

ITEM OPPORTUNITY SYNOPSIS

Name of the item to be scouted: Stretch Forming Capability

State item to be used in: Oregon

Describe the Item:

Please describe the item application/the end use of item. Stretch forming is a metal forming process that simultaneously stretches and bends a selected material over a machined form, called a die, to form a part with one or several different curve radii. This process produces perfectly curved parts with smooth, wrinkle-free contours. The metal is T6 Aluminum

Supplier Information:

Type of Supplier being sought (select from list below)

Manufacturer

Contract Manufacturer

Distributor

Other (please specify)

Reason for scouting submission (select from list below)

2nd Supplier

Price

Re-Shore

Past supplier no longer available

New Product Startup

BABA

Other (please specify)

Summary of Technical Specifications and Performance Requirements:

Describe the manufacturing processes (elaborate to provide as much detail as possible). Metals have a fundamental mechanical property called elasticity: their ability to return to their original size and shape after being stretched by an applied load, but only up to a limit. Stretch Forming involves placing an extrusion along a rounded, fixed bending die which is secured with clamps on each end. The machine will then rotate the clamped ends together, bending the extrusion to angles up to 180°. The extrusion takes its shape when it is bent around the bending die to reach its desired angle. Stretch forming is commonly used with components that require a larger bend radius. Stretch forming is commonly used for parts with a larger bend radius, as the

minimum bend radius is generally two to three times greater than other forming/bending methods. If a sufficient load is applied, the material reaches its elastic limit or yield point, where it will permanently deform. Elasticity and yield point properties are different for each material. These properties are essential factors to consider when stretch forming.

Provide dimensions / size / tolerances / performance specifications of the item. 3 inches by 2.25 inches H& W of profile, 90 7/8 inches when bent and 92 11/16ths when straight

List required materials needed to make the product, including materials of product components, if applicable. Aluminum T6 extrusion forming and trimming

Are there applicable certification requirements?

Yes

No

Please Explain:

Are there any applicable regulations that apply to the production of this item?

Yes

No

Please Explain:

Are there any other standards, requirements?

Yes

No

Please Explain:

Additional Comments:

Additional technical comments:

Volume and Pricing:

Estimated Potential Business Volume (i.e. #Units per day, month, year): Short term requirements of 3000 pieces within 2-3 weeks upon receiving the material 10,000 pieces a year after that initial order

Estimated Target Price / Unit Cost Information: \$24 - \$82 per piece

Delivery Requirements:

When is it needed by? (Immediate, 30 days, 6 months, etc) A.S.A.P.

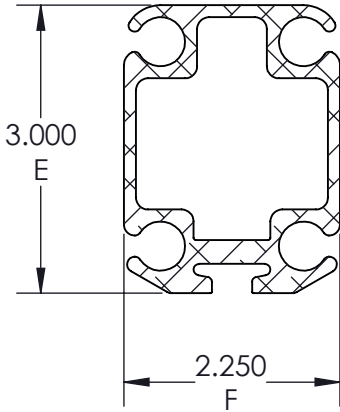
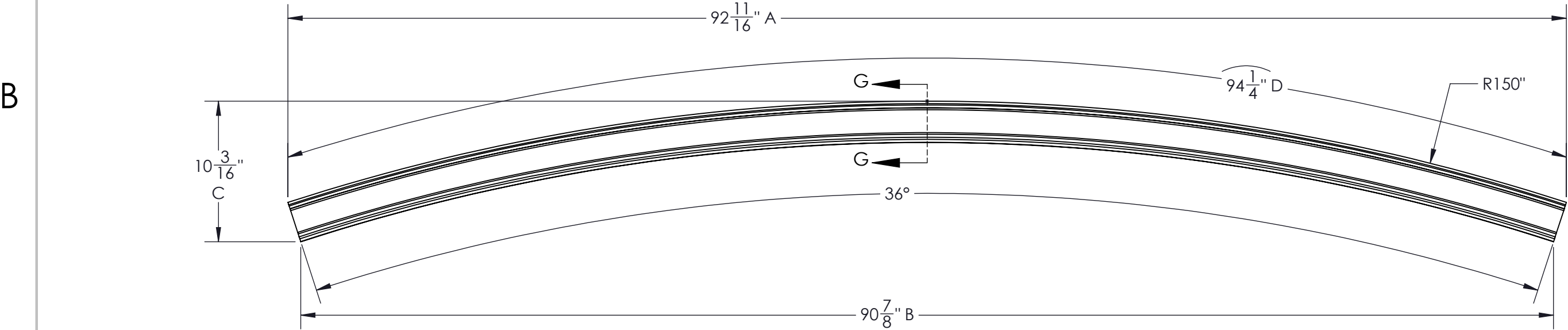
Describe packaging requirements (i.e., individually/ group packaging). Palletized and crated

