### **SYSTEM**

# RENOVATION OF PITTED TANK BOTTOMS

# solvent free epoxy coating system

4140

. •

September 2005 revision of 4-1998

**SPECIFICATION 1** solvent free epoxy coating system resistant to crude

a two page issue

oil (up to 60 °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)** 

SigmaCover 280 50 µm/2.0 mils

**pitfilling (see item 4)** SigmaGuard CSF 650

levelling of lapjoints, optional

Sigma NovaGuard 830

coving of corners (see item 5), optional

Sigma NovaGuard 830

coating (see item 6)

SigmaGuard CSF 650 600 µm/24.0 mils

note – if the structure is complex, two coats of each 300 μm/12.0 mils

of SigmaGuard CSF 650 can be applied

### **Coating procedure**

- 1. For blasting and coating guidelines: see sheet 4139.
- 2. Application of primecoat of SigmaCover 280 dft 50  $\mu$ m/2.0 mils or SigmaGuard 260 dft 75  $\mu$ m/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. Application of one coat (600  $\mu$ m) or two coats (2x300  $\mu$ m) of SigmaGuard CSF 650 dft 600  $\mu$ m/24.0 mils.
- 8. The dried film, a minimum of  $600 \mu m/24.0 \text{ mils}$  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.



# RENOVATION OF PITTED TANK BOTTOMS

solvent free epoxy coating system

4140

September 2005

### 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

Limitation of Liability - The information in this data sheet is based upon laboratory tests we believe to be accurate and is intended for guidance only. All recommendations or suggestions relating to the use of the products made by Sigma Coatings, whether in technical documentation, or in response to a specific enquiry, or otherwise, are based on data which to the best of our knowledge are reliable. The products and information are designed for users having the requisite knowledge and industrial skills and it is the end-user's responsibility to determine the suitability of the product for its intended use.

Sigma Coatings has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Sigma Coatings does therefore not accept any liability arising from loss, injury or damage resulting from such use or the contents of this data sheet (unless there are written agreements stating otherwise).

The data contained herein are liable to modification as a result of practical experience and continuous product development. This data sheet replaces and annuls all previous issues and it is therefore the user's responsibility to ensure that this sheet is current prior to using the product.