

## Coatings for Oil Submersible Equipment

A hardface super-stainless HVOF coating has been developed to withstand corrosion from salt and hydrogen sulfide, as well as abrasion, met on housings of downhole pumps and motors of oil artificial lift equipment.

The coating exhibits bond strength over 80 MPA (12 KSI) and hardness 56-60 HRC. Applied to 150-200 microns (6 to 8 mils) thickness, it is flexible enough to withstand deformation of elongated parts during handling and service.

The coating is applicable for new and repaired submersible pumps.

The coating performance is proven in industry, where over 48 km (30 miles) of housings have been already coated during these (past few) last years. Current coating production exceeds 3 km (2 miles) of housings per month.

### Application Case

Spray Work:	<b>ESP Pump housing</b> <b>ESP Motor housing</b>
Unit:	Electric Submersible Pumps
Industry:	Oil Drilling
Problem solved:	Corrosion/Abrasion
Coating type:	Hard super-stainless
Result of application:	Pump lifetime increased 4-fold; in the most severe conditions – up to 10-fold; higher strength, corrosion and wear resistance than Monel coatings, 7-fold more economical alternative to stainless steel piping



Reference: Plackart CJSC, Russia

