



Test Certificate

IFC Techprocomplex LLC
2, 2, 152 Profsoyuznaya s
Moscow
Russia
117321

REF NoN707705/10-12 Issue 1-1
Ord No Cash account

Date Tested 15/11/2007
Date Reported 27/11/2007

Test Product: **TIAL-M80** sleeve installed onto test panels with **TIAL-P** primer prior to application

Specification - ASTM D4060 -07

Description of product tested

TIAL-M80 heat-shrinkable wrap-around sleeve operating at temperature up to 80°C with TIAL-P wet epoxy primer.

| ASTM D4060 – 07 Taber Abrasion TIAL-M80 and TIAL-P Primer | | | | | | |
|--|--------------------------------|-------------------------------|-----------------|--------------|------------------|---------------------|
| Item number | Weight of panel before (grams) | Weight of panel after (grams) | Abrasion Wheels | Load (grams) | Number of Cycles | Weight loss (grams) |
| 1 | 257.98 | 257.93 | CS10 | 1000 | 1000 | 0,050 |
| 2 | 260.38 | 260.34 | CS10 | 1000 | 1000 | 0.040 |

The CS10 wheels were refaced after every 250 cycles using S11 re-facing discs.

| Coating Thickness TIAL-M80 and TIAL-P Primer | | | | | | |
|---|---------------------|---------------------|------------------|--------------------|--------------------|-----------------|
| Item number | Maximum before (µm) | Minimum Before (µm) | Mean Before (µm) | Maximum after (µm) | Minimum After (µm) | Mean After (µm) |
| 1 | 2630 | 2000 | 2320 | 2620 | 2020 | 2360 |
| 2 | 2490 | 2300 | 2410 | 2470 | 2300 | 2410 |

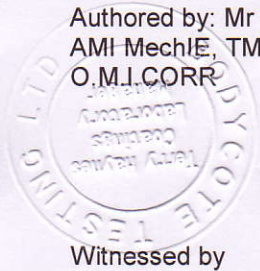
Test equipment used:

Taber 5130 Abraser serial number 925240 Calibration due 02/2009
Taber CS10 abrasion wheels batch number BN03C1
Sattorius BP3100P serial number 60804337 Calibration due 04/2008
Elcometer 256Fs3 serial number GC898/-40 Calibration on use against reference foils.
Elcometer reference foils serial number PC0787-795 Calibration due 07/2008

The test specimens were conditioned for 24 hours at 23 ± 2°C and 50 ± 5% relative humidity.
The test temperature was maintained within ± 2°C of the required temperature throughout the test.
The above testing has been carried out in accordance with the requirements of the governing specification and or clients requirements, and controlled within the laboratories BS/EN/ISO/IEC 17025 UKAS accredited quality system. However, the testing is covered under the laboratories UKAS testing schedule.

Test Product: TIAL-M80 sleeve installed onto test panels with TIAL-P primer prior to application
REF No N707703/10-12 Issue 1-1

Authorized by: Mr T S Haynes
AMI MechIE, TMIIE, Eng Tech
O.M.I.CORR



Witnessed by

John Carter
Operations Manager
Bodycote Testing Ltd.....
For and on behalf of
Bodycote Materials Testing, Ltd



Mr S. Davenport Inspection/Expediting Engineer
Velosi Europe Limited