

# LSS-2 Laser Picker



## **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



#### **Features**

- ► Part Fixturing thru
  One-sided Access
- ▶ Power up to 4 kW
- ► Repeatable Processing with Multi-layer Sheet Joining
- ▶ Reduced Processing Time due to Higher Joining Strength
- Programmable Fixturing with Long-term Repeatability
- ► Higher Component Strength and Rigidity due to Joint Quality
- Compact Laser and Picker Control in a Single Housing



**IPG Photonics' LSS-2 Laser Picker** combines one-sided fixturing action with a laser welding tool (max. 4 kW) and is typically used as a replacement for resistance spot welding. It provides numerous benefits including adjustable part fixturing force up to 1 kN, improved strength and stiffness of workpiece and faster process speed. The LSS-2 Laser Picker can weld a laser wobble seam up to 40 mm in length in half the cycle time of traditional resistance spot welding technology. The LSS-2 Laser Picker can be used on a wide variety of materials and is powerful enough to easily weld even hot-formed materials. The LSS-2 Laser Picker head can be mounted on a vertical stage with one degree of freedom or onto a robot with several degrees of freedom; ideal for processing 3D parts.



# LSS-2 Laser Picker

#### Technical Specifications: Laser Picker

Weight, kg	40
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, I/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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