

Precision, Quality & Efficiency
With Flexibility

**SHRI BHAGWATI MACHINES
PVT. LTD.**

— LASER CUTTING TECHNOLOGY —

EX SERIES

THE EX SERIES of laser cutting machines are designed to provide high-quality cutting solutions while being cost-effective. These machines are equipped to deliver precision and accuracy in cutting a wide range of materials. The Economical series machines are equipped with laser sources, ranging from 500W to 3000W, to ensure efficient and fast cutting. The Economical series machines are designed with user-friendly interfaces, making them easy to operate. The machines come with software that provides a range of cutting options, including automatic nesting, which maximizes material usage and reduces waste. The economical series machines are ideal for small and medium-sized businesses requiring efficient and cost-effective cutting solutions. With their user-friendly interfaces, and safety features, these machines provide a reliable cutting solution for a wide range of materials.



EX-2515	EX-3015	EX-4020
WORKING AREA IN (L X W) MM 2500 X 1500 1 KW to 1.5 KW	WORKING AREA IN (L X W) MM 3000 X 1500 1 KW to 2 KW	WORKING AREA IN (L X W) MM 4000 X 2000 1 KW to 3 KW

MX SERIES

THE MX SERIES of laser cutting machines with dual pallet system is a state-of-the-art, highly efficient, and reliable laser cutting solution designed for industrial applications. The machine is equipped with advanced fibre laser technology, including a high-power laser source, precise cutting head, and intelligent control system, which ensures high-quality cutting performance and accuracy. In summary, the MX series of laser cutting machines with dual pallet system is a highly advanced and reliable cutting solution that offers high-quality cutting performance and accuracy. The machine is designed to maximize productivity, reduce downtime, and simplify operation and maintenance, making it an ideal choice for industrial applications.



MX-3015	MX-4020	MX-6020
WORKING AREA IN (L X W) MM 3000 X 1500 1 KW to 2 KW	WORKING AREA IN (L X W) MM 4000 X 2000 1 KW to 6 KW	WORKING AREA IN (L X W) MM 6000 X 2000 1 KW to 6 KW
MX-8020	MX-10020	MX-12020
WORKING AREA IN (L X W) MM 8000 X 2000 1 KW to 6 KW	WORKING AREA IN (L X W) MM 10000 X 2000 1 KW to 6 KW	WORKING AREA IN (L X W) MM 12000 X 2000 1 KW to 6 KW

SX SERIES

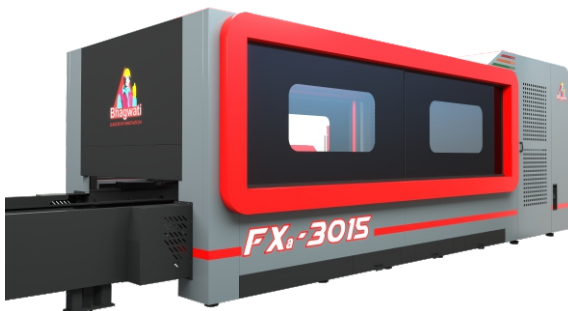
THE SX SERIES of laser cutting machines with single and dual pallet systems are reliable, versatile, and efficient solutions for precision cutting in a wide range of manufacturing applications. The Smart series of laser cutting machines is a versatile and reliable solution for precision cutting of a wide range of materials. These machines are available with both single and dual pallet systems, offering flexibility and efficiency for various manufacturing applications. The Smart series machines are built with high-quality components and advanced technology to ensure accuracy, speed, durability, and cutting of even the most intricate designs. In addition to precision cutting, the Smart series machines offer several advanced features that enhance their efficiency and ease of use. These features include automatic nozzle cleaning, material sensing, and collision detection, ensuring that the machine runs smoothly and safely at all times.



SX-6020	SX-6020-D	SX-8520	SX-8520-D
WORKING AREA IN (L X W) MM 6000 X 2000 2 KW to 6 KW	WORKING AREA IN (L X W) MM 6000 X 2000 X 2 3 KW to 12 KW	WORKING AREA IN (L X W) MM 8500 X 2000 2 KW to 6 KW	WORKING AREA IN (L X W) MM 8500 X 2000 X 2 3 KW to 12 KW
SX-12020	SX-12020D	SX-12025	SX-12025-D
WORKING AREA IN (L X W) MM 12000 X 2000 3 KW to 12 KW	WORKING AREA IN (L X W) MM 12000 X 2500 X 2 3 KW to 12 KW	WORKING AREA IN (L X W) MM 12000 X 2500 3 KW to 12 KW	WORKING AREA IN (L X W) MM 12000 X 2500 X 2 3 KW to 12 KW

FX SERIES

THE FX SERIES of laser cutting machines with both single and dual pallet systems are state-of-the-art machines designed for precision cutting of various materials. These machines are equipped with the latest technology and are capable of cutting various materials with extreme precision and speed. The machine is housed in a fully covered body, providing a safe and clean environment for the operator. The machine is built using high-quality materials, ensuring durability and longevity. The machine is designed to operate at high speeds with minimal noise, making it suitable for use in various sensitive industrial settings. In conclusion, the Fully Loaded series of laser cutting machines with both single and dual pallet systems in a fully covered body is an excellent choice for precision cutting in various industrial settings. With its advanced features, high-speed operation, and user-friendly interface, this machine is a must-have for any production facility.



