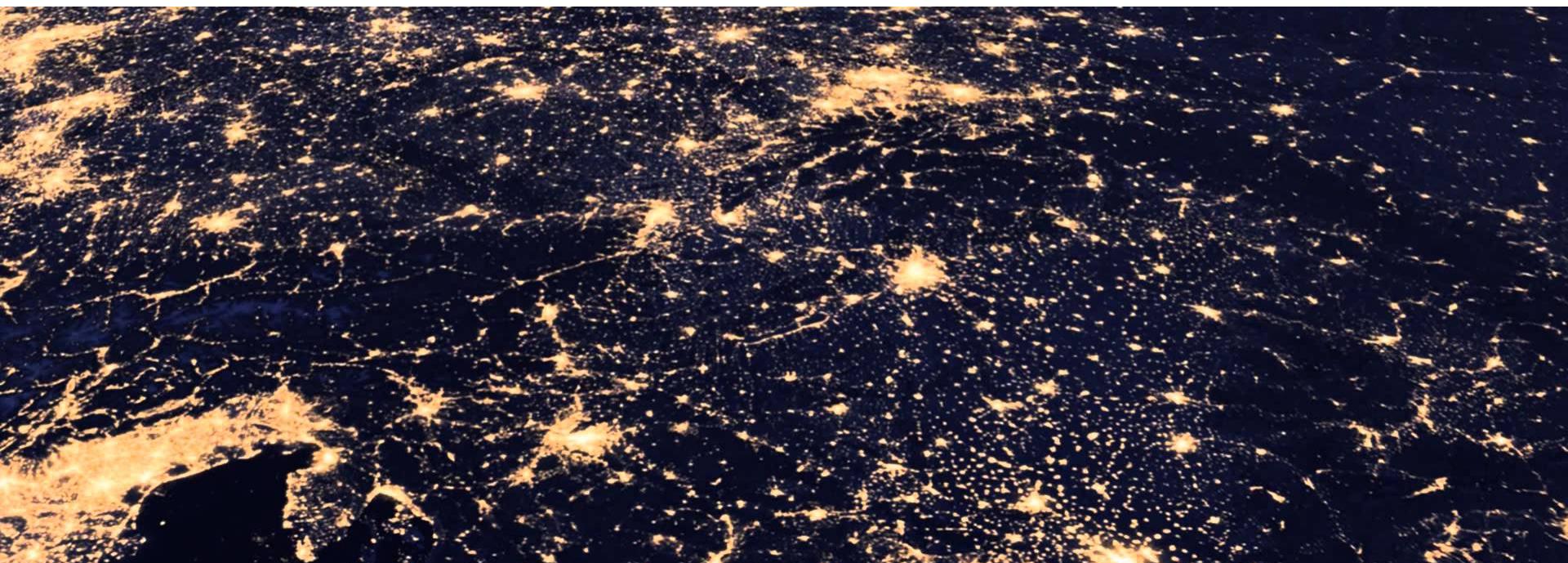
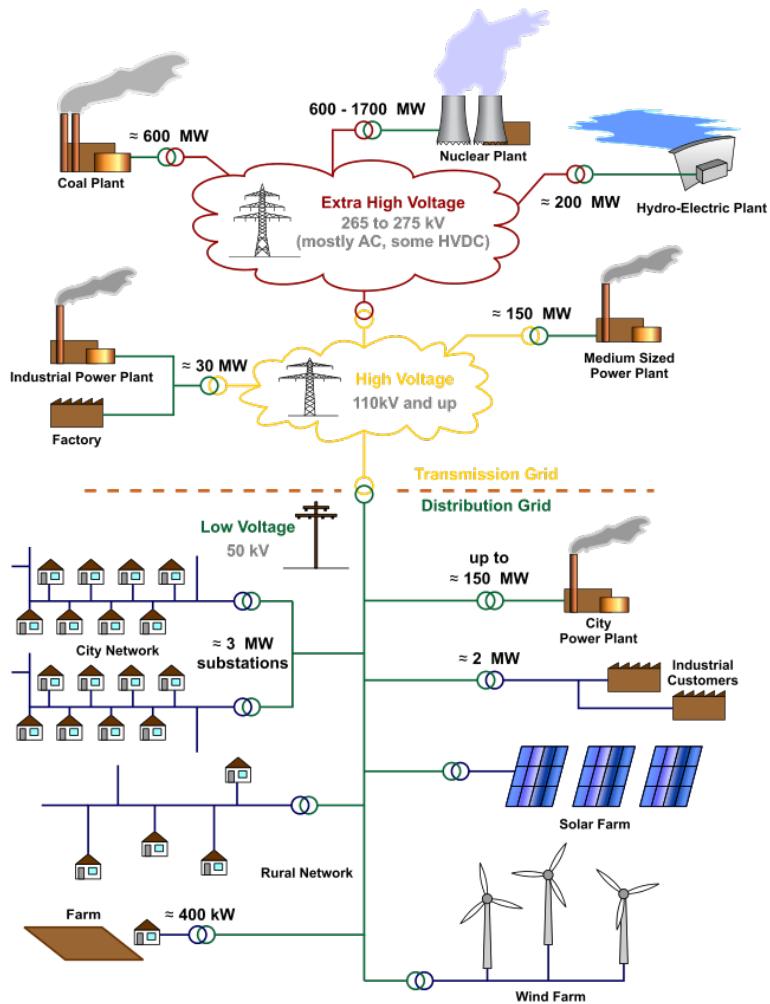


