

1950  
SINCE



# iLASER

FIBER LASER

# Specifications

- ▶ Rigid, powerfully body
- ▶ Structure constructed for heavy duty conditions
- ▶ World renowned components
- ▶ IPG LASER Source resonators
- ▶ IPG Laser Chiller Unit
- ▶ Fast, powerful shuttle table
- ▶ Precitec Laser Cutting Head
- ▶ Touch Screen Industrial CNC controller
- ▶ User friendly interface

High efficiency, highest performance

## ▶ IPG Multi Mode Fiber Laser YLS

- ▶ Low running cost
- ▶ Prec beam quality for precise cutting
- ▶ Optimum focal diameter for high accuracy laser cutting
- ▶ 100.000hours diode life time
- ▶ laser beam is transmitted by fiber core for continuous beam quality
- ▶ Cutting possibilities Cooper, titanium, brass
- ▶ Energy efficiency with Low capacity chiller
- ▶ High speed cutting
- ▶ High density laser beam
- ▶ Accurate geometric performance
- ▶ Maintenance free



## ▶ Precitec Cutting Head

- ▶ Reliable German made Precitec HP-SSL laser cutting head
- ▶ Protective glass for long life cutting lens
- ▶ low consumable cost
- ▶ Cartridge lens system for fast set-ups
- ▶ Height control system for constant cutting quality
- ▶ Collision safety control



## ▶ HPSSL Plus Optional

- ▶ Motorised focus adjustment
- ▶ Piercing Sensor Control
- ▶ Processing Sensor



## ▶ IPG Laser Chiller Unit

Standard

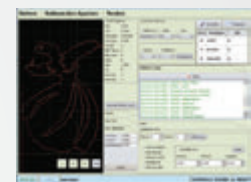
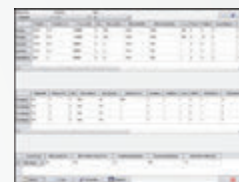
- ▶ Reliable efficiency for IPG laser source cutting head and lenses
- ▶ Digital micro processing controlled industrial chiller



Filtre Ünitesi

## ▶ iLaser

CNC Controller



- ▶ 15 " resistive touch screen 1024x768 pixel
- ▶ Intel Pentium® 1.6GHz CPU
- ▶ 160 GB HDD, (SSD veya CF opsiyonel)
- ▶ 1 GB RAM
- ▶ 1x Front USB port
- ▶ 2 x RJ45 Ethernet 10/100/1000Mhz
- ▶ 4 x Back USB port
- ▶ External keyboard connections
- ▶ Industrial based PC controller
- ▶ TCP /IP or USB connection for sending part programs
- ▶ EtherCAT communications for data transfer or machine control
- ▶ Reliable, real time Linux system
- ▶ Database for cutting parameters
- ▶ "No Piercing" technology for thin materials
- ▶ Fly cut functions for same direction high speed cutting
- ▶ "G codes standart" support
- ▶ Kerf calculations on controller or software
- ▶ Special Restart functions, for any interruption
- ▶ Referencing options, and automatic sheet recognition
- ▶ Unlimited part program size
- ▶ Different user-level possibilities by password supervisor, maintenance or operator mode
- ▶ Direct counter or part choosing functions
- ▶ Ethercat bus protocol.
- ▶ Create manual programs according to job, part or priority
- ▶ Motion task cycle time 0.5 ms.
- ▶ Soft plc with 1 ms cycle time
- ▶ 2D Process monitor
- ▶ Preview of the part to be processed
- ▶ G code compliant

