

Seam tracking  
SeamLine Remote

## Right on target



01

**Reduced space  
requirement**

02

**Twice the  
feed rate**

03

**High-precision  
fillet seams**

04

**Integrated process  
monitoring**

01

## Reduced space requirement

When laser welding automotive body parts, SeamLine Remote reduces the number of work stations needed from three to just one: lap and fillet seams can be welded with high precision with the same tool. What's more, the integrated seam geometry measurement replaces the quality assurance step.

02

## Twice the feed rate

The seam tracking sensor detects the joint position during the welding process and regulates the position of the laser beam. This contact-free process allows twice the feed rate of the classic fillet seam process using filler wire. The time-consuming tactile probing of the fillet also becomes obsolete.

03

## High-precision fillet seams

Ever smaller flanges are an important objective in car body construction. They enable vehicles to save weight, and in so doing achieve lower fuel consumption. Small flanges require fillet seam welding, which in turn needs a high-precision targeting of seam points – and that is something that SeamLine Remote is predestined for.

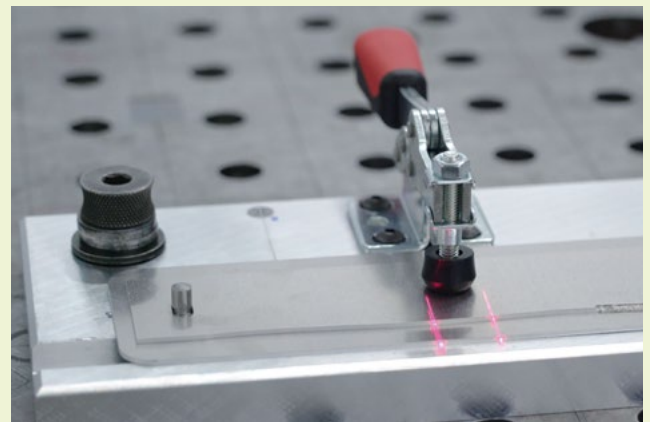
04

## Integrated process monitoring

The seam geometry is measured while welding. If the measured values go outside the limits, this is reported immediately by the system and the process can be corrected in time to restore process quality. The additional quality check software provides an assessment of the entire part quality and offers comprehensive documentation of the measured values.

## Perfect fillet welds using SeamLine Remote seam tracking sensor

The robust TRUMPF seam tracking system for 3D scanners is the ideal tool for the remote laser welding of automotive body parts. The light section measuring procedure is ideal for different surfaces, seam-point edge shapes and scanner welding angles. The laser beam always hits the seam exactly at the required position.



### TRUMPF SeamLine Remote

Available optics	PFO 3D
Available focal length	f = 450 mm
The laser class of linear projectors	Class 3B, $\lambda = 660 \text{ nm}$
Measurement rate	500 Hz
The tracking range of the seam position control	Y $\pm 5 \text{ mm}$ (lateral) Z $\pm 5 \text{ mm}$ (vertical)
The measuring accuracy of seam position control	< 50 $\mu\text{m}$

Subject to alteration. Only specifications in our offer and order confirmation are binding.

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