EMERALD BPS-HD & FiberStrand®

Sticker Breakout Detection System

based on FBG fiber temperatures

&

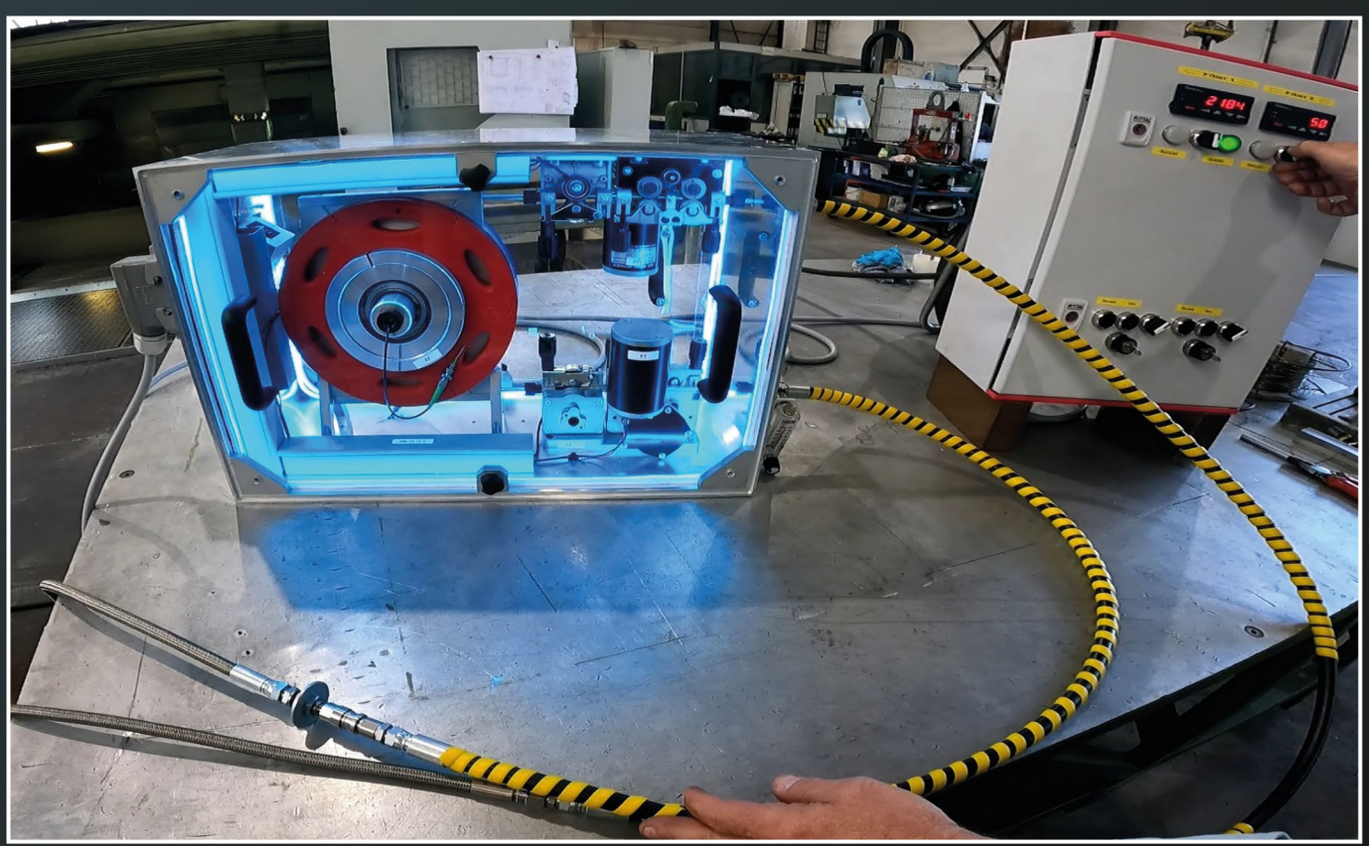
FBG Fiber equipped strand

EBDS ENGINEERING

FiberStrand® is a unique method to install FBG fibers at the caster.

The caster's strand is equiped with FBG fibers, not the molds anymore. The mold is receiving the fibers only after it is placed on the strand, thanks to a fully automated simple fiber installation system.

The fibers are transported from the FiberStrand® equipment to the inside of the copper plates via hydraulic hoses, that are creating a perfect protection and guidance system.



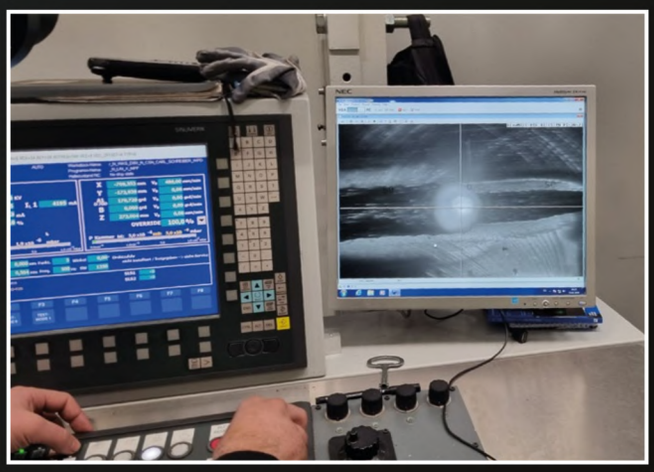
The advantages of the fiberStrand® system are unique:

1. No mold or plates have to be equipped prior with fibers.
2. Investment and maintenance cost reduced to a strict minimum. 4 fibers per mold assembly are enough to run our BPS-HD system
3. No fiber optical connexion to open or close: the fibers are permanently connected at the caster.
4. No fiber handling.
5. The fibers are permanently protected into robust hoses.
6. Installing or removing the fibers takes some seconds.
7. The fiber is supplied on a reel that has been designed to fit the motorization cabinet.

CARL SCHREIBER NEUNKIRCHEN

FiberStrand® works in combination with another unique innovative method to prepare the copper plates: the EBW insert of CSN Carl Schreiber.

To install horizontally fibers in a copper plate, the only reliable and affortable method consists of placing the fiber behind an insert.
The insert is placed into an horizontal machined slot, done on the hot side of the copper, and then electronbeam welded.



This unique and patented method developed by CSN Carl Schreiber, in combination with the FiberStrand® technique, allows to equip any caster (conventional or thin slab) with FBG optical fibers, at a fraction of the cost of the traditional thermocouple technique.

EBDS Engineering can provide you with the best Breakout Prediction System on the market, based on thermocouple temperature signals or FBG optical fibers.

We can demonstrate, based on your temperature data, that we can improve your overall BPS performance significantly, whatever system you are using today, through a free comparison study.

DON'T HESITATE TO CONTACT US AT:

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