

IPG Photonics Launches LightWELD® 2000 XR

Higher Power Enables Faster Speeds and Greater Productivity

MARLBOROUGH, Mass., May 23, 2024 (GLOBE NEWSWIRE) -- IPG Photonics (NASDAQ: IPGP), the world leader in fiber laser technology, today announced the launch of LightWELD 2000 XR, the fourth product offering within its handheld laser welding and cleaning product line. Fabricators will benefit from the increased processing speed and extended range of material thicknesses that LightWELD 2000 XR offers.

More Power, More Productivity

LightWELD 2000 XR is the new, superior version to the existing LightWELD 1500 XR handheld laser welder and cleaner released in 2022. The LightWELD 2000 XR offers 2 kilowatts of laser power, over 30% more than its predecessor. This extra power increases processing speeds and extends the range of welding capability up to zero-gauge 0.315" (8mm) for steels and aluminum 3 & 5 series, up to 0.275" (7 mm) for titanium and nickel alloys, and up to 0.120" (3mm) for copper. Built-in presets for welding and cleaning have been updated and optimized, enabling operators to get up and running quickly to make quality welds across the entire material range.

The LightWELD XR series produces a smaller laser spot size than the original LightWELD 1500 or the LightWELD 1500 XC, and delivers more than 6X the energy density. This increase in energy density makes welding penetration of thicker materials easier, faster, and deeper, offers more finesse on thin material, and creates a wider process window on difficult to weld materials such as copper and titanium. Additionally, this smaller spot size minimizes the heat-affected zone, which further reduces distortion or deformation of the surrounding surface area.

More Speed, More Capability

Compared with previous LightWELD models, the LightWELD 2000 XR offers increased welding speeds without any sacrifices to quality. Until today, LightWELD was already up to 4X faster than TIG welding; the new LightWELD 2000 XR brings even more speed gains which proportionately increase overall fabrication productivity and throughput.

LightWELD 2000 XR has been designed to expand the cleaning capabilities to cover these new material thicknesses with built-in preset cleaning modes. Pre-weld cleaning removes grease, oils, rust, and excessive oxide coatings from the area to be welded. Post-weld cleaning removes soot, weld-related debris, and any discoloration at the seam.

"We designed LightWELD 2000 XR to address the need for fabricators to weld thicker and deeper across the entire range of material capability, while maintaining industry leading safety standards that LightWELD is known for," said Daniel Earley, LightWELD Product Manager. "This model also provides incredible speed benefits as compared with the current LightWELD 1500 XR, which is perfect for jobs requiring longer welds on typically thinner materials. Traditional welders couldn't believe the incredible speed and quality of the original LightWELD versus traditional methods, now with the new LightWELD 2000 XR, both the increase in speed and power enables welders to produce wider welds and maximize productivity in the shop."

This new LightWELD product is fully compatible with the LightWELD Cobot System which makes automating welding jobs easy for fabricators regardless of experience with collaborative robots or laser processing. Welders are able to teach the cobot with manual guidance in just minutes and control all system functionality from a single graphical user interface which requires no coding knowledge. Combined with LightWELD 2000 XR, fabricators can take advantage of a turnkey cutting-edge laser welding and cleaning system that provides unmatched capabilities from a single vendor.

LightWELD 2000 XR, all other LightWELD models and the LightWELD Cobot System are proudly made in the USA and are available direct from IPG and laser equipment distributors. For more information, visit www.LightWELD.com

About IPG Photonics

IPG Photonics Corporation is the leader in high-power fiber lasers and amplifiers used primarily in materials processing and other diverse applications. The company's mission is to make its fiber laser technology the tool of choice in mass production. IPG accomplishes this mission by delivering superior performance, reliability and usability at a lower total cost of ownership compared with other types of lasers and non-laser tools, allowing end users to increase productivity and decrease costs. IPG is headquartered in Marlborough, Massachusetts and has more than 30 facilities worldwide.