Innovation for safer, sustainable electricity networks
HedgeHog: A revolutionary strong current joint



Strong current joints today

Unsafe, costly, cause energy loss



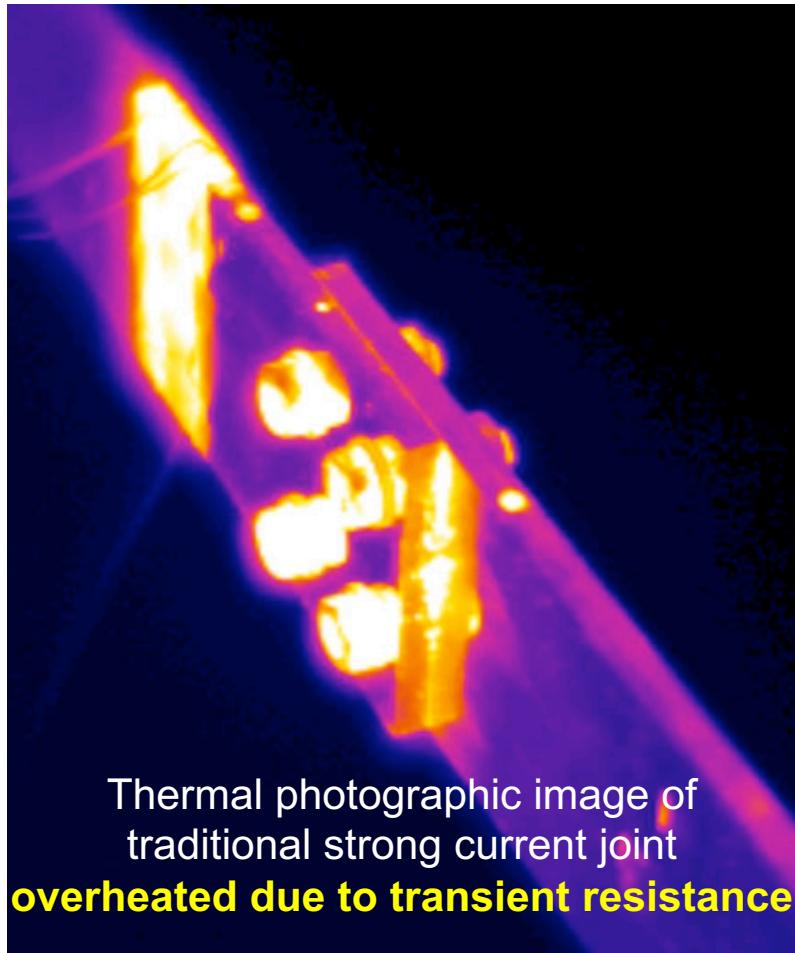
Traditional strong current joint

1. High rate of failure despite regular maintenance efforts
2. Constant safety risk
e.g. electrical fire caused by overheating
3. Source of up to 1% of all network dissipation

