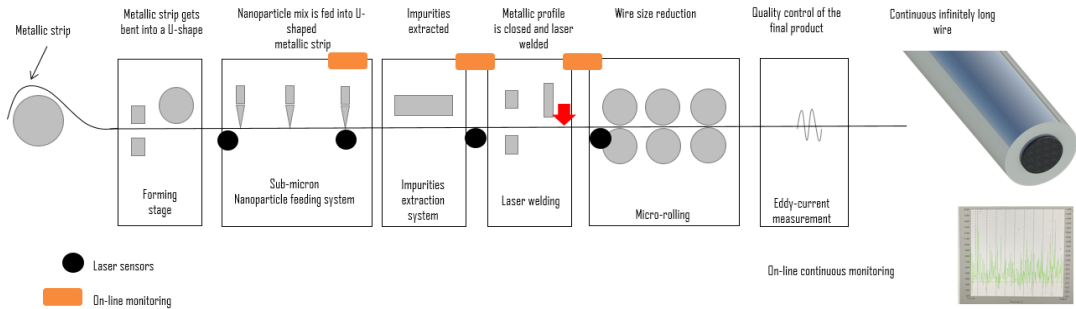
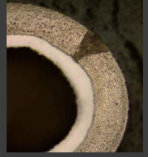


Application Validation Projects
for MgB₂

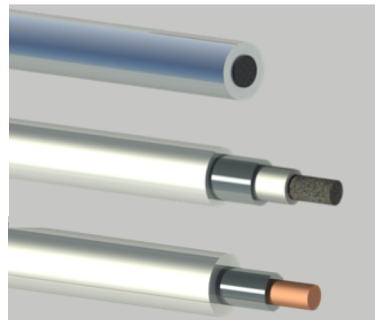
FuSuMaTech 2021

Who : Est. 2014 - Cambridge, UK
 What : Continuous powder (Mg+B) feeding + laser seam welding
 How : Industrialized high throughput production line

Continuous Material-In-Tube Wire

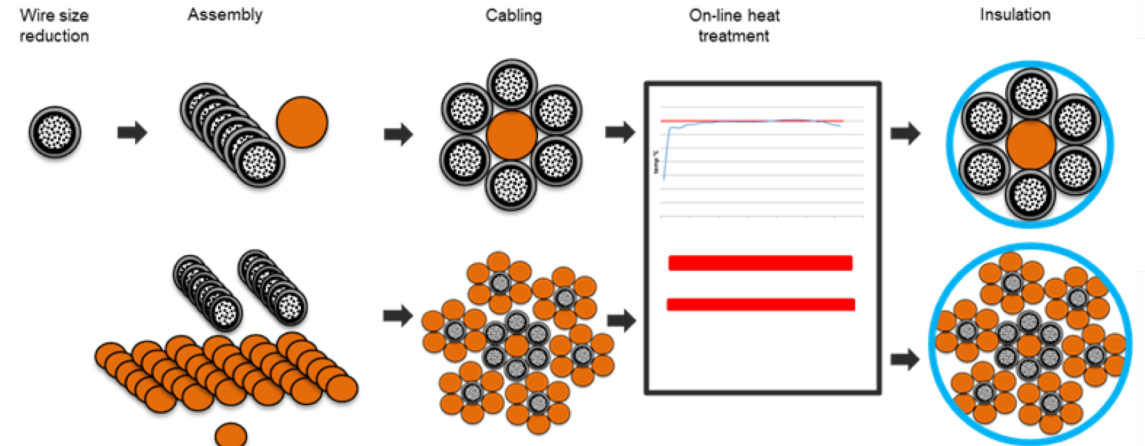
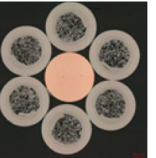


