



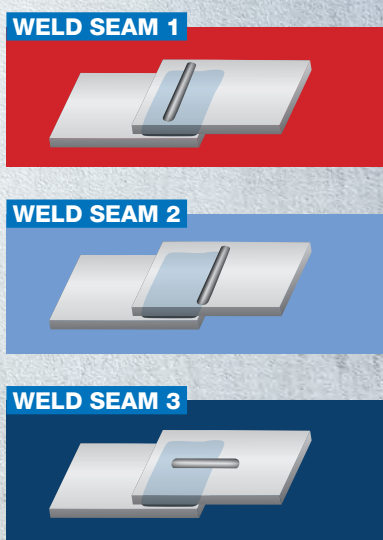
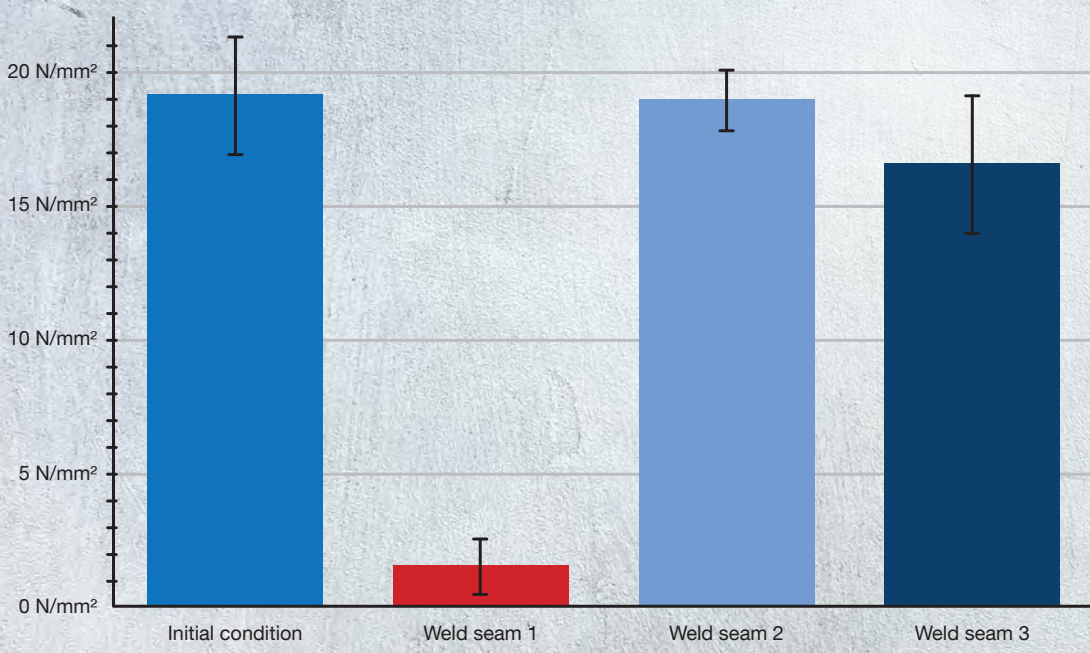
# IT'S POSSIBLE!

**At the Fraunhofer Institute for Manufacturing Technology and Advanced Materials in Bremen (IFAM), samples that had already been bonded were welded as part of a research project. The results were very impressive and open up new possibilities in manufacturing.**

It was long believed that adhesives would inevitably burn when welding was carried out close to the bond. A wealth of practical evidence supports this assumption.

The tests at Fraunhofer IFAM, however, lead to a different conclusion. If an epoxy adhesive with excellent temperature resistance is used, such as Easy-Mix HT 180, welding can be performed near the bond without significantly affecting its strength.

