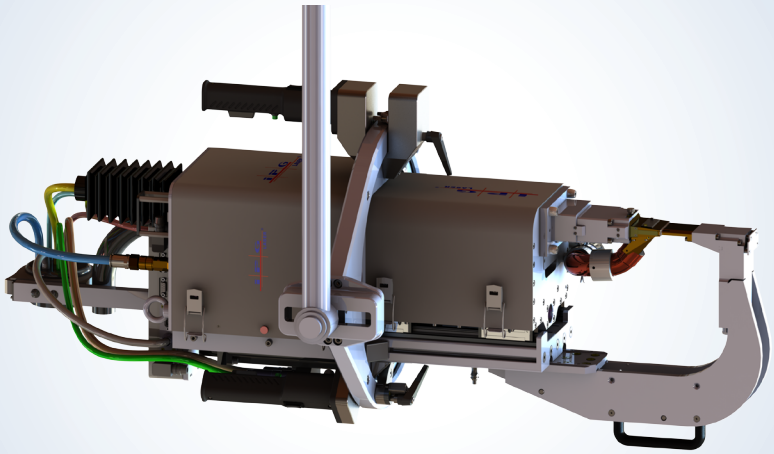
LSS-3
Handheld Laser Seam Stepper



Applications

- Welding of Car Body Parts
- Consistently Reproducible Welds with High Grade Steel or Aluminum
- Reliable Joining of Hot-formed Materials
- Reliable Welding of High Strength Steel
- Joining of Thin, Light-weight Materials
- Increase of Joining Quality and Component Stiffness
- Low Distortion Joining
- Manufacturing of Prototypes, Components in Low Volume Production

Features

- Handheld Manual Operation
- Laser Welding with Simple Clamping Technology
- Power up to 4 kW
- Repeatable Processing with Multi-layer Sheet Joining
- Wall-plug Efficiency >30%
- Smart Welding Option Real Time Welding Quality Control and Data Record of each Welding Seam
- Compact Laser and C-gun Control in a Single Housing
- Class 1 Laser System*

IPG Photonics' LSS-3 Handheld Laser Seam Stepper allows user to make welding seams by hand. It is designed for applications such as prototyping, low volume manufacturing and car body repair with frequently changing requirements requiring manual control. The LSS-3 Seam Stepper combines a clamping and laser welding tool in a compact head with up to 3 kN clamping action and laser output power up to 4 kW. LSS-3 Laser Seam Stepper is typically used as a replacement for resistance spot welding, providing the user with a number of benefits: adjustable clamping force, improved strength and stiffness of workpiece, faster process speed vs resistance spot welding, no expensive laser safety cabinets, significantly reduced flange sizes and minimal clamping efforts. LSS-3 Laser Seam Stepper produces a laser welded seam up to 4 cm in length and can be used on a wide variety of materials.

*Minimum safety distance of 1 meter must be provided by an interlocking guard

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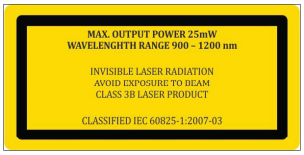
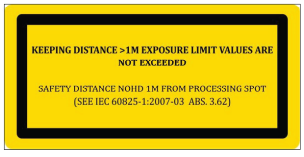
Technical Specifications: C-Gun

Weight, kg	45
Adjustable Clamping Force (Z-hub), kN	0.8-3.0
Opening Width C-gun, mm	130
Welding Seam Length, mm	max. 40
Wobble Amplitude (Wobble), mm	±1
Frequency (Wobble Frequency), Hz	1-25
Welding Speed, mm/s	max. 50
Focal Length, mm	250 or 300
Compressed Air Consumption, l/min	250 (during operation)

Technical Specifications: Laser/ Controller

Weight, kg	400
Wavelength, nm	1070
Mode of Operation	CW/ Modulated
Nominal Output Power, kW	max. 4
Beam Spot Diameter, µm	125, 250, 375, 500
Peak Power Consumption, kW	<14 (without chiller)
Dimensions Controller, L x W x H	806 x 856 x 1517





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rev. 09/14