

RENOVATION OF PITTED TANK BOTTOMS**Glass fiber reinforced solvent free phenolic epoxy coating system 4143**

a two page issue

April 2006
revision of September 2005

SPECIFICATION 1	chopped glass fibre reinforced solvent free epoxy coating system resistant to crude oil (up to 60°C/140°F) aliphatic hydrocarbons and 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 3) Sigma NovaGuard 840	
	levelling of lapjoints (see item 4), Sigma NovaGuard 830	
	coving of corners (see item 4), optional Sigma NovaGuard 830	
	coating + laminate (see item 5) Sigma NovaGuard 840 + chopped glass fibre	800-900 µm/ 32.0-36.0 mils 450 gr/m² (1,5 oz/ft²)
coating (see item 6) Sigma NovaGuard 840	300 µm/12,0 mils	

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. Combined application of Sigma NovaGuard 840 + chopped glass fibre. The chopped fibres should be brought into intensive contact with the epoxy material by rolling with a washer/roller. The surface should be smooth and free from air inclusions.
8. Application of one coat of Sigma NovaGuard 840.



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9. The dried film, a minimum of 600 $\mu\text{m}/24,0$ 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.

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

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