Modular product design
 Long length consistency
 > 30 km piece length



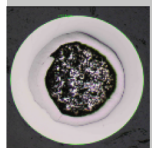
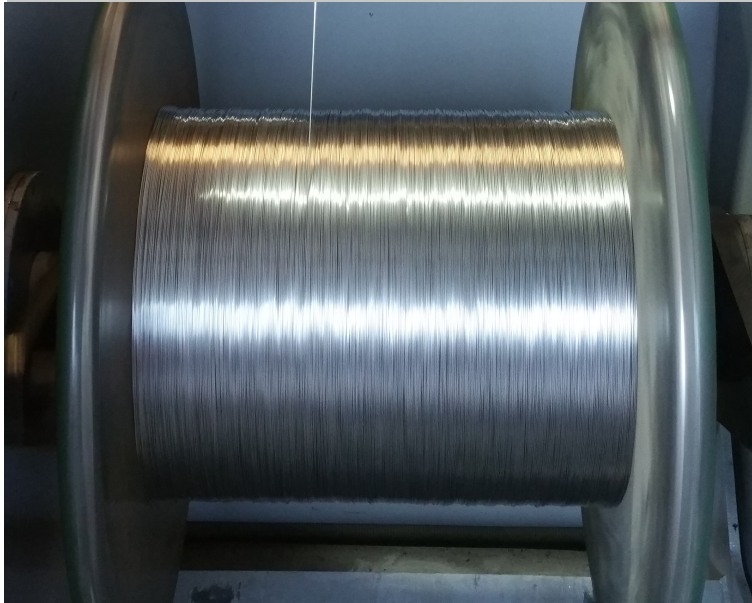
Who : Est. 1880 - Zwevegem, BE, operating in 120 countries
 What : Steel wire transformation & coatings
 How : Industrialized processes (drawing, cabling, heat treatment, metallic/non-metallic coatings...)

Continuous cabling, coating, insulation and heat treatment solutions



- First testing programs have demonstrated very good results and advantages of continuous process

Wire performance



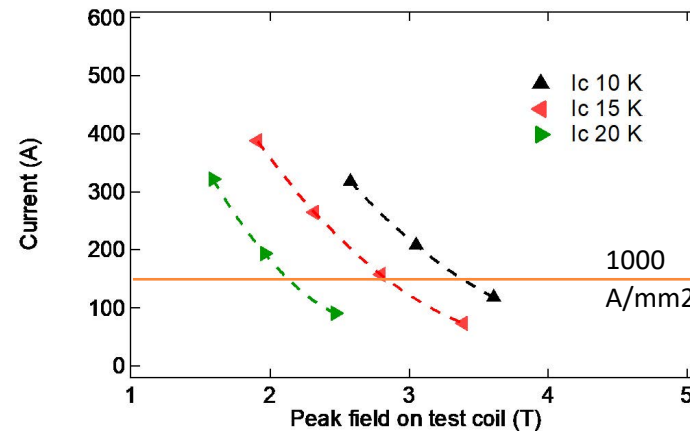
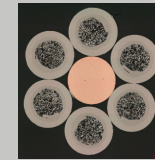
2017 performance consistency:
10 km - 750 μ m

Since 2018 :
30 km - 750 μ m
100 km - 400 μ m

Magnet performance

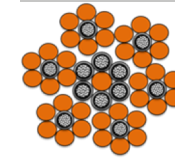


Product design :
200 mtr of 1+6 cable (1.2 mm)
0-4T
10-20K
magnet =
wire performance

