

### Technical Data

<b>Cutting Axes</b>		
X Axis	3060	mm
Y Axis (for sheet cut)	1530	mm
Z Axis	250	mm
Max. Sheet Size	3048 x1524	mm
Max. Sheet Weight	200	kg/m <sup>2</sup>
<b>Dynamics</b>		
Max. speed X-Axis	120	m/min.
Max. speed Y-Axis	120	m/min.
Max. speed Synchronous	170	m/min.
Max. acceleration X-Axis	20	m/s <sup>2</sup>
Max. Acceleration Y-Axis	20	m/s <sup>2</sup>
Max. acceleration Synchronous	28	m/s <sup>2</sup>
Positional Accuracy	± 0,05	mm
Repeatability	± 0,05	mm
<b>Control Unit</b>		
CNC	SINUMERIK; 840D SL; NCU 730.3PN	
PC	PCU 50.5-C 1.86 GHz / 1024 MB XP / SSD	
Port	2x Ethernet;4xUSB; 1x Profibus	
Expansion Slots	2xPCI ; 1xCF Card	
Screen	TP 015A , 15" Touch panel	
Laser Cutting Head	Precitec Procutter	
Focus Length	150 mm	
Focus	Automatic	
<b>Filter</b>		
	VANTERM	
Capacity	2500	m <sup>3</sup> /h
Power	4	kw
<b>Chiller</b>		
	OMI	
Chiller for 2 kw	LC.71.01	
Chiller for 3 kw	LC.170.01	
Chiller for 4 kw	LC.170.01	
Chiller for 6 kw	LC.170.01	

Max. Cutting Thickness depending on Laser Power					
Material	YLS 1000 (1 kW)	YLS 2000 (2 kW)	YLS 3000 (3 kW)	YLS 4000 (4 kW)	YLS 6000 (6 kW)
Mild Steel	8	12	16	20	25
Stainless Steel	4	6	8	10	12
Aluminum (AlMg3)	4	6	8	12	15
Copper	2	3	5	6	10
Brass	4	6	8	10	12

Resonator				
Product Designation	YLS-2000	YLS-3000	YLS-4000	YLS-6000
Description	Kw-Class Yiterbium Fiber Laser System			
Available operating modes	CW, QCW, SM			
Polarization	Random			
Available output power	200-2000 W	300-3000 W	400-4000 W	500-6000 W
Emission wavelength	1070 - 1080 nm			
Feed fiber diameter	Available in single mode, 50,100,200,300 µm			
Output Termination Options	QBH-Type (HLC-8). LCA, QD compatible			
Ancillary Options	Options Available: Internal coupler, Internal 1x2 beam switch, Internal 50:50 beam splitter, External 1x4 or 1x6 beam switch.			
Interface	Standard: LaserNet, Digital I/O, Analog Control Additional Options: DeviceNet or Profibus			
Cabinet Style/ Dimensions	25U Standalone NEMA 12 Enclosure (HxWxD, mm) 1106x856x806			

<b>Maximum Cutting Tube Features</b>		
Cutting Max. Tube Diameter With Loading Through Chuck	<120	mm
Cutting Max. Tube Diameter With Loading Laterally	120<x<400	mm
Cutting Min. Tube Diameter	30	mm
Cutting Max. Square Profile Dimension	250x250	mm
Cutting Max. Rectangle Profile Dimension	300x200	mm
Cutting Max. Profile Weight	120	kg/m
Cutting Max. Tube Length With Loading Through Chuck	6000	mm
Cutting Max. Tube Length With Loading Laterally	2780	mm
Accuracy for Tube Cutting*	± 0,5	mm

\* The maximum possible precision on the workpiece depends factors on the type of workpiece, its pretreatment.  
Measurement length is 1 m.