Where will this item be shipped? Eugene, Oregon

REVISIONS				
ECO	REV.	DESCRIPTION	DATE	APPROVED
NA	DEV.001	RELEASE FOR FA INSPECTION	6/5/2023	TR

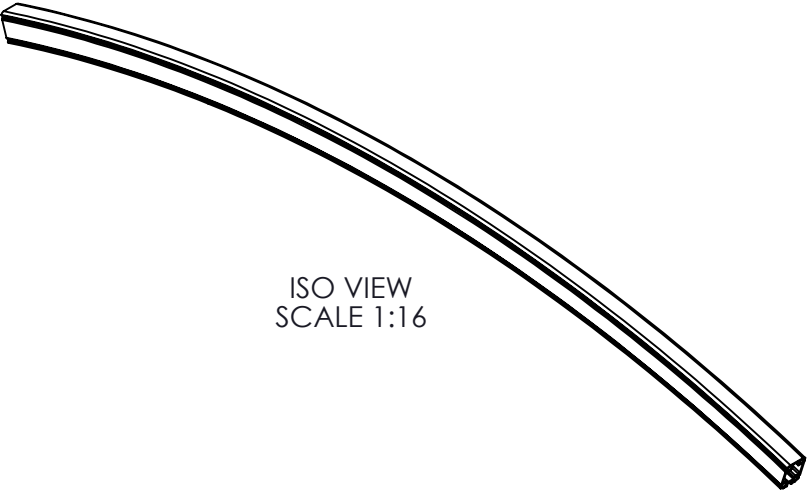
B

A



SECTION G-G
SCALE 1 : 2

ISO VIEW
SCALE 1:16



DIMENSION	THEORETICAL VALUE	VENDOR INSPECTED VALUE
A	92 11/16	
B	90 7/8	
C	10 3/16	
D	94 1/4	
E	3.000	
F	2.250	

		INITIALS		WESTERN SHELTER SYSTEMS							
DRAWING CHECKED BY		BE									
FINAL ENG. APPROVER		TITLE: ARCH BAR, QH, 25'									
PRODUCT. APPROVER 1		DWG.#	1000361	REV	DEV.001	DRAWN BY	TR	DRAWN DATE	4/21/2022		
PRODUCT. APPROVER 2		---		MATERIAL		6063 T-6					
Q.A. APPROVER		--				FINISH CLEAR ANODIZE					
COMMENTS:		PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF WESTERN SHELTER SYSTEMS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF WESTERN SHELTER SYSTEMS IS PROHIBITED.		DIMENSIONS AND TOLERANCES ARE TO BE INTERPRETED PER ASME Y14.5M-2009							
				DIMENSIONAL LIMITS APPLY AFTER PLATING/COATING							
				UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES							
				GENERAL							
				SHEET METAL							
		CAGE CODE #:				.X		±.1			
		067A4				.XX		±.025		EDGE TO BEND ±.02	
						.XXX		±.005		BEND TO BEND ±.03	
						ANGLE		± .5		BEND ANGLE ± 1°	
						FRACT.		± 1/16th			
DO NOT SCALE DRAWING		SIZE B		SCALE: 1:8		WEIGHT:		SHEET 1 OF 1			