N°1

pro beam

PRO-BEAM GROUP

World-Leading Electron Beam Technology



Standardization strategy electron beam equipment

Uwe Clauß, Sales Manager Aerospace

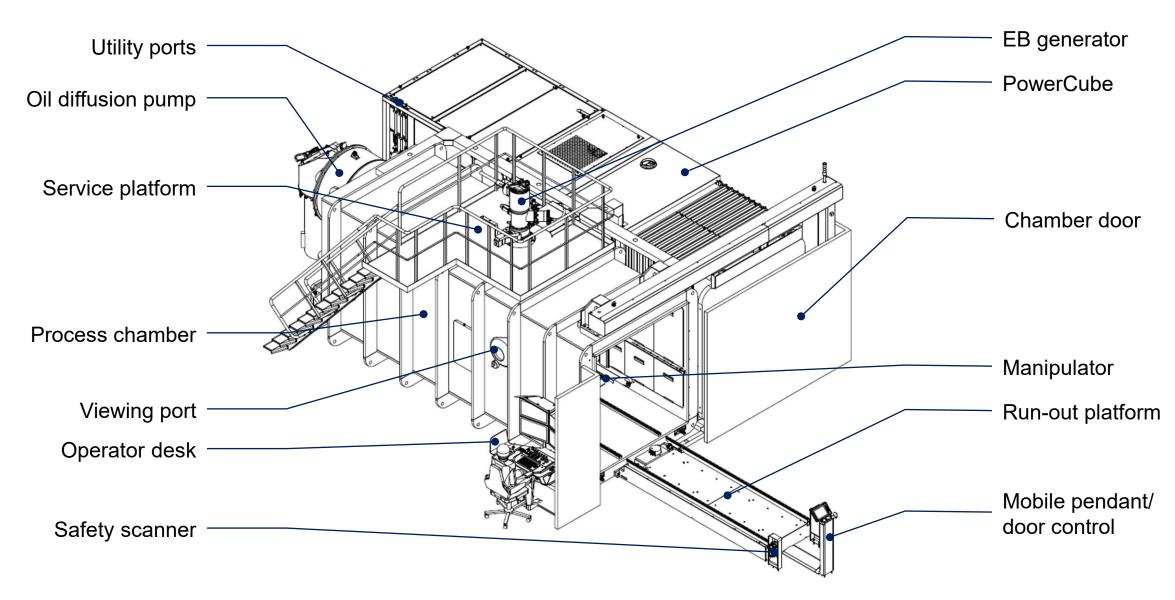
pro-beam systems GmbH September 2025

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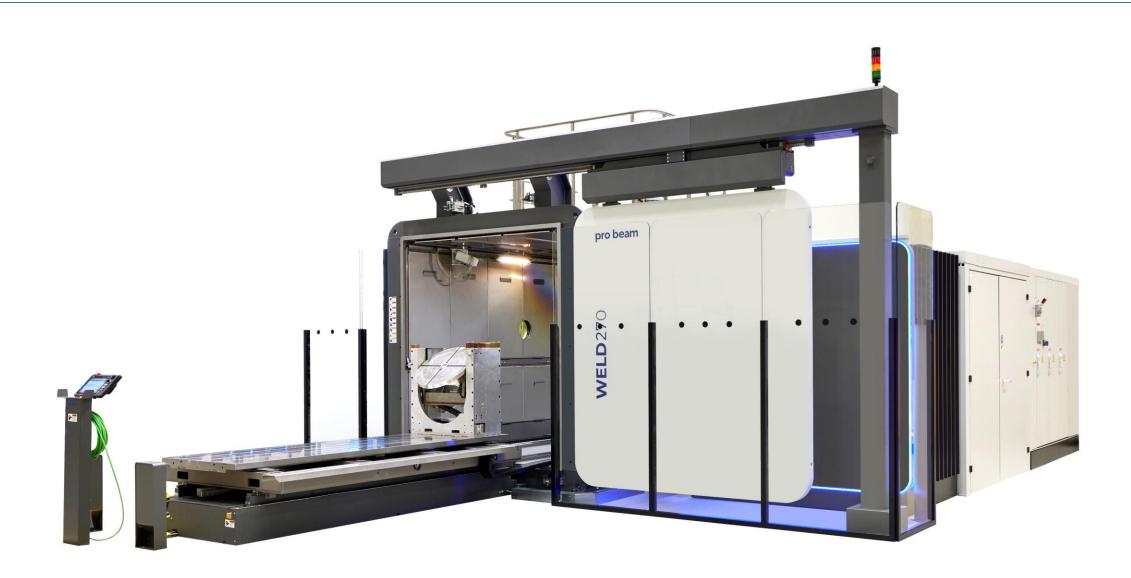
- applying concept used for EB components to EB machines
- reduce lead time of equipment
- reduce cost for material and optimize assembly/ build of equipment to enable competitive pricing
- product improvement with higher dedication to details and market/ customer feedback
- increase functionality and reliability of components (software)
- standardize training and equipment upgrade
- maintaining capability for customization is required

