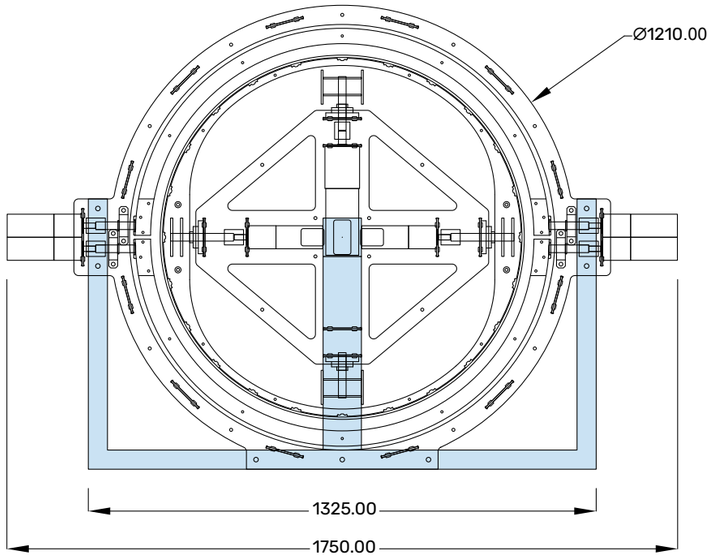
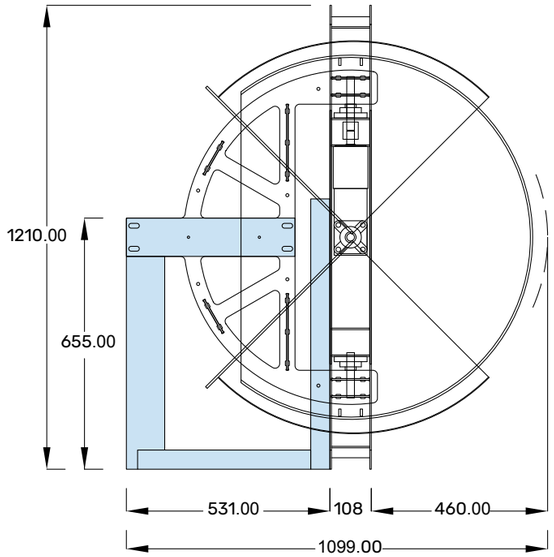
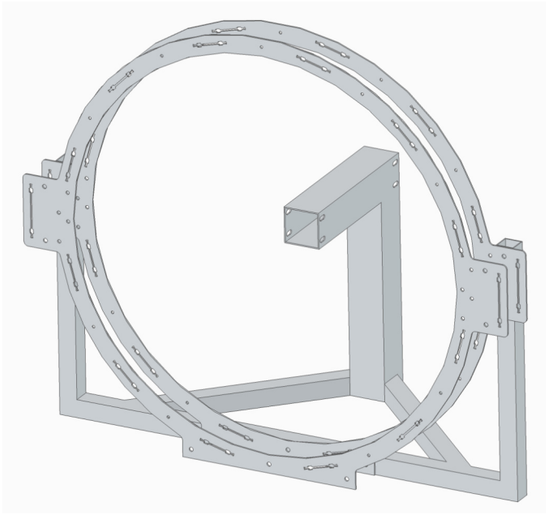
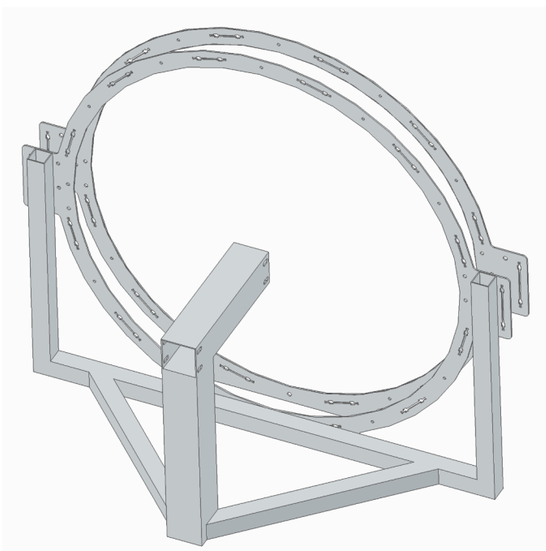
FRONT ELEVATION



