Decoral System®

TECHNICAL TOOLS

Laboratory Tests and Technical Documentation

VOLT SERIES 6X-XXX-A073

Conductive Powders

Information:

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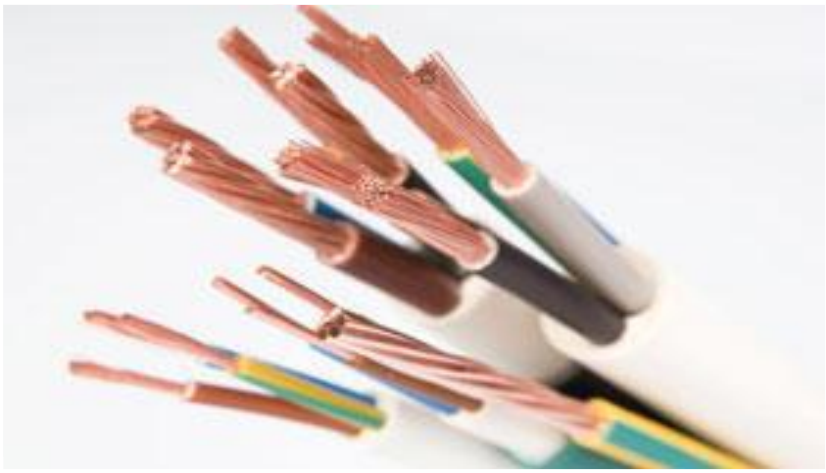
MRK-012-0149rev1

SERIE 6X-XXX-A073

Conductive Powders

1. Product Features

Unlike standard powders, those of the 6X-XXX-A073 series have a low electrical resistance and can therefore conduct electricity. This peculiarity grants the possibility of using them in conditions that were not previously recommended.



2. Technical Information

- Technical Data

Chemical Nature	Polyester
Class of resistance	Class 1
Yield in surface/mass	13,1 m^2/Kg
Specific weight	1,27 ± 0,03 g/cm^3

- Application and Curing Cycle

Available for corona charging.
Recommended application thickness: 70 microns – yield 11.2 m^2/Kg,
80 microns – yield 9.8 m^2/Kg,
90 microns – yield 8.7 m^2/Kg.
Curing time and temperature: 20’ x 180 °C (metal surface) - 20’ x 320 °F

- Mechanical Properties

Test	**Standard Reference**	**Result**
Gloss	ISO 2813	ok
Buchholz	ISO 2815	ok
Adhesion	ISO 2409	ok

3. Variants:

The following special formulations are all available on customer request:

- Polyester cl.1 and cl.2
- Polyurethane cl.1 and cl.2
- All surface effects;
- All nuances of black and grey
- Can be decorated with Heat-Transfer Film
- Metallized
- Bendable

N.B. – Due to the presence of additive in the formulation, light colours such as RAL 1021 / 9010 / 9016 CANNOT be produced.

