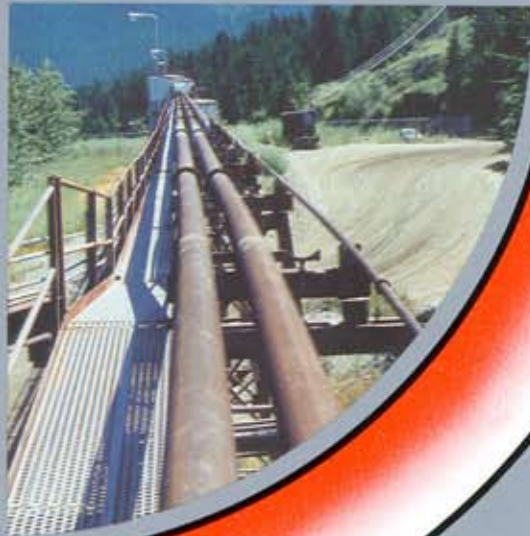


NASPipe

abrasion resistant steel pipe



INDUTECH
INDUSTRIAL TECHNOLOGY



NASPipe abrasion resistant steel pipe

NASPipe is a tough, abrasion resistant, hardened steel piping system. Offsets, sweeps, elbows and fittings are made from the same tough base material.

NASPipe offers advantages similar to those of mild carbon steel pipe, such as flexibility in design and ease of fabrication.

NASPipe typically has a wear life on straight pipe of 4 to 6 times the life received from conventional carbon steel pipe.

NASPipe's monolithic structure facilitates ultrasonic measurement of wall thickness.

NASPipe is one of the most cost-effective pipes available in the industry today.

NASPipe is approved to ASME B31.11 Slurry Transportation Piping Systems.

NASPipe is manufactured from a special analysis steel in nominal pipe sizes from 2 1/2ins (73mm) to 24ins (610mm) and up to 50ft (15m) in length. A special heat treatment process produces a thick zone of 600 BHN on the inner surface of the pipe to provide **NASPipe**'s wear-resistant properties. The softer outer surface adds to **NASPipe**'s toughness.

NASPipe is used worldwide. For instance, sections of **NASPipe** were welded together for a power plant bottom ash line using 40ft (12m) lengths and weld rings. The flexibility and resilience of **NASPipe** allowed the pipe to take the contour of the Potomac River bottom in a crossing between Maryland and West Virginia.

Over 200,000ft (60 km) of **NASPipe** has been successfully used in the transport of phosphate through environmentally sensitive areas in Florida.

The **NASPipe** system provides a combination of economy in cost with economy in weight, low resistance to flow and high resistance to abrasion.

NASPipe is supported by application and product engineering staff who will be pleased to review particular customer requirements.



24" diameter pipe leaving the induction heat treatment machine.

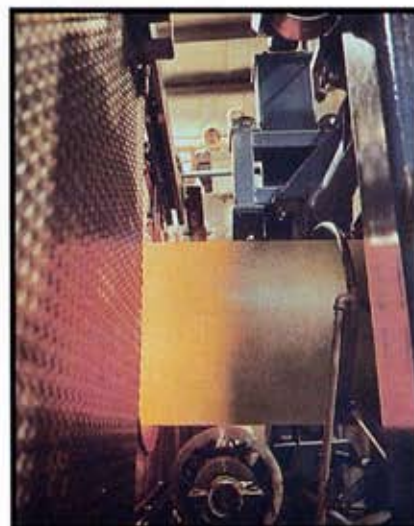
NASPipe also offers benefits at the point of installation. Hardened steel pipe can be cut with an abrasive saw and welded using common low-hydrogen welding rod. (The necessary welding procedures are available.)

NASPipe's standard 20ft (6m) and 40ft (12m) lengths as well as hardened bends and tangents will reduce the number of joints in a system.

NASPipe will accept many of the common coupling methods used for plain, mild steel pipe. Welded pipe joints utilize pipe with weld rings attached. The rings form a "V" groove which receives a full penetration weld. When using Victualic® couplings, these are applied over weld rings, but the pipe can also be grooved for certain sizes and applications.

This brochure sets out the basic information on the **NASPipe** product line. We would be pleased to supply additional information relevant to particular applications.

Please contact us if you have any questions. We would be pleased to work with you on your next abrasion resistant piping requirement.



NASPipe being manufactured showing the definitive quench line.



NASPipe® gives good service in the following applications:

Power Generation

- coal slurry transport
- fly-ash systems
- bottom ash disposal
- pulverised fuel systems
- dry scrubbers

Mining and Processing

- tar sand transport
- phosphate transport
- process plants
- preparation and cleaning plants
- tailings and backfill lines

Dredging and Slurry Transport

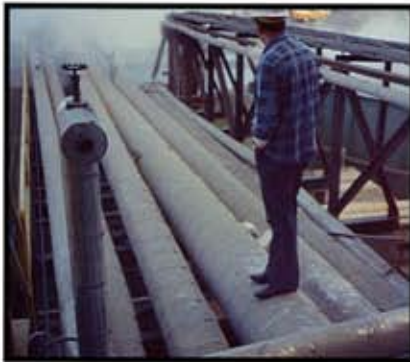
- onshore slurry transport
- quarry product transport
- delivery pipe lines

