

THE INNOVATORS OF THE ELECTRON BEAM



ELECTRON BEAM

FOCUS ON

INNOVATIONS

EN



AEROSPACE INDUSTRIES



E-MOBILITY



RENEWABLE ENERGY



MACHINERY & PLANT ENGINEERING



AEROSPACE

HIGH-TECH SOLUTIONS IN ELECTRON BEAM TECHNOLOGY –
GOOD REASONS FOR STEIGERWALD STRAHLTECHNIK



WITH SUPER-FAST DIGITAL DEFLECTION TECHNOLOGY TO UNIMAGINED MANUFACTURING POSSIBILITIES

Multi-process technique with preheating (1a & 1b), deep welding (2) and cosmetic seam (3)

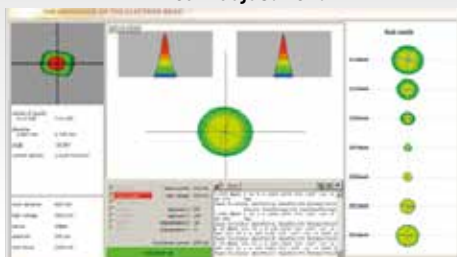


Multi-beam technology



Welding of several seams simultaneously, also with different parameters and deflection patterns

Beam adjustment



The electron beam can be measured very easily and adjusted automatically - even at high beam power

Electron-optical image



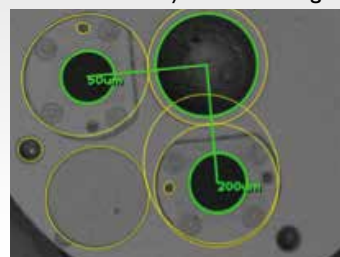
High resolution and contrasting electron-optical images for precise positioning of the weld seam and the observation of the welding process

Engraving



Each workpiece can be individually marked, no matter if it is with a serial number or, for example, a QR code

Part detection / seam tracking



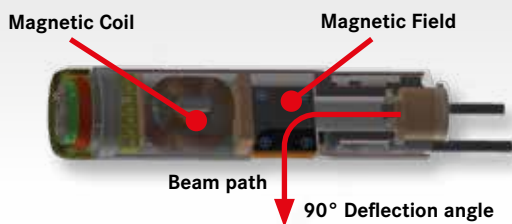
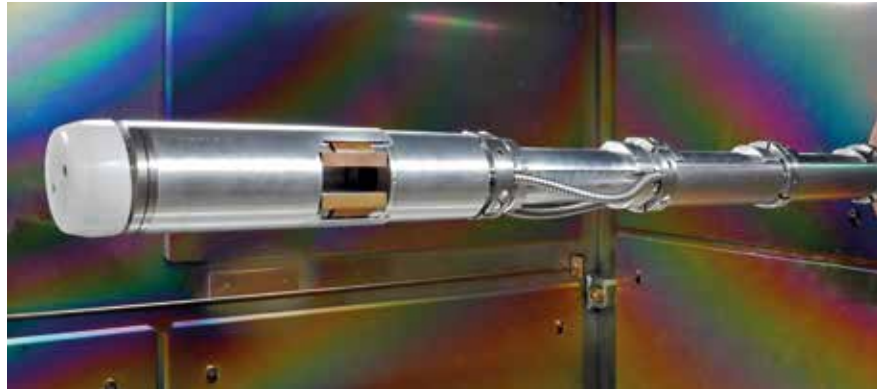
Powerful analysis software enables automatic recognition of the part and its position. The electron beam can then be automatically positioned

SIMPLY WELD ROUND THE CORNER

With EBO Bend Technology, the electron beam will be deflected by 90° by using an electromagnetic coil.

This makes it possible to weld otherwise inaccessible areas or, for example, pipes from the inside instead of the outside.

CERN, the European Organisation for Nuclear Research, uses EBO Bend to weld cavities, the segments of particle accelerators.



