

Insulation System:	
Description	Resin rich hot pressed cell incorporating VPI accepting material applied to the coil extensions
Up to 15,000V	✓
Guaranteed Flexibility in outhangs	✓
Full Corona Protection on Coils ≥ 6,000V	✓
Guaranteed Storage Life Under Approved Conditions	
Optional Tropical Climate Protection	✓
Guaranteed Tan δ / Tip Up Integrity	✓
Thermal Performance:	
Class F155°C	✓
Class H180°C	
Class C220°C	
Surge Comparison or Turn To Turn Tested	✓
AC Flash Tested	✓
Moisture Proof Capability	✓
Oven Baking Required To Cure	✓
Fully Cured Before Insertion	
Tested Before Dispatch	✓



## Our unique insulation system combining the merits of VPI and resin rich technology

HiBRID™ is a fully testable and flexible system pre-VPI, and a fully waterproof system post-VPI.

It guarantees the virtues that both VPI and resin rich technology offer, with the drawbacks of neither.

Our experience showed inherent electrical failures occurred inside the slot of VPI machines, leaving a life expectancy of roughly 5 - 6 years. However, resin rich systems acted in reverse. The life expectancy was longer but the failures occurred in the outhang (coil extension) rather than inside the slot.

Therefore HiBRID™ comprises a hot pressed resin rich cell, scarfed into a VPI accepting outhang (coil extension), providing:

- Guaranteed slot fill
- World leading tan delta figures
- Excellent flexibility
- All coils are fully testable prior to varnishing

### Houghton International

Ronnie Mitten Works,  
Shields Road, Newcastle upon Tyne,  
NE6 2YL, United Kingdom.

**T:** +44 (0)191 234 3000  
**E:** info@houghton-international.com  
**W:** www.houghton-international.com



**Houghton International**  
Electro mechanical innovation