

Laser Portal Equipment and Laser Handwelder



With the hand guided laser system, called „laser handwelder“, portable and flexible solutions for the tool repairing sector can be created.

Especially very large tools or areas which are difficult to access, can be laser welded.

The laser handwelder is connected with a pulsed working Nd:YAG laser by a light conducting cable. Process observation is done with a tft-monitor and the working space is illuminated by high-power light-emitting diodes (led).

A camera is integrated in the laser handwelder for image- acquisition and at the center of the laser beam a reticle appears.

The rotary connection between laser handwelder and light conducting cable prevents transmission of twisting moments towards the optics– in combination with an optionally mountable handhold you'll get a target-orientated and precisely manageable piece of equipment. Status indicators and switches for laserparameter built in the the laser handwelder complete the equipment.



Solid- state laser and outlet of light conducting cable can be installed in a way that one laser operates alternating for multiple working stations. That's why the laser handwelder can be used as an extension of multiaxial operating tool welding unit.



Smaller parts can be handled easily and in general the machining is faster and in higher quality with the motorized system. The work on big tools can be arranged below a portal equipment (look at the picture on the left), very large tools or parts with only small surface defects can be repaired very cost-effective and competitive with the laser handwelder.

The laser handwelder shown on the above pictures, was developed and built after specifications made by LASERVORM GmbH by the institute Laserinstitut Mittelsachsen e.V. (www.laserinstitut-mittelsachsen.de).