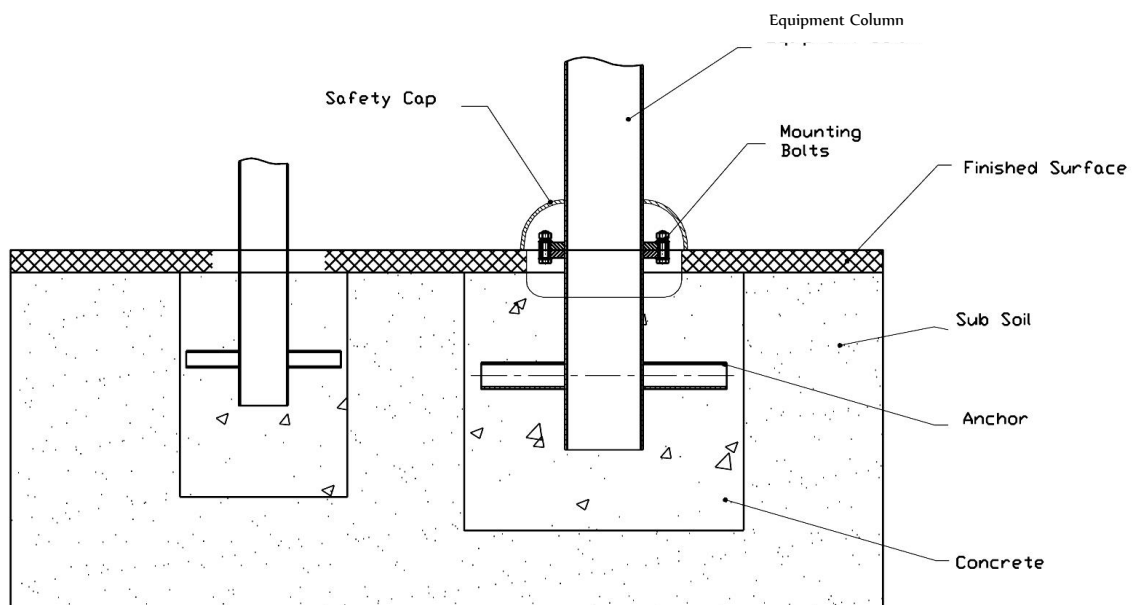
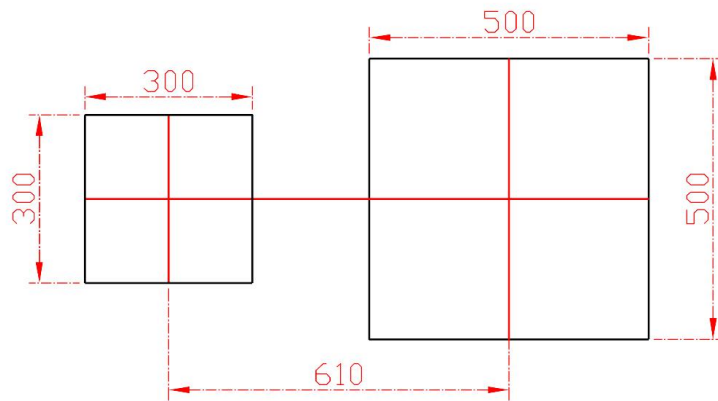
Safety area



ST-A03X



MASSAGER (ST-A03X)

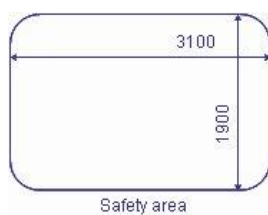


Trench Dimensions	Hole 1	Hole 2	Apparatus	Garcol Leisure Ltd T/A DynamX
Length	300mm	500mm	ST-A03X	
Breath	300mm	500mm	Pull down Trainer	
Depth	400mm	500mm		

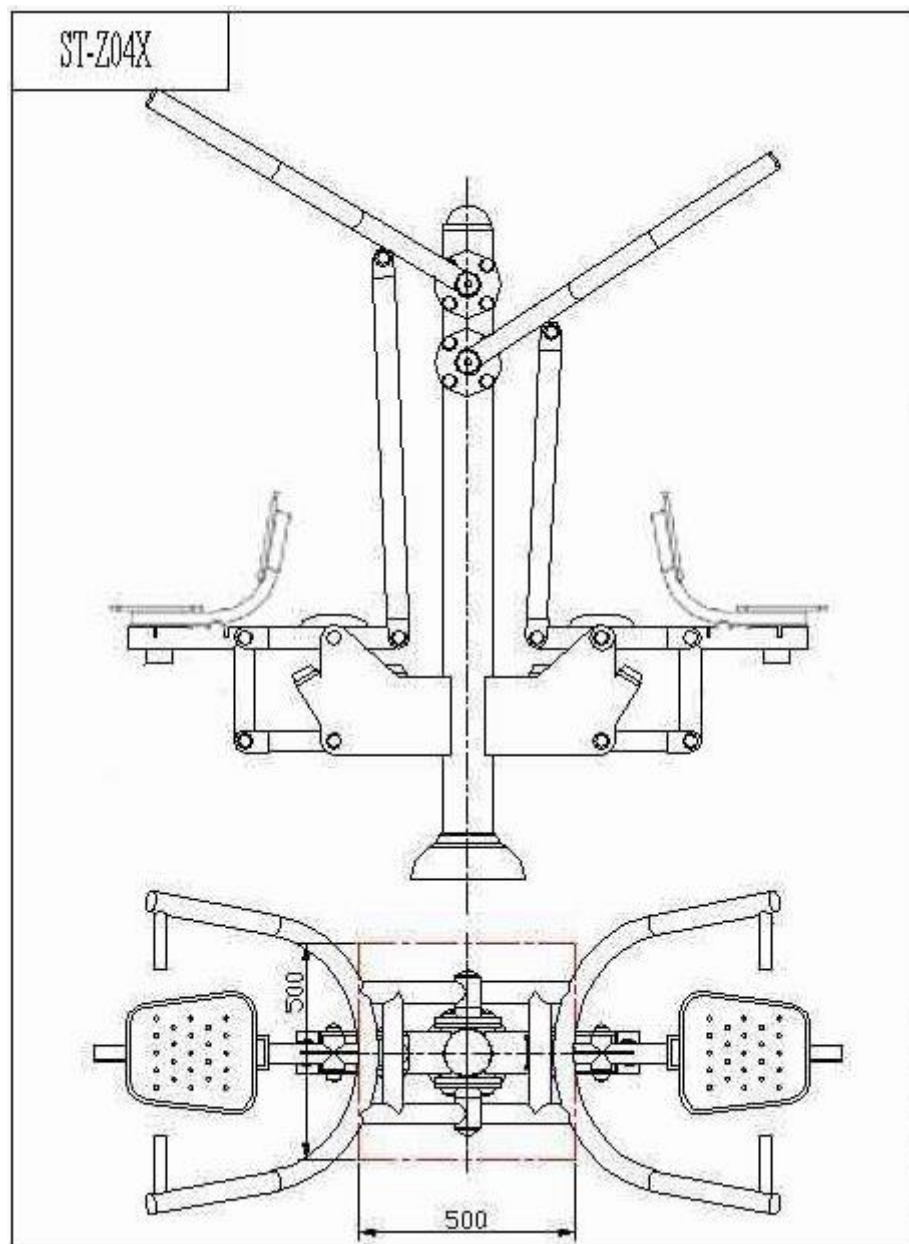
4.5 PULL DOWN TRAINER (ST-Z04X)

