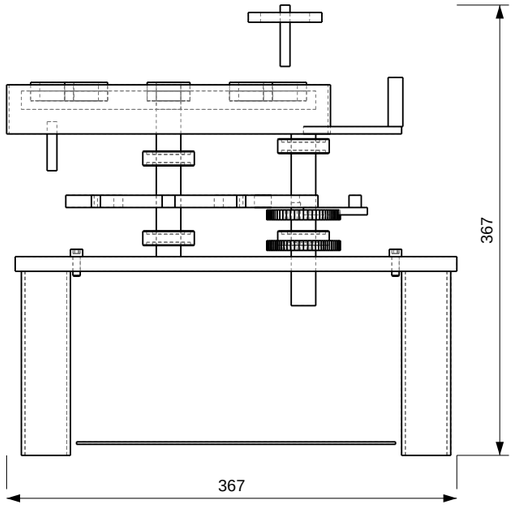
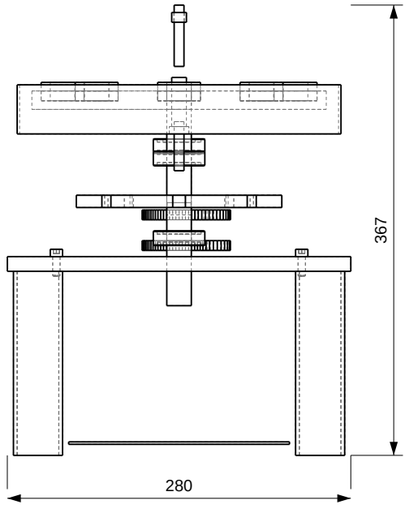
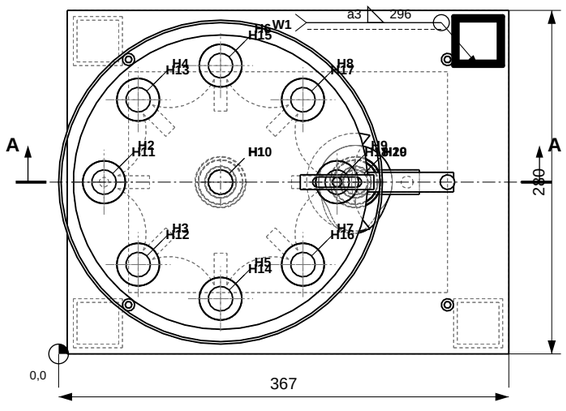
FRONT VIEW



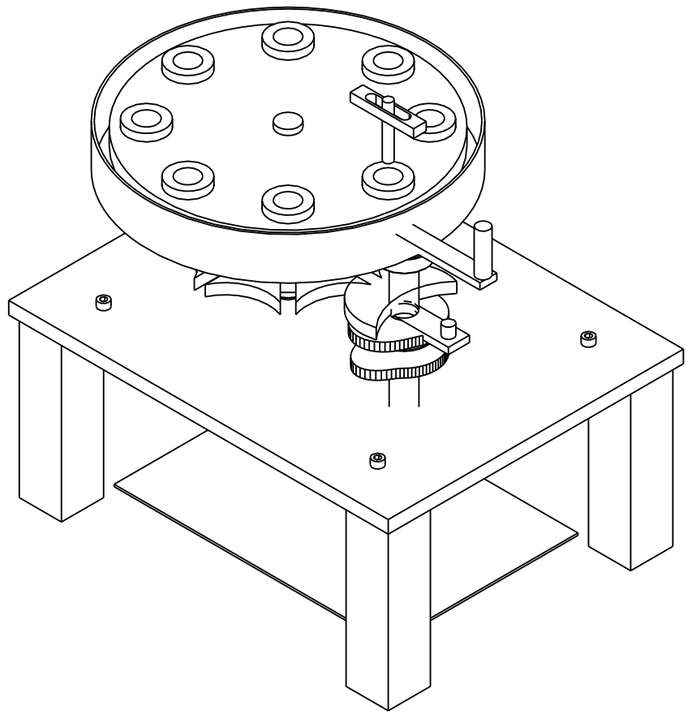
LEFT SIDE VIEW



TOP VIEW



ISOMETRIC



DRIVING DIMENSIONS

Parameter	Value	Unit
Stations	8	
Geneva centre distance	110	mm
Driver pin dia	10	mm
Geneva t	10	mm
Table diameter	240	mm
Table t	15	mm
Nest diameter	35	mm
Nest r	95	mm
Base w	360	mm
Base d	280	mm
Base t	12	mm
Leg h	150	mm
Shaft d	20	mm
Cam base r	30	mm
Cam lift	12	mm
Table z	120	mm

PARTS LIST

Pos	Part	Qty	Standard / mass
1	base_plate	1	9495.4 g
2	leg_1	1	522.8 g
3	leg_2	1	522.8 g
4	leg_3	1	522.8 g
5	leg_4	1	522.8 g
6	base_cover	1	734.8 g
7	geneva_wheel	1	1195.2 g
8	driver	1	252.9 g
9	table_shaft	1	345.3 g
10	input_shaft	1	345.3 g
11	Deep groove ball bearing 6004	4	bearing
12	table	1	4806.5 g
13	nests	1	605.2 g
14	probe_cam	1	189.3 g

NOTES

1. The 8-slot Geneva has a peak acceleration about 5x that of a cam indexer, so do not crank fast with heavy nests.
2. The locking arc has backlash of about 0.2 mm. Add a spring detent if probe accuracy below 0.05 mm is needed.
3. For n=6, a=55 mm and the pin circle grows. Check the guard clearance and keep C at 110 mm.
4. Geneva centre distance C = 110 mm. Wheel radius R = C·cos(180/n) = 101.6 mm. Driver pin radius a = C·sin(180/n) = 42.1 mm.
5. Pin Ø10 mm. Slot width 10.4 mm (H9-like running clearance). Slot inner end lies at C-(a+...) giving slot depth = a+R-C+6 mm.
6. Locking disc radius ≈ a·0.95 minus clearance, with a relief arc cut on the pin side (relief arc 2·(90-180/n) deg). Locking disc is integral with the driver.
7. Index motion occupies input angle 180-360/n = 135° for n=8 (120° for n=6). Dwell occupies 225° (240° for n=6).
8. Probe cam rise/dwell/return occupies 60°-200° of dwell, centred on the locked arc with ≥25° margin each side. Ejector uses 80°-180°.