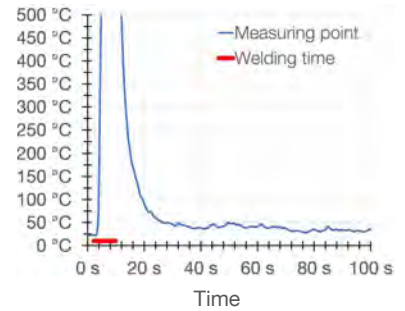
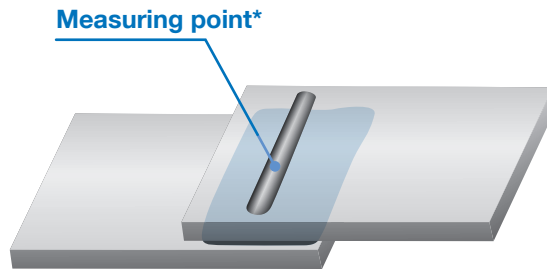
This finding opens up new possibilities for production processes. With WEICON Easy-Mix HT 180, welding operations that would make a component difficult to handle for bonding can be carried out after the bonding process – without reducing the bond's strength.



Average values based on five samples each

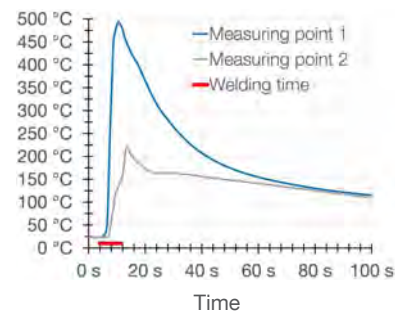
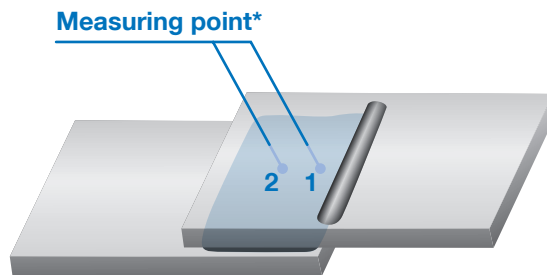
**WELD SEAM 1**

If the weld seam runs directly over the bond and follows its line, the adhesive is exposed to temperatures exceeding 1000 °C. As expected, this exposure destroys the bond, with less than 10 % of the initial strength remaining.



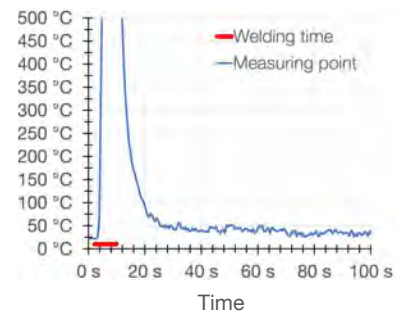
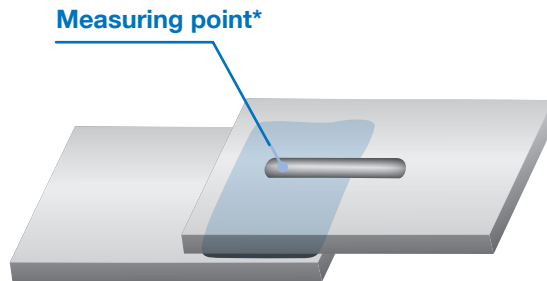
**WELD SEAM 2**

If a weld seam is placed close to the bond, the adhesive is subjected to high temperatures. Thanks to the excellent heat resistance of Easy-Mix HT 180 and the short exposure time, the bond stays entirely intact.



**WELD SEAM 3**

If a weld seam is placed into or through a bond, the bond directly beneath the weld is destroyed as a consequence of the intense heat in that area. Owing to the outstanding temperature resistance of Easy-Mix HT 180 and the short duration of exposure, the bond adjacent to the weld seam remains undamaged and retains about 85 % of its initial strength.



\* Position of measuring point:



**Easy-Mix HT 180**

high temperature resistance | non-drip | impact and shock resistant | suitable for powder coating

WEICON Easy-Mix HT 180 is a two-component epoxy-based adhesive with high temperature resistance up to +180 °C and short-term resistance up to +230 °C. The adhesive is highly viscous, stable and suitable for vertical applications.

It is impact and shock resistant, has a long pot life, cures at room temperature and can be machined after curing.

► 50 ml  
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