



SEAM INSPECTION FOR LASER BRAZING

At a glance

Seam Inspection for safety-relevant components, e.g. on roof seams, rear trunk lids and water channels of vehicles

Challenge

Automated welding and soldering is essential within industrial production for countless industries. Guaranteeing perfect quality through testing of high volume weld seams and an increasing number of variants require 100% error-free processes. Especially for brazed seams by robots, as there are for too few trained employees available for the visual inspection. Also, the requirements are particularly high when the “just-in-time monitoring systems” have to check the seam sections with traces of powder or smoke.

plasmo's solution

Quality inspection plays a key role for repeatable and reliable product quality for metalworking manufacturing. To monitor and optimize laser brazing or laser welding seams, the plasmo profileobserver offers the perfect solution. The system recognizes, captures, analyzes and documents the seams as well as geometry and surface. Depending on the manufacturer, fault types and individual tolerances are defined according to internal and external standards. If the profile reading exceeds the specified tolerances, the profileobserver signals that the corresponding assembly (soldered seam) must go to the rework station and the error is displayed directly on the screen.

APPLICATION seam inspection of roof seams (vehicles)
JOINING PROCESS laser brazing
POSITION inline
PLASMO SOLUTION plasmo profile observer compact
TECHNOLOGY camera based

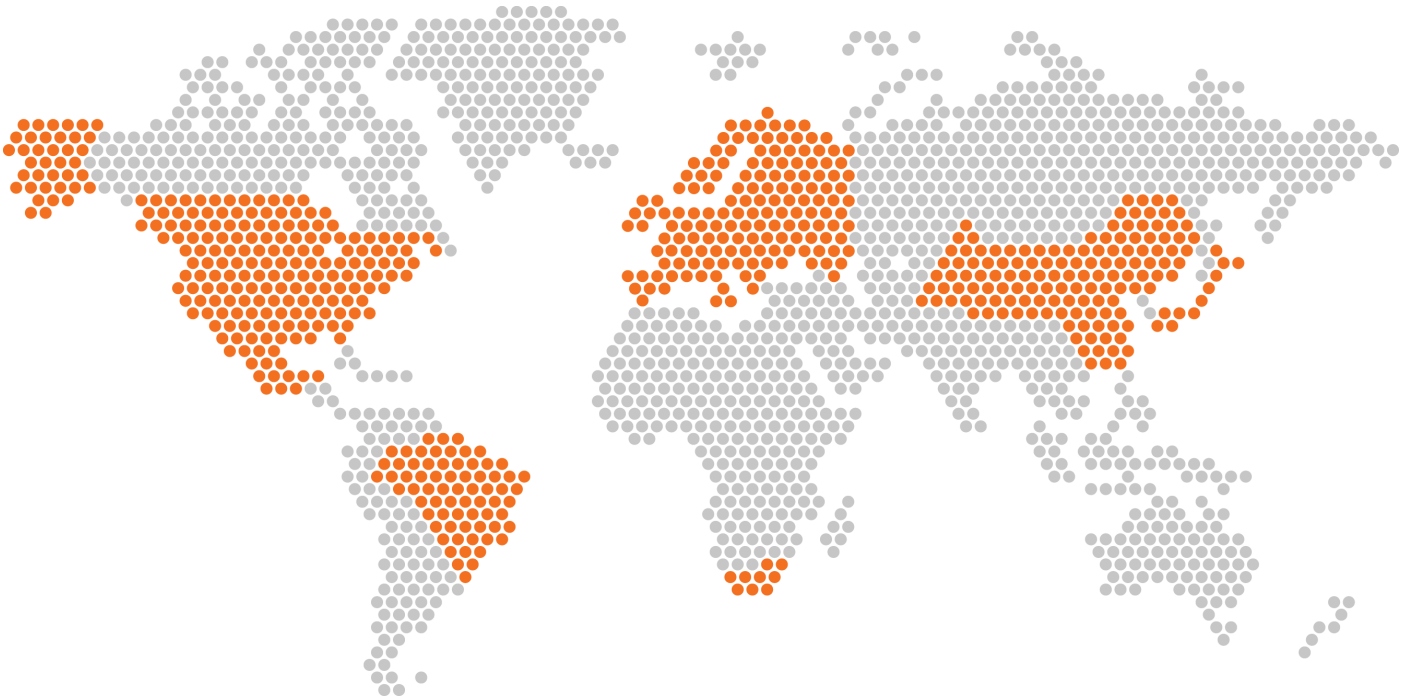
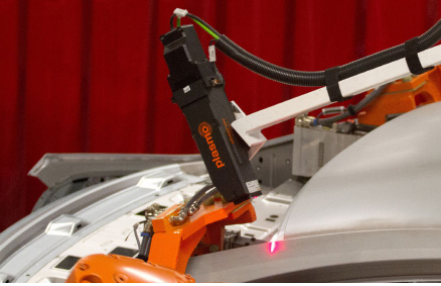
- Immediate result = no lost time or wasted cost
- Non-destructive
- Efficient
- Unproblematic integration into serial processes
- Features for additional evaluations
- Ease of use
- Flexibility
- Low-maintenance





Result - seam inspection

Through the use of an optical seam inspection system, it is possible to detect existing defects in the seam quickly to minimize cost and optimize the production process. This ensures that only parts with perfect quality are in the downstream production process. Also, all results are documented and stored for the further development and optimization of the soldering process while ensuring guaranteed quality assurance at all times.



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