

PRODUCT CATALOGUE

Pipestar now offering full-line of flanged Arcbends™

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 pressure pipes and are available in IPS and DIOD sizes 2" through to 14". Metric sizes available in 20mm through to 355mm diameters.



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° without reversion
- Linear tolerance of +/- 3/4" (+/-20mm)
- Center line of curvature generally 3 times the pipe diameter (HDPE Industry Nomenclature 6D)

Company Profile

Pipestar International Inc. established by 3 entrepreneurs with a combined 60 plus years of experience in the HDPE pipe industry.

The original impetus for developing a specialty long radius HDPE bend comes from the mining sector. It is through these mining companies looking for a longer lasting more versatile product for their slurry lines that the HDPE [Arc™](#) sweep bends have come to be.

The original patented process began almost 9 years ago in Australia and is now being introduced to the North American Market. Since its inception the long sweep bend in Australia now dominates not only the mining sector but every domain where HDPE is installed.

The introduction of this unique patented process into the North American market began in Nov. 2002 from a 10,000 sq ft. facility located in Winnipeg, Manitoba, Canada. This central location allows easy access to all markets East, West, North & South on major trucking routes.

This 21st century state of the art manufacturing plant, manufactures [Arc™](#) sweep bends 1"-14" through a 10° to 90° range inclusive. The future plans include expansion of the facility to accommodate up to 24" Sweep bends.

Pipestar's mandate is to sell through a network of stocking & non-stocking distributors throughout Canada and the USA.

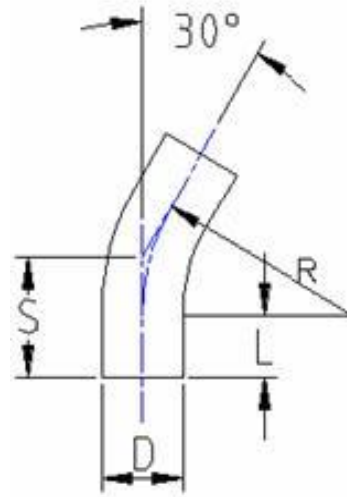
Products



Arc™ Bends

- LS 30
- LS 45
- LS 45, flanged
- LS 60
- LS 90
- LS 90, flanged





Manufactured in one continuous piece from PE3408 high density polyethylene pipe

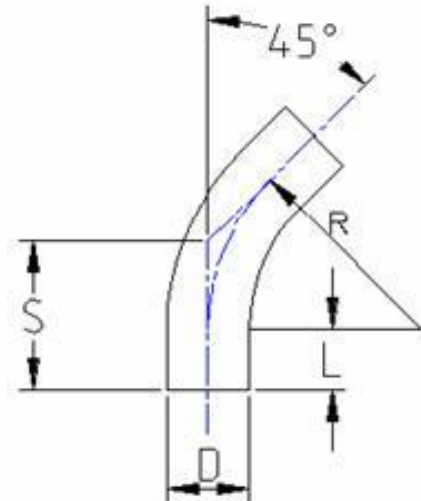
All angles up to and including 30° available in IPS (OD) diameters from 3" to 14" and metric (OD) diameters (ISO 161) from 90mm to 355mm. Center line radius of curvature (IPS) from 10.5" to 39" and 270mm to 1065mm (metric).

DIOD sweep bends are also available.

Tolerances: - Linear tolerance of $\pm \frac{3}{4}$ " (± 20 mm)
 - Angular tolerance of $\pm 2^\circ$ with no reversion

Dimensions

Size	D	L	R	S
2" IPS	2.375"	6"	7.13"	7.5"
3" IPS	3.5"	6"	10.5"	8.8"
4" IPS	4.5"	6"	13.5"	9.6"
6" IPS	6.6"	7"	19.9"	12.3"
8" IPS	8.6"	10"	24.5"	16.6"
10" IPS	10.8"	11"	32.25"	19.6"
12" IPS	12.8"	13"	38.3"	23.3"
14" IPS	14"	13"	38.9"	23.4"



Manufactured in one continuous piece from PE3408 high density polyethylene pipe

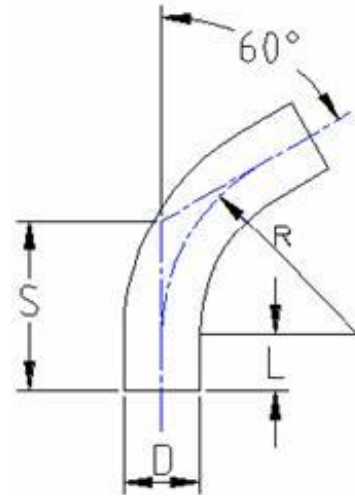
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DIOD sweep bends are also available.

