## TAGRAS Oilfield Services Holding





EXTERNAL CORROSION
RESISTANT POLYMER
COATING OF STEEL PIPES
BASED ON POWDER
MATERIALS

(TU 1390-018-67740692-2017, TU 24.20.13-135-78682242-2023)



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## **Purpose**

Corrosion resistant polymer coating based on powder materials is intended to protect steel pipelines for various purposes against aggressive corrosive action of the environment.

## Field of application

Pipes with powder coating are used for:

- underground pipelining and in areas where it is not possible to apply external polyethylene insulation due to high pipeline operating temperature (above +176 °F);
- · above-ground pipelining;
- as an anticorrosive coating with heat insulation.

## Advantages:

- 1. The coating is resistant to ultraviolet and thermal aging, and does not crack during its entire service life;
- 2. Highly resistant to atmospheric and soil corrosion, to cathodic disbandment, and long-term exposure to water;
- 3. A wide range of colors;
- 4. Can be used as a part of more complex combined heat-insulating and anticorrosive coatings or an anticorrosive coating with heat insulation:
- 5. Pipes with polymer powder coating can be assembled in all weather conditions.
- 6. The coating does not screen cathodic protection currents;
- 7. Highly resistant to cutting (stripping) compared to the polyethylene precoating.

At the customer's request, the inner surface of the pipe can be lined with a polyethylene pipe with stainless steel pitching (for external laying or for ground-to-air transition); an internal paint-and-lacquer coating can be applied or combined with thermal insulation



Pipeline diameter, in

4.25 to 32.28



Operating temperature, °F

-76... +302

at least 0.014

Depth of coating penetration at a load of 110.2 lb, in

Adhesion strength index

by by pull-off method, ksi

over 18

0.0067



Coating thickness, in

The service life of steel pipes with an external coating made from powder materials is more than 20 years