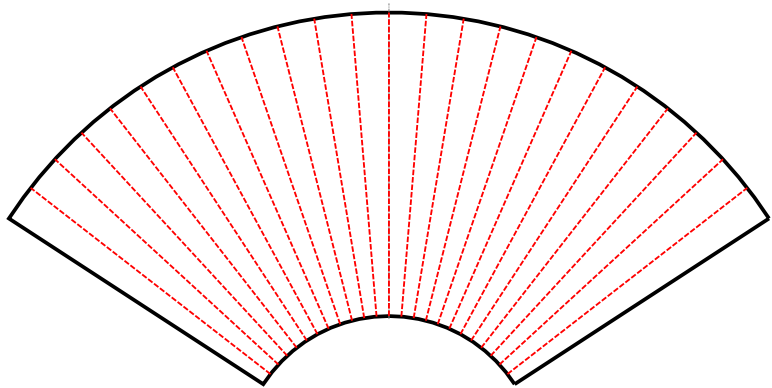




FLAT BLANK ENVELOPE 79.1777 x 38.7192 in
SCALE 1:20 ALL DIMENSIONS ARE FLAT PATTERN UNLESS MARKED FINISHED

FINISHED GEOMETRY	
Large End Diameter (OD)	30.0000 in
Large End Diameter (ID)	29.7628 in
Small End Diameter (OD)	10.0000 in
Small End Diameter (ID)	9.7628 in
Axial Height	30.0000 in
Slant Height	31.6228 in
Half Apex Angle	18.435 deg
Included Apex Angle	36.87 deg
Material	Aluminium 5052-H32
Thickness	0.1250 in
Formed as	24 facets (press brake)
Large End Across Corners	29.9584 in
Large End Across Flats	29.7275 in
Out Of Round At Large End	+0.0385 in / -0.0769 in
Faceted Axial Height	29.9914 in (shorter than the smooth cone)

FLAT BLANK	
Blank Outer Radius (FLAT)	47.2467 in
Blank Inner Radius (FLAT)	15.6239 in
Sector Angle (FLAT)	113.842 deg
Outer Arc Length (FLAT)	93.8752 in
Inner Arc Length (FLAT)	31.0434 in
Blank Envelope (FLAT)	79.1777 in x 38.7192 in
Development Surface	K = 0.5 (mid-thickness geometric assumpt...
Diameter Basis Entered	Outside Diameter (OD)
Seam	Butt seam, no length allowance (blank cu...

BENDING INFORMATION	
Bend-Through Angle	14.234 deg (rotation from flat)
Resulting Open Angle	165.766 deg (interior angle between faces)
Inside Bend Radius	0.0625 in
Bend Lines On This Blank	23
Facet Count (full cone)	24
Developed Facet Angle	4.743 deg
Facet Chord At Large End	3.9104 in
Bend Identifiers	B1, B2, ... are IDENTIFIERS, not an oper...

BLANK	
Envelope (FLAT)	79.1777 x 38.7192 in
Blanks to cut	1
Estimated blank mass	10.843 kg each

BEND TABLE (IDs, not a sequence)					
ID	DIR	THROUGH	OPEN	IN . R	LENGTH
B1	UP	14.23	165.77	0.0625	31.6228
B2	UP	14.23	165.77	0.0625	31.6228
B3	UP	14.23	165.77	0.0625	31.6228
B4	UP	14.23	165.77	0.0625	31.6228
B5	UP	14.23	165.77	0.0625	31.6228
B6	UP	14.23	165.77	0.0625	31.6228
B7	UP	14.23	165.77	0.0625	31.6228
B8	UP	14.23	165.77	0.0625	31.6228
B9	UP	14.23	165.77	0.0625	31.6228
B10	UP	14.23	165.77	0.0625	31.6228
B11	UP	14.23	165.77	0.0625	31.6228
B12	UP	14.23	165.77	0.0625	31.6228
B13	UP	14.23	165.77	0.0625	31.6228
B14	UP	14.23	165.77	0.0625	31.6228
B15	UP	14.23	165.77	0.0625	31.6228
B16	UP	14.23	165.77	0.0625	31.6228

RUTHEN SYSTEMS Fabrication Generator	PART NAME Faceted Cone 24 Facet	PART NO CONE-BRK-24	REV A	JOB NO S-1003	CUSTOMER Sample Customer
	MATERIAL Aluminium 5052-H32	THICKNESS 0.1250 in	UNITS INCHES	QTY (BLANKS) 1	PROCESS Press brake, 24 facets
	PREPARED BY Ruthen Systems	DATE 2026-09-02	SHEET 1 of 2		

B17	UP	14.23	165.77	0.0625	31.6228
B18	UP	14.23	165.77	0.0625	31.6228
B19	UP	14.23	165.77	0.0625	31.6228
B20	UP	14.23	165.77	0.0625	31.6228
B21	UP	14.23	165.77	0.0625	31.6228
B22	UP	14.23	165.77	0.0625	31.6228
B23	UP	14.23	165.77	0.0625	31.6228

NOTES

- 1. Blank developed on the neutral surface at K = 0.5 (mid-thickness geometric assumption - verify against shop practice). Bend data from K-factor (EXAMPLE preset - not verified shop data). Bend allowance is REPORTED ONLY and has not been applied to the blank.
- 2. VERIFY BEND ALLOWANCE AGAINST SHOP TOOLING / BEND TABLE BEFORE PRODUCTION.
- 3. Bend sequence is not modelled. Work out the order on the machine; the identifiers do not imply one.
- 4. Generated dimensions must be reviewed against the job specification, material condition and shop process before production.

RUTHEN SYSTEMS Fabrication Generator	PART NAME Faceted Cone 24 Facet	PART NO CONE-BRK-24	REV A	JOB NO S-1003	CUSTOMER Sample Customer
	MATERIAL Aluminium 5052-H32	THICKNESS 0.1250 in	UNITS INCHES	QTY (BLANKS) 1	PROCESS Press brake, 24 facets
	PREPARED BY Ruthen Systems	DATE 2026-09-02	SHEET 2 of 2		