

## POLYBRIGHT NEWSLETTER N°7

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Hello,

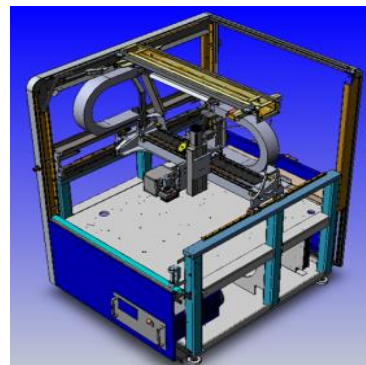
After four years of intensive work, the Polybright project will end soon and exciting results are now available. Three laser welding prototype machines using a high-brilliance (fiber) laser have been developed two of which will be exhibited from October 16-23 at the K2013 plastic trade fair in Düsseldorf, Germany.

The first prototype – a high-flexible dynamic mask welding unit developed by Leister (CH) is a real novelty in laser polymer welding, since it allows the weld contour change within minutes due to the use of a Liquid-Crystal-on-Silicon (LCoS) reflective mirror. Additionally, with the build-in scanner and beam shaping facility using transmissive diffractive optical elements, contour welding and quasi-simultaneous welding is feasible as well. The beam source is a polarized fiber laser, emitting at 1070 nm with 70 W maximum output power (see below left).

The second one is a scanner+axes QSLW machine developed by Cencorp (FI) which allows to apply every utilized laser contour welding method (contour, contour TWIST, quasi-simultaneous) along the large working area (see below right).



Leister: Dynamic Mask prototype for high-flexible simultaneous laser welding + schematic (fiber laser 1070nm)



Cencorp: Prototype for contour welding, quasi-simultaneous welding, TWIST welding (fiber laser 1070nm)

Both prototypes will be presented at the international trade fair

▶ **[K 2013](#)**

October 16-23, 2013, Düsseldorf, Germany

**Visit the Polybright booth 07 C 03 in hall 7!**

Several new results are also available on the project website:

▶ **[New public Polybright results & highlights](#)**

Feel free to forward this information to any of your colleagues who might be interested. Thanks!  
If you have any questions you can contact us on: [polybright-info@eurtd.com](mailto:polybright-info@eurtd.com)

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