DIMENSIONS: 2100x750x1690 mm

Weight 75KG

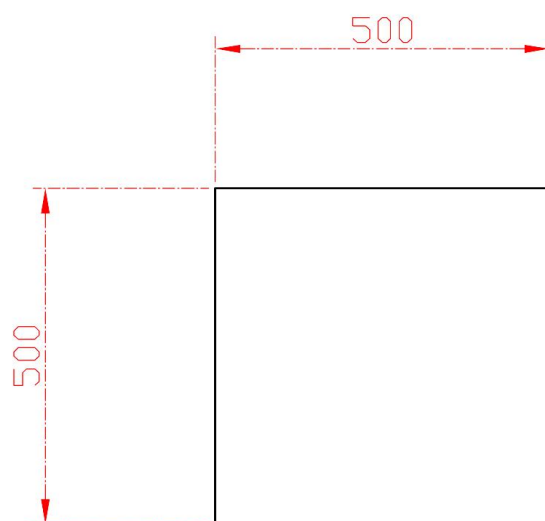


PULL DOWN TRAINER (ST-Z04X)

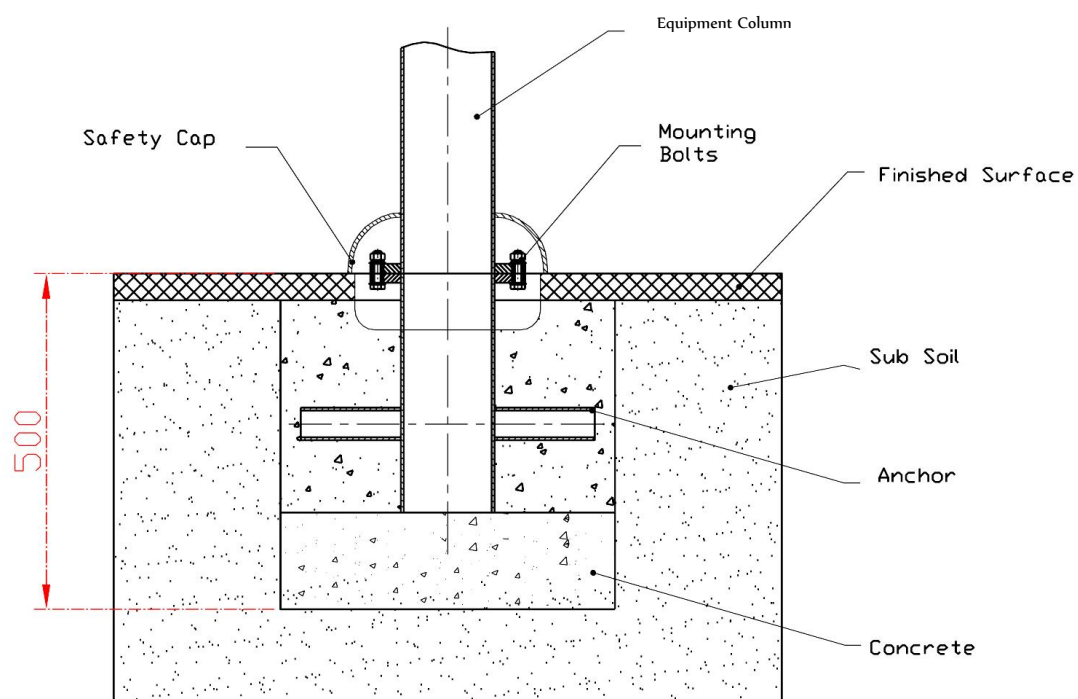


PULL DOWN TRAINER (ST-Z04X)

TOP VIEW/PLAN VIEW



CROSS SECTION



			Garcol Leisure Ltd T/A DynamX
Trench Dimensions	Millimeters	Apparatus	
Length	500	ST-Z04X	
Breath	500	Pull down Trainer	
Depth	500		

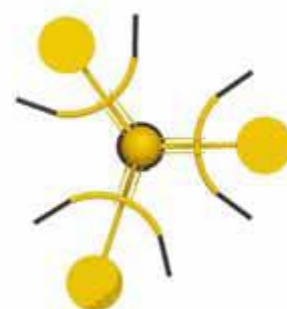
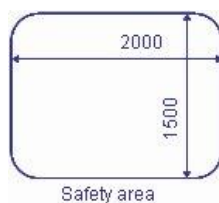
4.6 WAIST MOVEMENT MACHINE (ST-Z05X)