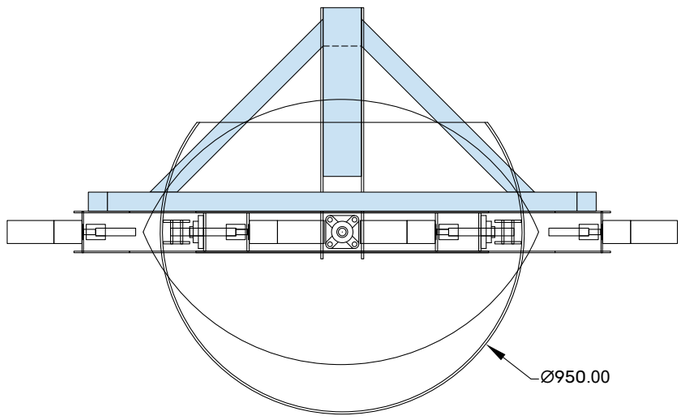
SIDE ELEVATION







PLAN

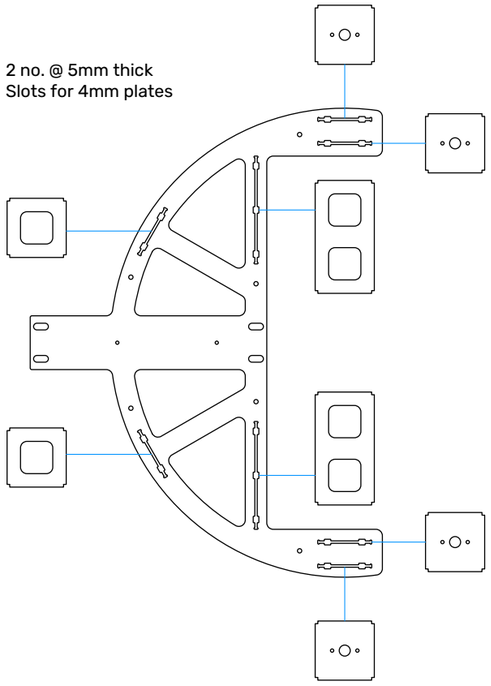


Steel box section frame shown in blue.
Max width = 1750mm across the eyelid motors.
Steel construction with acrylic eyeball and eyelids.
Steel wall mounted control box = 400 x 500 x 200mm.

Project:	WTT MECHANICAL
Drawing title:	Eyeball gimbal and stand
Date:	20th October 2026
Drawn by:	nervoussquirrel.com
Revision:	1
Scale:	1:16 @ A3 All dimensions in mm
Sheet:	1 of 4