CONFIDENTIAL

Strong current joints today

Inherent problems, yet global standard



Thermal photographic image of traditional strong current joint
overheated due to transient resistance

1. Loosening of joints due to varying thermal expansion of different metal parts
2. Continuous weakening of joints due to galvanic voltage generated by humidity between the differently polarised metal parts
3. Drift current and hysteresis produced on steel bolts
4. Ohmic resistance results in overheating

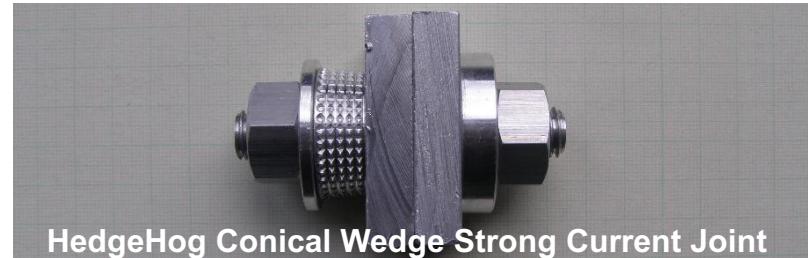
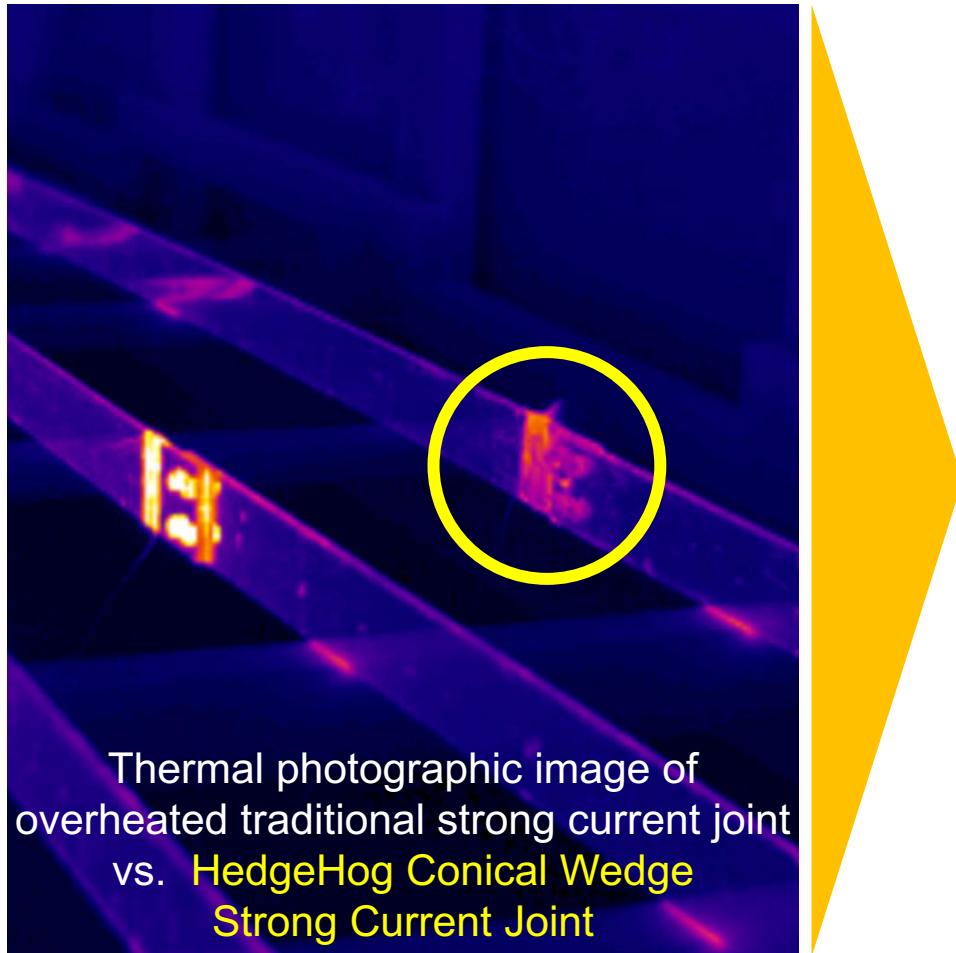
Transient resistance causes