DIMENSIONS: $\varnothing 1600 \times 1270$ mm

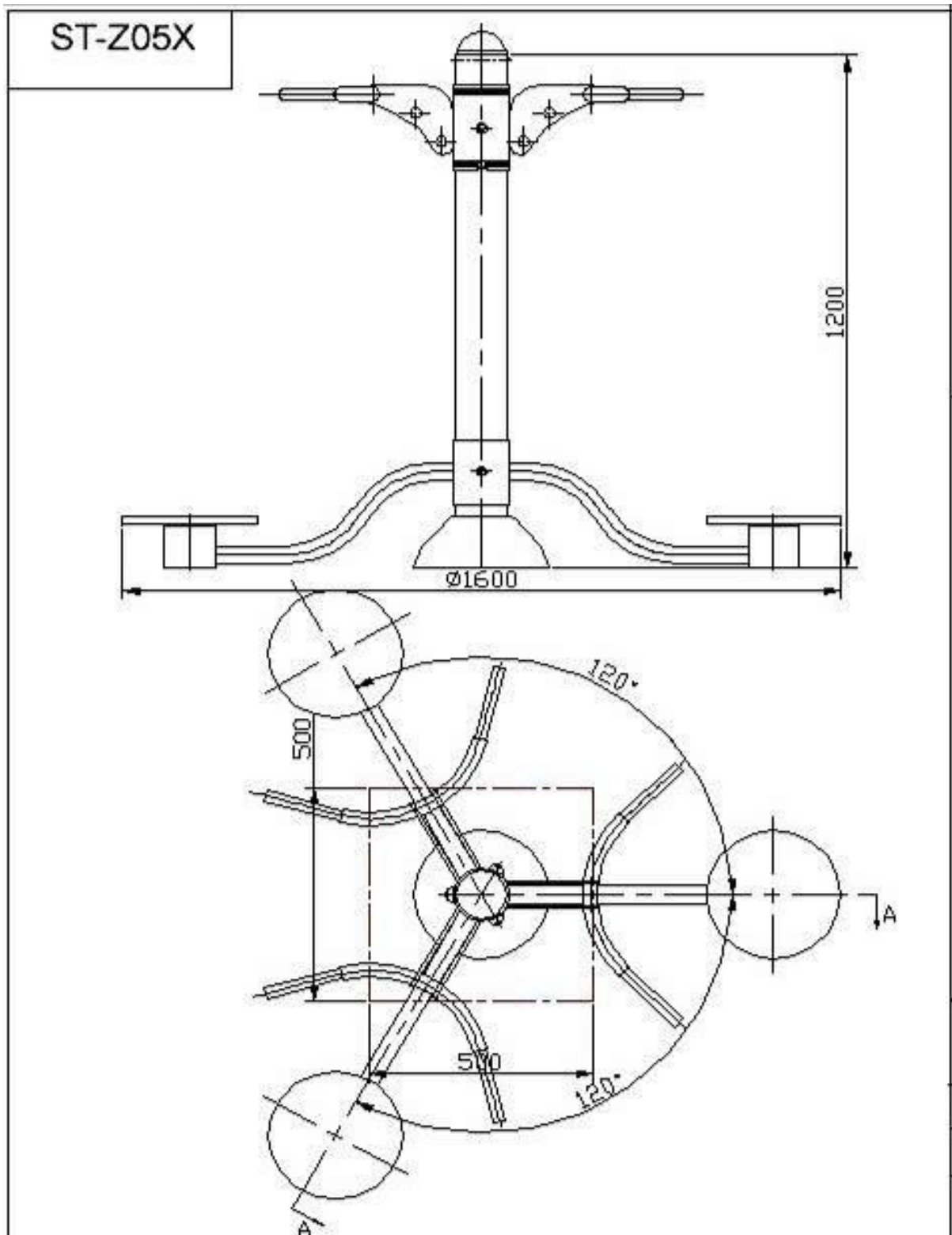
Weight 60KG



3

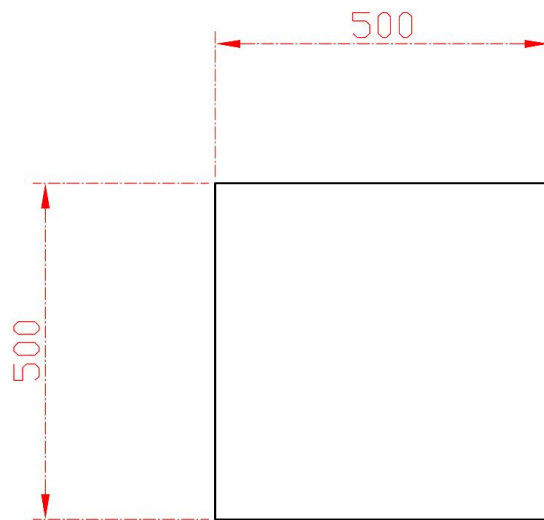


WAIST MOVEMENT MACHINE (ST-Z05X)

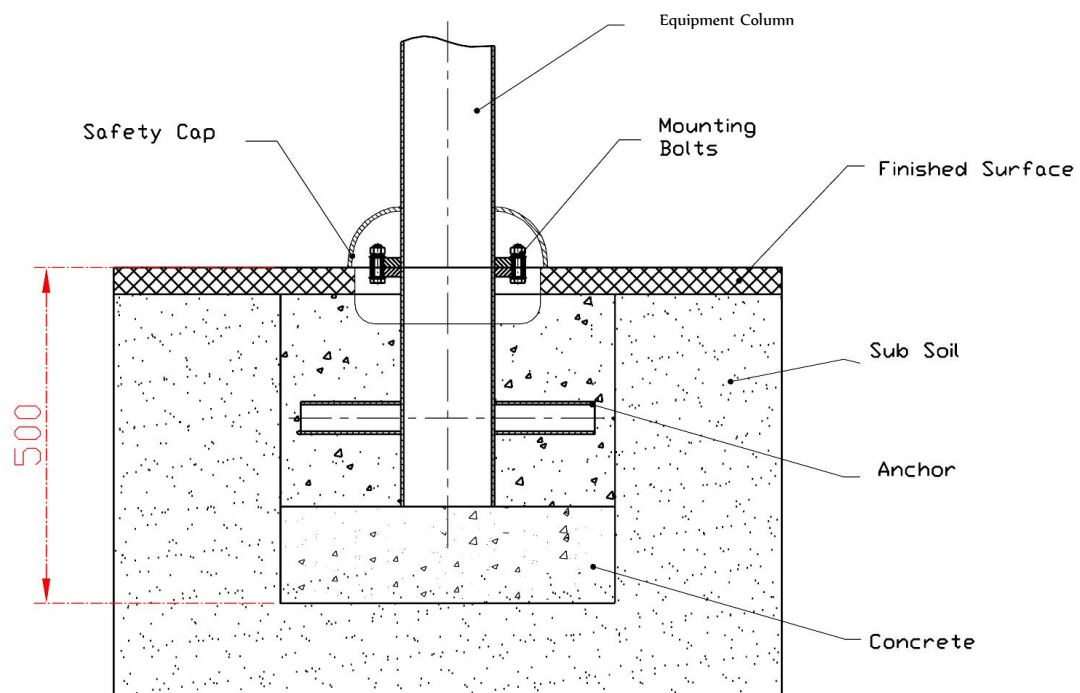


WAIST MOVEMENT MACHINE (ST-Z05X)

TOP VIEW/PLAN VIEW



CROSS SECTION



			Garcol Leisure Ltd T/A DynamX
Trench Dimensions	Millimeters	Apparatus	
Length	500	ST-Z05X	
Breath	500	Waist Movement Machine	
Depth	500		

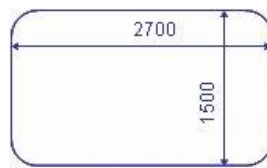
4.7 SHOULDER JOINT HEALING IMPLEMENT (ST-J01X)

