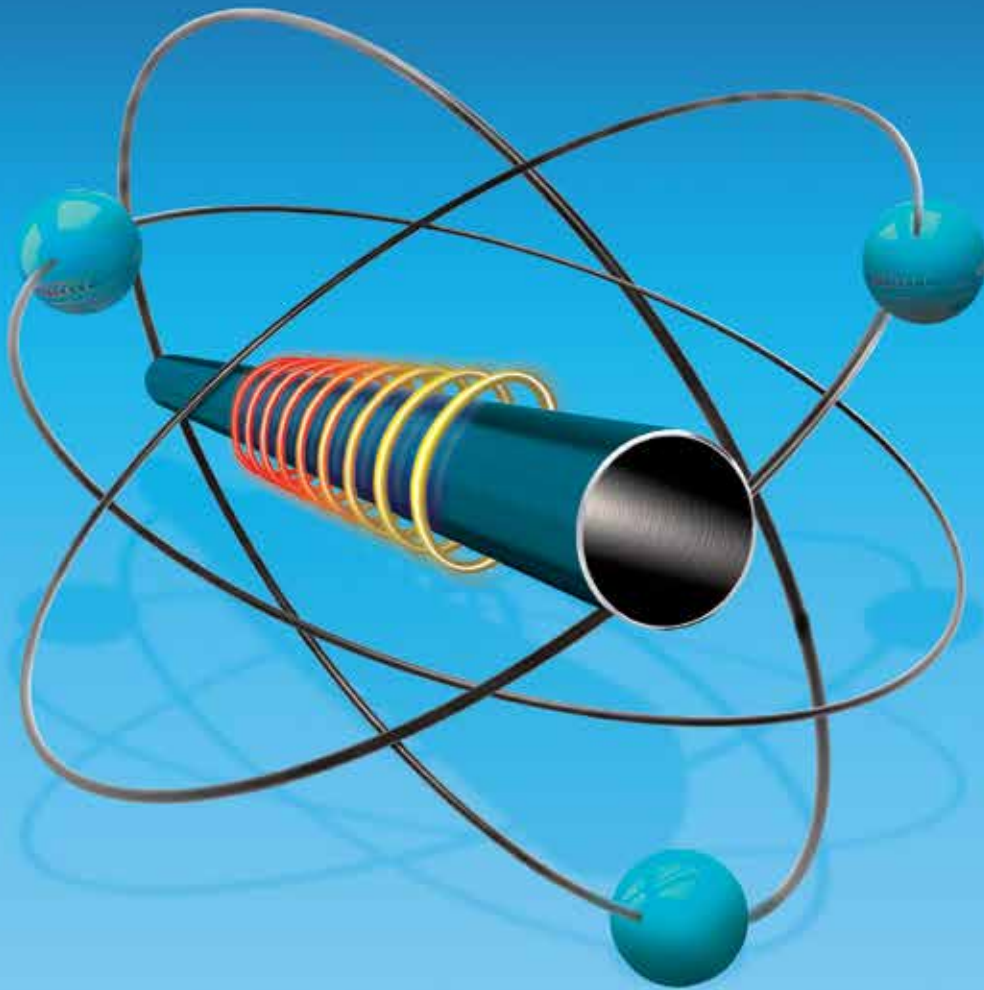




JOTUN

Performs even when things cool down

Low Application Temperature Coatings



Jotapipe | LT

Pipelines protected

Powder Coatings

Jotun GreenSteps



Performs even when things cool down

Fusion-Bonded Epoxy (FBE) coatings have been used for pipeline protection for over fifty years as stand-alone coatings and later as primers in 3-layer polyolefin (PO) coating systems.

In today's world, there is increasing pressure to adopt energy-efficient practices to save time, money and to minimize the impact on our environment.

Jotun Powder Coatings has developed a range of pipe coatings that can be applied at lower temperatures whilst still maintaining operational efficiency and anti-corrosion performance.

