RENOVATION OF PITTED TANK BOTTOMS
solvent free phenolic epoxy coating system 4141

a two page issue

September 2005
revision of 4-1998

SPECIFICATION 1	solvent free phenolic epoxy coating system resistant to crude oil (up to 90 °C/140 °F) aliphatic, hydrocarbons leaded and unleaded petrol, aviation fuels for additional information see Sigma TankSelect	
pretreatment	steel; blast cleaned to ISO-Sa2½ blasting profile; 50-100 µm/2,0-4.0 mils	
paint system	**primer (see item 2)** SigmaGuard 260	75 µm/3.0 mils
	pitfilling (see item 4) Sigma NovaGuard 840	
	levelling of lapjoints, optional Sigma NovaGuard 830	
	coving of corners (see item 5), optional Sigma NovaGuard 830	
	coating (see item 6) Sigma NovaGuard 840	600 µm/24.0 mils
note	– if the structure is complex, two coats of each 300 µm/12.0 mils of Sigma NovaGuard 840 can be applied	

Coating procedure

1. For blasting and coating guidelines: see sheet 4139.
2. Application of primecoat of SigmaGuard 260 - dft 75 µm/3.0 mils.
3. Before starting the final coating the substrate should be inspected for hidden steel defects. If necessary adequate repairs should be carried out.
4. Pitting can be filled by using a scrape layer of Sigma NovaGuard 840 (see sheet 4139).
5. For incomplete welded areas in the chine transition, striker plate bedding and lap joints etc., levelling is accomplished by trowel application using Sigma Novaguard 830.
6. "Stripe coat" of the prepared sharp edges and welding seams with Sigma NovaGuard 840. Apply the next full coat of Sigma NovaGuard 840 wet on wet or after appropriate cure.
7. Application of one coat (600 µm) or two coats (2x300 µm) of Sigma NovaGuard 840 - dft 600 µm/24.0 mils.
8. The dried film, a minimum of 600 µm/24.0 mils has to be tested for the presence of pores, and repaired, where necessary, with Sigma NovaGuard 840 (see also 5).
   See also 2.7.10 of the working procedure.

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Note:

The coats on the side shells must be applied step-wise in such a way that the system thickness gradually decreases up the vertical sides.

REFERENCES

Sigma NovaGuard 830	see product data sheet 7945
Sigma NovaGuard 840	see product data sheet 7468
SigmaGuard 260	see product datasheet 7944
Safe working in confined spaces	see information sheet 1433
Directives for ventilation practice	see information sheet 1434
Cleaning of steel and removal of rust	see information sheet 1490
Working procedures - general guidelines	see information sheet 4139