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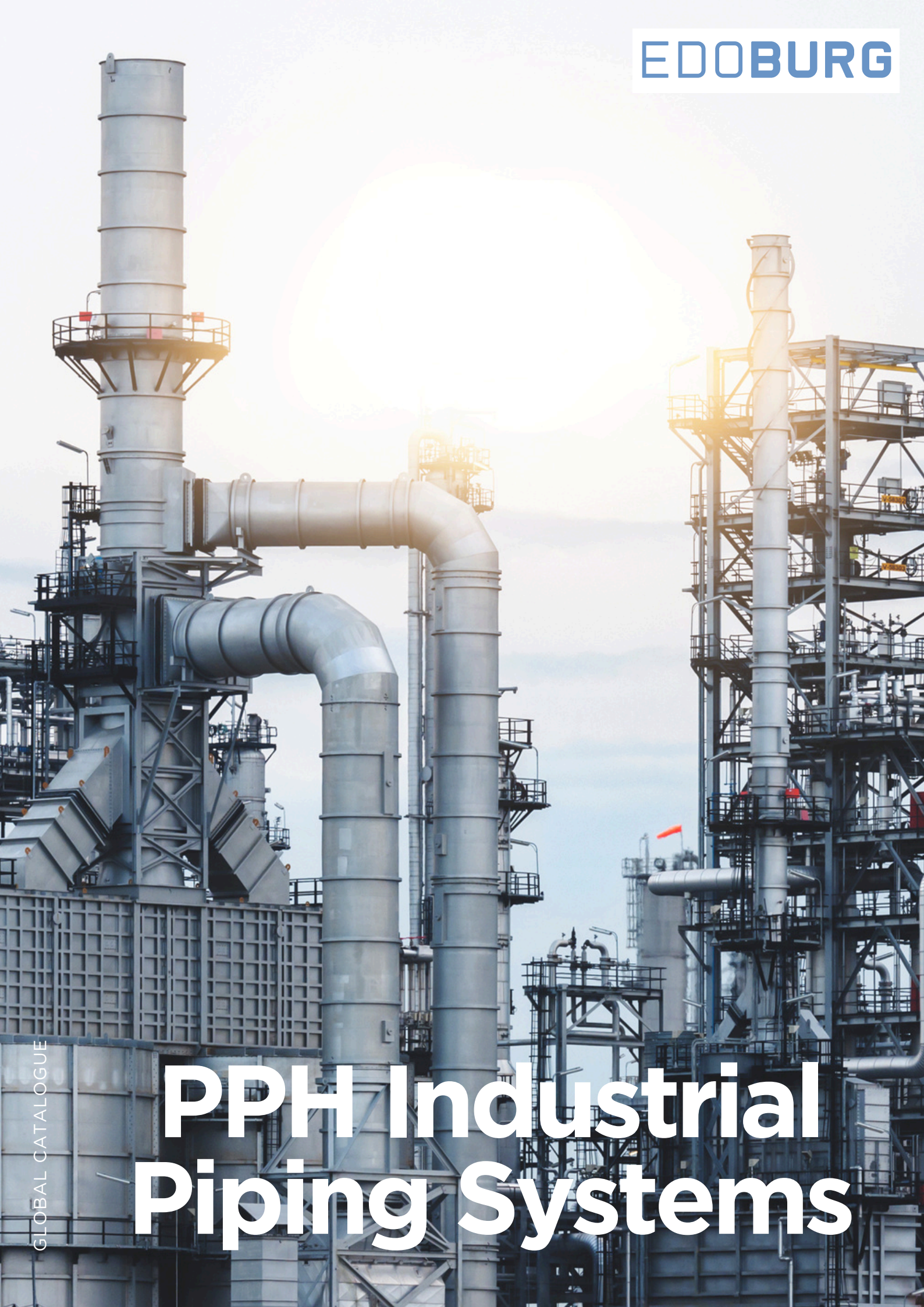
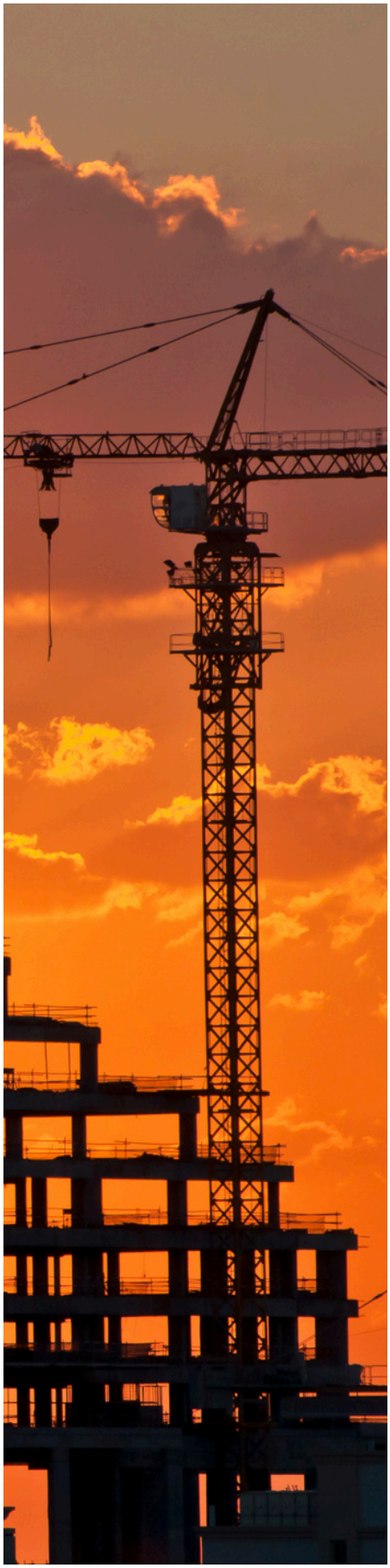