DIMENSIONS: 660×950×1790 mm

Weight 40KG



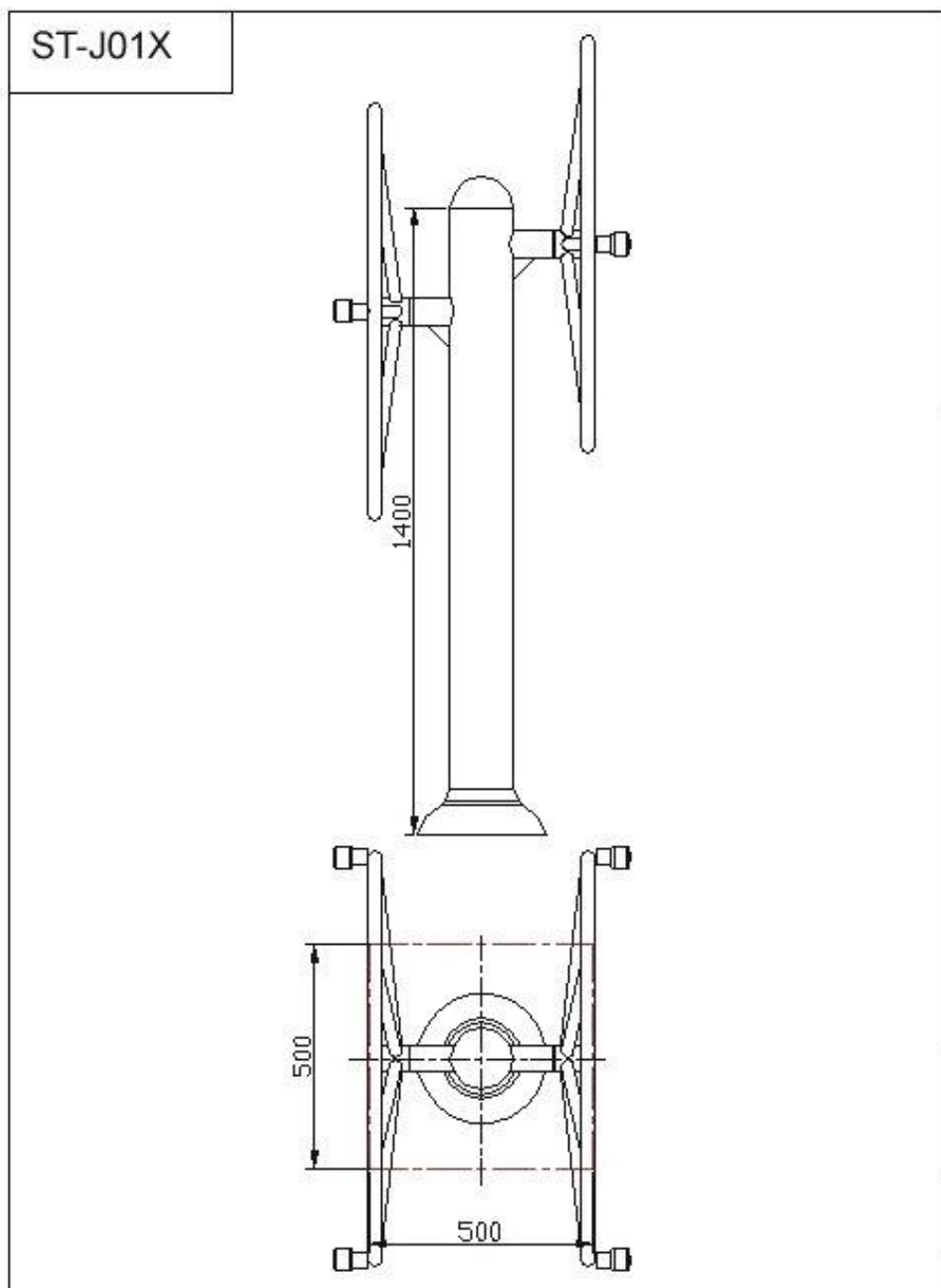
2



Safety area

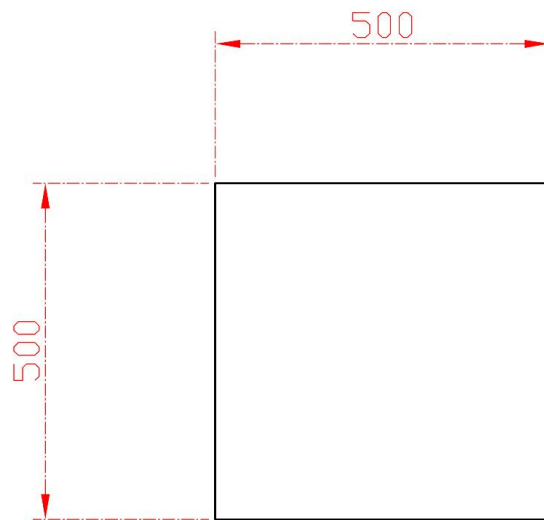


SHOULDER JOINT HEALING IMPLEMENT (ST-J01X)

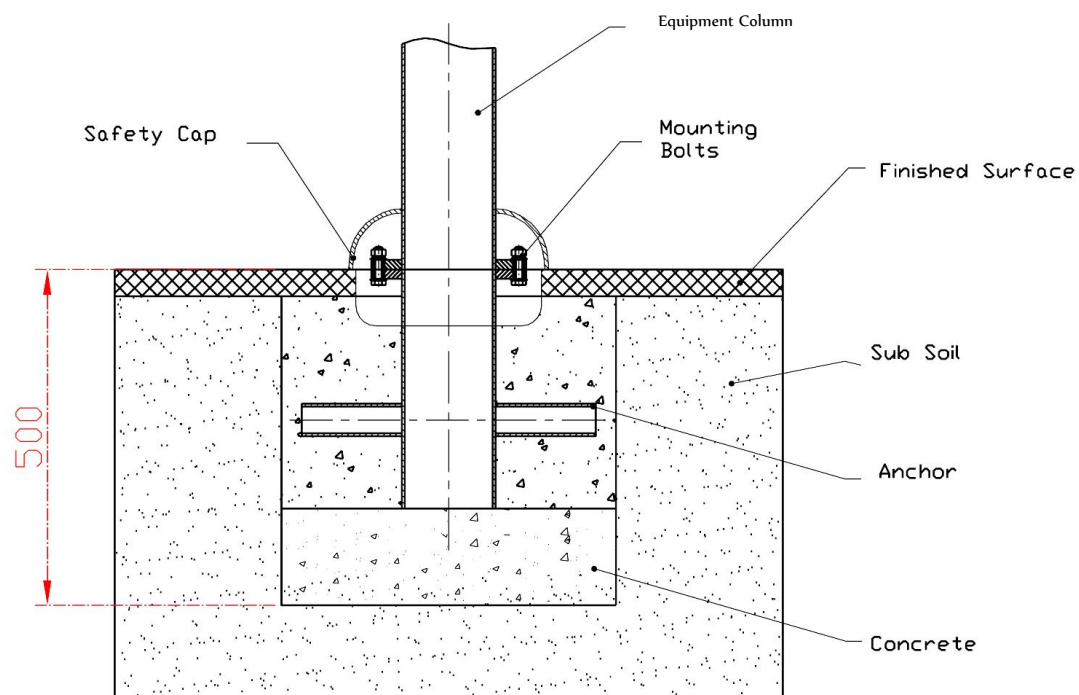


SHOULDER JOINT EXERCISER (ST-J01X)

TOP VIEW/PLAN VIEW



CROSS SECTION

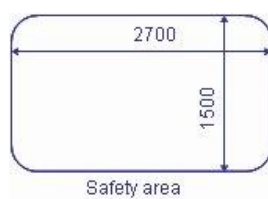


			Garcol Leisure Ltd T/A DynamX
Trench Dimensions	Millimeters	Apparatus	
Length	500	ST-J01X	
Breath	500	Shoulder Joint Exerciser	
Depth	500		

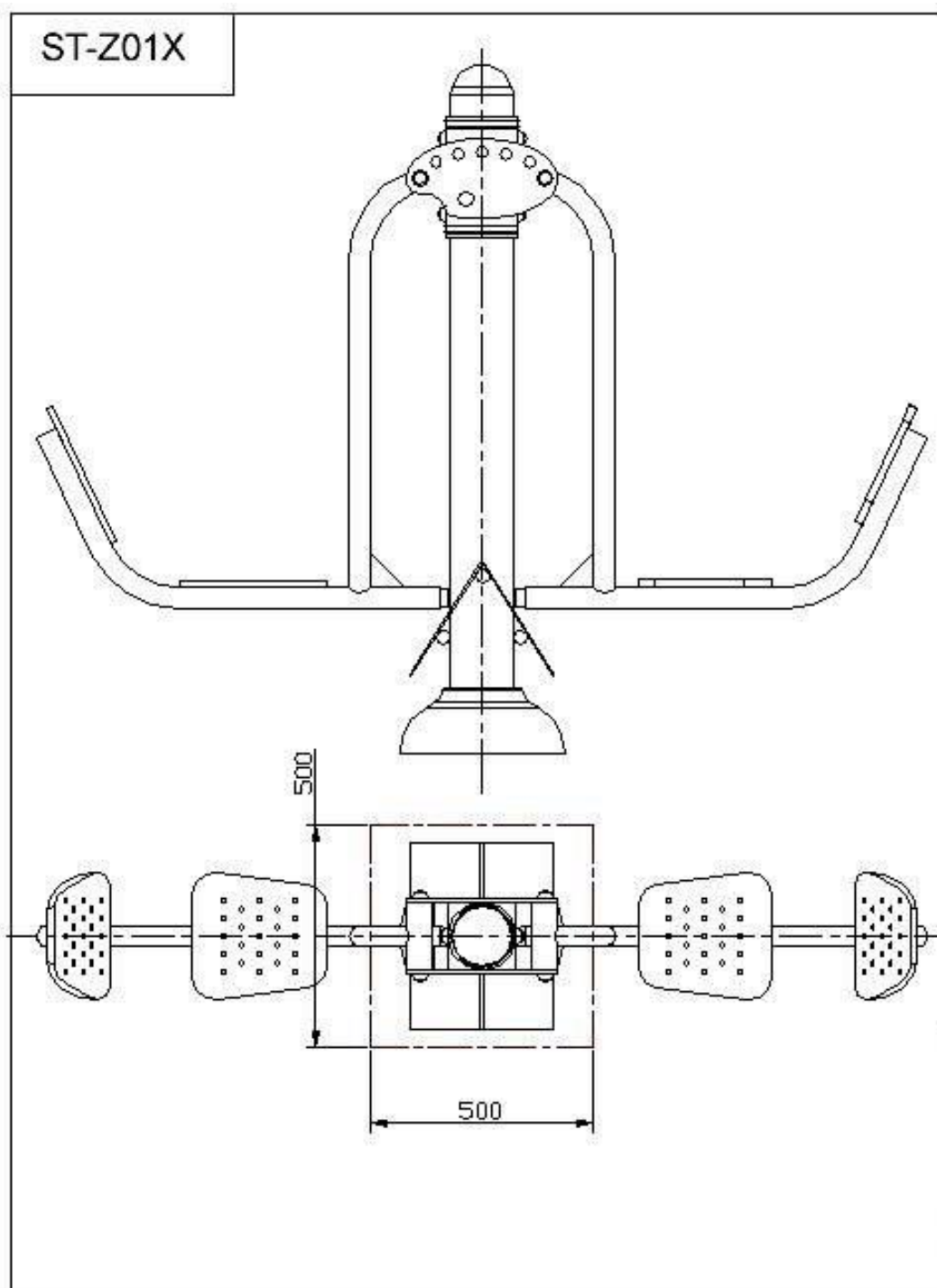
4.8 SEATED PEDAL MACHINE (ST-Z01X)