- Network failures
- Shutdowns
- Electrical fires

CONFIDENTIAL

The HedgeHog Conical Wedge Strong Current Joint

Revolutionary, safe, sustainable



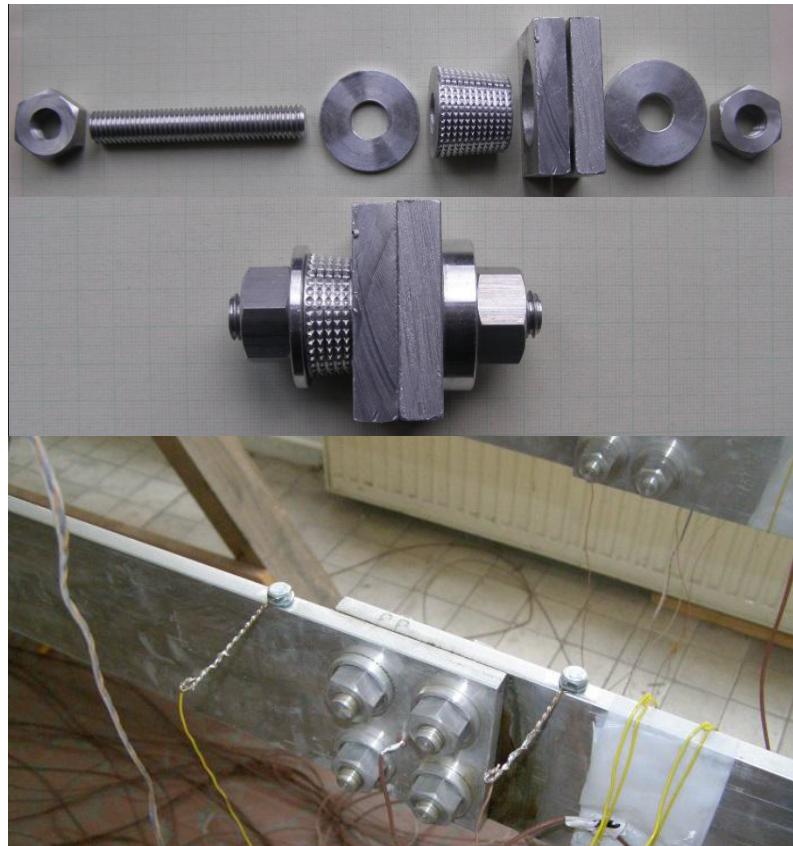
1. Significantly improves performance by reducing transient resistance:
 - Safe
 - Reliable
 - Does not require regular maintenance
2. Eliminates network losses
3. Improves efficiency, thus profitability

CONFIDENTIAL

All rights reserved. Power Contact Hungary Gyártó és Kereskedelmi Korlátolt Felelősséggű Társaság

The HedgeHog Conical Wedge Strong Current Joint

Solves inherent problems of traditional joint



HedgeHog Conical Wedge Strong Current Joint
with increased conductive surface

1. Eliminates loosening of joints thanks to conical wedge structure
2. Eliminates weakening of joints because of improved conductive surface of components
3. Decreases resultant resistance not only compared with traditional joints but **shows better results than reference rail without any joints**

Decreased transient resistance:

- Improved performance & safety
 - Better operational efficiency
 - Higher profitability

CONFIDENTIAL

The HedgeHog Conical Wedge Strong Current Joint

The value of safe operations – without the on-going cost



A pharmaceutical plant in Debrecen, Hungary currently faces an **annual safety inspection cost** of EUR 10,000 for thermal imaging alone.

On average **once a year**, plans have to be made for a **necessary cease of operations** (factory shut-down) leading to **debilitating production losses** – and all of this because of far-from ideal traditional strong current joints.