GLOBAL CATALOGUE

PPH Industrial Piping Systems

About Edoburg

Edoburg is a structured, multi-category global supplier of certified infrastructure materials, serving contractors, distributors, and institutional buyers across regulated global markets. A division of ***Edoburg Downes Pvt. Ltd.***, the company operates with a clear focus on tested quality, export compliance, and long-term delivery consistency.



Our product portfolio spans over 10,000 SKUs across a wide range of categories including plastic piping systems, thermoplastic and composite pipelines, metal pipes and sections, drainage and utility systems, industrial components, and specialized engineered solutions for global projects.

All Edoburg-supplied products are manufactured in audited facilities and conform to international standards such as ASTM, CSA, ISO, IS, AS/NZS, and EN, depending on the target market. Each order is backed by full documentation support — including batch test reports, packing lists, Certificates of Origin, and private labelling when required.

We operate with export-ready processes, offering mixed container loads, low or no minimum order quantity, and market-specific packaging and compliance labelling. Our systems are designed to meet the expectations of professional buyers who require traceability, repeatability, and standardization across multiple geographies.

With clients across North America, Europe, the Middle East, Africa, and Asia-Pacific, Edoburg is positioned as a dependable global supplier — combining technical competence with structured commercial execution.

We don't just deliver material. **We supply what builds**.

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Technical & Properties Sheet

PPH Industrial Piping Systems — DIN 8077 / DIN 8078

Manufacturing Origin: India

Material specification

- Material: Polypropylene Homopolymer (PP-H, Type 1), virgin resin, heat- and UV-stabilised (UV on request), pigment masterbatch as specified.
- Manufacture: Pipes extruded to DIN 8077 (dimensions/tolerances); quality and testing to DIN 8078.
- Colour: Grey (standard) or as specified.
- Jointing: Butt fusion, socket fusion; electrofusion components as specified; hot-gas welding for fabrications (per DVS/ISO guidelines).

Applicable standards & guidelines

- DIN 8077: Polypropylene (PP) pipes — dimensions.
- DIN 8078: Polypropylene (PP) pipes — general quality requirements and testing.
- EN ISO 15494 (reference for system design/install): Industrial thermoplastic piping (PP, etc.).
- DVS 2207-1 / DVS 2203: Fusion welding of PP; weld testing.
- ISO/TR 10358: Chemical resistance classification for thermoplastic pipes.

(Where test methods are shown below, typical references are ISO 527, ISO 179/180, ISO 2039-1, ISO 868, ISO 11359, ISO 22007-4, IEC 60243-1, IEC 60093.)

Fire, hygiene & chemical performance

- Combustibility: Thermoplastic; combustible. Typical classification UL 94 HB for non-FR grades. Halogen-free; low corrosive combustion products compared to halogenated plastics.
- Physiologically safe: Yes — PP-H is physiologically inert and non-toxic; specific potable water/food-contact approvalsavailable on request (grade- and market-dependent).
- Chemical resistance: Excellent resistance to acids, alkalis, salts, detergents, many alcohols; good resistance to aqueous solutions. Limited resistance to aromatic/aliphatic hydrocarbons and oils; not resistant to strong oxidizing acids/agents (e.g., fuming nitric acid), chlorinated and many halogenated solvents. Verify against ISO/TR 10358 and the medium's temperature/concentration.
- Temperature range (service): 0 °C to +80 °C continuous (application-dependent); short-term excursions up to ~+95 °C. At sub-zero temperatures, impact toughness decreases — handle and design accordingly. Apply pressure derating with temperature per design standard.