DIMENSIONS: 960x1110x1285 mm

Weight 56KG

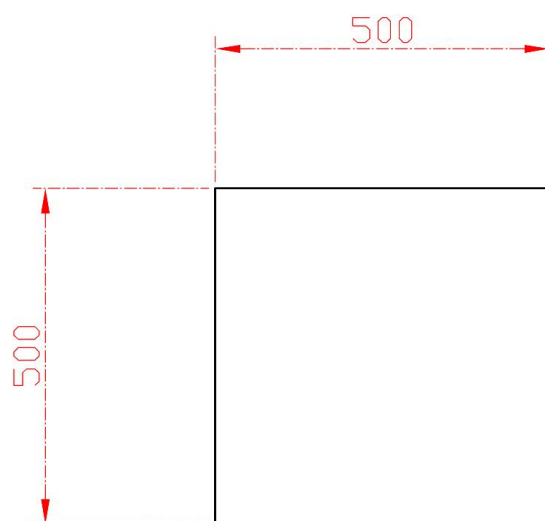


SEATED PEDAL MACHINE (ST-Z01X)

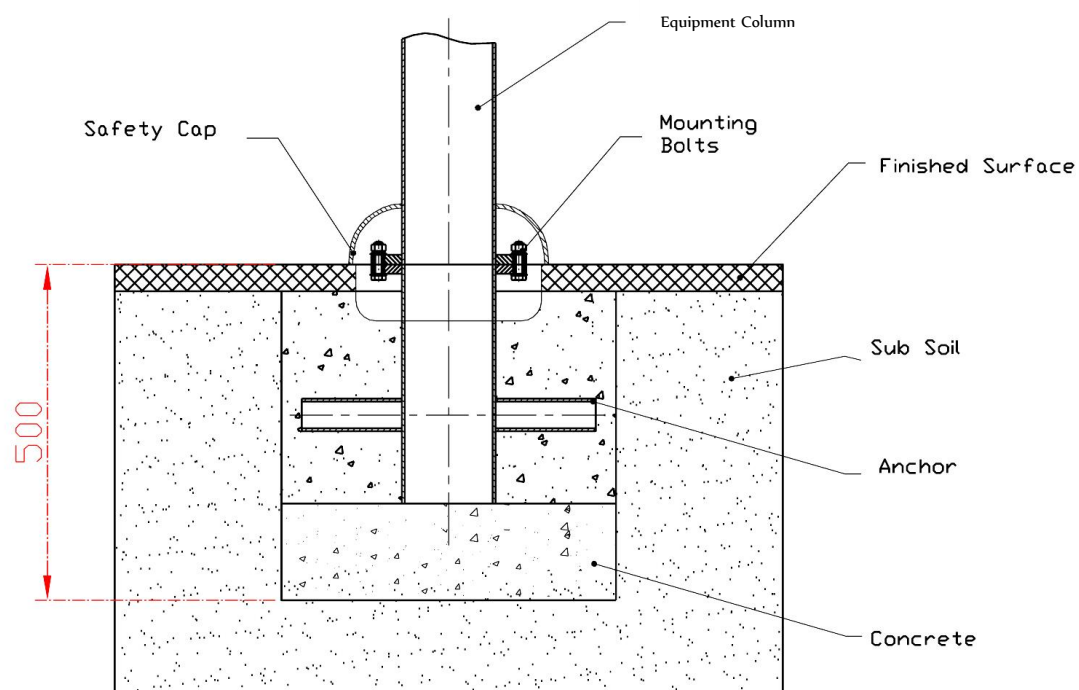


SEATED PEDAL MACHINE (ST-Z01X)

TOP VIEW/PLAN VIEW



CROSS SECTION

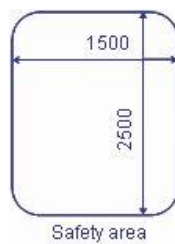


			Garcol Leisure Ltd T/A DynamX
Trench Dimensions	Millimeters	Apparatus	
Length	500	ST-Z01X	
Breath	500	Seated Pedal Machine	
Depth	500		