EINSIMPLY INGENIOUS:

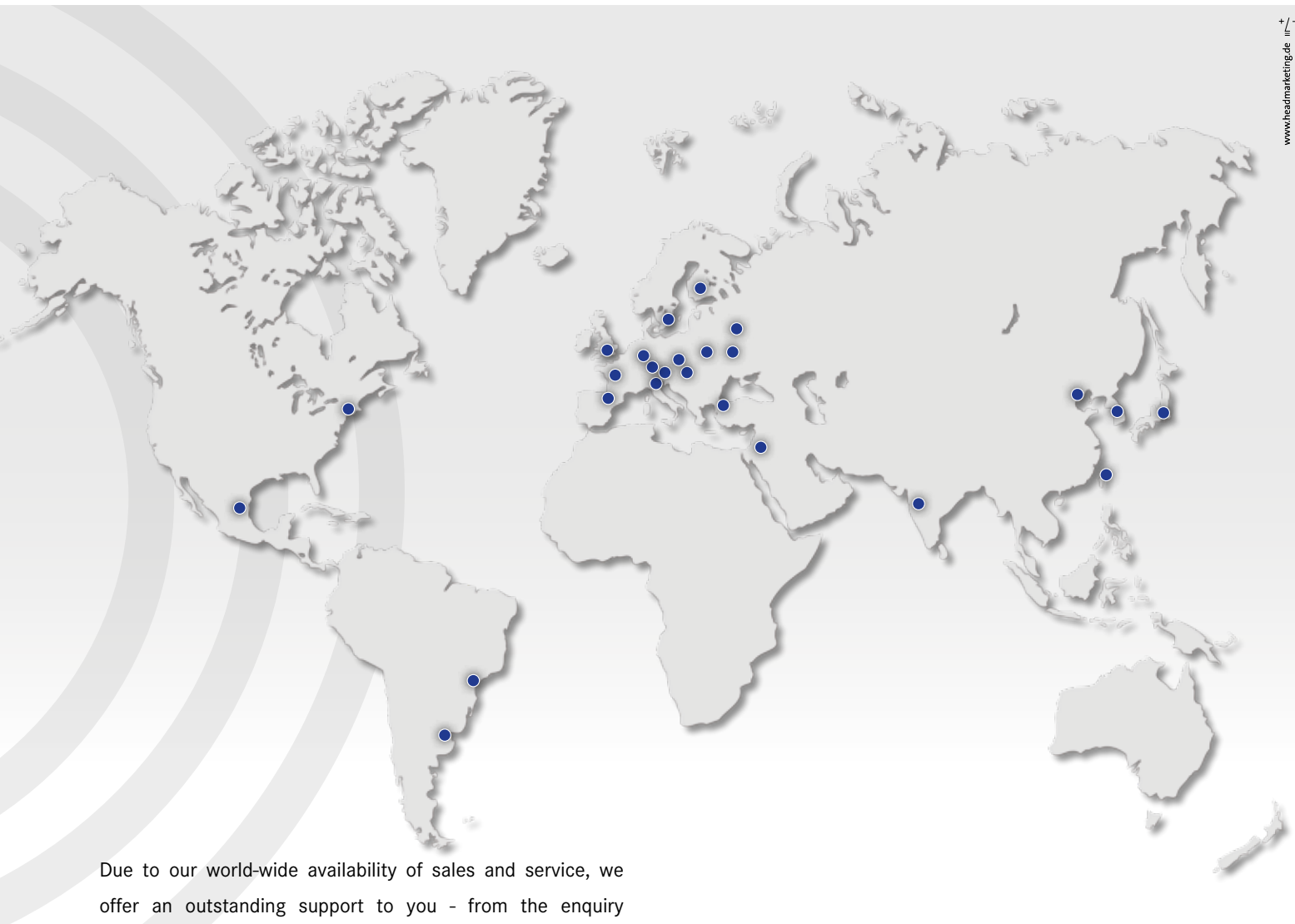
3D METAL PRINTING TECHNIQUES

EBOADD is a technique developed by SST that enables to be produce highly complex metallic workpieces cost-effectively and flexibly in just one process step.

Both processes, **wire and powder printing**, are possible with **EBOADD**.



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