

Oil & Gas

High performance coatings for the Oil & Gas industry



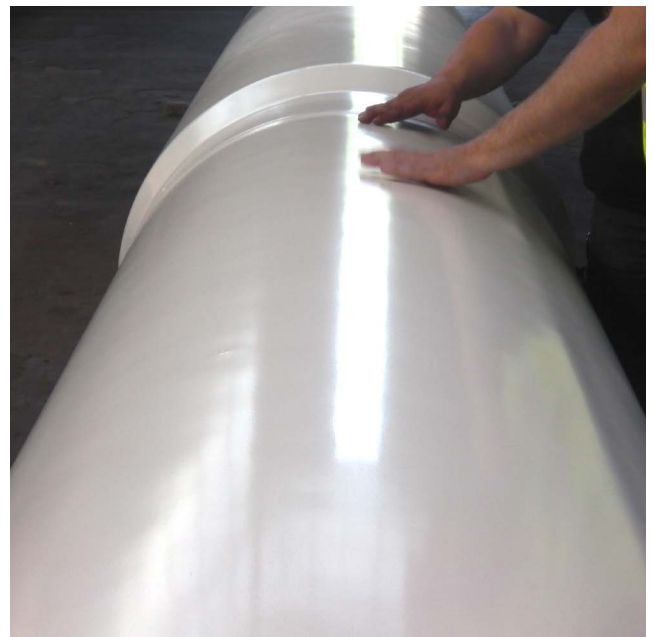
Plascoat® high performance coatings

Why choose Plascoat®?

Plascoat® provides the Oil & Gas industry with a range of high performance coating powders for pipelines, field joints, pipe bends, buckle arrestors, custom fittings and other support structures.

Plascoat® high performance polyolefin powders can be applied in the factory or on-site. The coatings are engineered to closely match the factory applied pipe body top coat. This ensures that they will fuse to form a homogeneous bond thereby minimising the risk of corrosion. Typically it is the welded joints that carry the greatest risk of corrosion related failure, when pipes are connected, due to incompatible top coat technologies.

Plascoat® Oil & Gas products have been specifically developed to suit pipeline operating temperatures, ensuring exceptional performance and longevity.



This buckle arrestor has been flame spray coated with Plascoat® PP10.



Pipe bends coated in Plascoat® PE09, in compliance with DIN 30670, ensuring exceptional longevity.



The above field joint is being flame spray coated with Plascoat® PP10.

Field joint coated with Plascoat PP10 using the flame spray application method and then quenched using water.

Plascoat Range	Plascoat FSPE	Plascoat PE09	Plascoat PE10	Plascoat PP10	Plascoat PP20
Product Type	Polyethylene	Polyethylene	Polyethylene	Polypropylene	Polypropylene
Brittle temperature °C	-70	-70	-70	0 ‡	0 ‡
Vicat softening point (°C, ISO 306)	≥ 95	≥ 100	≥ 105	≥ 110	≥ 125 †
Can be applied by flame spray	√			√	√
Can be applied by flock spray or sinter	√	√	√	√	√
Suitable for 3-layer system joints (over FBE)	Signe layer performing as an adhesive layer and a topcoat	√		√	√
	ISO FDIS 21809-1* (where possible)	Part A	Part A	Part B	Part C
	ISO FDIS 21809-3	√		√	
	DIN 30678			√	√
Suitable for single layer (over steel)	DIN 30670		N Type	S Type	
	DIN 30678			√	√
Specific gravity (g/cm³)**	0.92 - 0.97	0.92 - 0.95	0.93 - 0.96	0.93 - 0.96	0.93 - 0.97
Hardness (Shore D)	53	51	52	63	65
Indentation resistance at 23°C (mm)	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.1	≤ 0.1
Elongation at break (%)	600	500	600	500	400