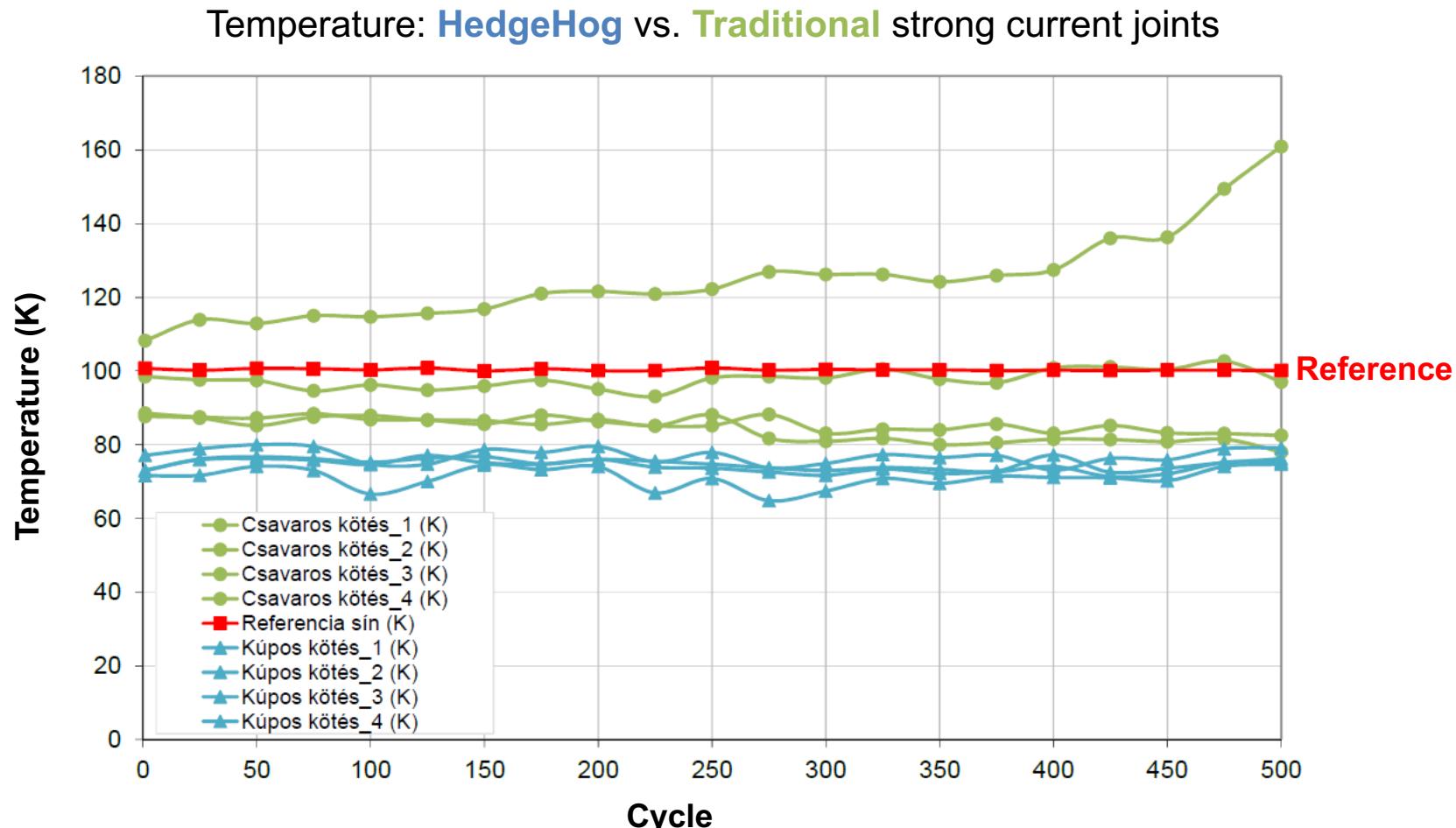
None of this is necessary with HedgeHog Conical Wedge Strong Current Joint

CONFIDENTIAL

All rights reserved. Power Contact Hungary Gyártó és Kereskedelmi Korlátolt Felelősségegű Társaság