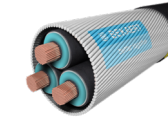


- 20+ quenches with no degradation
- Coil was run stably at 99% IC

DC power performance

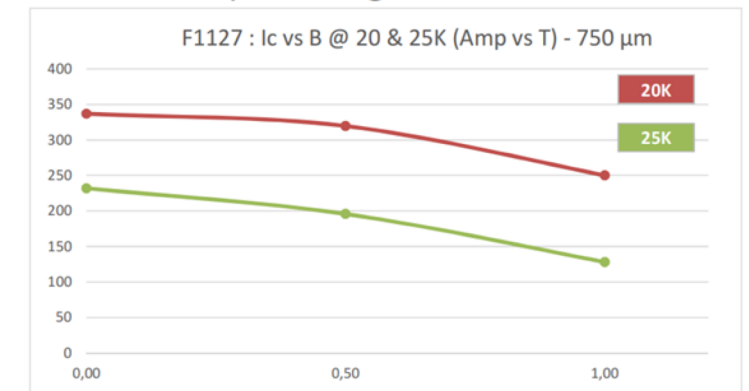


Product design :
200 mtr of 7x7 cable (6.75 mm)
0-1T
20-25K

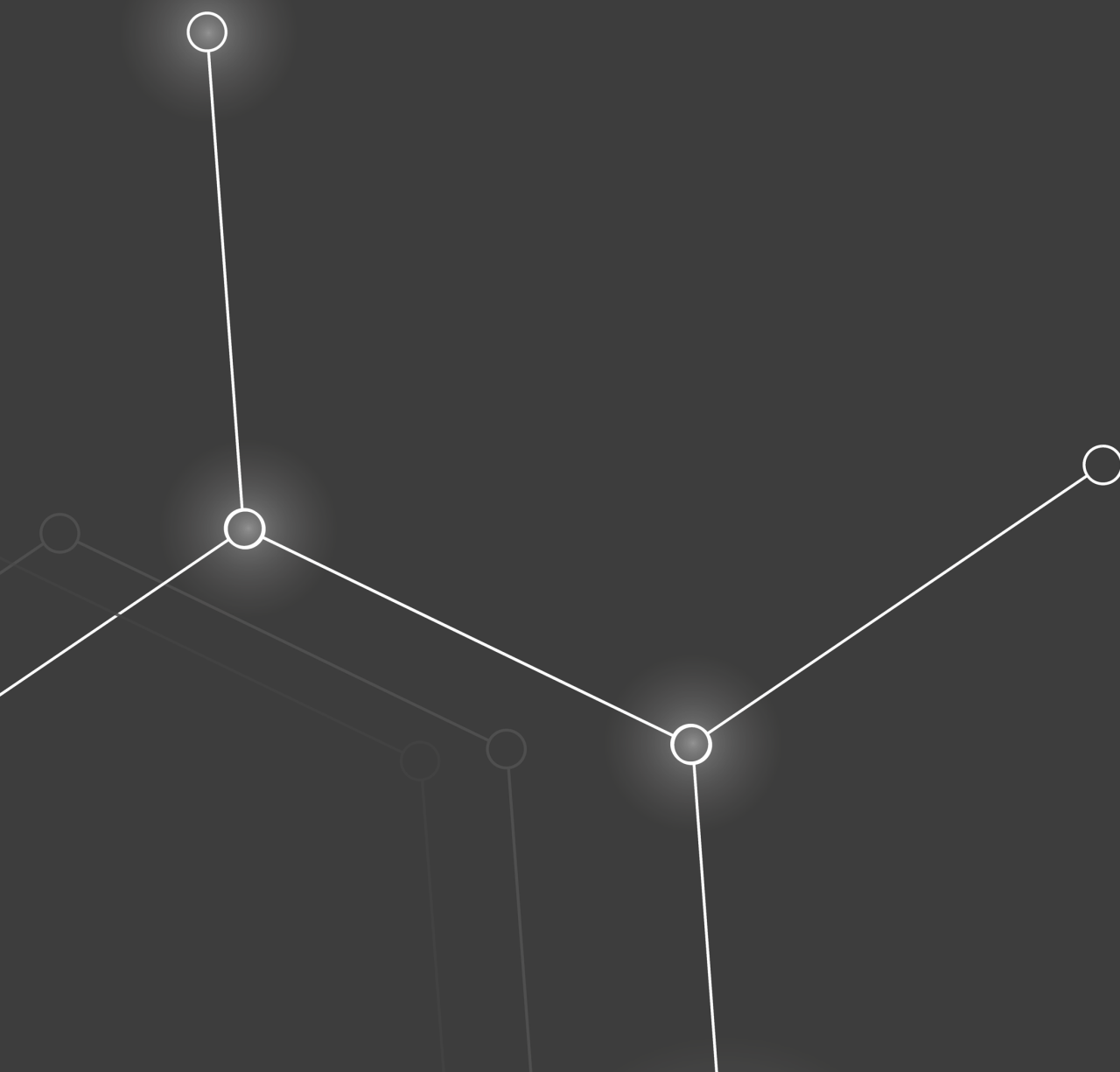


strand performance:
3 kAmp
+ multi-strand
performance

Ic performance @ 20-25K



To be demonstrated in 2022



We would like to thank
FuSuMaTech Council for
accepting us as a member