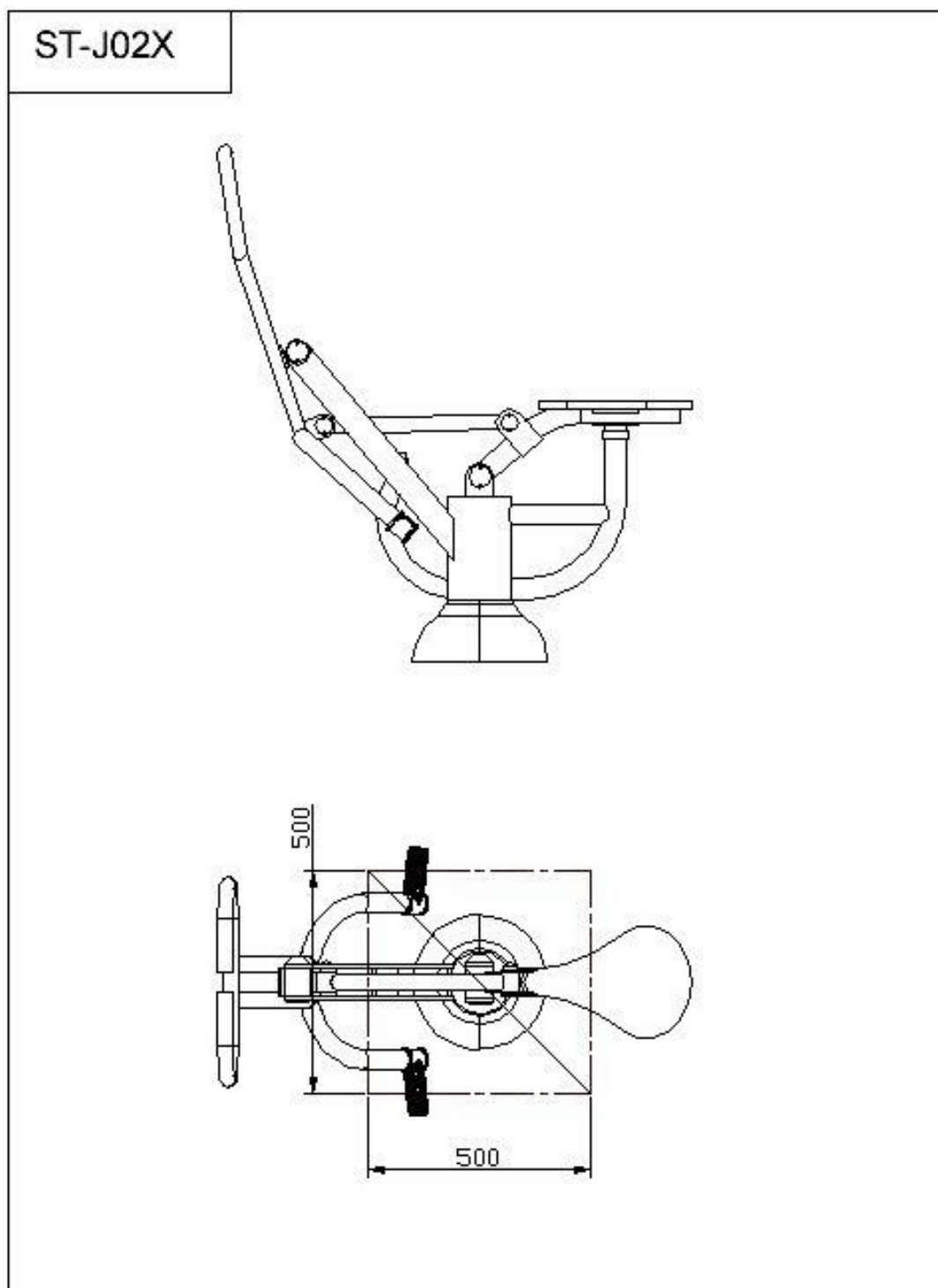
4.9 RIDER (ST-J02X)

DIMENSIONS: 1060x600x1160 mm

Weight 35KG

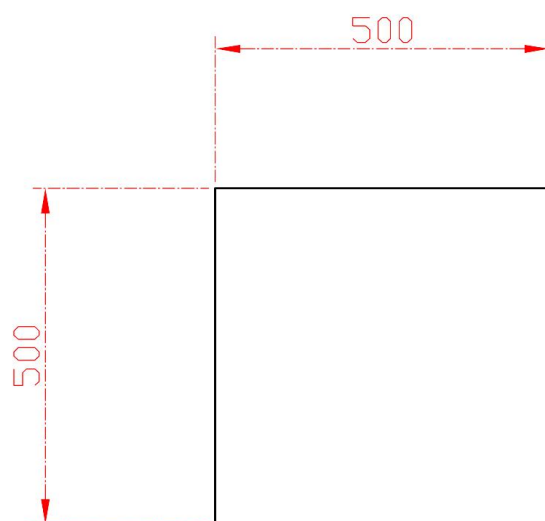


RIDER (ST-J02X)

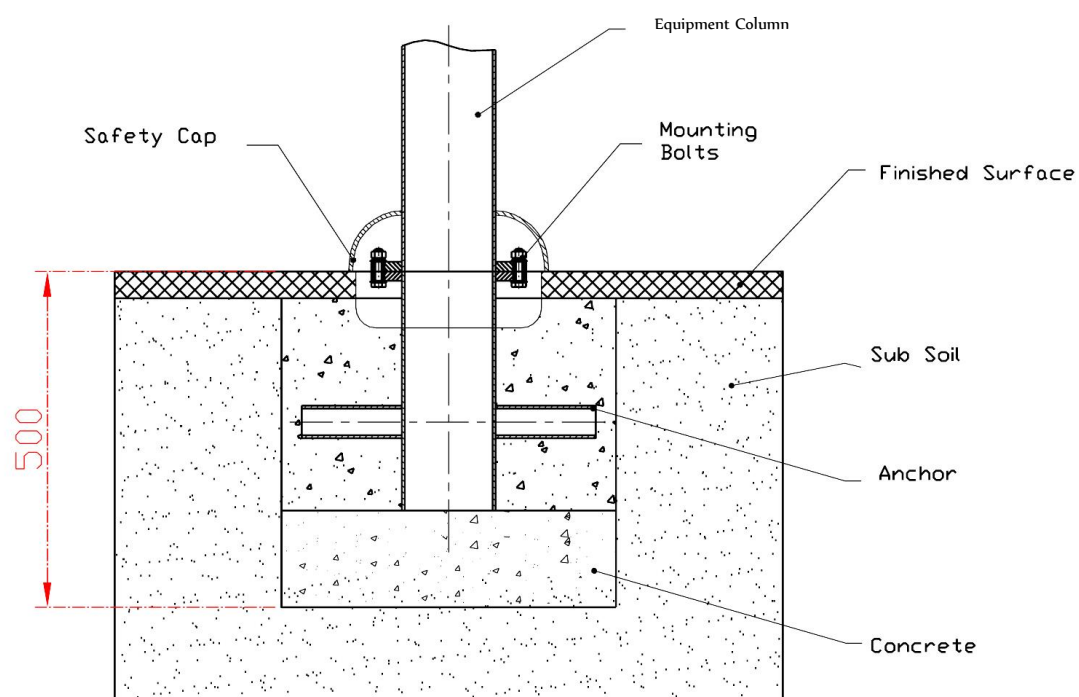


RIDER (ST-J02X)

TOP VIEW/PLAN VIEW



CROSS SECTION

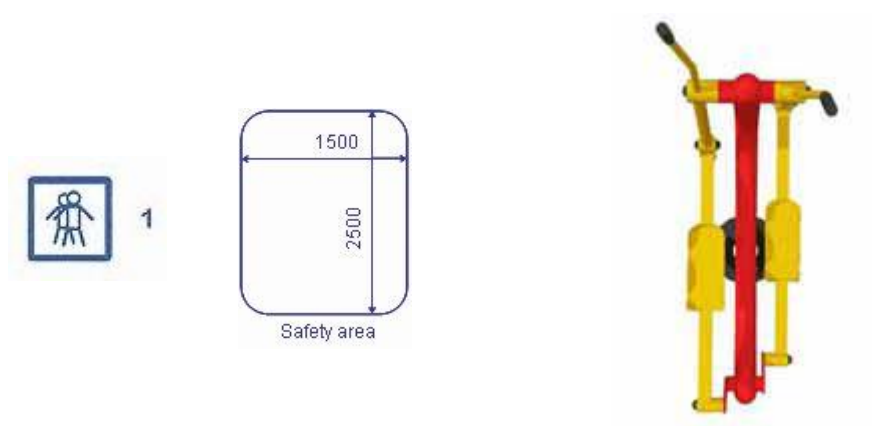


			Garcol Leisure Ltd T/A DynamX
Trench Dimensions	Millimeters	Apparatus	
Length	500	ST-J02X	
Breath	500	Rider	
Depth	500		