The HedgeHog Conical Wedge Strong Current Joint

Superiority proven by electrical regulatory authority



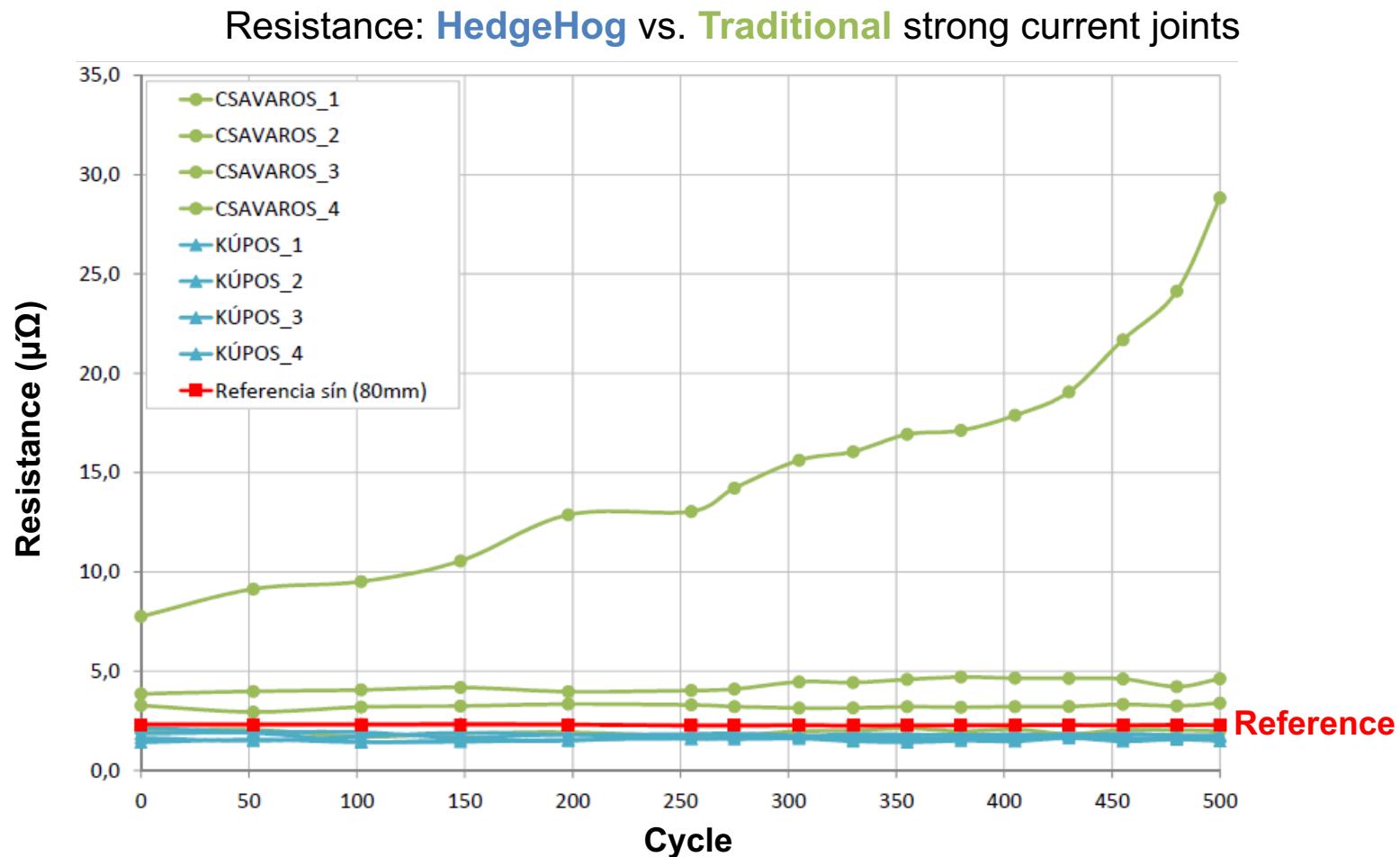
Study conducted in 2014 by VEIKI-VNL Electric Large Laboratories Ltd. Study identifier: NAL-10/2013

CONFIDENTIAL

All rights reserved. Power Contact Hungary Gyártó és Kereskedelmi Korlátolt Felelősségtartó Társaság

The HedgeHog Conical Wedge Strong Current Joint

Superiority proven by electrical regulatory authority



Study conducted in 2014 by VEIKI-VNL Electric Large Laboratories Ltd. Study identifier: NAL-10/2013

CONFIDENTIAL

All rights reserved. Power Contact Hungary Gyártó és Kereskedelmi Korlátolt Felelősséggű Társaság

The HedgeHog Conical Wedge Strong Current Joint

Target markets

All high-powered devices used in step-up/step-down transmission or distribution substations and in any transmission and distribution systems, e.g. circuit breakers and other switches, insulators etc.

