

PIPELITE® ALUMINUM
FOR MULTILAYER PIPES





PIPELITE® – SUPERIOR ALUMINUM STRIP

Pipelite® is Aleris' solution to the stringent requirements of modern composite pipes.

With an unmatched selection of aluminum alloys, Pipelite® offers numerous advantages especially developed for multilayer pipes, such as

- Weight reduction
- Pressure resistance
- Excellent combination of bendability and form stability

Multilayer pipes are mainly used in the following end use applications:

- Domestic sanitary and drinking water installations
- Central and floor heating
- Distribution of gas and special liquids
- Industrial applications



PIPELITE® – A UNIQUE GENERATION OF ALLOYS

Pipelite® 303 HP and **806 HP** provide both **HIGHEST PRESSURE RESISTANCE** combined with maximum downgauging possibilities.

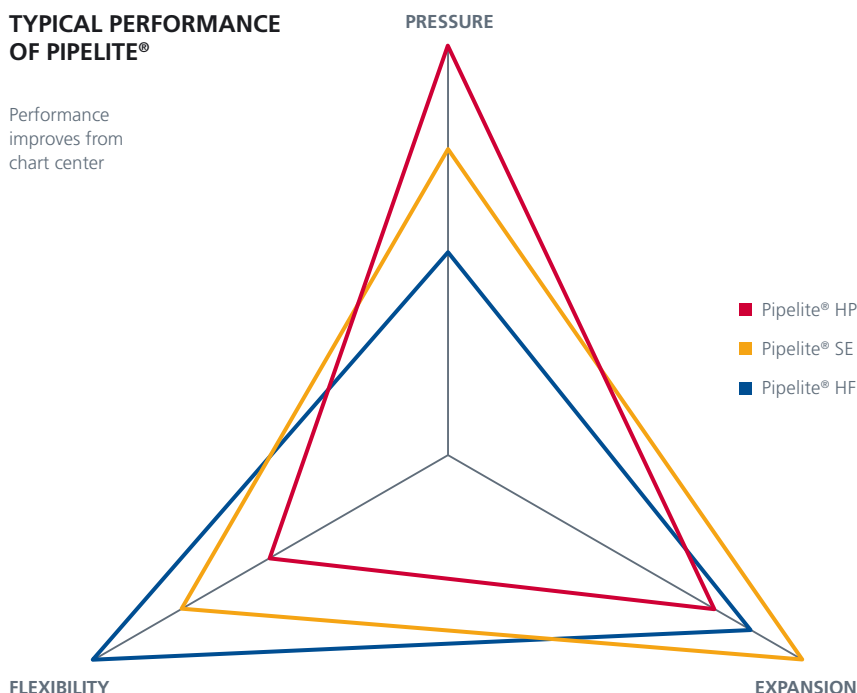
Pipelite® 806 SE and **120 SE** are able to withstand high to **EXTREMELY HIGH EXPANSIONS** typically required for special fittings.

Pipelite® 120 HF, 801 HF and **105 HF** are **OPTIMIZED FOR FLEXIBILITY** and bendability. It allows for instance smaller bending radius in floor heating.

Pipelite® complies with all the relevant European Standards (ENs) but has optimized thermo-mechanical processing and mechanical properties developed specifically for use in composite pipes.

TYPICAL PERFORMANCE OF PIPELITE®

Performance improves from chart center



Chemical composition (all data on wt. -%)

Alloy	EN-alloy	Chemical elements								Others each	total
		Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti		
Pipelite® 303 HP	3003	< 0.60	< 0.70	0.05 - 0.20	1.0 - 1.5	-	-	< 0.10	-	< 0.05	< 0.15
Pipelite® 806 HP	8006	< 0.40	1.2 - 2.0	< 0.30	0.3 - 1.0	< 0.10	-	< 0.10	-	< 0.05	< 0.15
Pipelite® 806 SE											
Pipelite® 120 SE	1200	< 1.00 Si + Fe		< 0.05	< 0.05	-	-	< 0.10	< 0.05	< 0.05	Al > 99
Pipelite® 120 HF											
Pipelite® 801 HF	8011	0.40 - 0.80	0.5 - 1.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.05	< 0.05	< 0.15
Pipelite® 105 HF	1050	< 0.25	< 0.40	< 0.05	< 0.05	< 0.05	-	< 0.07	< 0.05	< 0.03	Al > 99.5

