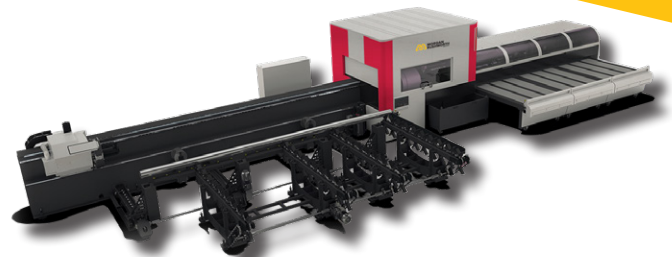


XTR High Volume Tube Laser

The Morgan Rushworth XTR Tube Fibre lasers are capable of processing up to 8,000mm tubes. With a maximum part length of 4,000mm, this machine can handle large and small parts with ease.



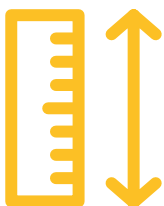
Featuring the Precitec Light Cutter 3D, the system can handle a multitude of profiles, including Round, Rectangular, Triangular, C, U, L, Elliptical, Obround and Custom Shapes, with diameters minimum of Ø16 up to a maximum of Ø220 mm with wall thickness's from 0.8 - 12mm.

Optional additions includes bevel cutting and automated loading and unloading systems.

FEATURES AND BENEFITS



**Up to
8.1m Infeed**



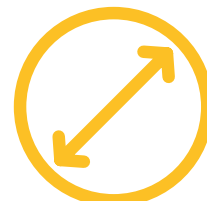
**Up to
4m Outfeed**



**3, or 6kW
Laser Power**



**Up to 1.5G
Acceleration**



**Up to 360mm
Tube Diameter**



**SigmaTube /
Lantek Flex 3D**



CUTTING TORCH



BECKHOFF CNC

MACHINE FEATURES

- Fibre optic beam delivery system
- Precitec LightCutter 2.0 Autofocus Laser Cutting Head
- High strength, rigid gantry design to ensure high accuracy and allow high acceleration
- Applicable tube types : Round tube, square tube, rectangular tube, oval tube, D-shaped steel, T-shaped steel, H-shaped steel, channel steel, angle steel, I-Beams etc.
- Material Receiving and Collecting System
- CE compliant complete machine enclosure and light barrier system
- High automation level and shorter configuration times
- Beckhoff Control System
- Lantek / Sigmanest Software
- Loading System
- Scrap collection draw
- Weld Seam Detection
- Tube Transfer System
- 3m Outfeed

OPTIONAL EQUIPMENT

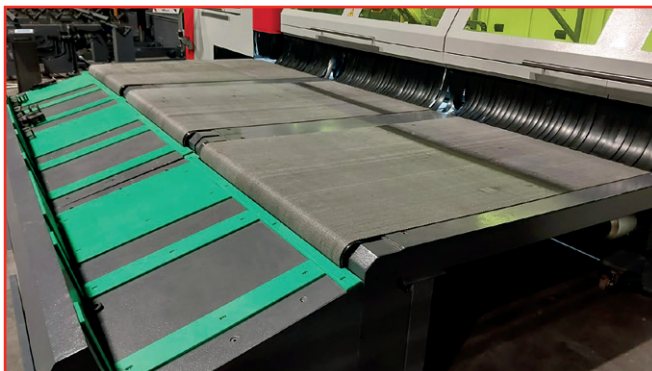
- Bevel Cutting
- 4m / 6m Outfeed
- Automatic Loading / Unloading Systems
- Deslagging Device
- Filtration & Extraction



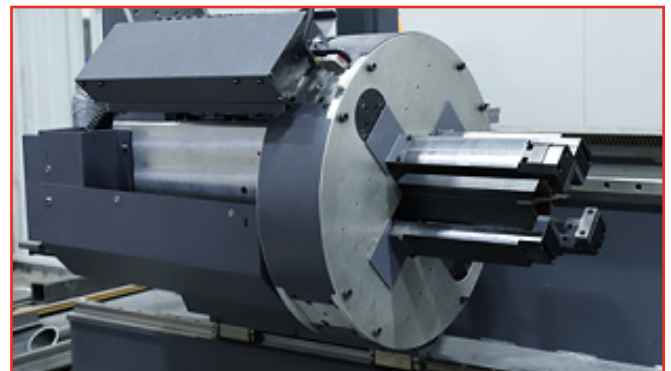
SEMI-AUTOMATIC LOADING SYSTEM (OPTIONAL)



