

ALFlak MAX

AN ESPECIALLY LONG REACH

With a laser arm almost 2.80 m long, the ALFlak MAX offers an especially large movement radius– as a service provider or mold maker, this gives you even more flexibility for your applications. Whether working on pressing tools, large molds or machine components, just move the ALFlak MAX on its self-propelled caterpillar track to the workpiece, aim the laser arm at the weld, and start welding. Welding seams up to 340 mm are possible without relocation.

A rotatable laser head, the unique optional turn and tilt objective, and various focusing lenses ensure that you can reach almost any position on the workpiece with the laser beam. The ALFlak MAX comes in two versions: with a self-propelled caterpillar track or a model that can be moved manually.

The User Coordinate Controller offers additional ease of use for effortlessly teaching in a slope as a work surface.



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Technical data

| | ALFlak MAX 250 | ALFlak MAX 300 |
|-----------------------------|--|-----------------|
| LASER | | |
| Laser type/wave length | Nd:YAG, 1064 nm | Nd:YAG, 1064 nm |
| Average power | 250 W | 300 W |
| Peak pulse power | 9 kW | 9 kW |
| Pulse energy | 90 J | 90 J |
| Pulse duration | 0.5-20 ms | |
| Pulse frequency | Single pulse - 100 Hz | |
| Operating mode | Pulsed | |
| Welding spot Ø | 0.2-2.0 mm | |
| Focusing objective | 150 mm, further according to lens data sheet | |
| Pulse shaping | Adjustability of power curve within a laser pulse | |
| Display and operation | Display with membrane keyboard. Laser parameters can also be set using a multifunctional footswitch, WINLaserNC software through external PC | |
| OBSERVATION LENS | Leica microscope attachment with eyepieces for glasses wearers 10 ×, optional 16 ×. | |
| WORK AREA | | |
| Movement speed | 0-25 mm/s | |
| Movement range (X, Y, Z) | 320 × 330 × 370 mm | |
| Lowest working point | 510 mm | |
| Highest working point | 1870 mm | |
| Arm deflection | 2700 mm | |
| EXTERNAL DIMENSIONS | | |
| W × D × H | 1200 × 1200 × 1300 mm | |
| Weight | with caterpillar track approx. 910 kg, without caterpillar track approx. | |
| EXTERNAL CONNECTIONS | | |
| Electrical connection | 3 × 400 V / 50-60 Hz / 3 × 16 A / 16 A | |
| External cooling | Prepared | Prepared |
| OPTIONS | Turn and tilt objective Rotary axis module with chuck, tiltable, for horizontal to vertical rotation Camera system for demonstrating and observing the welding process Ergo wedge | |