



**ROYAL DIAMOND**

*your insulation partner*

## Dry Type Transformer



We design, formulate and customize resins, varnishes and flexible laminates  
for Dry Type Transformer

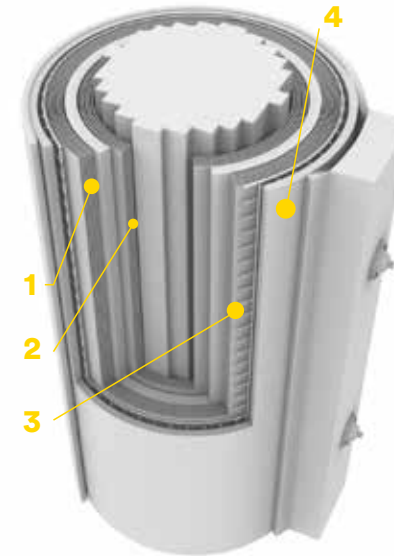
Our large experience reached thanks to continuous work with our Clients (PARTNERS) in Transformer industry, allows us to desing electrical insulation systems for any kind of transformer to offer to wind sector, aerospace, railway, marine and domestic use.

## Dry Type Transformer

Dry Type Transformers are often subjected to extrem temperatures and harsh environments and our resins, varnishes and flexible laminates help them to be thermally and dielectrically insulated.

According to our experience with Dry Type Transformer manufacturers it is important that our products offer them the following properties:

- Electrical insulation system
- Protection against harsh environments
- Protection against extrem temperatures
- Different Thermal Classes



1. Polyester film
2. Flexible Laminates & Prepreg Laminates
3. Reinforcement grid
4. Encapsulation resin

We design and manufacture a wide range of products for insulation and protection in the different phases of transformer construction:

### 1 - High voltage coil

We have the necessary materials for this type of coils. The combination of our flexible laminates and reinforcement grid (Royagrid), customized according to necessary thicknesses and dimensions of the transformer with the aluminum conductive material and a perfect epoxy resin (Royapox) encapsulating guarantees that this coil is perfectly electrical insulated.

### 2 - Low voltage coil

Our different types of flexible laminates (Royaglass) & laminates in prepreg technology (Royapreg and AFA Prepreg) customized to thickness and Thermal Class requested by our Clients, offer them a perfect thermally and dielectrically insulation.

RESINS

	Product	Chemical Nature	Thermal Class	Drying Method
<b>ENCAPSULATION AND FILLING</b>	ROYAPOX 502F (UL)	EPOXY	H (180°C)	OVEN
	ROYAPOX 502FC	EPOXY	H (180°C)	OVEN

FLEXIBLE LAMINATES

	Product	Material	Thermal Class	Thickness
<b>NOT IMPREGNATED</b>	POLYESTER FILM	POLYESTER	B (130°C)	From 0,023 to 0,35 mm
	TERCOTT MTS (UL)	DMD	B/F (130/155°C)	From 0,11 to 0,45 mm
	TUFQUIN TFT (UL)	TUFQUIN BASED	H (180°C)	From 0,13 to 0,51 mm
	THERNOMID AFA (UL)	ARAMIDE BASED	H (180°C)	From 0,14 to 0,47 mm
	TUFQUIN TPiT (UL)	TUFQUIN BASED	N (200°C)	From 0,12 to 0,32 mm
	THERNOMID APiA (UL)	ARAMIDE BASED	N (200°C)	From 0,13 to 0,30 mm
<b>IMPREGNATED</b>	THERNOMID 10.04VF	DM IMPREGNATED	F (155°C)	From 0,06 to 0,30 mm
	TRIPLEX F 20.08 (UL)	DMD IMPREGNATED	F (155°C)	From 0,13 to 0,45 mm
	ROYAPREG (UL)	DMD PREPREG	F (155°C)	From 0,11 to 0,33 mm
	AFA PREPREG (UL)	ARAMIDE BASED PREPREG	H (180°C)	From 0,14 to 0,24 mm
	ROYAGLASS B-STAGE	FIBER GLASS PREPREG	H (180°C)	0,25 mm

REINFORCEMENT GRID

	Product	Impregnated	Thermal Class	Thickness
<b>IMPREGNATED</b>	ROYAGRID 6X6	EPOXY	H (180°C)	0,70 mm
	ROYAGRID 10X8	EPOXY	H (180°C)	1,50 mm
	ROYAGRID 25X15	EPOXY	H (180°C)	2,20 mm
	ROYAGRID 30X20	EPOXY	H (180°C)	2,20 mm



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## Our values:

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### Tradition

More than 50 years dedicated to electrical insulation for different sectors. A combination of values, experience and know-how make us your best partner for your electrical insulation needs.

### Customization

We understand electrical insulation like a system integrated of resins, varnishes and flexible laminates as individually designed for any sector and Client.

### Human Team

Our Team is made up of more than 50 people who transmit naturally the values of the company.

### Quality

The quality in our company and our products is a must and we work under ISO 9001:2015 certification.

Our target is to be your best **partner** to create great projects together.

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