Other Industries

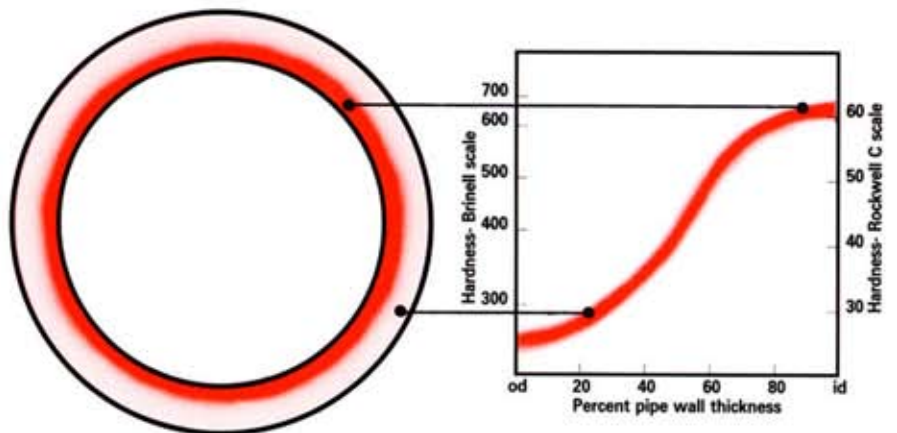
- wood chip conveyance
- foundry sand handling
- cement conveyance
- waste disposal



Dry Cement Handling and Storage System.

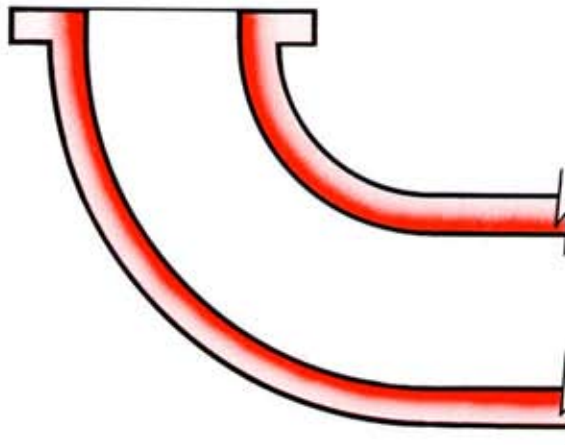


Pulverised fuel ash (PFA) hydraulic transportation pipeline made from NASPipe®



Pipe available in standard and heavy wall material. Bends available in heavy wall material. See back page.

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Product range

End preparation and coupling methods

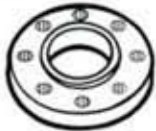
Weld ring

Added at factory on request.
Prepares ends for various coupling methods.



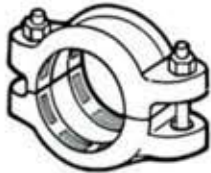
Slip on flange

Prepares ends for various coupling methods.



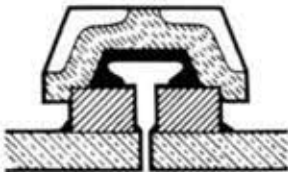
Roust-A-Bout® coupling

A well proven site applied temporary coupling arrangement.



Victaulic® coupling

Coupling applied over a weld ring.



Split flange

For application to stretches of made up pipework in-situ.



NASPipe is readily available in the standard sizes listed below in 20ft (6m) and 40ft (12m) lengths up to 16" (406mm) dia. Lengths up to 50ft (15m) are available in 18" (457mm), 20" (508mm) and 24" (610mm) dia.

normal size ins	thickness	O/D ins	(mm)	wall thickness ins	(mm)	weight lb/ft	kg/m
2½	Sch 80	2.87	(73)	.276	(7.01)	8	(11)
3	Sch 80	3.50	(89)	.300	(7.62)	10	(15)
4	Sch 80	4.50	(114)	.337	(8.56)	15	(22)
5	Sch 80	5.56	(141)	.375	(9.53)	21	(31)
6	Sch 80	6.63	(168)	.280	(7.11)	19	(28)
6	Sch 80	6.63	(168)	.432	(10.97)	29	(43)
8	Sch 80	8.63	(219)	.322	(8.18)	29	(43)
8	Sch 80	8.63	(219)	.500	(12.7)	43	(65)
10	Sch 80	10.75	(273)	.365	(9.27)	40	(61)
10	XH	10.75	(273)	.500	(12.7)	55	(82)
12	STD	12.75	(324)	.375	(9.53)	50	(74)
12	XH	12.75	(324)	.500	(12.7)	65	(97)
14	STD	14	(365)	.375	(9.53)	55	(81)
14	XH	14	(365)	.500	(12.7)	72	(107)
16	STD	16	(406)	.375	(9.54)	63	(93)
16	XH	16	(406)	.500	(12.7)	83	(123)
18	STD	18	(457)	.375	(9.53)	71	(105)
20	XH	20	(508)	.500	(12.7)	79	(117)
22	STD	22	(559)	.375	(9.53)	87	(129)
24	XH	24	(610)	.500	(12.7)	110	(164)

Custom Fabrication

NASPipe is produced in bends and fittings to special order, using standard pipe sizes listed above.

Bends down to 4" (114mm) diameter, and radii from 3D upwards to permit you to design for minimum wear conditions in combination with high abrasion resistance.

Fabricated laterals, T's and Y's are also available in **NASPipe**



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