

LASER SAFETY CERTIFICATE



The laser processing system described hereunder has been classified regarding laser safety according to the stated norms and has been evaluated as described. Measurement techniques and test results are documented in the stated laser safety report.

Laser Safety Report	# 2404254206 GUT
Manufacturer / Distributor	RB Solutions GmbH & Co. KG
Street	Mühlgasse 18-20
Post Code / Town	D – 63683 Ortenberg
Product / System	
Designation	Hand-held welding laser workstation
Test unit S/N	none
Intended use	Welding metal materials by hand in a protective enclosure
Laser source(s)	
Manufacturer	IPG Laser GmbH & Co. KG, 57299 Burbach, Germany
Model & S/N	LightWELD XR LWXR42402061
Lasertype / Wavelength	Fibre laser λ 1.070 nm
Op. mode / Power	CW / PULSE P_{max} 2.500 W
Norms / Regulations	
ISO IEC EN	IEC 60825-1:2014 // EN 60825-1:2022 // EN 60825-4:2011
FDA ANSI	J.
EU Optic Radiation Safety	EU directive 2006/25/EC // OStrV 2017-10
EU Machine Directive	EU directive 2006/42/EC

Classification	Normal operation Operator	Set up / Maintenance Operator	Service / Repair Manufacturer
Operating mode / Condition			
Applies to	4	4	4
Fulfils the accessible exposure limits (AEL) of laser class	T3	T3	N/A
Test class	only with PSE	only with PSE	only with PSE
Eye safety confirmed (inside the cabin)	YES	YES	YES
Eye safety confirmed (outside the cabin)	YES	YES	YES
Laser safety officer	YES	YES	YES
Laser safety goggles	YES	YES	YES
EU Directive 2006/42/EC § 1.5.12	YES	YES	N/A

Our experts' report confirms that the accessible exposure limits (AEL) of the stated laser classes comply with the specified audit classes for the three operating conditions as described above.

The optical radiation safety for the operator while operating the laser system in the intended operating modes as described above, in accordance with the instructions of the system manufacturer, referred to the original delivery status, was considered. All operation modes available for the operator fulfil the requirements as per § 1.5.12 of the EU machine directive (EU directive 2006/42/EC). The expert only made a risk analysis regarding laser protection; electrical and / or mechanical hazards were not part of this review.

Darmstadt, 30th of July 2024

Prof. Klaus R. Goebel

Publicly appointed and certified expert
for laser technology by the Darmstadt Chamber
of Industry and Commerce