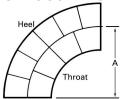
### Smooth Flow Elbows Made With Die-Formed Panels



Long Radius 90°



Lona Radius 45°



Short Radius 90°

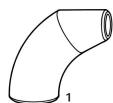
- Available in either the "as welded" or "annealed" condition as described more fully under smooth flow elbows on page 6.
- Alloys stocked include Types 304, 304L, 316, 316L and 317L. However, elbows can normally be produced in any weldable corrosion resistant alloy. These elbows have a smooth contour design and are made from multiple panels for ease of fabrication. Die-formed panel elbows are not "mitered" elbows.
- Non-standard diameters and elbow angles are available.
- ID size elbows are available.

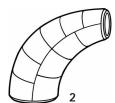
Nominal Pipe Size	Outside Diameter	А	Throat Panels	Heel Panels	В	Throat Panels	Heel Panels	С	Throat Panels	Heel Panels
	26	39	4	6	16	2	3	26	4	6
	28	42	4	6	17 1/4	2	3	28	4	6
	30	45	4	6	18 1/2	2	3	30	4	6
	32	48	4	6	19 3/4	2	3	32	4	6
	36	54	4	6	22 1/4	2	3	36	4	6
	40	60	4	6	24 7/8	2	3	40	4	6
	42	63	4	6	26	2	3	42	4	6
	10	72	1	4	20.7/	2	2	40	1	4

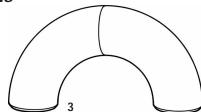
Dimensions for LR 90° and LR 45° elbows per ANSI B16.9. Short Radius 90° elbow dimensions per Alaskan standard.

Alloys: pg. 56, 57 Wall Thicknesses: pg. 46-48 Tolerances: pg. 54 Shipping Weights: pg. 46-48

# Special Welding Elbows and Bends









#### 1. Cut-Back Transition Reducing Elbow

An economical reducing elbow which is available in standard long and short radius configurations. Supplied in NPS and tube size and diameters 4" through 24" and is available in all stainless steel and other weldable corrosion resistant alloys.

Can be supplied in non-standard degrees of bend.

#### 2. Smooth Flow Reducing Elbow

Available in long radius, short radius, non-standard center-line radius and variable radius configurations. Supplied in standard and non-standard diameters and available in all stainless steel and other weldable corrosion resistant alloys.

Normally made with die-formed panels, also available in half-shell construction.

## 3. 180° Return Bend

Available in standard long and short radius configurations and supplied in NPS, tube size and non-standard diameters.

Available in all stainless steel and other weldable corrosion resistant alloys.

Can be manufactured to meet non-standard dimensional requirements.

#### 4. Special Radius Bend

Available in any center-line radii, where the minimum center-line radius is 3 times the outside diameter. Supplied in NPS, tube size, ID size and non-standard diameters.

Available in all stainless steel and most other weldable corrosion resistant alloys.

Can be supplied in non-standard degrees of bend.