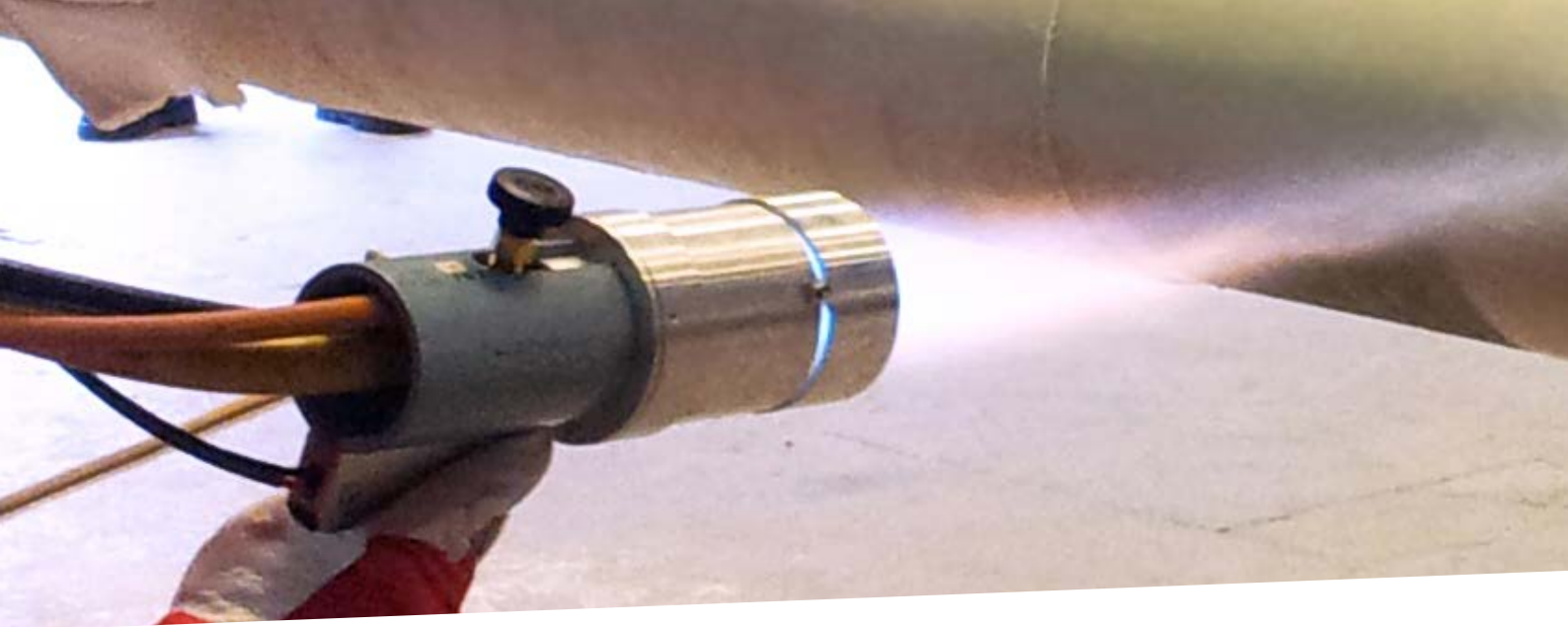
* ISO 21809-Part 1 is a specification for factory extruded polyolefin coating

** Values variable dependent on test method

† For temperatures greater than 125°C please contact Axalta

‡ For temperatures lower than 0°C please contact Axalta

In order to obtain optimal properties, relevant data sheets, application and process guidelines must be followed. Test results dependent on method of application. All Plascoat disclaimers apply.



High performance coatings

Plascoat® FSPE and PP10 can either be flame or flock sprayed onto FBE, liquid epoxy or directly over steel. Both can be used as a tie layer or a combined tie and top layer to coat bends, field joints or fittings in the factory or in the field.

Plascoat® PP10

Plascoat® PP10 (polypropylene) is recommended where there is a requirement for:

- Bends, joints and fittings to meet DIN 30678
- High continuous pipeline operating temperatures (up to 110°C)
- Rapid factory or field applied coating that can form a homogeneous bond with the parent coating

The application of flame spray allows the option to build up Plascoat® FSPE and PP10 to high coating thicknesses and generate less waste.



Plascoat® FSPE

Plascoat® FSPE (polyethylene) is recommended where there is a requirement for:

- The pipeline to survive temperatures of down to -70°C
- Rapid factory or field applied coating that can form a homogeneous bond with the parent coating

Pipe bends, field joints, buckle arrestors, fittings and other associated support structures can now be flame sprayed in minutes.

Plascoat® FSPE and PP10 can be used in 3-layer specifications.

Blasted steel

Epoxy layer
(in gel phase)

Flock sprayed
FSPE or PP10

Flame sprayed FSPE or PP10
powder (outer coating)





Plascoat® PE09 - PE10

Both Plascoat® PE09 and PE10 will deliver outstanding corrosion protection at sub-zero temperatures. PE09 has been engineered to meet the DIN30670 N-Type specification and PE10 has been designed to meet the DIN 30670 S-type specification. Plascoat® PE09 and PE10 can be applied by sinter or flock spray.

Plascoat® Roughcoat range

The Roughcoat range has been designed to produce a highly-textured top layer increasing friction on the pipeline's external surface. Plascoat® Roughcoat can be used independently or in conjunction with Plascoat® top coats. Axalta can provide customised Roughcoat products to suit your needs.

Nap-Gard®

Axalta Nap-Gard® Fusion Bonded Epoxy (FBE) Coatings offers innovative solution for today's epoxy based pipe coating solutions. Designed to provide superior corrosion protection, Nap-Gard® FBE protects internal and external pipe surfaces of Oil and Gas pipelines.

- FBE Primers for Multi-layer systems
- Single-Layer FBE systems
- Dual-Layer FBE systems
- Internal coatings

Plascoat® Roughcoat range

	Plascoat® Roughcoat LD	Plascoat® Roughcoat HD	Plascoat® Roughcoat PP
Brittle temperature °C	-70	-70	0 ‡
Vicat softening point (°C, ISO 306)	≥ 100	≥ 105	≥ 110 †
Roughcoat for DIN 30670 (N-Type)	√		
Roughcoat for DIN 30670 (S-Type)		√	
Roughcoat for DIN 30678			√
Roughcoat for ISO FDIS 21908-1*	√ Part A	√ Part B	√ Part C

* ISO 21809-Part 1 is a specification for extruded polyolefin on the pipe body

† For temperatures greater than 125°C please contact Axalta

‡ For temperatures lower than 0°C please contact Axalta

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