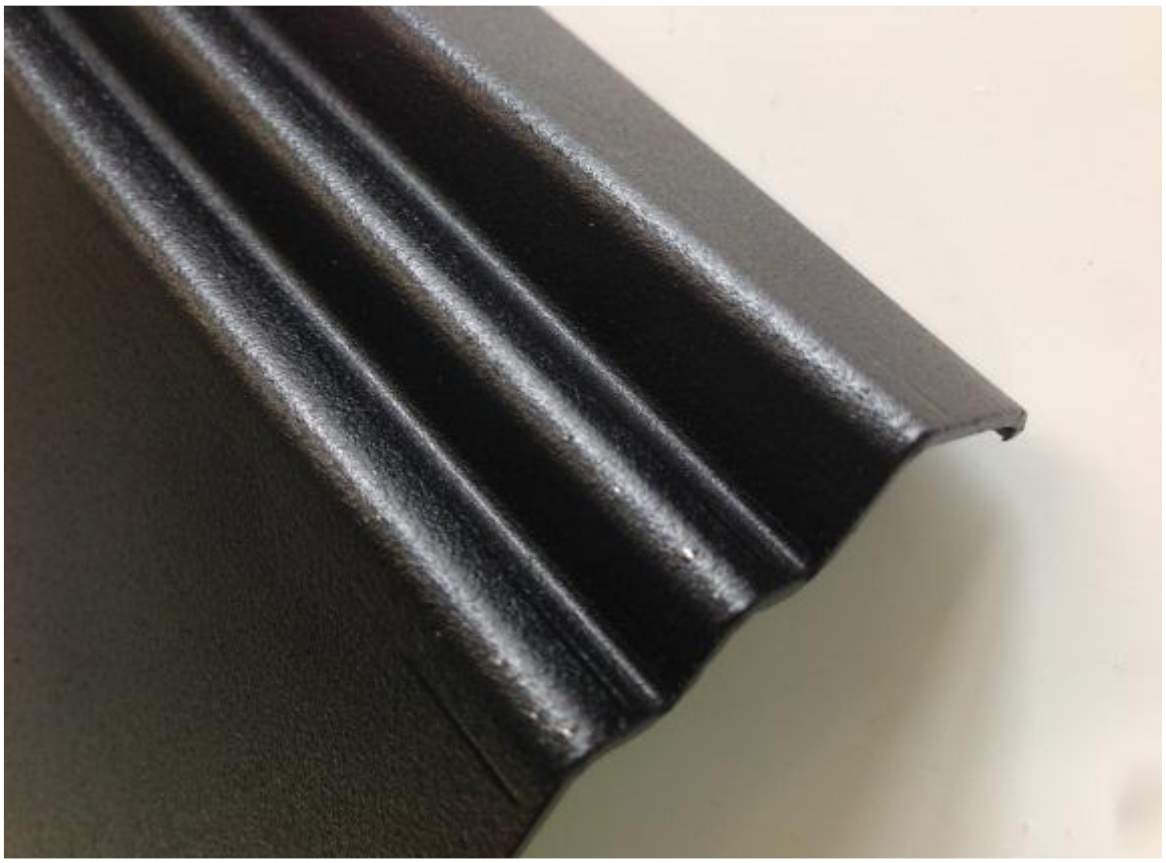


Figure 1: 6G-207-A073 – Bendable Variant

4. Possible Usage:

Powders of the 6*X-XXX-A073* series DO NOT accumulate static charges. Unlike standard powders, they can be used in presence of voltage, as in switchboards, or of harmful substances, like gas or oils, as for instance in gas stations.

Figure 2-3: Possible application fields of Volt series.

5. Conduction Test

The Conduction test enables us to measure paint products' resistance to the passage of electricity. The higher their resistance, the lower their ability to conduct electricity. On the other hand, the lower their resistance, the higher their ability to conduct electricity. As we can see in the picture below (Figure 4), the powder of the **Volt** series conducts more electricity than a standard powder.

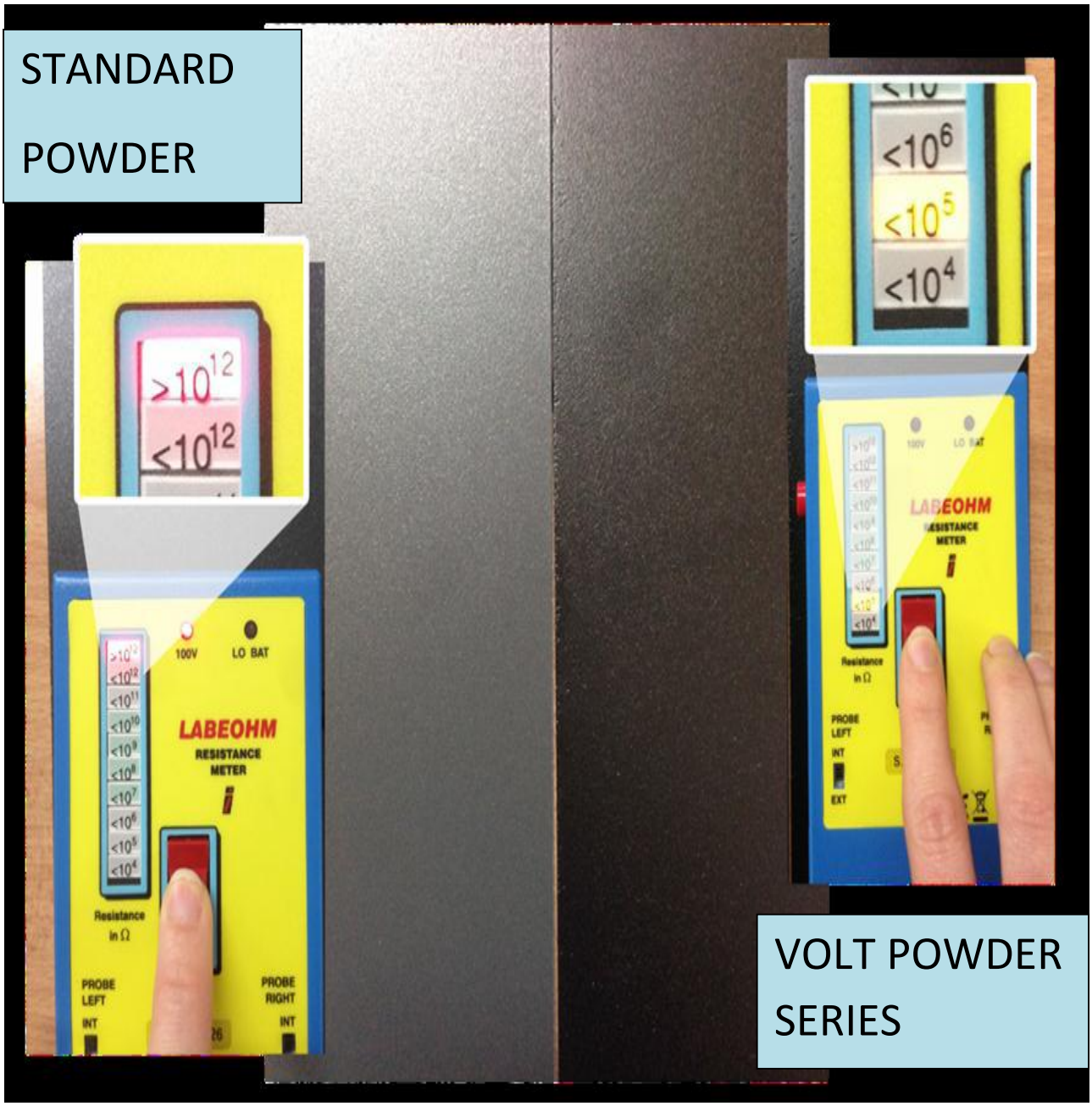


Figure 4: Conduction test (10^7 Ω is the limit value of conductive and non-conductive products)

Marchi di qualità registrati di Decoral System:

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