FX-3015	FX-4015	FX-10020
WORKING AREA IN (L X W) MM 3000 X 1500 X 2 3 KW to 12 KW	WORKING AREA IN (L X W) MM 4000 X 1500 X 2 3 KW to 12 KW	WORKING AREA IN (L X W) MM 10000 X 2000 X 2 4 KW to 20 KW
FX-6020	FX-8520	FX-12020
WORKING AREA IN (L X W) MM 6000 X 2000 X 2 4 KW to 20 KW	WORKING AREA IN (L X W) MM MM 8500 X 2000 X 2 4 KW to 20 KW	WORKING AREA IN (L X W) MM 12000 X 2000 X 2 4 KW to 20 KW

PX SERIES

PX LASER CUTTING MACHINES are powerful tools designed to accurately cut pipes of various sizes and shapes. These machines utilize laser technology to produce clean, precise cuts on a wide range of materials, commonly used in industrial and manufacturing applications. It is designed to cut pipes of up to a diameter of 20 mm to 220 mm and length and is typically equipped with a high-powered laser beam, a precision cutting head, and a computerized control system that allows for precise cutting. Overall, pipe cutting laser cutting machines are powerful tools that are ideal for a variety of industrial and manufacturing applications. Whether used as a standalone unit or as an attachment to an existing laser cutting machine, they offer unparalleled precision, speed, and efficiency in pipe cutting operations.



PX-6000	PX-9000	PX-6000A	PX-9000A
WORKING AREA IN (D X L) MM 025 to 0220 X 6000 1 KW to 3 KW	WORKING AREA IN (D X L) MM 025 to 0330 X 9000 1 KW to 3 KW	WORKING AREA IN (D X L) MM 025 to 0220 X 6000 1 KW to 3 KW	WORKING AREA IN (D X L) MM 025 to 0330 X 9000 1 KW to 3 KW

ABOUT LASER TECHNOLOGY

LASERS have been around for a long time but their use in commercial applications is quite recent. High performance fibre lasers are now well-established as an extremely robust and reliable technology enabling a growing and diverse number of demanding industrial applications. Fibre lasers have been very successful in enabling new applications, which is explained by their increasing market share.

Fibre Laser Applications Due to the wide range of possible power outputs, fibre lasers are effectively used in many different applications. Some of these are:

Laser Marking

01

Generally, ytterbium-doped fibre lasers with an emission wavelength of 1064 nm are considered perfect for laser marking applications. These lasers can mark plastic and metals with permanent, high-contrast marks. Fiber laser equipment can be used for annealing, etching, and engraving too.

Laser Cleaning

02

Fiber lasers can effectively clean metal surfaces of paint, oxide, rust, etc. This process is known as laser cleaning. The process can be automated and customized for different production line parameters.

Laser Welding

03

Fiber laser welding is one of the most promising upcoming technologies that is gaining market share fast due to the various benefits the process offers. Laser welding provides faster speeds, greater precision, lower deformation, higher quality, and efficiency compared to traditional methods.

Laser Cutting

04

Laser cutting is one of the most researched areas of fiber laser application. It can handle complex cuts with impressive edge quality. This makes it optimal for parts with close tolerances. Its adoption is increasing across the board with fabricators due to its long list of benefits.

FIBER LASER CUTTING BENEFITS

Compared to other laser types, a fiber laser has several characteristics which make it ideal for wider commercial use. We have divided these benefits into four categories:

Process Benefits

Greater stability High efficiency Superb beam quality Easy integration Non-contact process Faster speeds (though, CO2 lasers cut faster in a straight line) Safer as the beam is absorbed more readily preventing reflection damage

Cost Benefits

More cost-effective in the long run High energy efficiency (~75%, the number for CO2 lasers is ~20%) Reduced wastage Reduced power usage Reduced operator redundancy Low operating cost

Equipment Benefits

Scalability Versatility across industries More compact with a smaller footprint Long service life No periodic mirror realignment Reduced set-up and downtime Eliminated tooling charges