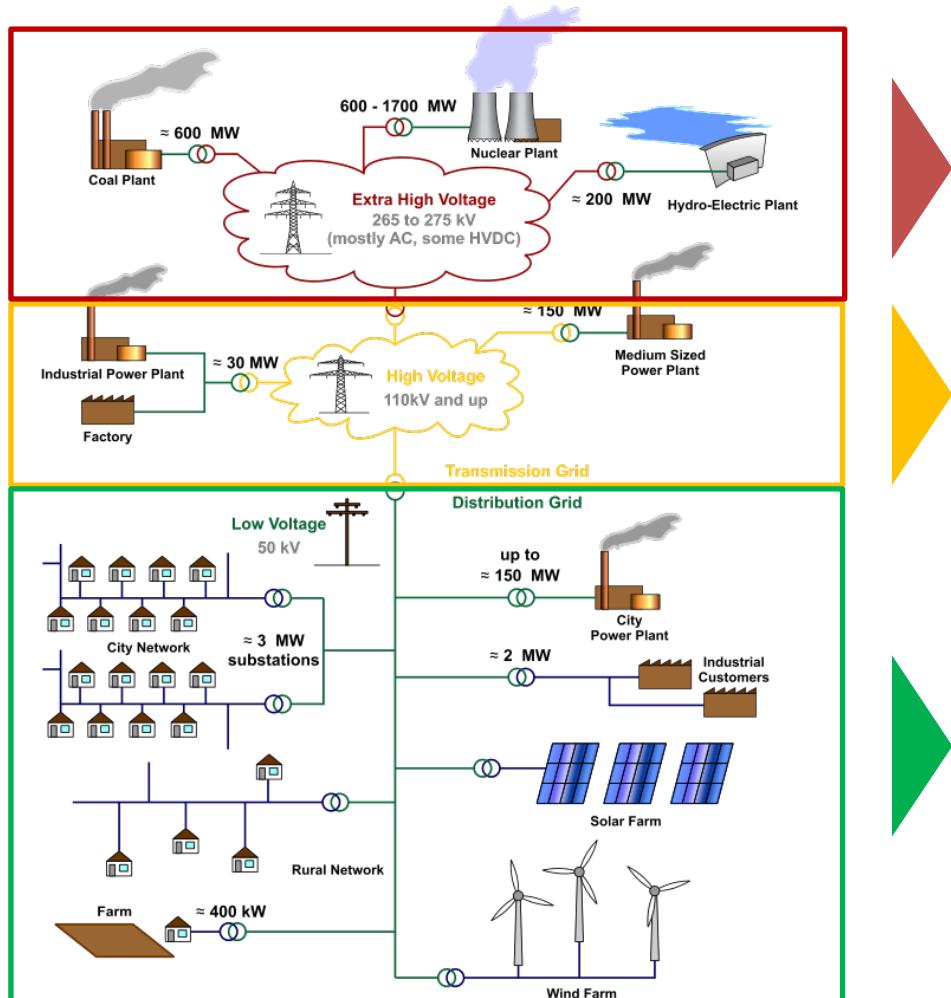


CONFIDENTIAL

All rights reserved. Power Contact Hungary Gyártó és Kereskedelmi Korlátolt Felelősségegű Társaság

The HedgeHog Conical Wedge Strong Current Joint

Top-line market overview - Hungary



30 substations –
approximately 50k joints

200 substations –
approximately 300k joints

52,000 substations –
approximately 2 million joints

CONFIDENTIAL

All rights reserved. Power Contact Hungary Gyártó és Kereskedelmi Korlátolt Felelősségtartós Társaság