4.10 ELLIPTICAL CROSS TRAINER (ST-T08X)

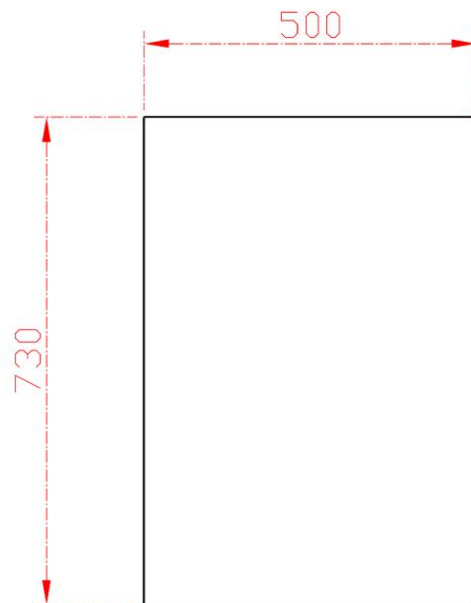
DIMENSIONS: 1270x530x1480 mm

Weight 55KG

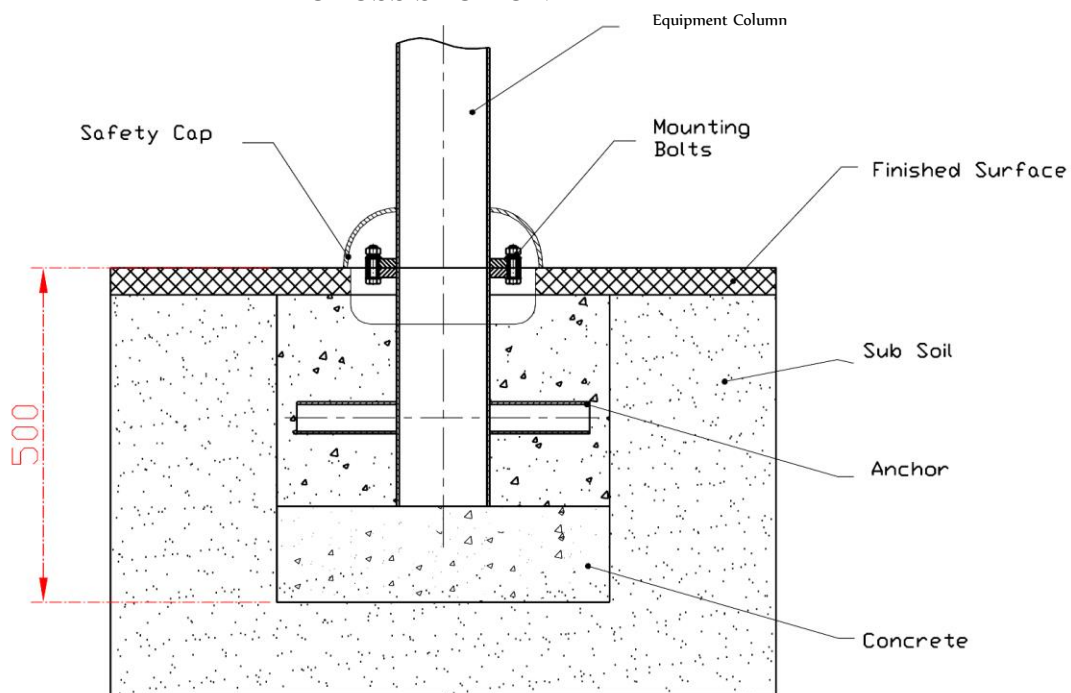


ELLIPTICAL CROSS TRAINER (ST-T08X)

TOP VIEW/PLAN VIEW



CROSS SECTION

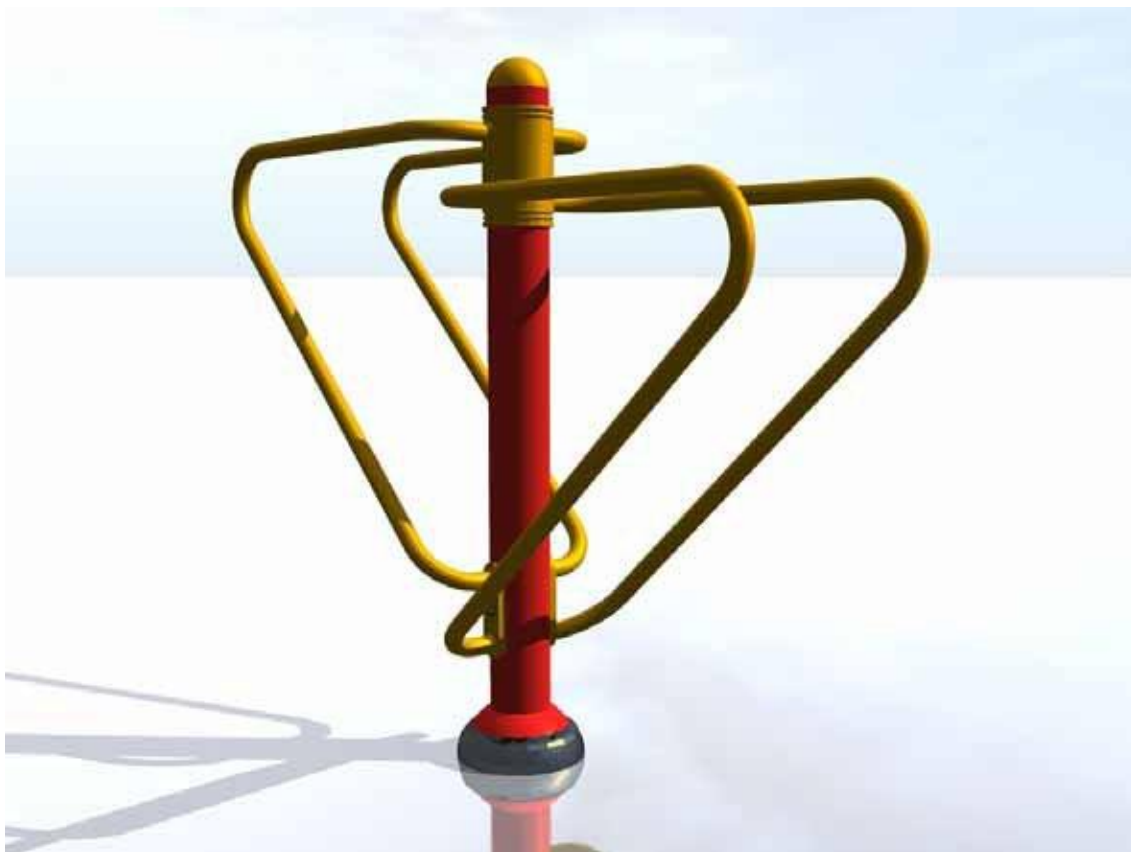


			Garcol Leisure Ltd T/A DynamX
Trench Dimensions	Millimeters	Apparatus	
Length	500	ST-T0X	
Breath	500	Cross Trainer	
Depth	500		

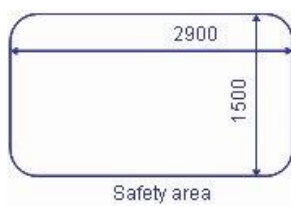
4.11 PARALLEL BARS (ST-S03X)