Tolerances: - Linear tolerance of $\pm 3/4"$ (± 20 mm)
 - Angular tolerance of $\pm 2^\circ$ with no reversion

Dimensions

Size	D	L	R	S
2" IPS	2.375"	6"	7.13"	9"
3" IPS	3.5"	6"	10.5"	10.3"
4" IPS	4.5"	6"	13.5"	11.6"
6" IPS	6.6"	7"	19.9"	15.2"
8" IPS	8.6"	10"	24.5"	20.1"
10" IPS	10.8"	11"	32.25"	24.3"
12" IPS	12.8"	13"	38.3"	28.7"
14" IPS	14"	13"	38.9"	29.1"



Manufactured in one continuous piece from PE3408 high density polyethylene pipe

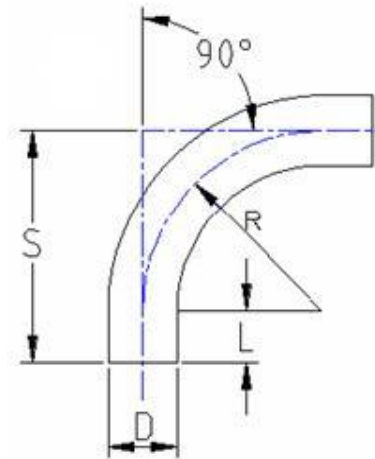
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Dimensions

Size	D	L	R	S
2" IPS	2.375"	6"	7.13"	10.5"
3" IPS	3.5"	6"	10.5"	12.1"
4" IPS	4.5"	6"	13.5"	13.8"
6" IPS	6.6"	7"	19.9"	18.5"
8" IPS	8.6"	10"	24.5"	24.2"
10" IPS	10.8"	11"	32.25"	29.6"
12" IPS	12.8"	13"	38.3"	35.1"
14" IPS	14"	13"	38.9"	35.5"



Manufactured in one continuous piece from PE3408 high density polyethylene pipe

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2" IPS	2.375"	6"	7.13"	13.13"
3" IPS	3.5"	6"	10.5"	16.5"
4" IPS	4.5"	6"	13.5"	19.5"
6" IPS	6.6"	7"	19.9"	26.9"
8" IPS	8.6"	10"	24.5"	34.5"
10" IPS	10.8"	11"	32.25"	43.2"
12" IPS	12.8"	13"	38.3"	51.3"
14" IPS	14"	13"	38.9"	51.9"

Long Radius Sweep Bend Specifications

The long sweep bend will be manufactured from Type III high density Polyethylene meeting or exceeding:

- ASTM F714
- ASTM 3350
- AWWA C901
- AWWA C906
- ASTM D3035
- NSF

General Bend Specifications

- Manufactured in one continuous piece from HDPE 3408 pressure pipe
- Center line radius of curvature generally 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 $\pm 2^\circ$ without any reversion
- 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

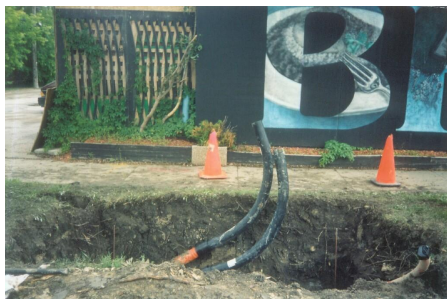
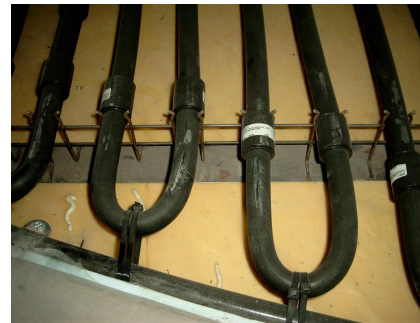
- The manufacturing process shall not create any grooves, blisters, or other visual defects on the outside surface of the bend
- There shall be no cavities, voids or inclusions in the fittings body and the inside surface shall be smooth, clean and free from grooves or blisters
- Defective fittings cannot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

PHOTO GALLERY

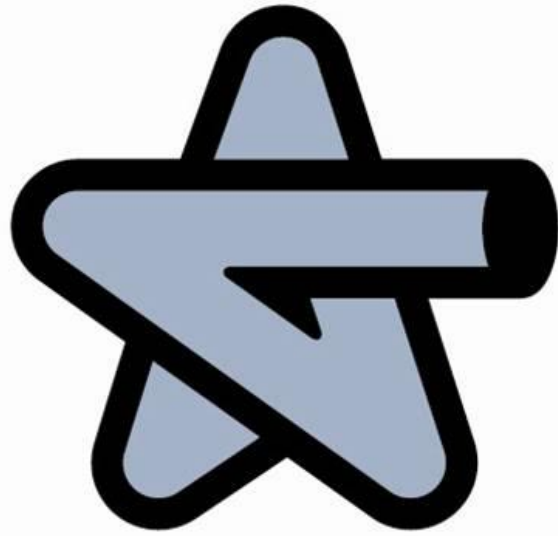


Industry Applications of Arc™ HDPE Sweep Bends

- 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
- Textiles/Leather Tanning
- Irrigation
- Grain Processing
- Gas Distribution
- Conduit
- Coal Beneficiation
- Slurry Lines
- Non Newtonian Fluids

PHOTO GALLERY





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