

Intertherm 751CSA

A coating applicators dream

A proven track record of critical problem solving

Trusted cold spray aluminium technology, a specialist solution for high temperature maintenance that challenges everything you know about TSA protection in high temperature/cyclical environments and CUI risk zones.



As an oil and gas coating applicator,

you often run into seemingly impossible maintenance challenges where nothing seems to work to protect the asset as required.

This is especially true when working on assets where previous coatings had failed, when working with high temperature cycling piping or in situations where production stoppages, required for maintenance are far too costly. For more than 16 years Intertherm® 751CSA has helped applicators the world over and has proven its unique capability to solve these seemingly impossible problems or where shutdowns weren't practical.



The problem solving solution



Unmatched performance in high temperature cyclical conditions



Bridging the gap between conventional and TSA coatings



Hot apply to 150°C

Global track record

Intertherm 751CSA has a global track record that is long and distinguished, helping applicators like you to not only avoid specialized TSA application risks, but also adopt an easier to apply cold spray alternative and solve corrosion challenges that traditional coatings simply couldn't meet. From uninsulated gas dryers with temperatures cycling from -12°C to over 200°C in the USA, to protecting a French refinery's valves running temperatures up to 400°C to a previously coated heat exchanger in the UK, where oleoresinous primers failed to deliver the required corrosion protection due to cracking.



Intertherm 751CSA

Traditional TSA

Which is easier and faster to apply

Traditional TSA or Intertherm 751CSA?

Well, one of our customers wanted to find out and chose to try both protective products while installing two new dryers at a refinery in Italy. After surface preparation using grit blasting, a single coat 200um thick was applied. The applicator was surprised by how much quicker and easier the Intertherm 751CSA was on the first dryer was compared to the TSA + sealer coat on the second dryer. Even better was the durability of the protection in aggressive cycle conditions.



REFINERY - USA

Protecting gas dryer from high temperature

Imagine trying for years to protect a gas dryer from the aggressive corrosion of temperature cycling from -12°C to 200°C, and getting fed up with coatings that never lasted more than 6 months! Using a conventional air spray application method, a single coat with DFT of 200um was applied directly to the metal substrate. After two annual inspections, the Intertherm 751CSA coating was still intact and performing as new despite the temperature conditions.



REFINERY - FRANCE

Protecting field joints in thermal sprayed aluminium

Protecting joints in the field is extremely difficult even under normal conditions. However, doing so with welded piping that undergoes temperature exposures up to 400°C is another level all together! A coatings refinery in France, had this issue where the heat generated from field welding pipe joints were destroying the existing TSA. No other polymeric coating was able to offer long term corrosion protection over these repair areas after being exposed to temperatures of up to 400°C. The Intertherm 751CSA was easy to apply on site and finally provided a solution to this problem.



REFINERY - SPAIN

Difficult to prepare surfaces

High temperature cyclic conditions can lead to corrosion risks not seen in other areas or processes. This often leads to protective coating challenges that even the most skilled applicators struggle to prevent. The typical solution of TSA in these areas is begin challenged by cold spray aluminum alternatives like Intertherm 751CSA. At a refinery in Spain, a coatings applicator struggled with extensive surface preparation of mineral wool insulated piping that handled materials cycling between 12°C and 340°C every two days. Due to confined conditions the limited surface preparation that was possible on the corroded steel surface left an extremely uneven surface which would lead to overcoating and perhaps failure with traditional TSA applications. Intertherm 751CSA was applied in two coats of 100um for a total DFT of 200um. The applicator was able to apply the coating to the pipe surface even at temperatures of up to 150°C and could trust that the minimally prepared steel wouldn't lead to failure because on Intertherm 751CSA's surface tolerance.