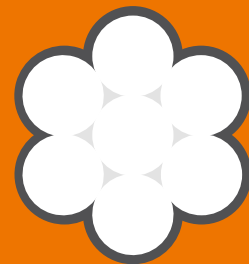


# SILENT BLACK COLOUR

Combination of **colour-coating** and  
**noise reduction** in perfect harmony

COLOUR-COATED CONDUCTORS  
FOR NOISE REDUCTION



# SILENT BLACK COLOUR

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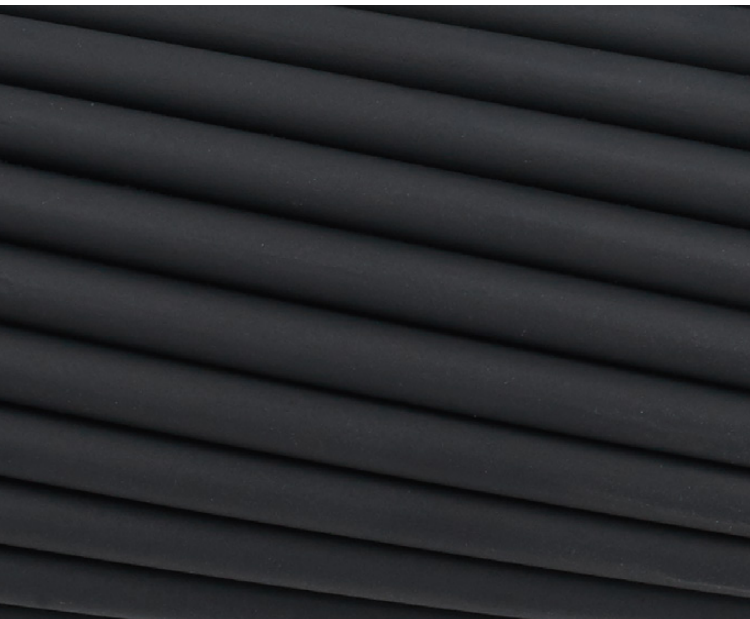
## NEW PATHS TO INNOVATION - THE PERFECT COMBINATION OF COLOUR-COATING AND NOISE REDUCTION

### MATERIAL-FRIENDLY SURFACE TREATMENT

As a measure to effectively combat corona discharges in high-voltage overhead lines, LUMPI-BERNDORF has developed a process that is gentle on the material and gives a hydrophilic surface.

Our groundbreaking new development of colour-coatings with **SILENT BLACK COLOUR** is the logical consequence of our efforts to find unique solutions for tomorrow's market.

**The effect achieved is a further reduction in noise emissions compared to bead blasting!**



### HYDROPHILIC SURFACE

In the event of precipitation and fog, noise development can only be reduced to a minimum by increasing hydrophilicity.

