

# The STATE OF THE ARC\*



**SEAMLESS HDPE  
ARC™ BENDS**



Available in  
**16", 18" and 20"**  
**SUPER ARC\* sizes.**



**PIPESTAR**  
INTERNATIONAL INC.

\*ARC is a registered trademark of Pipestar International Inc.



**Pipestar offers a range of seamless long radius ARC™ HDPE sweep bends made to the highest quality standards.**

Pipestar offers a range of seamless, HDPE ARC™ Bends produced through a unique patented manufacturing process. The name **ARC™** comes from the word ARCHetype which means "original pattern or model of which all things of the same type are representations or copies." ARC™ sweep bends are hot forged from polyethylene PE 3408/4710 pressure pipes and are available in IPS sizes 2" through to 20."

**Major Features:**

- No Mitred Fusion Joints
- Seamless Smooth Interior
- Virtually no flow restriction
- Fully pressure rated
- Wearability increased in slurry lines
- Can manufacture any angles up to 90°
- Suitable for butt-welding, electrofusion or flanging
- No reversion

**ARC™ Bends Manufactured to:**

- Angular tolerance of +/- 2°
- Linear tolerance of +/- 3/4" (+/-20mm)
- Center line of curvature 3 times the pipe diameter

**Industry Applications of ARC™ HDPE Sweep Bends**

- Mines • Paper Board Mills • Chemical Works • Water Supply – Treatment • Fire Ring Mains • Sewage – Gravity, Pressure & Vacuum • Food Processing • Breweries, Distilleries, Soft Drinks • Fish Processing • Thermal Generating Plants • Steel Plants • Hydro Generating • Mechanical Contracting • Saw Mills • Plating Shops • Civil Engineering • Oil Refineries • Hospitals • Irrigation • Grain Processing • Gas Distribution • Conduit • Coal Beneficiation • Slurry Lines

# Long Radius Sweep Bend Specifications

• AWWA C901 • AWWA C906 • ASTM D3035 • NSF

## General Bend Specifications

- Manufactured in one continuous piece from HDPE 3408/4710 pressure pipe
- Center line radius of curvature 3 x diameter. Meets Pipestar published dimensional schedule. Dimensional tolerance  $\pm 3/4"$  ( $\pm 20\text{mm}$ )
- Outside diameter of the spigot ends shall meet the requirements of ASTM F714 for a length of one diameter from the end. Spigot lengths suitable for butt welding or electrofusion
- The bending process will result in a single piece bend at the angle specified by the engineer, with an angular tolerance  $\pm 2^\circ$
- The bends will be shipped to site loose or palletized. No strapping or other foreign material will be placed inside the bend
- Only ARC™ bends as manufactured by Pipestar International Inc. will be considered approved. All others must submit technical data and samples to be considered for approval
- Fittings shall be examined for defects by visual inspection in the first instance, or by any other inspection method if required

## Freedom from Defects

- The manufacturing process shall not create any grooves, blisters, or other visual defects on the outside surface of the bend
- There shall be no cavities, voids or inclusions in the fittings body and the inside surface shall be smooth, clean and free from grooves or blisters
- Defective fittings cannot be repaired and re-supplied unless specifically authorized by the client in writing

