

XP Fibre Laser Cutting Machine & Loading System

The Morgan Rushworth XP CNC fibre laser cutting machine is available in a compact footprint, with a bed size of 1.5m x 3m, with M-Lase power sources ranging from 3kW through to 12kW.

All XP models are supplied with an automatic transfer table, allowing the operator to easily load and unload the material while cutting continues. Paired with a loading system, this improves the efficiency of the XP laser even further.

Simply load a pallet of material onto the loader, and the suction lifter will transfer raw material and cut parts for you.



FEATURES AND BENEFITS



**1.5m
Bed Widths**



**3m
Bed Lengths**



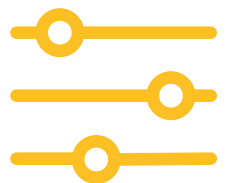
**Up to 12kW
Laser Power**



**1.2G
Acceleration**



**M-Nest
Software**



**Integrated
CNC Controller**

New CNC Laser BUS Control System

Use the latest highest-end bus type dedicated CNC laser cutting control system. It is divided into 7 modules, which are making plan, production, debugging, technology, diagnosis, maintenance, setting etc, aiming at providing modular, personalised, automated, informed solutions. It can be smart compatible to the MESS data management system to achieve industry 4.0.



Touch screen operation: high-end touch operation interface

Visual material reproduction: visual recognising device focus on the position of the plate to realize super-efficient recycling of surplus material

Intelligent anti-collision protection: dual-drive balance real time calibration, air moving obstacle avoidance, biometric collision avoidance, etc

Convenient functions: provide one key cut off, automatic edge finding, automatic calibration, intelligent focus test, air pressure calibration, etc

Various perforation processes: non-inductive perforation, lightning perforation, multi-level perforation, lead strategy, perforation slag removal, etc

High quality cutting: fly cutting, air cutting, bright surface cutting, smart leapfrog, etc

BLT 6 Series

High-Power Smart Cutter



BLT 6 Series smart cutters are especially developed for ultra-high power laser equipment (max of 40kw). Brand new beam path design and optimized optical lens bring you great performance with stable cutting, simple installation and setup, and double dust prevention. The Smart Piercing and Auto Recut features, meeting the highly demanding standard of air as well as N2 high-power cutting, considerably improve efficiency and yield.

Stable and Efficient Cutting

Real-time in-head sensor realises stable cutting performance by detecting paths not cut through to give an automatic recut.

Smart Piercing

Real-time monitoring of piercing process make it possible to start cutting right after piercing. No more waiting, efficiency significantly improved.

Slag-free Cutting

Monitor the laser beam to timely turn it off to realize a slag-free cutting with no gap.

Easy to Maintain, Low Cost to Repair

Ready-to-use optics drawer, lens changed in 5 mins. Protective screws keep cutting head from damage. No time wasting on Depot Repair.

Spring Energised Seal Test

Monitor the gas pressure of the first and second lower protective lens to give early warning.

Protective Lens Monitor

Upgraded algorithm integrated with sensor, effectively prevents protective lens from cracks caused by pollution.

CUTTING CAPACITIES

LASER SOURCE			3kW	6kW	12kW
Material	Gas	Capacity			
Carbon Steel	O2	mm	22	25	40
Stainless Steel	N2	mm	12	20	35
Aluminium	Air	mm	10	16	35
Brass	N2	mm	8	14	20
Copper	O2	mm	6	10	15
Galvanised	N2	mm	8	14	25

TECHNICAL SPECIFICATIONS

STOCK CODE		XP-LOAD 3015
Laser Source	kW	3, 6 or 12
X Axis Travel	mm	1,540
Y Axis Travel	mm	3,100
Z Axis Travel	mm	120
Processing Size	mm	3,050 x 1,530
Acceleration	G	2.5
CNC Control Unit		HypCut8000 FSCUT CNC Controller (with CypNest Software)
Cutting Head		BOCI BLT 6 Series
Max. Traverse Speed	m/min	180
Max. Table Capacity	kg	800
Absolute Positioning Accuracy	mm	± 0.05
Repeatability (X & Y Axis)	mm	± 0.03
Length	mm	8,771
Width	mm	2,260
Height	mm	2,460
Weight	kg	7,500

TECHNICAL SPECIFICATIONS - LOADING SYSTEM

STOCK CODE		LOAD
Loading & Unloading Plate Thickness	mm	1 - 12
Maximum Plate Loading Size	mm	3,000 x 1,500
Minimum Plate Loading Size	mm	1,250 x 1,250
Maximum Plate Weight	kg	600
Maximum horizontal movement speed (X-axis)	m/min	30
Maximum vertical movement speed (Z-axis)	m/min	15
Maximum Load Capacity of raw material / finished product trolley	mm	3,000
Raw Material / Finished Product Trolley placement Height	mm	≤ 200 (Including Tray)
Gas Supply Pressure	MPa	0.55
Length	mm	6,500
Width	mm	4,500
Height	mm	4,600

MACHINE FEATURES

- High performance Max Photonics Fibre Laser Source
- CypNest Software
- HypCut8000 FSCUT Controller
- Fibre optic beam delivery system
- BOCI 6 Series Laser Cutting Head
- Dual Shuttle Exchange Table
- S & A Chiller
- High strength, rigid gantry design to ensure high accuracy and consequently allow high acceleration
- Ultra high precision class alpha rack and pinion drive motion system
- Vertical drag chain for an even more efficient footprint
- Drawers fitted underneath the cutting table for the removal of small parts and scrap
- High speed dual pallet mechanical transfer table allowing cutting during loading and unloading
- CE compliant complete machine enclosure and light barrier system

OPTIONAL EQUIPMENT

- Fume extractor with filters
- Air compressor and dryer