

An Industry First: Laser Photonics Develops Laser Characteristics Standards

ORLANDO, FL / ACCESSWIRE / June 30, 2021 / Internationally recognized manufacturer of industrial laser equipment, Laser Photonics Corp (LP) announced today that it has developed a laser characteristics matching system that sets standards for measuring the performance of industrial laser materials processing equipment. This industry first is designed to take the mystery out of choosing the right laser to achieve desired results in industrial materials processing.

Laser Blaster™ Matching Chart

LASER PHOTONICS Gauge Number	Roughing			Conditioning				Finishing			Industry
	1/4" to 3" plate	4g to 10g sheet		11g to 15g sheet				20g to 30g sheet			
Grit (sandpaper)	#40	#50	#60	#100	#120	#150	#220	#320	#600	#2000	Maintenance Shops
CAMI (media Abrasive blasting)	24	30	40	50	60	70	80	100	150	200	Sand Blasting
DPI	72dpi to 150dpi			200dpi to 300dpi				600dpi to 1200dpi			Sign Making
LPI	35lpi to 65lpi			85lpi to 120lpi				133lpi to 200lpi			Printing
Laser Grade	1	2	3	4	5	6	7	8	9	10	
Strip rate in ft² per hour*	480ft²	240ft²	120ft²	X	X	60ft²	36ft²	24ft²	12ft²	6ft²	
Laser Blaster™ Model	LPC-4000CTH	LPC-2000CTH	LPC-1000CTH	X	X	LPC-500CTH	LPC-300CTH	LPC-200CTH	LPC-100CTH	LPC-50CTH	

* Strip rate in ft² per hour is calculated as follows: 2 X (laser power in kW) / (coating thickness in mils, where one mil = .001), X 60 minutes. Source: Robotic Laser Coating Removal System ESTCP Project WP-0536 apps.dtic.mil

X - Not available yet

Sandpaper and abrasives blasting media are graded by grit size, sheet metal is measure by gauge, desktop printers are categorized by DPI, and the printing industry uses LPI to determine the resolution of printed publications. Now that industrial lasers are increasingly replacing hazardous legacy materials surface preparation and industrial cleaning methods, the laser photonics industry as a whole has recognized the need for a grading standard to apply to lasers.

Without a standard, buyers have typically relied on the stated wattage of systems listed on manufacturers' product labels to a system's ability to achieve desired results. But since not all lasers are created equal, this can be a costly mistake. Systems billed as laser cleaning equipment are built with vastly different technologies and internal components, ranging from inefficient and shorter-lived decades-old resonator based lasers, to highly efficient state-of-the-art fiber lasers. Incorporated optics

and software controllers also make a huge difference in the efficacy of a laser system. So, depending on which components are used in the construction of industrial laser equipment, one manufacturer's laser rated at a lower wattage may actually be more efficient and have a higher throughput-or strip rate-than a competitor's product rated at a 1000W.

So, to take the guesswork out of determining which laser system might right for a particular job, LP published an easily relatable comparison table that gives end-users from different industries a visual overlay of laser grades and the legacy industry standards that those end-users are accustomed to working with. The simple to use Laser Blaster™ Matching Chart grades lasers on a scale from 1 through 10, with 1 yielding the roughest finish, and 10 achieving the finest finishes. So by seeing where a particular grade of laser lines up with the correct gauge of steel, sandpaper grit, or CAMI rating for blasting media, one can immediately know which laser is right for the job.

Largely because of health, safety and environmental concerns, industry is under pressure to abandon legacy materials processing methods. Industrial laser systems have proven to be the clean, safe, and efficient alternative, but without clear guidance by way of a standard, adoption of the new technology has been hampered by need to take a slow and costly trial and error approach. In recognition that industry relies on standards to ensure consistency and repeatability, and in the absence any such standard for laser cleaning applications, LP took the initiative. By applying its industrial laser equipment manufacturing experience and expertise it delivered a simple, practical tool to aid anyone seeking to understand which laser to employ to achieve their desired materials processing results using laser.

The laser photonics industry has kicked this idea around for some time, but it was industrial laser pioneer LP that delivered a tool that industry can use today. That should come as no surprise. LP has developed the broadest range of industrial laser equipment available, including their CleanTech™ line, which runs the gamut from lasers that can delicately clean contaminants from sensitive materials with finesse, to the world's most powerful handheld Laser Blasting™ systems capable of vaporizing the rust from a battleship.

LP delivers an impressive stable of products thanks to a dedicated team of experienced laser physicists, design engineers, software developers, assemblers, and sales & marketing professionals all working under one roof in Orlando, Florida in the only U.S based industrial laser equipment R&D and manufacturing facility.

Contact:

Wayne Tupuola
Acting Chief Financial Officer
(407) 477-5624, extension 1007

Mark Kouri
Laser Photonics Director Investor Relations
(407) 477-5624, extension 1002

SOURCE: Laser Photonics Corp.