## Marking

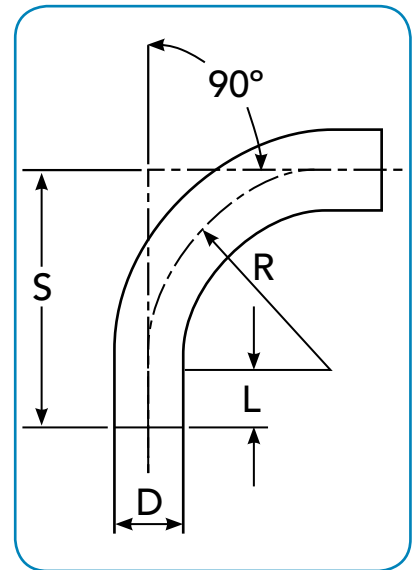
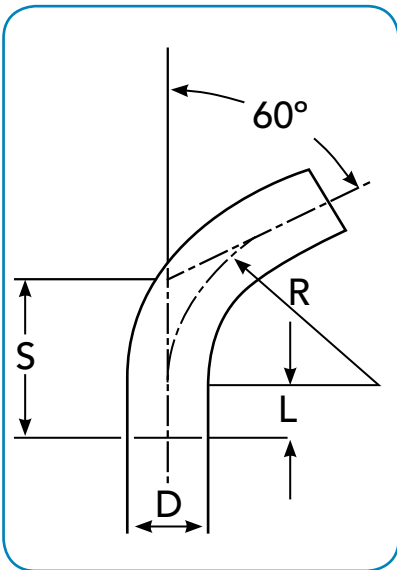
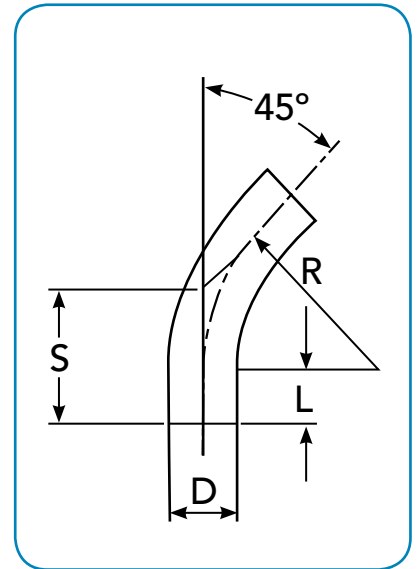
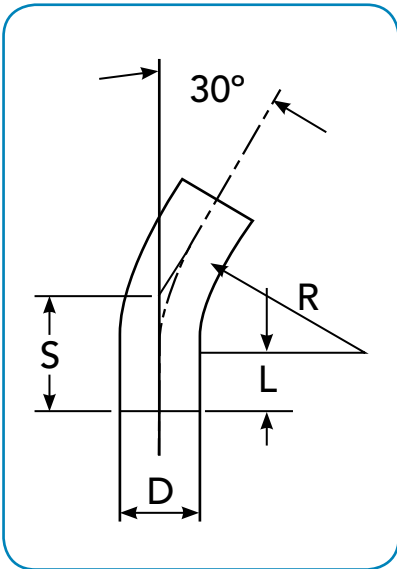
All fittings shall be clearly marked with at least the following information:

- Manufacturers name or Trade mark
- Identification of the material type
- Designated angle of bend
- Nominal size, SDR and angle of the pipe for which the fitting is intended
- Code for traceability of the manufacturing date or batch





**PIPESTAR**  
INTERNATIONAL INC.



## DIMENSIONS

SIZE	D	L	R	S-30°	S-45°	S-60°	S-90°
2" IPS	2.375"	6"	7.13"	7.5"	9"	10.5"	13.3"
3" IPS	3.5"	6"	10.5"	8.8"	10.3"	12.1"	16.5"
4" IPS	4.5"	6"	13.5"	9.6"	11.6"	13.8"	19.5"
6" IPS	6.625"	7"	19.9"	12.3"	15.2"	18.5"	26.9"
8" IPS	8.625"	10"	24.5"	16.6"	20.1"	24.2"	34.5"
10" IPS	10.75"	11"	32.25"	19.6"	24.3"	29.6"	43.2"
12" IPS	12.75"	13"	38.3"	23.3"	28.7"	35.1"	51.3"
14" IPS	14"	13"	38.9"	23.4"	29.1"	35.5"	51.9"
16" IPS	16"	16"	48"	28.9"	35.9"	43.7"	64"
18" IPS	18"	18"	54"	32.5"	40.4"	49.2"	72"
20" IPS	20"	20"	60"	36.1"	44.9"	54.6"	80"



**PIPESTAR**  
INTERNATIONAL INC.





**PIPESTAR**  
INTERNATIONAL INC.

Pipestar International Inc.  
58 Paramount Road  
Winnipeg, Manitoba, Canada  
R2X 2W3

Phone: 1 (204) 949-3910  
Fax: 1 (204) 949-3919  
E-mail: [info@arcbends.com](mailto:info@arcbends.com)  
[www.arcbends.com](http://www.arcbends.com)