DIMENSIONS: 1875x530x1600 mm

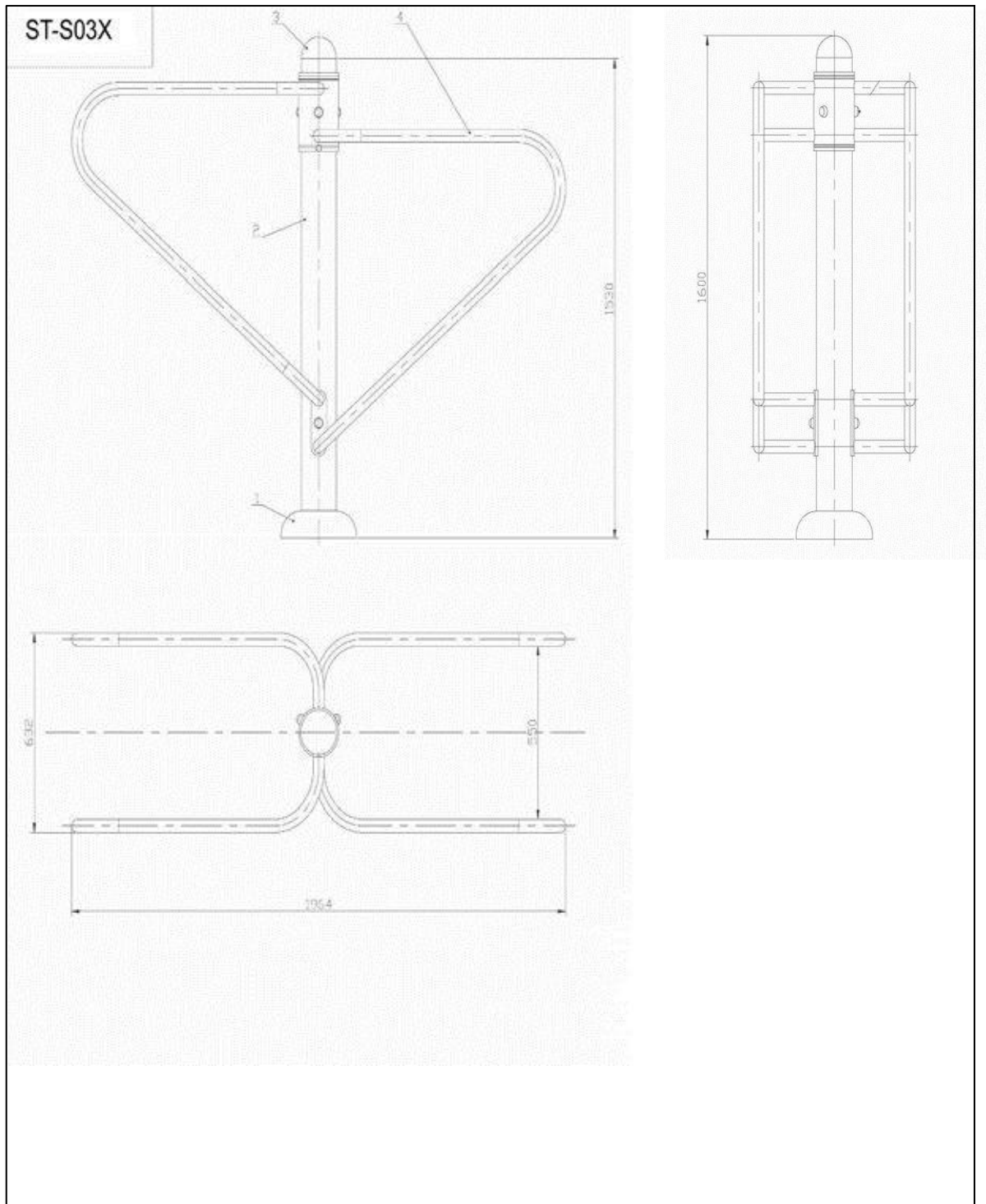
Weight 50KG



2

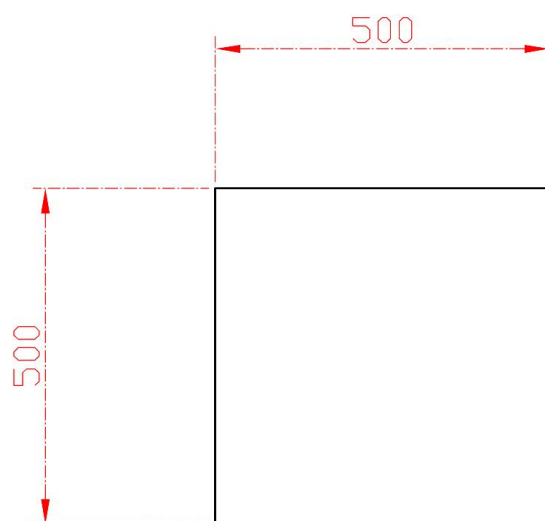


PARALLEL BARS (ST-S03X)

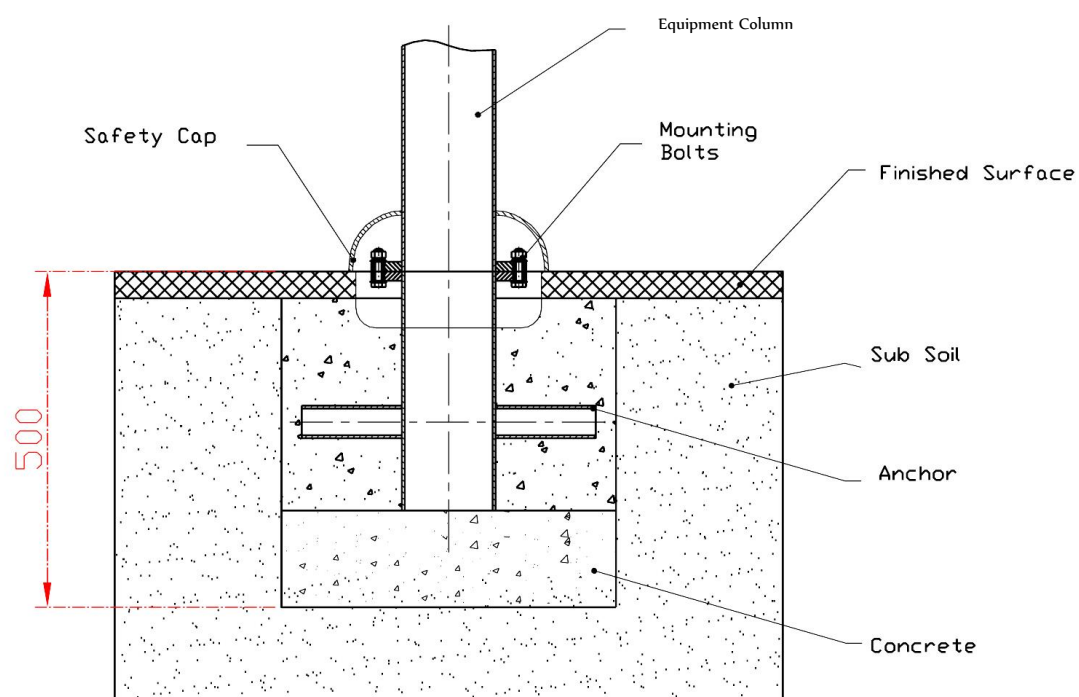


PARALLEL BARS (ST-S03X)

TOP VIEW/PLAN VIEW



CROSS SECTION



			Garcol Leisure Ltd T/A DynamX
Trench Dimensions	Millimeters	Apparatus	
Length	500	ST-S03X	
Breath	500	Parallel Bars	
Depth	500		

$\frac{A}{31}$