FULLY AUTOMATIC LOADING SYSTEM (OPTIONAL)



CONVEYOR UNLOADING (OPTIONAL)



FEEDING CHUCK

SIMPLE TO USE, ADVANCED HMI

One of the biggest advantages of Morgan Rushworth Laser Machines is our advanced HMI; it comes as standard on all Morgan Rushworth Fibre Laser models.

Morgan Rushworth R&D engineers have been created Morgan Rushworth HMI from years of high experience on cutting machines. Morgan Rushworth HMI offers plenty of features to make machines easier to use for the operators, it's been improved with feedbacks from customers during previous years.

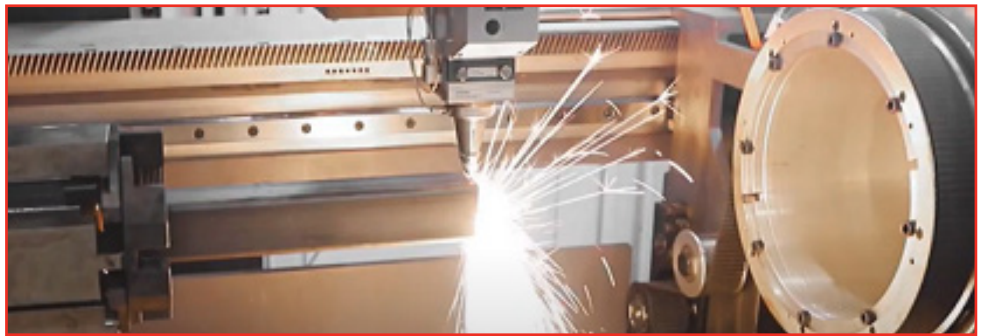
Morgan Rushworth HMI is fully integrated with Industry 4.0. All cutting parameters can be monitored and intervened by operators during cutting process.

Morgan Rushworth HMI has English, German, Spanish and Polish language options are available.

- One touch menu to reach all machine HMI pages
- Graphically real-time cutting monitoring
- Multi-touch (on) part program graphic view
- Safety warnings and graphical diagnostic
- Graphical zooming on parts program
- Easy to find every counter with "Block Search"
- Extensive cutting parameters database
- Detects errors during cutting process
- Control of laser power on different materials
- Automatic profile detection
- Allows to change parameters during cutting process
- Automatic multiple parts cutting process
- Fully integrated with Industry 4.0
- Power and frequency ramping on piercing
- Power ramping depending on cutting speed.
- Burr Cleaning with cutting gas
- Lead-in start hole



DOUBLE FRONT CHUCK



CUTTING LAST PART

The front chuck (the Chuck fixing the tube close to the cutting head) is designed to move 1.5m in the direction of tube length.

This short movement helps us to cut the end of tube very close to the chuck clamps.



LAST PART REMOVAL

BECKHOFF INDUSTRIAL PC

The multi-touch panel series from Beckhoff offers the greatest possible flexibility. The Beckhoff multi-touch panels with projective capacitive touch screen (PCT) technology feature a high touch-point density, which enables accurate, safe and jerk-free operation even in minute steps.

Zooming, scrolling, object turning, flicks etc. are now also usable for industrial applications with the multi-touch devices.

Morgan Rushworth XTR Laser Systems use latest advanced Beckhoff high-quality servo motors and drivers, which represents robust, durable and high-performance synchronous servomotors “Made in Germany”.

The servomotor range AM8000 stands for durable and powerful synchronous servomotors. High-performance AM8000 Synchronous Servomotors are characterised by high dynamics, energy efficiency and reduced lifecycle costs.