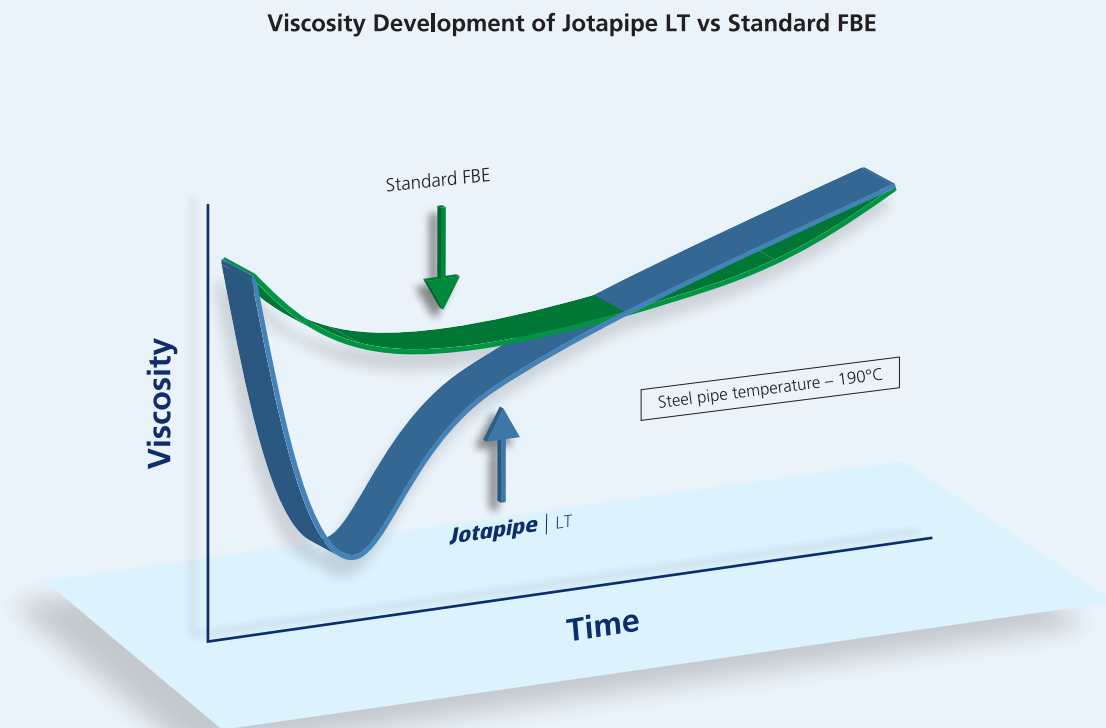
Jotapipe LT is a range of Low Application Temperature (LAT) FBE coatings designed with a speciality low-melt viscosity binder system. Application and curing takes place at temperatures significantly lower than that of conventional FBE coatings.

LAT FBE is used to protect pipelines without compromising coating quality or plant efficiency. Less energy and time is required during the curing process, making this an efficient, 'green' and economic solution.

How it works

FBE powders are based on heat-cured, thermosetting epoxy resins. When FBE is applied to hot, grit-blasted steel surfaces, it melts and flows into the surface profile. Complete wetting of the surface profile by the molten epoxy powder ensures good adhesion to the steel and thus anti-corrosion performance of the FBE coating.

As the FBE melts and flows, a curing reaction takes place, which causes an increase in the viscosity of the molten epoxy powder. The FBE should therefore be designed to achieve the correct balance of reactivity and viscosity development to ensure good surface wetting.



Conventional stand-alone FBE pipe coatings are typically applied at temperatures of 232-250°C (450-482°F). Application at lower temperatures may lead to insufficient wetting of the steel surface by the FBE and cause poor adhesion and compromised anti-corrosion performance.

Jotapipe LT, with its low viscosity binder system, is capable of curing at lower temperatures down to 185°C (365°F), when applied as a stand-alone coating. At these temperatures, Jotapipe LT provides good surface wetting of the steel ensuring no compromise between lower application temperatures and coating performance. Jotapipe LT meets all the key pipe coating standards and specifications.