The HedgeHog Conical Wedge Strong Current Joint Investment – Innovation Project

- Estimated EUR 3,000,000 covering:
 - Target-market specific research and development including
 - Identification of product ranges and families to the specific sales segments
 - R&D facility set-up
 - Intellectual Property Rights
 - Installation
 - Certification
 - Potentially standardisation
 - Development of training methods/materials/channels
 - TÜV or local regulatory processes/certification (e.g. US)
 - Examination and certification of materials used in joints (i.e. physical characteristics and properties)
 - Mass production capabilities & equipment

CONFIDENTIAL

All rights reserved. Power Contact Hungary Gyártó és Kereskedelmi Korlátolt Felelősségegű Társaság

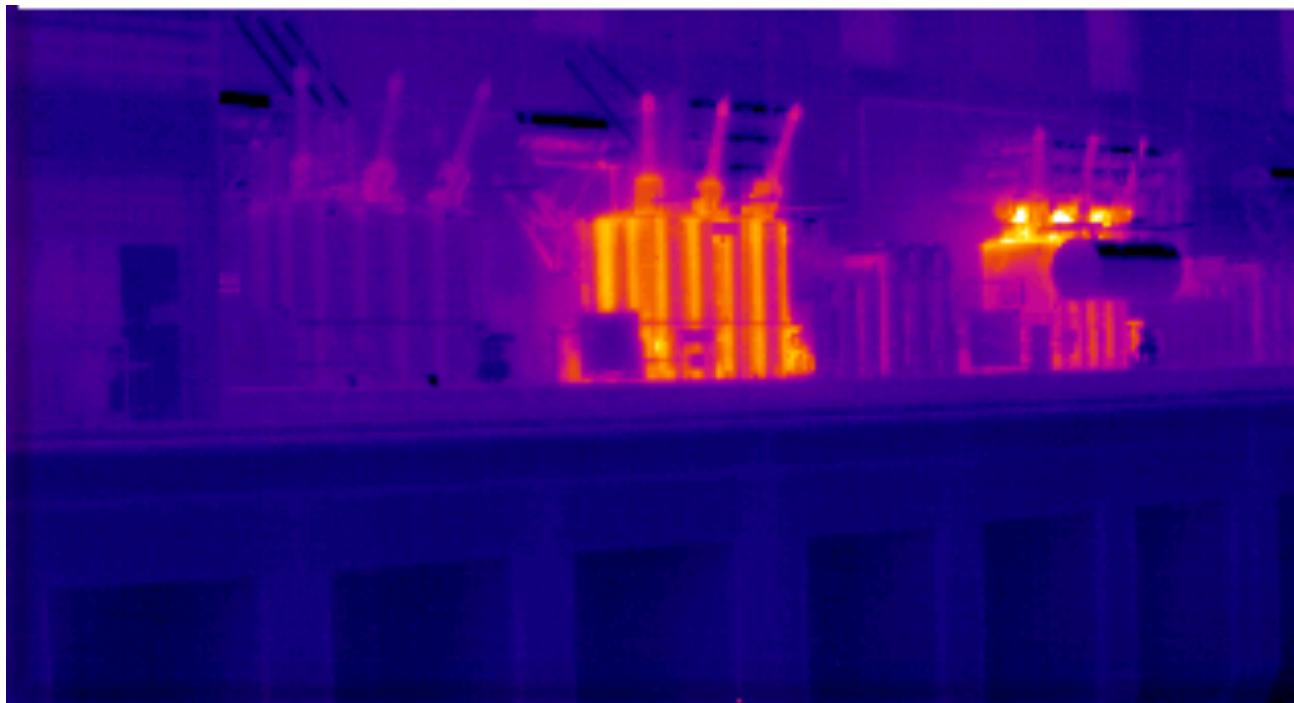
The HedgeHog Conical Wedge Strong Current Joint Summary

- World-first solution for a safer, sustainable and profitable strong current joint
- Superiority proven by foremost electrical regulatory authority
- Mass production possibilities verified
- Patents acquired to date
 - PO800510 (Hungary)
 - EP09785722 (EU)
 - 13/058528 (US)

CONFIDENTIAL

All rights reserved. Power Contact Hungary Gyártó és Kereskedelmi Korlátolt Felelősségű Társaság

**Thank you.
Questions?**



CONFIDENTIAL

All rights reserved. Power Contact Hungary Gyártó és Kereskedelmi Korlátolt Felelősségegű Társaság