Hernani, a 21 de Junio de 2017

Fco Javier López Nájera

KC005M - THERMAL SHOCK RESISTANCE

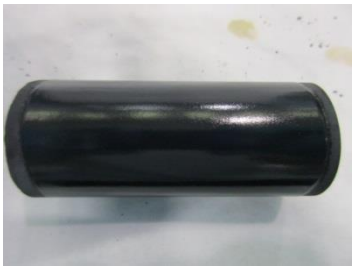
1 – SAMPLING

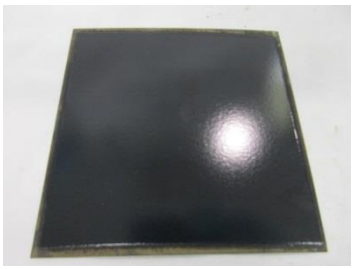
We had prepared some Coated Sheet Steel and Extruded Carbon Steel Tubes cleaned the with an high chemical resistance ceramic coating:

KC005M

Thickness – 100 to 150 µm

Note: Sharp edges have been corrected to avoid defects





2 – PROCEDURE

For each cycle the following steps are performed:

- ✓ Samples are introduced (coated sheet steel and tube) in a furnace 450ºC 30'
- ✓ Samples taken from the furnace and directly introduced in a container with cold water 20ºC.
- ✓ Drying after 5'
- ✓ Visual Inspection after 30'
- ✓ If the coating shows no damage , goes to the next same cycle.

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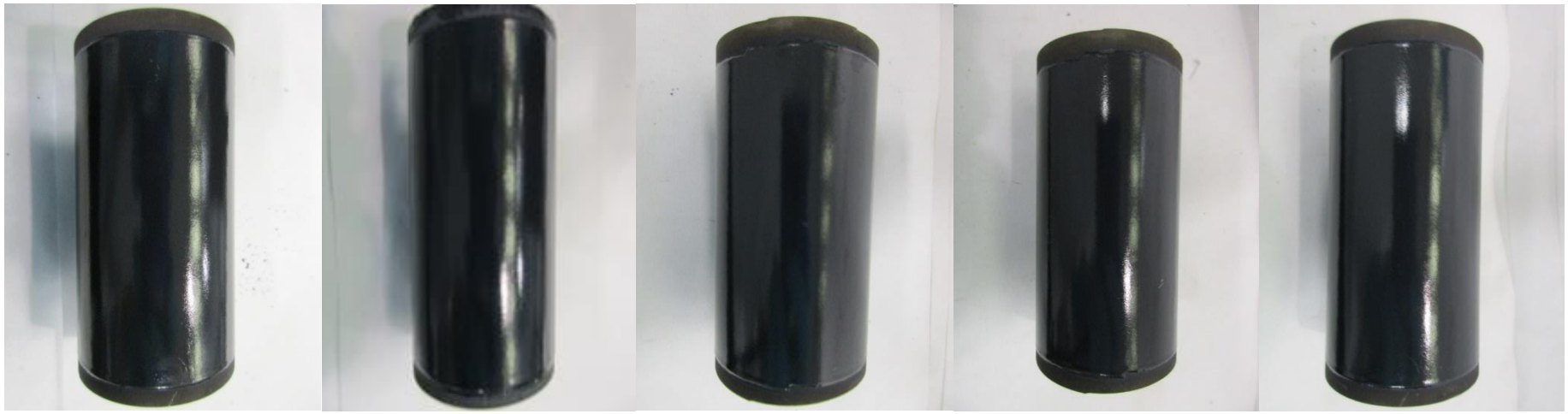
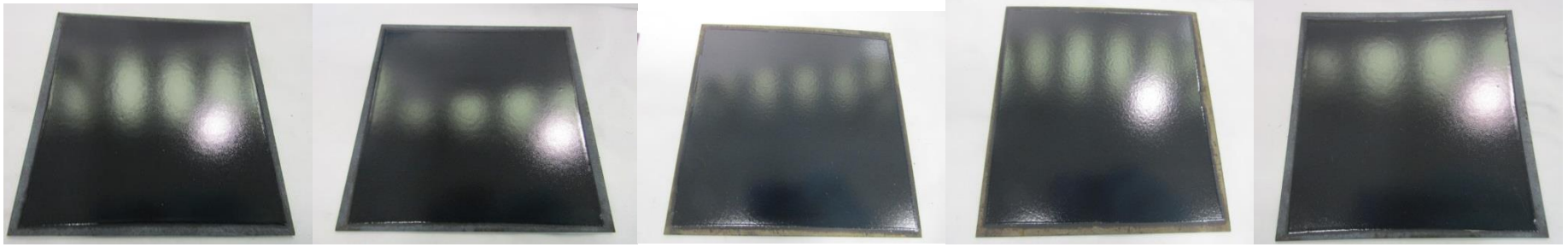
3 – RESULTS

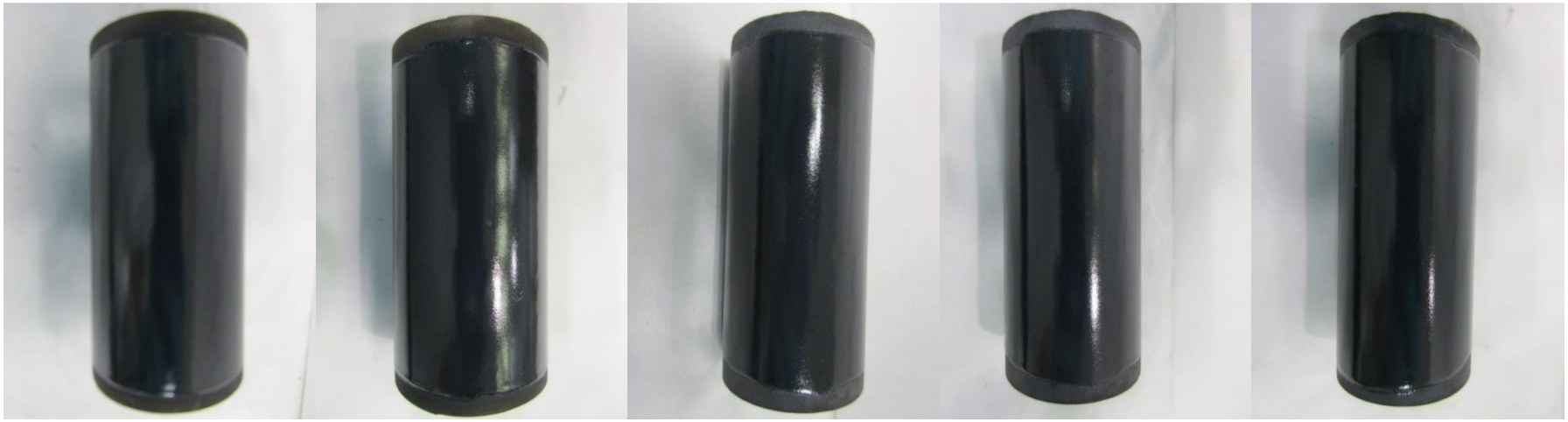
AFTER 10 CYCLES - NO CERAMIC COATING DAMAGE IN ANY POINT

We consider very unlikely that more cycles will bring more valuable information



----------CYCLE 1 ----------CYCLE 2 ----------CYCLE 3 ----------CYCLE 4 ----------CYCLE 5----------





----------CYCLE 6 ----------CYCLE 7 ----------CYCLE 8 ----------CYCLE 9 ----------CYCLE 10----------