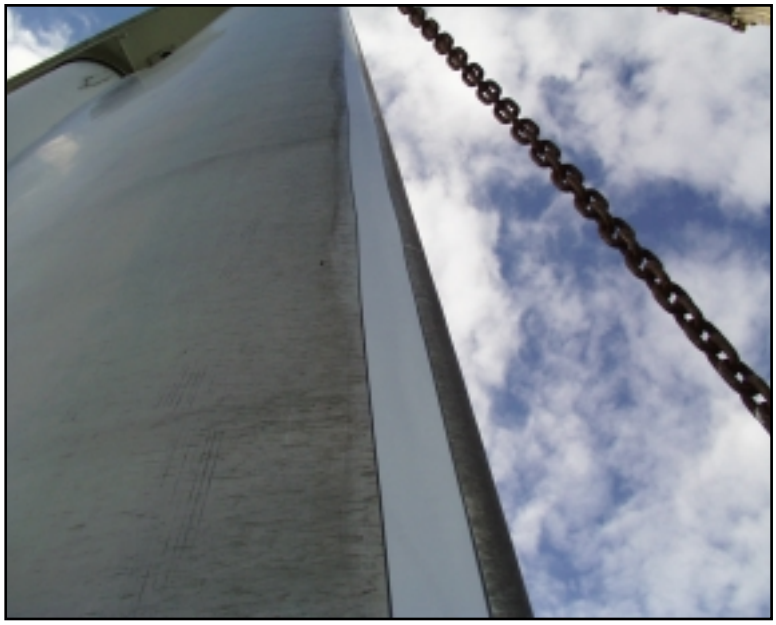
Jomitek

www.jomitek.dk

Lightning Protection for Turbine Blades

Patent pending by Jomitek



The lightning protection tape mounted on a Dutch turbine.

Jomitek and 3M have together developed a simple lightning protection system for turbine blades.
The lightning current is guided through the tape and above the tape in the ionized air layer.
The combination of the advanced 3M tape technology and the Jomitek lightning sensor system give a very high protection level.

Ask for technical details at info@jomitek.dk

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Product Specification

3M LS3PT is made of exceptionally tough, abrasion resistant polyurethane with an embedded copper mesh. It is formulated especially for its excellent resistance to outdoor exposure.

3M LS3PT may be applied over painted surfaces and show little or no discoloration after prolonged periods of environmental exposure.

3M LS3PT comes coated with a long-ageing solvent resistant, presure sensitive acrylic adhesive, protected with an easy release paper liner.

Physical Prpperties
Not for specification purposes

Adhesive Type	Pressure Sensitive Firm Acrylic
Liner	Paper
Thickness (without liner)	0.36 mm
Tolerance	+/- 0.025 mm
With	50-146 mm (Customer specific)
Tape Colour	Copper transparant / White / Grey
Total tape weight (without liner)	720 grams/m^2
Conductive matrix weight	380 grama/m^2

Lightning current

20kA (average strike level)	Typical 5 strikes
100kA (95% level)	Typical 2 strikes
200kA (98% level)	Typical 1 strike

Adhesion (90degree -peel test)

G-10 epoxyfiberglass	0.41 kg/cm width (initial)
	0.60 kg/cm width (72 hrs dwell time)
Stainless Steel	0.33 kg/cm width (initial)
	0.60 kg/cm width (72 hrs dwell time)

Test Records
UMIST University of Manchester (UK)
AEA Technologies, Oxford (UK)

Lightning Sensor System

It is strongly recommended to install the Jomitek Lightning Sensor System at the turbine. The Lightning sensor measures whenever a direct strike hits the turbine. The Lightning sensor then automatic can stop the turbine and inspection is possible before further damage has occured. For more information look at www.jomitek.dk