HEAT-FLEX® 1200 PLUS



MIO-ENHANCED MULTI-POLYMERIC MATRIX COATING

Heat-Flex 1200 Plus is a two component, inert multi-polymeric matrix coating enhanced with micaceous iron oxide (MIO) for high heat and Corrosion Under Insulation (CUI) service resistant to temperatures ranging from -196°C to 649°C.

Heat-Flex 1200 Plus offers improved resistance to corrosion in extreme environments and mechanical damage. Heat-Flex 1200 products consistently outperform comparable alternatives in resistance to heat, thermal shock as well as application properties.

BENEFITS

Extended lifecycle

- Improved corrosion resistance without heat curing
- Excellent corrosion creep resistance without zinc
- · Resistant to thermal cycling and thermal shock

Faster shop throughput

- · Faster recoat times
- Low VOC's (375 g/lt)
- Easy to mix and incorporate

Less damage, less rework

- Superior film hardness less marring
- Exceptional UV erosion resistance, Si-O bonds
- Greater abrasion resistance



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DURABILITY FROM SHOP TO FIELD

Heat-Flex 1200 Plus features enhanced durability, minimizing the damage caused by transporting steel from shop to site.

Heat-Flex 1200 Plus develops a harder film and helps reduce damage during fabrication, shipping, and construction experienced with competitive products.

IMPROVED CORROSION RESISTANCE

Heat-Flex 1200 Plus has been tested against environments up to ISO 12944-9 CX, as a two-coat system direct to metal with no pre-heating successfully passing performance requirements for non-zinc systems.

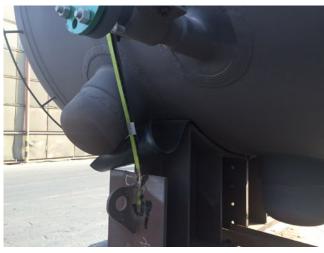
HIGH TEMPERATURE THERMAL CYCLING

Heat-Flex 1200 Plus has been aggressively tested being placed in oven and increasing oven temperature at a rate of 20°C/min up to a temp of 649°C and keeping the panels for 8 hours followed by natural cool of 16 hours. Cycle is repeated 5 times and evaluated for blistering, rust, cracking, chalking, and flaking.

Heat-Flex 1200 Plus successfully passes test without evidence of blistering, rusting, cracking, flaking, or chalking.



Mechanical damage typical IMM/IC Coatings



Heat-Flex 1200 Plus - Improved resistance to mechanical damage



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EROSION RESISTANCE, BS EN 927-6:2016

Coatings were subjected to cyclic UV and water spray to simulate erosion in tropical environments. Dry film thickness was monitored throughout 20 cycles. The addition of MIO improves performance.

Heat-Flex 1200 Plus show exceptional results, without any significant measurable loss in DFT after exposure.







After 20 weeks exposure

CORROSION UNDER INSULATION – ISO 19277:2018 CATEGORY CUI-3

Sherwin-Williams evaluated Heat-Flex 1200 Plus in the 'Houston Pipe test' in accordance with ISO 19277:2018, with excellent results conforming to category CUI 3.

THERMAL CYCLING - ISO 19277:2018 CATEGORY CUI-3

Coated panels applied and conditioned from 5°C to 204°C followed by ice-water immersion reducing temperature to <15°C. Cycle is repeated 20 times.

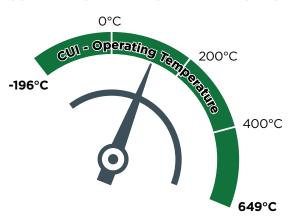
Heat-Flex 1200 Plus is in full accordance with the requirements of ISO 19277 corrosivity category CUI-3 Thermal Cycling Test showing no signs of blistering, rusting, cracking, flaking in accordance with ISO 4628.



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SUITABLE OPERATING TEMPERATURES



Service temperature

Use outside of given temperatures is not recommended.

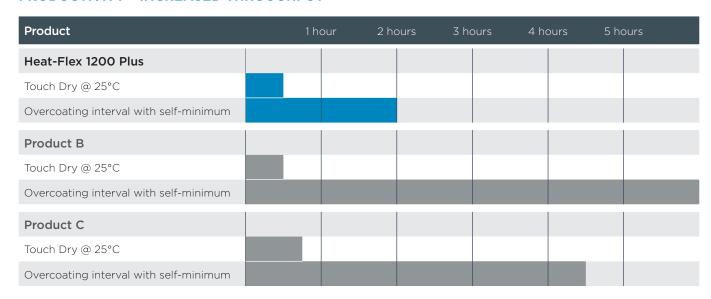
TYPICAL SPECIFICATION

Insulated and Unisulated CS and SS to 649°C:

Prime coat: Heat-Flex 1200 Plus 125 - 150 µm DFT

Finish coat: Heat-Flex 1200 Plus 125 - 150 um DFT

PRODUCTIVITY - INCREASED THROUGHPUT



THE SHERWIN-WILLIAMS DIFFERENCE

Sherwin-Williams Protective & Marine delivers world-class industry subject matter expertise, unparalleled technical and specification service, and unmatched regional commercial team support to our customers around the globe. Our broad portfolio of high-performance coatings and systems that excel at combating corrosion helps customers achieve smarter, time-tested asset protection. We serve a wide array of industries across our rapidly growing international distribution footprint, including oil and gas, water and wastewater, bridge and highway, steel fabrication, flooring, food and beverage, rail and power, and marine.

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