Example: EB welder WELD270

EB welding machine WELD270







EB welding machine WELD270 – PowerCube



Additive EB machines EBM30S and WEBAM100

Additive manufacturing machine type WEBAM100

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operated by pro-beam



EB machine control system

Control Desk



Control Desk pro beam





pro-beam electron beam tools

EB Generator - Technical Features

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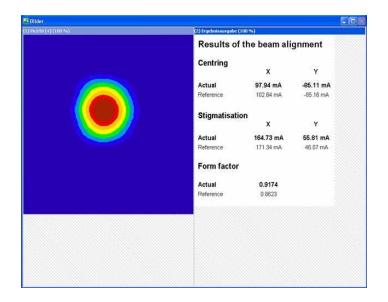
Electron-Optical Monitoring



Benefits:

Reflection free imaging, all areas are accessible, simplified positioning with reduced error rate

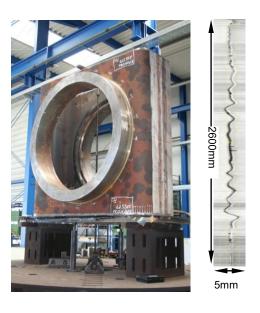
Automatic Beam Alignment



Benefits:

operator independent and optimum setup of the EB machine performance monitoring of the machine condition

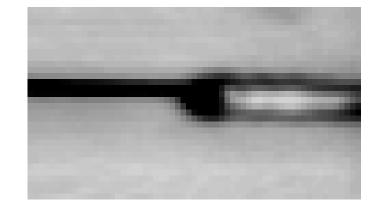
Scanning Like Welding



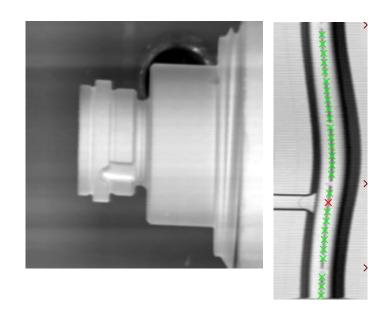
Benefits:

complex or sensitive welds welded at high quality, Reduce risk of scrapping of components (quality welds every time)

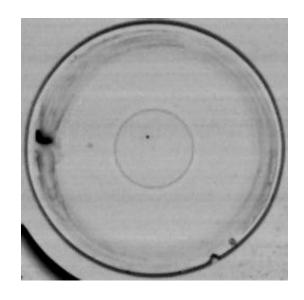
ELO- Online



Automatic Seam Tracking



Post weld inspection



Benefits:

reflexion free imaging, all areas are accessible, simplified positioning with reduced error rate

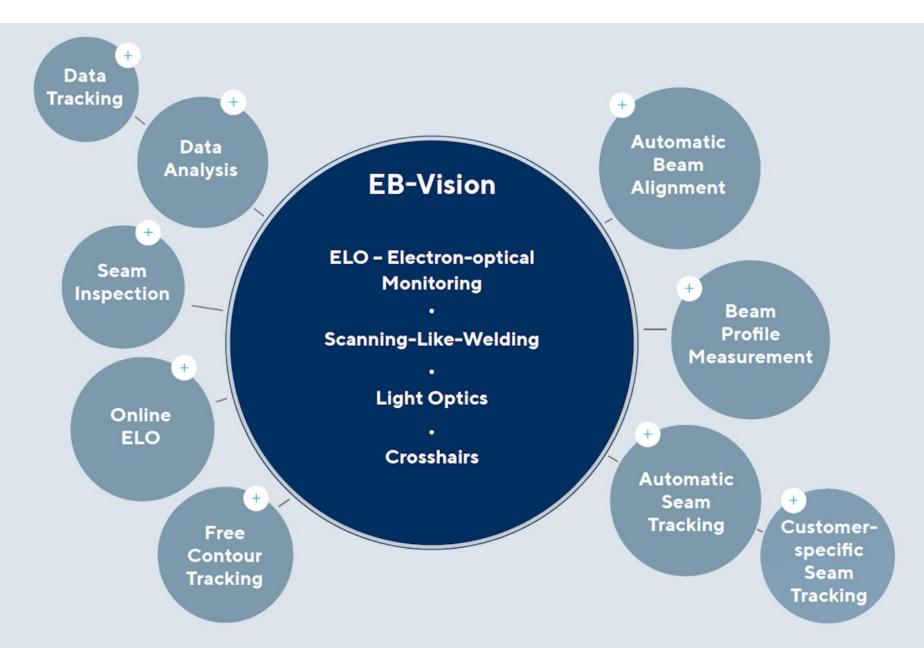
Benefits:

the control system can locate the joint position and guide the beam to the joint, process errors are visible

Benefits:

Evaluation of weld crown for defects and indications

EB vision software pro beam



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