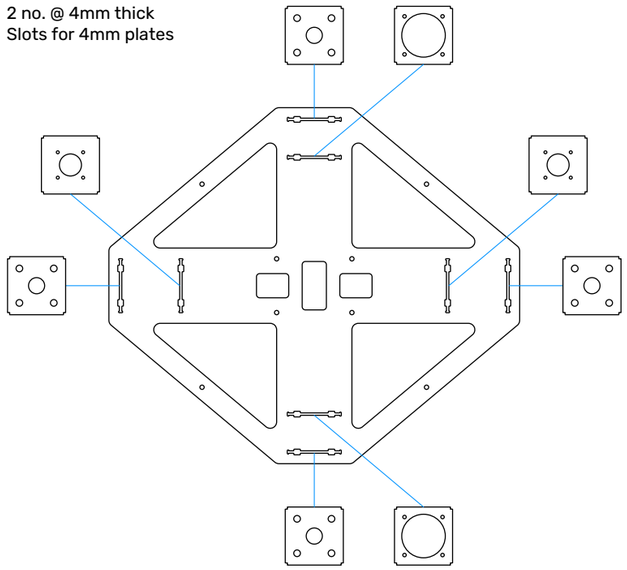
BRACKET FOR X-AXIS PIVOT

2 no. @ 5mm thick
Slots for 4mm plates



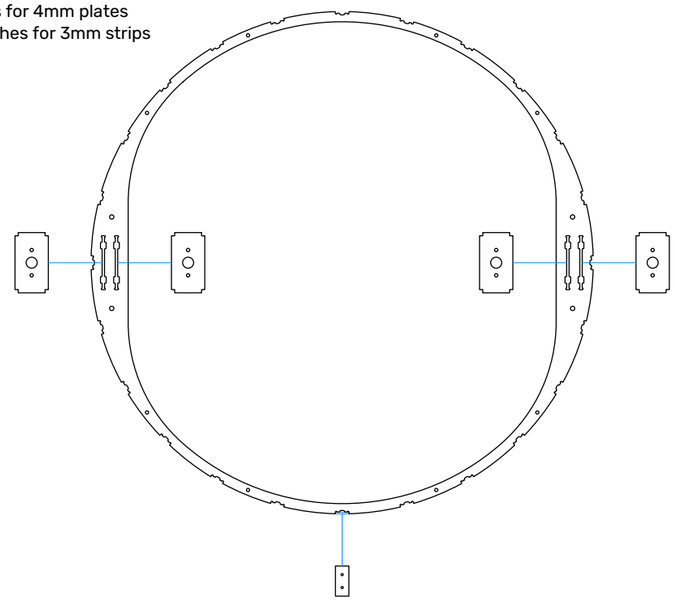
CENTRAL GIMBAL

2 no. @ 4mm thick
Slots for 4mm plates



EYEBALL MOUNTING RING

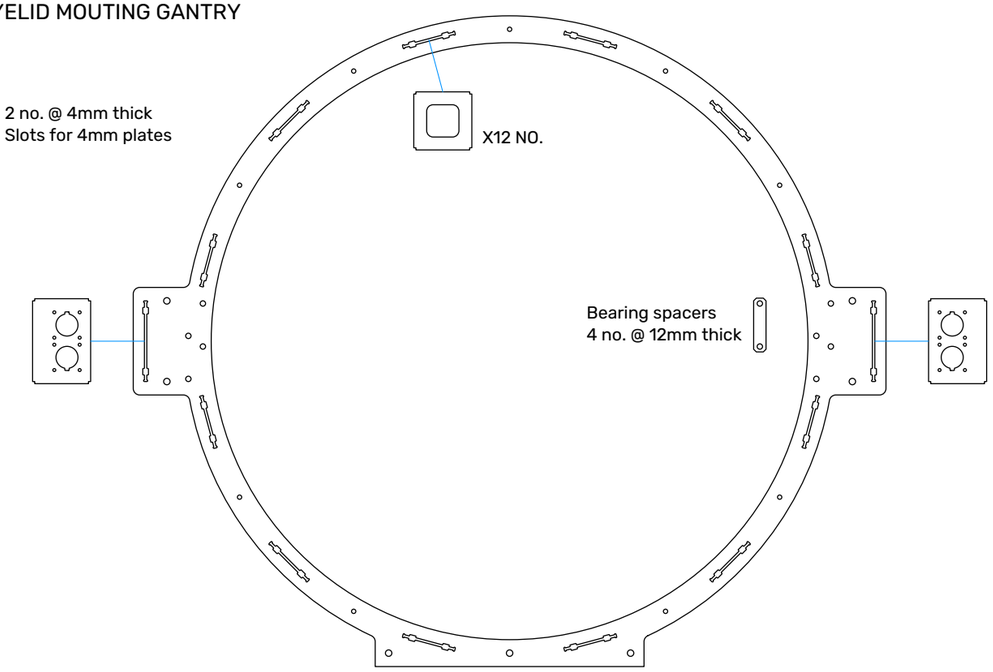
2 no. @ 3mm thick
Slots for 4mm plates
Notches for 3mm strips



24 no. strips around the circumference, slight curve
(rolled to 475mm radius), 2 no. M4 threaded rivets in each.
Acrylic hemispheres fix to this with machine screws.

