RENOVATION OF PITTED TANK BOTTOMS
Glass fiber reinforced solvent free epoxy coating system 4142

a two page issue

September 2005
revision of 4-1998

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)** SigmaCover 280	50 µm/2,0 mils
	pitfilling (see item 3) SigmaGuard CSF 650	
	levelling of lapjoints (see item 4), Sigma NovaGuard 830	
	coving of corners (see item 4), optional Sigma NovaGuard 830	
	coating + laminate (see item 5) SigmaGuard CSF 650 + chopped glass fibre	800-900 µm/ 32.0-36.0 mils 450 gr/m² (1,5 oz/ft²)
	coating (see item 6) SigmaGuard CSF 650	300 µm/12,0 mils

Coating procedure

1. For blasting and coating guidelines: see sheet 4139.
2. Application of primecoat of SigmaCover 280 - dft 50 µm/2.0 mils or 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 SigmaGuard CSF 650 (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 SigmaGuard CSF 650. Apply the next full coat of SigmaGuard CSF 650 wet on wet or after appropriate cure.
7. Combined application of SigmaGuard CSF 650 + 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.

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8. Application of one coat of SigmaGuard CSF 650.

9. 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 SigmaGuard CSF 650 (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
SigmaCover 280	see product data sheet 7414
SigmaGuard 260	see product datasheet 7944
SigmaGuard CSF 650	see product data sheet 7443
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