Mechanical properties (mean values versus EN standard)*

Alloy	EN-alloy	Temper	Tensile strength R _m [MPa]		Yield strength R _{p0.2} [MPa]		Elongation A ₅₀ [%]	
			Aleris	EN standard	Aleris	EN standard	Aleris	EN standard
Pipelite® 303 HP	3003	O	124	95 - 135	52	≥ 35	30	≥ 15
Pipelite® 806 HP	8006	O	121	90 - 140	52	≤ 100	29	≥ 16
Pipelite® 806 SE	8006 S	O	110	85 - 135	46	≤ 80	37	≥ 15
Pipelite® 120 SE	1200 S	O	82	75 - 105	35	≥ 25	44	≥ 19
Pipelite® 120 HF	1200	O	97	75 - 105	35	≥ 25	34	≥ 19
Pipelite® 801 HF	8011	O	92	85 - 130	38	≥ 30	38	≥ 19
Pipelite® 105 HF	1050	O	89	65 - 95	38	≥ 20	35	≥ 20

*For nominal thickness ≥ 0.2 mm

Dimensions

Thickness range	0.1 - 1.0 mm
Width	15 - 1,650 mm
Coil outer diameter	max. 1,800 mm
Other dimensions on request	



ALERIS EXPERTISE APPLIED TO MULTILAYER PIPES

Aleris has been active in multilayer piping since the technology was created more than 20 years ago. This strong commitment continues today with ongoing research and material development, investments in dedicated product lines and training, and a specialized commercial team.

Aleris, a leading producer and solution provider of aluminum strips for multilayer pipe manufacturers, is committed to continued innovation and growth in this segment.

TECHNICAL EXPERTISE

The high quality narrow and thin coils in soft condition are obtained as a result of Aleris' state-of-the-art slitting line with automated packaging. An excellent adhesion between aluminum and polyethylene is further stimulated by a chemical degreasing of the surface on a dedicated line.

The quality of our products and production process is supported by a quality assurance system that satisfies the many stringent requirements, notably ISO/TS 16949.

We deliver large coils in various thicknesses and widths with consistent quality including uniform tension and flatness throughout the coil, as well as low burr and edge deformation. This contributes to stability in subsequent production processes, allowing high-speed welding, less standstill and fewer rejects.

TAILOR-MADE CUSTOMER SUPPORT DEDICATED TO YOUR SUCCESS

Pipelite® not only offers a consistently high-quality product but also provides dedicated, expert service.

Aleris field engineers and metallurgists have the expertise to recommend the right materials for each individual end use. They can provide pro-active technical support for manufacturing optimization and efficient pipe production, with processes like downgauging (high meter tube/ aluminum weight ratio), for example.

Aleris has also developed short delivery time programs, allowing its customers to react to urgent market fluctuations or unexpected changes.



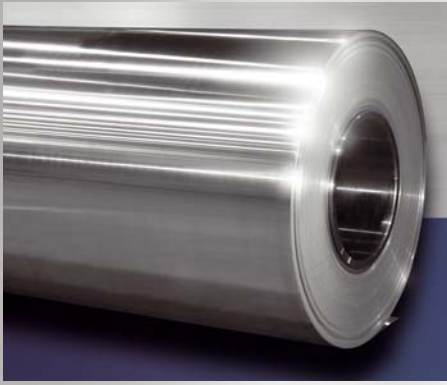


CONTACT US

Feel free to contact your local Aleris representative with any questions regarding our services.

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Charges may apply.



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