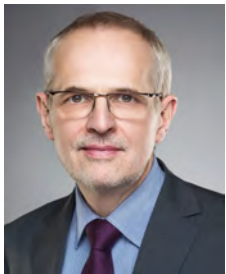


## Get in touch with us

With our headquarter in Germany and sales representatives worldwide, we are happy to assist and consult you to find the best superconductor solution for your application.

### Our contact persons at the German Headquarter



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China: Quantum Design (walter@qd-china.com)

Korea: AMS Korea (sales@amskorea.net)

Japan: K&R Creation (info@k-and-r.co.jp)

Taiwan: UMAT (ejong@umat.com.tw)

## THEVA Pro-Line: HTS wires produced by e-beam PVD

Thin. Robust. Efficient.



- Excellent performance
- Long lengths
- Competitive pricing

# Pro-Line Series: Highest performance and reliability for different applications – made in Germany

THEVA offers with Pro-Line a wide range of superconducting wires (coated conductors) for cables, rotating machines or high field magnets

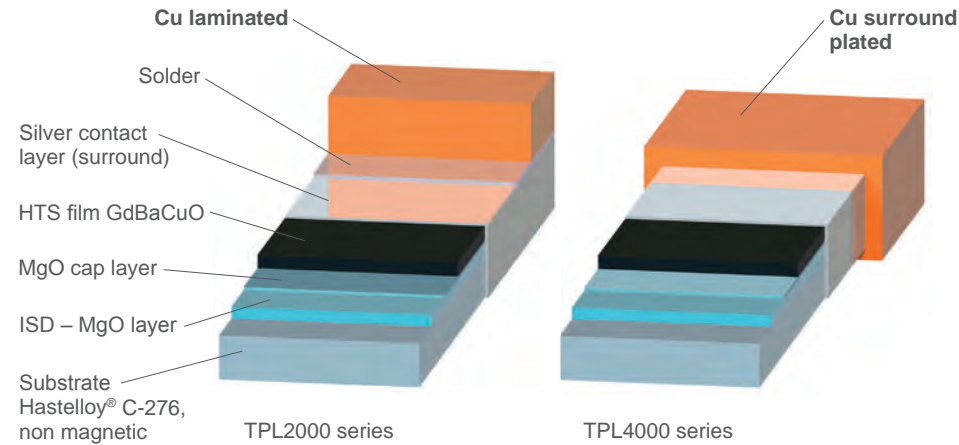
Specification for THEVA Pro-Line	
Substrate thickness	50 $\mu\text{m}$ / 100 $\mu\text{m}$
Width	12 mm, 4 or 6 mm upon request
Piece length	up to 300 m
Critical current (77 K, s.f.)	up to 420 A /cm width
Copper surround coating	up to 10 $\mu\text{m}$ per side
Copper lamination thickness	100 $\mu\text{m}$ on HTS side
Solder coating	upon request
Joint resistance	60 n $\Omega$ * cm <sup>2</sup> (typical)

## TPL2000 and TPL4000 series

Mechanical and electrical stabilization according to your needs:

**Copper lamination** (picture on the left) on the HTS side of the wire, our proven type used e.g. for HTS coils of a wind power generator ([www.ecoswing.eu](http://www.ecoswing.eu)).

**Surround copper coating** (picture on the right) for all kinds of applications.



## Copper coating

THEVA uses PVD for the copper coating

- Highest geometrical shape accuracy
- Up to 10  $\mu\text{m}$  thickness
- No dogboning



SEM cross section of PVD copper coating

## Magnetic field performance

Below, on the left side you see the lift factor for  $B \parallel c$  and the corresponding  $I_c$  for a tape with 500 A @ 77 K, self field.  $B \parallel c$  represents the minimum value. Higher lift factors are possible, depending on the field angle. High-field measurements at 4.2 K, done by KIT at LNCMI in Grenoble, are shown below on the right side.