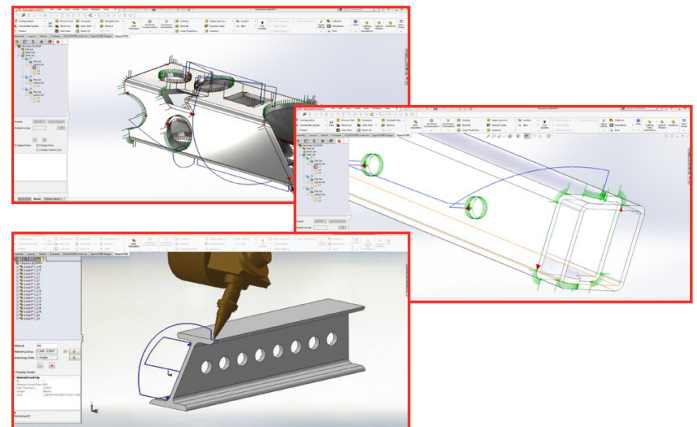
Beckhoff Servo Drive product line sets new standards in drive performance, AX5000 drives support fast and highly dynamic positioning tasks. The drives utilize EtherCAT as a high-performance communication system, providing an ideal interface with PC-based control technology while supporting coupling with other fieldbus systems.

Tube and Pipe Made Simple with SigmaTUBE SW Software

While SigmaNEST covers sheet and plate, SigmaTUBE SW extends this intelligence into the world of tube, pipe, and structural cutting. Fully embedded within SOLIDWORKS, it provides fabricators with a seamless way to process complex 3D assemblies. Entire tube assemblies can be imported, automatically broken down into individual parts, and nested for maximum yield within seconds.

The software's advanced feature recognition identifies tube sections, holes, and joint details, grouping similar parts by material and cutting process. Toolpathing is designed to be both automatic and flexible, with options for weld preparation, seam compensation, and common-line cutting to reduce cycle times.

Its fully 3D environment provides instant visualisation of machine heads, nests, and toolpaths, making editing and verification straightforward. Large assemblies can be easily handled, while animated previews of the cutting process offer confidence before a single pierce is made. Reporting is equally strong, generating clear documentation on cutting length, time, toolpaths, and inventory use.

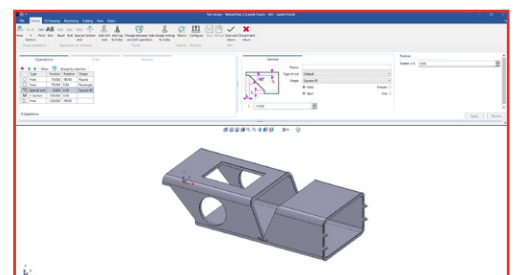


Lantek Flex3D Tubes Software

Lantek Flex3D Tubes integrates with various kinds of tubular geometry importers such as SAT and IGES. This software allows 3D design to be simple and intuitive. It gives a true vision of the resulting design profile that will eventually be cut on a machine.

This system is a parametric system which allows the user to change the values of any operations previously made, including changes to the initial parameters of each tube (lengthening, shortening, change of diameter).

Once the design stage is complete, the user can simulate optimisation of the tube (nesting) and the path followed by the cutting head. The software will directly generate the NC program in order to send this optimisation to the machine.



TECHNICAL SPECIFICATIONS

MODEL NUMBER		XTR 6122.3000		XTR 6122.6000		XTR 8122.3000		XTR 8122.6000	
Laser Source	kW	3		6		3		6	
Max. Tube Length	mm	6,100				8,100			
Tube Diameter Range	Ø mm	16 - 220							
Box Section Diameter Range	mm	16 x 16 - 220 x 220							
Axis Acceleration	G	1.0							
Scrap Length	mm	60mm							
Max. Single Tube Weight	kg	240							
Type of Infeed Supports		Servo Controlled							
Type of Outfeed Supports		Servo Controlled							
Chuck Speed	rpm	90							
Feed Speed	m/min	45							
Absolute Positioning Accuracy	mm	± 0.01							
Repeatability (X & Y Axis)	mm	± 0.02							
Cycle Time	s	13							

CUTTING CAPACITIES

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