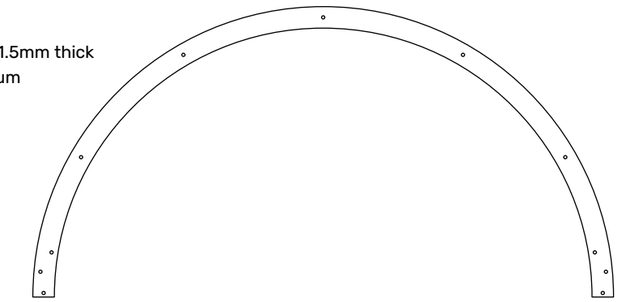
EYELID MOUTING GANTRY

2 no. @ 4mm thick
Slots for 4mm plates



EYELID FLANGE CLAMPS

4 no. @ 1.5mm thick
Aluminium



Shaft joining component
8 no. @ 5mm thick

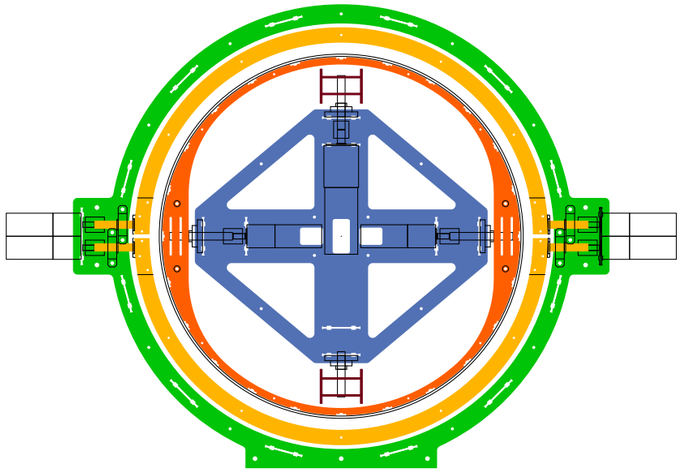


Shaft collar
4 no. @ 3mm thick

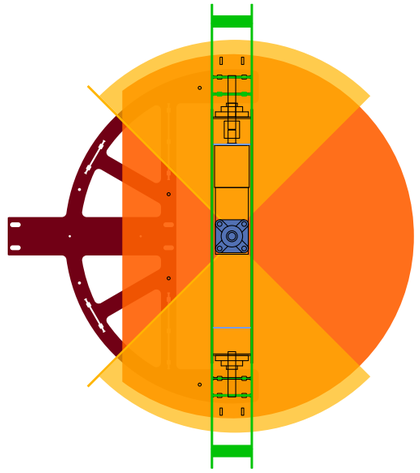


Project:	WTT MECHANICAL
Drawing title:	Eyeball - steel components
Date:	20th October 2026
Drawn by:	nervoussquirrel.com
Revision:	1
Scale:	NTS All dimensions in mm
Sheet:	2 of 4