TITLE

Eight-station Geneva indexing demonstrator

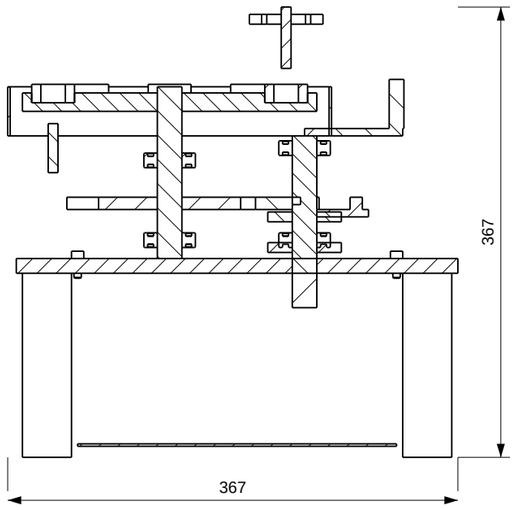
LUXXO

DRAWN BY Luxxo AI design engineer	DATE 2026-11-14	PROJECTION ISO first angle [|O] -O
MATERIAL Steel (S235)	GENERAL TOLERANCE ISO 2768-m ± 0.2 mm	MASS (calc.) 21.26 kg
SCALE 1 : 5	SHEET 1 / 2 A3	DRAWING No. LX-38FE43-v1

Dimensions in mm · unspecified tolerances ISO 2768-m · surface Ra 3.2 unless noted · break sharp edges 0.5 × 45° · welded

Hidden lines omitted · not to scale

SECTION A-A



A-A (1 : 5) cutting plane y = 0 mm, viewed from the front

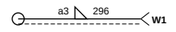
HOLE TABLE (X / Y from datum 0,0 of the view F / S / T on sheet 1)

Tag	Ø	X	Y	Depth	View	Thread / fit / note
H1	Ø20	132	140	THRU	T	Drilled
H2	Ø35	37	140	THRU	T	Ø35 H7 (+0.025 / 0) nest location
H3	Ø35	64.8	72.8	THRU	T	Ø35 H7 (+0.025 / 0) nest location
H4	Ø35	64.8	207.2	THRU	T	Ø35 H7 (+0.025 / 0) nest location
H5	Ø35	132	45	THRU	T	Ø35 H7 (+0.025 / 0) nest location
H6	Ø35	132	235	THRU	T	Ø35 H7 (+0.025 / 0) nest location
H7	Ø35	199.2	72.8	THRU	T	Ø35 H7 (+0.025 / 0) nest location
H8	Ø35	199.2	207.2	THRU	T	Ø35 H7 (+0.025 / 0) nest location
H9	Ø35	227	140	THRU	T	Ø35 H7 (+0.025 / 0) nest location
H10	Ø20	132	140	THRU	T	Drilled
H11	Ø20	37	140	THRU	T	Drilled
H12	Ø20	64.8	72.8	THRU	T	Drilled
H13	Ø20	64.8	207.2	THRU	T	Drilled
H14	Ø20	132	45	THRU	T	Drilled
H15	Ø20	132	235	THRU	T	Drilled
H16	Ø20	199.2	72.8	THRU	T	Drilled
H17	Ø20	199.2	207.2	THRU	T	Drilled
H18	Ø20	227	140	THRU	T	Drilled
H19	Ø20	242	140	THRU	T	Drilled
H20	Ø20	242	140	THRU	T	Drilled

FITS & TOLERANCES (ISO 286)

Feature	Size	Max / min	Fit
bearing seat	Ø20 k6	20.015 / 20.002	H7/k6 transition
bearing seat	Ø20 k6	20.015 / 20.002	H7/k6 transition
nest location	Ø35 H7	35.025 / 35.0	H7/g6 clearance

WELDS (ISO 2553, symbols on sheet 1)



W1 leg to base plate
Prep: no edge preparation, fit-up gap ≤ 1 mm

ENGINEERING CHECKS (simplified hand calculations)

OK table shaft: 6004: P = 337 N, C = 9.95 kN → L10 = 25738.3 mil. rev = 85,794,270 h at 5 rpm (need 5,000.0 h)
OK input shaft: Ø20: T = 5 N·m, M = 6 N·m → σv = 9.4 MPa, safety 24.94 vs. Re 235 MPa (need 2.5), min. Ø9.3
Flat patterns: 5 DXF files (5 pcs) for laser cutting - download in the app.

TITLE
Eight-station Geneva indexing demonstrator

LUXXO

DRAWN BY Luxxo AI design engineer	DATE 2026-11-14	PROJECTION ISO first angle [|O] -O
MATERIAL Steel (S235)	GENERAL TOLERANCE ISO 2768-m ± 0.2 mm	MASS (calc.) 21.26 kg
SCALE 1 : 5	SHEET 2 / 2 A3	DRAWING No. LX-38FE43-v1

Section hatching per ISO 128-50 · hole coordinates from the datum symbol · fits ISO 286-2 · weld symbols ISO 2553 · weld preparation EN ISO 9692-1