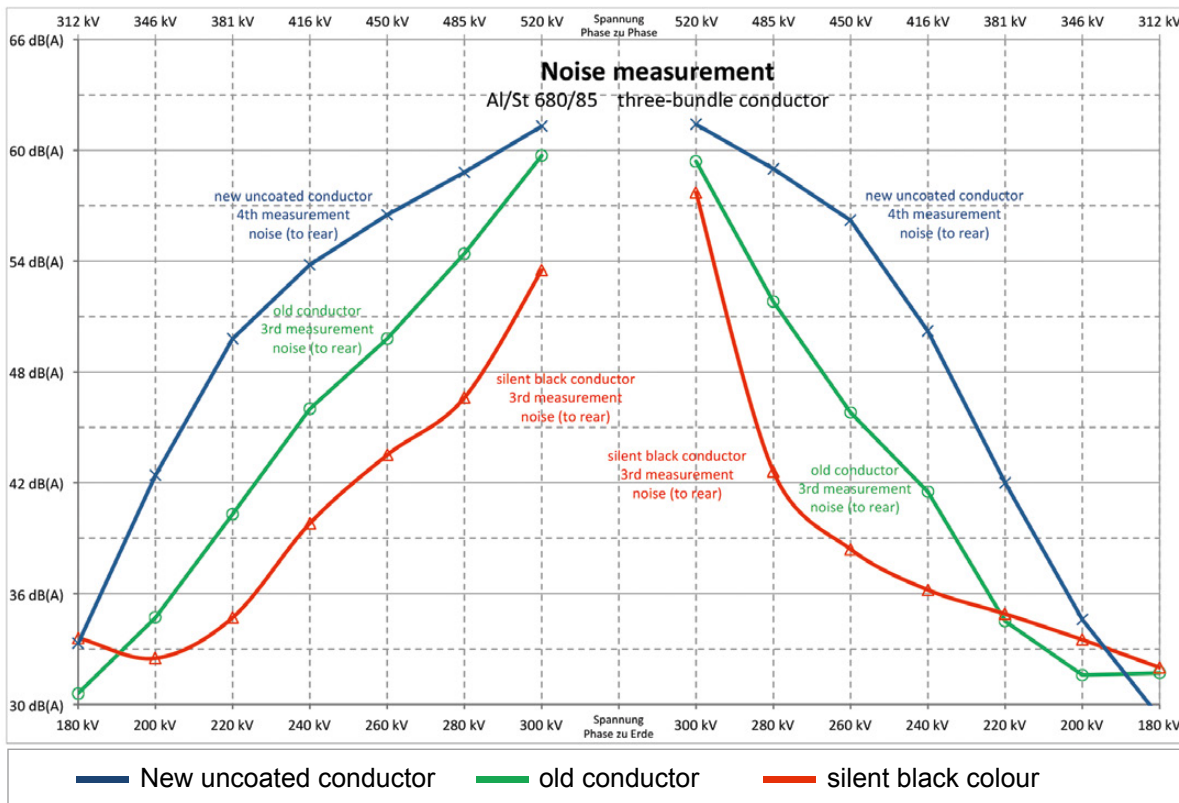
Due to fast dispersal of water and a reduction in the number of water droplets on the hydrophilic surface, the frequency and intensity of corona discharge is significantly lowered and the resulting noise level is reduced to a minimum.

### ADVANTAGES:

- **EXTREME REDUCTION OF CORONA NOISE LEVEL**
- Camouflage reduces visual impact on environment
- CO<sup>2</sup> reduced due to lower transmission losses
- Increased transmission capacity
- Reduced conductor temperature and sag
- Emission coefficient increased to 0.97
- Product features certified by independent institutes

## OUTSTANDING PRODUCT FEATURES

This special coating makes it possible to reduce the corona noise level by **more than 50%** compared to new uncoated conductors. The different surfaces are compared in the diagram below.

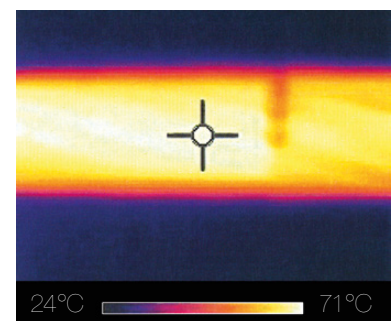


## EFFICIENCY MEETS TECHNOLOGICAL ADVANCEMENT

Cost-effectiveness, efficiency and sustainability are the key challenges for energy transport in the future, with the positive aspect of a reduction in transmission losses from overhead lines making an important contribution to efficient energy transport.

We can also point to an emission coefficient of 0.97, achieved through the MATT BLACK COATING, as another significant factor.

Thanks to this almost perfect black body, it is possible to increase the transmission performance or reduce the conductor temperature and therefore also the sag.



$$\epsilon = 0,97$$

**COST-EFFECTIVE AND FORWARD-THINKING - MADE BY LUMPI-BERNDORF.**

## LUMPI-BERNDORF Draht- und Seilwerk GmbH

Head office and plant Linz  
Binderlandweg 7  
A-4030 Linz

Plant Berndorf  
Leobersdorfer Straße 26  
A-2560 Berndorf



Tel. +43 732 / 383 848 - 0  
Fax: +43 732 / 37 03 78

Tel.: +43 2672 / 83595-0  
Fax: +43 2672 / 81245