FRONT ELEVATION

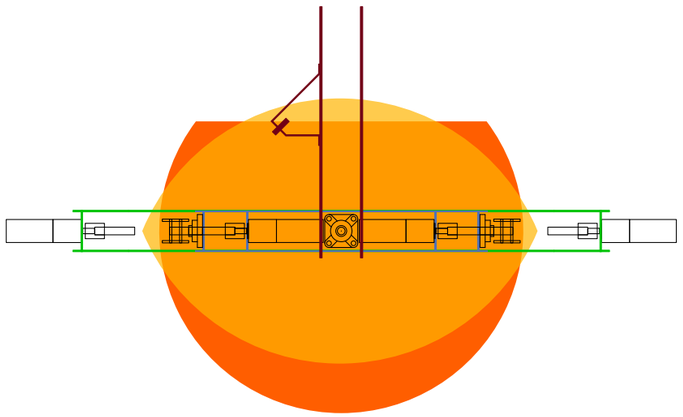


SIDE ELEVATION



BRACKET FOR X-AXIS PIVOT
CENTRAL GIMBAL
EYEBALL
EYELIDS
EYELID GANTRY

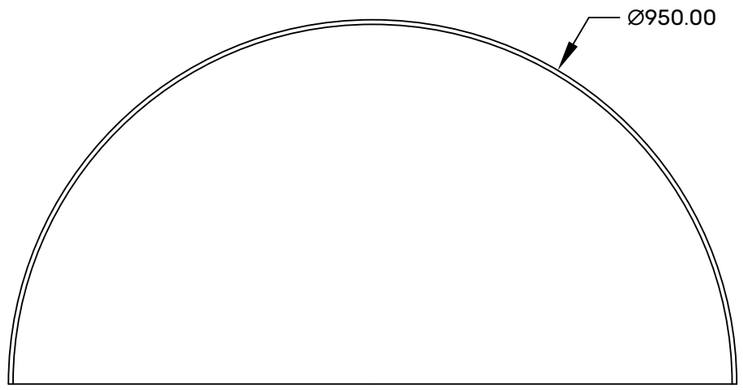
PLAN

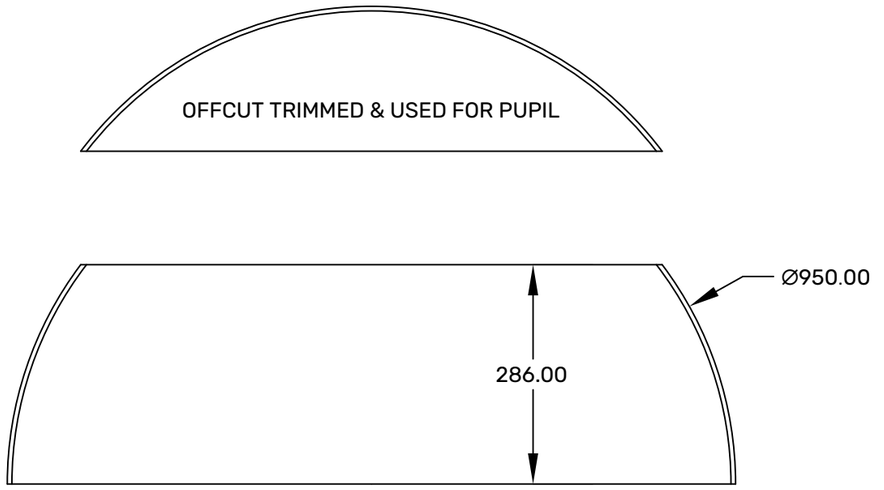


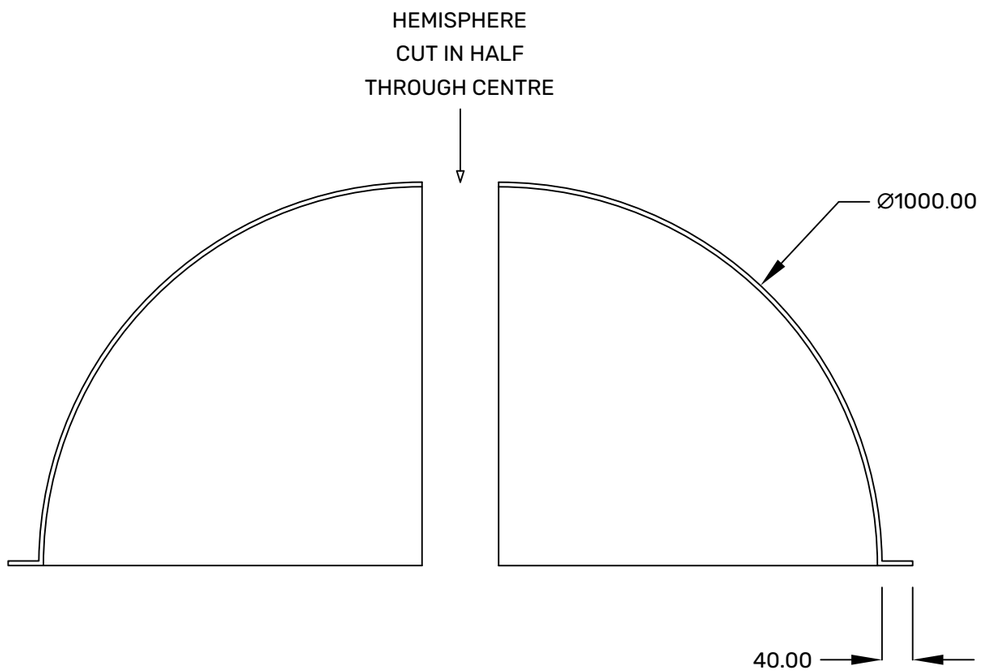
X-axis pivot driven by single stepper motor with planetary gearbox.
Y-axis pivot driven by two stepper motors and planetary gearboxes.
Eyelids driven by 4 no. stepper motors with planetary gearboxes.

Project:	WTT MECHANICAL
Drawing title:	Eyeball - component guide
Date:	20th October 2026
Drawn by:	nervoussquirrel.com
Revision:	1
Scale:	1:16 @ A3 All dimensions in mm
Sheet:	3 of 4

3 no. hemispheres fabricated fro 6mm white opal acrylic.
Hemisphere 1: 1000mm diameter, 40mm flange, cut into 2 quadrants.
Hemisphere 2: 950mm diameter, no flange.
Hemisphere 3; 950mm diameter, no flange, cut at 286mm as shown.







Project:	WTT MECHANICAL
Drawing title:	Eyeball - acrylic hemispheres
Date:	20th October 2026
Drawn by:	nervoussquirrel.com
Revision:	1
Scale:	1:8 @ A3 All dimensions in mm
Sheet:	4 of 4