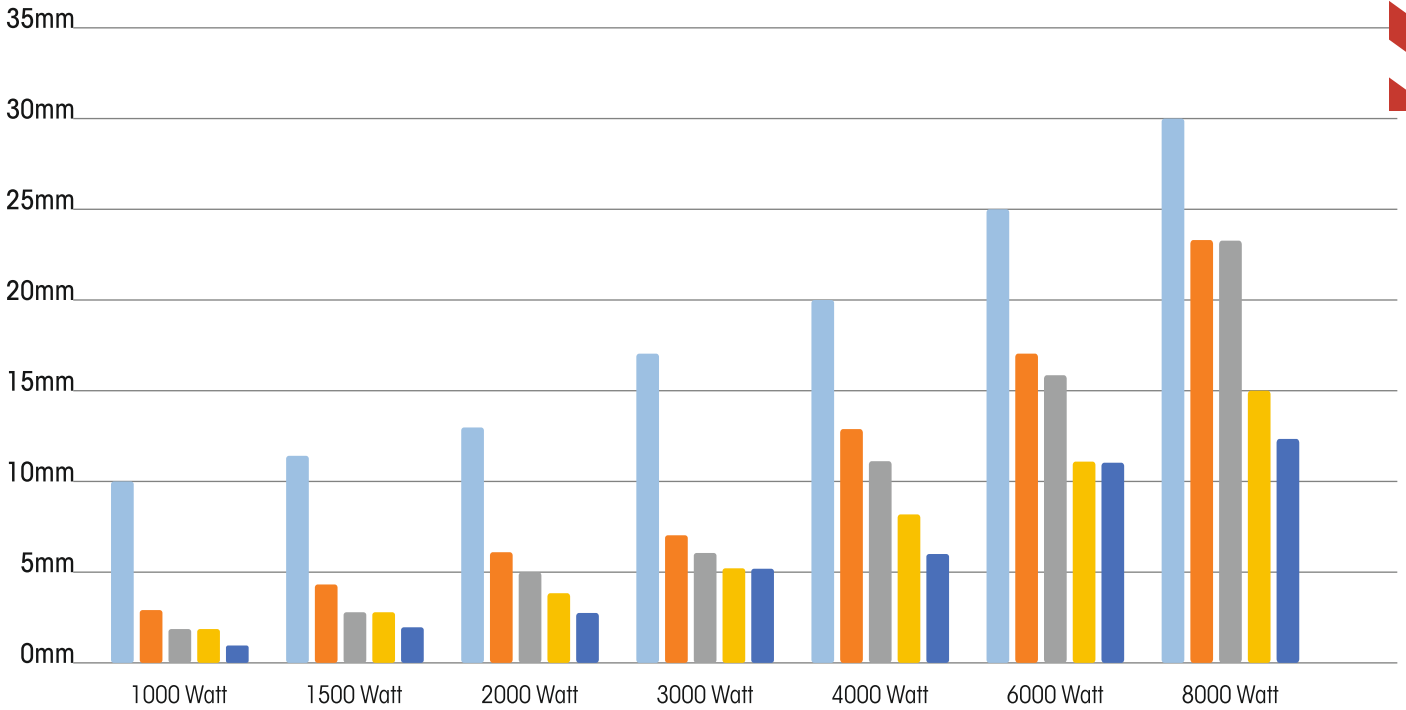
Part quality Benefits

Less heat damage to details Material Diversity Better edge quality Lower residual Stresses Reduced part contamination



SHEET THICKNESS VS LASER SOURCE

SHEET THICKNESS



GLOBAL PRESENCE



DUBAI



SAUDI ARABIA



SRI LANKA



ALGERIA



EGYPT



UZBEKISTAN



NEPAL



BANGLADESH



ETHIOPIA



ADDRESS

+91 9145962323

pranit@bhagwatimachines.com

Info.cranes@bhagwatimachines.com

HEAD OFFICE (AJMER)

178, 179, 179-A, RIICO Industrial Area Extn,
Parbatpura-Makhapura, AJMER (Raj)

DELHI OFFICE

YC CO-WORKING SPACE 4TH FLOOR, PLOT NO-94 SEC-13,
NEAR RADISSON BL NEW DELHI-110078

PUNE (MAHARASHTRA)

Shop No.- 104, Westwood Estate, 235/2A,
Chhatrapati Chowk, Kaspte Vasti, Wakad, Pune-57

BENGALURU (KARNATAKA)

1F, Maa Tara Apartments, 4th Floor Srirampura,
Bommasandra, Jigni Road Bengaluru (Karnataka)

PALANPUR (GUJRAT)

District Banaskantha,
Palanpur (Gujarat)

KARIMNAGAR (TELANGANA)

Shree Niwasa Complex, Kazipur Road,
Bahupet, Karimnagar (Telangana)

SRIKAKULAM (ANDHRA PRADESH)

H. No 4-12, Sai Nagar, Narasannapeta,
Srikakulam (Andhra Pradesh)

KISHANGARH (RAJASTHAN)

Studio Flat No. C-1, 3rd Floor, Ganpati Square,
RIICO Industrial Area Madanganj-Kishangarh (Raj)

+91 9145962323, 9773352023, | info@bhagwatimachines.com | bhagwatimachines.com