Physical & Mechanical Properties

(typical at 23 °C unless noted)

Property	Unit	Typical Value / Range	Test Method (typ.)
Density	g/cm^3	0.90 – 0.91	ISO 1183
Yield stress	MPa	26 – 32	ISO 527
Elongation at yield	%	8 – 12	ISO 527
Elongation at break	%	⩾ 50 (grade-dependent; often >>50)	ISO 527
Tensile modulus of elasticity	MPa	1,200 – 1,700	ISO 527
Impact strength (Charpy, un-notched)	kJ/m^2	⩾ 60 (often “no break”)	ISO 179-1
Notched impact strength (Charpy)	kJ/m^2	3 – 6	ISO 179-1
Ball indentation hardness	MPa	55 – 70	ISO 2039-1
Shore hardness	Shore D	65 – 75	ISO 868
Mean coeff. of linear thermal expansion (CLTE)	K^{-1}	$(1.5 – 1.8) \times 10^{-4}$	ISO 11359
Thermal conductivity	W/(m·K)	~ 0.22	ISO 22007-4
Dielectric strength	kV/mm	⩾ 30 (typ. ~35)	IEC 60243-1
Surface resistivity	Ω	⩾ 1×10^{12} (typ. ⩾ 1×10^{13})	IEC 60093 / ASTM D257

Notes for design & installation

- Dimensions & series: As per DIN 8077 (S/SDR series). Pressure class depends on SDR and temperature; apply derating factors per EN ISO 15494 or project spec.
- Fusion welding: Follow DVS 2207-1 parameters (surface prep, bead formation, heat/pressure/time). Qualify joints and personnel per local code/DVS.
- Supports/expansion: Use CLTE above for expansion loop/sliding support design; allow for ~0.15–0.18 mm/m·K.
- UV exposure: For outdoor use, specify UV-stabilised grades or shielding/painting as required.
- Quality assurance: Lot-wise tests per DIN 8078 (dimensions, appearance, density, tensile properties, impact, melt flow as applicable).

Dimension of PPH Pipe

OD		PN 2.5		PN 4		PN 6		PN 10		PN 16		PN 20	
		Wall Thickness		Wall Thickness		Wall Thickness		Wall Thickness		Wall Thickness		Wall Thickness	
IN.	MM.	THICK	kg/m	THICK	kg/m	THICK	kg/m	THICK	kg/m	THICK	kg/m	THICK	kg/m
1/2"	20							1.9	0.11	2.8	0.15	3.4	0.17
3/4"	25							2.3	0.16	3.5	0.23	4.2	0.27
1"	32					1.8	0.17	2.9	0.26	4.4	0.37	S.4	0.43
1.25"	40			1.8	0.22	23	0.27	3.7	0.41	55	58	6.7	0.67
1.5"	SO			20	30	29	42	46	64	69	90	83	104
2"	63	18	35	2 S	47	36	66	58	101	86	141	105	165
2.5"	75	19	44	29	65	43	94	68	141	103	201	125	234
3"	90	2.2	0.62	3.5	0.94	5.1	1.33	8.2	2.03	113	2.87	15	3.36
4"	110	2.7	0.9	4.2	1.37	6.3	1.99	10	3.01	15.1	4.3	18.3	5.1
5"	125	3.1	1.18	4.8	1.76	7.1	2.55	11.4	3.91	17.1	5.53	20.8	6.47
5"	140	3.S	1.48	5.4	2.23	8	3.2	12.7	4.87	19.2	6.95	23.3	8.12
6"	160	4	1.91	6.2	2.92	9.1	4.17	14.6	6.38	21.9	9.4	26.6	10.6
7"	180	4.4	2.38	6.9	3.63	10.2	5.25	16.4	8.07	24.6	11.4	29	13.4
8"	200	4.9	2.92	7.7	4.5	11.4	6.5	18.2	9.95	27.4	14.1	33.2	16.5
9"	225	5.5	3.7	8.6	5.65	12.8	8.19	20.5	12.6	30.8	J 7.90	37.4	20.9
10"	250	6.2	4.63	9.6	6.99	J4.2	10.1	22.7	15.5	34.2	22.1		
11"	280	6.9	5.73	10.7	8.72	15.9	12.6	25.4	19.4	38.3	27.6		
12"	315	7.7	7.2	12.1	11.1	17.9	16	28.6	24.6				
14"	355	8.7	9.14	13.6	14	20.1	20.3	32.2	31.2	-	-	-	-
16"	400	9.8	11.6	15.3	17.8	22.7	25.7	36.3	39.6				
18"	450	11	14.7	17.2	22.5	25.5	32.5	40.9	50.1				
20"	500	12.3	J8.20	19.1	27.7	28.4	40.2						
22"	560	13.7	22.6	21.4	34.7	3J.7	50.3	-	-	-	-	-	-
24"	630	15.4	28.6	24.1	44	35.7	63.7	-	-	-	-	-	-

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