Key benefits

Use of high grade steels now a possibility

By choosing Jotapipe LT, design engineers can opt for high strength steels such as those used in high pressure, strain-based design pipelines. These FBE coatings can be applied at temperatures lower than 200°C (392°F), above which the tensile properties of high grade steel are affected.

True low viscosity FBE

Jotapipe LT is a true low viscosity FBE that provides enhanced wetting of steel substrates at low application temperatures.



Kinder to the environment

Many companies today are striving to be 'greener' and objectives include finding ways to minimise their carbon footprint. When Jotapipe LT is used as a primer in a multi-layer polyolefin system, the preheat temperature can be reduced down to 160°C (320°F), delivering a potential 20-30% energy saving.

Reduced polyolefin usage

The amount of polyolefin required can also be reduced by up to 15% during the application of three-layer polyethylene (PE) or polypropylene (PP) products due to the lower application temperatures. Lower temperature means that the PE is less compressible, therefore requiring less coating thickness on the body of the pipe in order to ensure the correct thickness over the weld.

One solution for multiple applications

Jotapipe LT is suitable for conventional factory application. It can also be used for application in the field for girth weld protection.

Other benefits include:

- Meets key international FBE and 3LPO specifications
- Suitable for custom-coated fittings, piping components and valves



An eco-friendly solution

Every time you use Jotun products, you can rest assured that you are working towards a greener, more sustainable future. Being environmentally friendly, our powder coatings do not contain solvents, so no Volatile Organic Compounds (VOCs) are released into the air. Oversprayed powder can be recycled with minimal wastage, and disposal is easy and safe. In addition, all Jotun Powder Coatings' products are lead-free.

About Jotun

Jotun is one of the world's leading manufacturers of decorative paints, marine, protective and powder coatings. The group has 74 companies and 39 production facilities on all continents. Jotun products are available in 90 countries through own subsidiaries, joint ventures, agents, branch offices and distributors. At Jotun Powder Coatings, we are committed to develop, produce and deliver solutions that create value through consistency in application, enhanced appearance and superior durability.

A partner you can trust

Jotun Powder Coatings is here to partner with you and meet your specific project needs. We deliver more than just products - we bring you our unique Pipeline Concept. With the entire process in mind, we provide a comprehensive portfolio of coating solutions for the most demanding global environments. This is supported by our strong supply chain and a team that is ready to help you with any technical support you require 24/7, 365 days a year.

With an unbeatable range of products, a dedicated point of contact, and training and education facilities, the Pipeline Concept from Jotun Powder Coatings is the only pipe coating solution you need.



Stay in touch

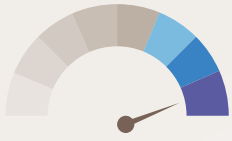
Please contact us for more information on our product range. We offer company training on our product portfolio and powder coating technology through a number of powder schools that we run for selective customers. Feel free to contact your local sales representative for more information.



Scan QR code to find out more or visit [jotun.com](https://www.jotun.com)



Jotun Protects Property



Outstanding track record

Working with someone you can trust is essential in the industry and we back that up with a proven track record of over 40 years protecting more than 130,000 km of pipelines.

Jotun Powder Coatings is working with key international pipe coaters and pipeline owners so they may take advantage of the low application temperature benefits of Jotapipe LT.



Product Portfolio

Product Name	Coating Type	Application Temperature
Jotapipe LT 1011	Stand-alone ¹	185-210°C (365-410°F)
	Primer ²	160-180°C (320-356°F)
Jotapipe LT 7011	Girth Weld	185-210°C (365-410°F)

¹ Stand-alone FBE

² Primer for three-layer polyolefin systems

When applied as a primer under 3LPO, the steel surface temperature can be reduced as the thermal profile compensates the lower application temperature.