## ▶ Automatic Loading Unloading Shuttle Table

Standard

- ▶ Rigid, powerful loading table

## ▶ Laser Protective Glasses

Standard

- ▶ Laser cabin with protective viewing glass

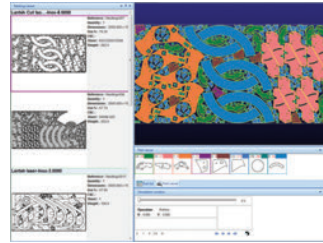
## CAD CAM

Standard

- ▶ Automatic machining for optimum cutting head calculations
- ▶ Automatic nesting
- ▶ Time and cost analysis simulations prior to cutting
- ▶ Part importer / exporter from CAD system, DXF, DWG, IGES, etc
- ▶ Part drawing module, automatic or manual nesting, machining, CNC codes generates, Sheet metal stock searching etc.
- ▶ Parts management database
- ▶ Scrap material database
- ▶ Programmable cad cam system for common cut, micro joint, lead in / lead out parameters

### Automatic Nesting

- ▶ Manual or automatic nesting
- ▶ Fully adjustable part positioning
- ▶ Scrap parameters



## Specifications

Machine Model	F2 - 1530	F3 - 1530	F4 - 1530	F2 - 2040
Laser Power	2 Kw	3 Kw	4 Kw	2 Kw
Type	Fly Optic	Fly Optic	Fly Optic	Fly Optic
Maximum Sheet Size	1530 mm. x 3030 mm.	1530 mm. x 3030 mm.	1530 mm. x 3030 mm.	2030 mm. x 4030 mm.
Maximum Cutting Thickness	Steel 15 mm	Steel 18 mm	Steel 20 mm	Steel 15 mm
	Stainless steel Ç. 6 mm	Stainless steel 9 mm	Stainless steel 12 mm	Stainless steel 6 mm
	Aluminium 5 mm	Aluminium 8 mm	Aluminium 10 mm	Aluminium 5 mm
Maximum Loading Capacity	1000 Kg.	1000 Kg.	1000 Kg.	1750 Kg.
Axes				
X Axes	3030 mm.	3030 mm.	3030 mm.	4030 mm.
Y Axes	1530 mm.	1530 mm.	1530 mm.	2030 mm.
Z Axes	100 mm.	100 mm.	100 mm.	100 mm.
Average Electricity Consumption kw/h	20kw/h	30kw/h	35kw/h	20kw/h
Acceleration	X, Y, Z: 1.5 G	X, Y, Z: 1.5 G	X, Y, Z: 1.5 G	X, Y, Z: 1.2 G
Axes Speed	X, Y : 120 meter / minute	X, Y : 120 meter / minute	X, Y : 120 meter / minute	X, Y : 120 meter / minute
Axes	X and U Parallel, Y and Z 4 axes	X and U Parallel, Y and Z 4 axes	X and U Parallel, Y and Z 4 axes	X and U Parallel, Y and Z 4 axes
Positioning Accuracy	X, U, Y and Z +/- 0.02 mm.	X, U, Y and Z +/- 0.02 mm.	X, U, Y and Z +/- 0.02 mm.	X, U, Y and Z +/- 0.02 mm.
Repability	./- 0.01 mm. For 4 axes	./- 0.01 mm. For 4 axes	./- 0.01 mm. For 4 axes	./- 0.01 mm. For 4 axes
Cutting Head	5" ve 7.5" Focus length	5" ve 7.5" Focus length	5" ve 7.5" Focus length	5" ve 7.5" Focus length
Z Axes Height Control	Precitec Lasermatic	Precitec Lasermatic	Precitec Lasermatic	Precitec Lasermatic
Lighting	4 pieces Light	4 pieces Light	4 pieces Light	4 pieces Light
Cutting Gas Type	Compressor Air, Oxygen and Nitrogen Cutting Gas	Compressor Air, Oxygen and Nitrogen Cutting Gas	Compressor Air, Oxygen and Nitrogen Cutting Gas	Compressor Air, Oxygen and Nitrogen Cutting Gas
Cutting Gas Pressure	Oxygen 0,2 bar - 2.5 bar, Nitrogen 5 - 25 bar	Oxygen 0,2 bar - 2.5 bar, Nitrogen 5 - 25 bar	Oxygen 0,2 bar - 2.5 bar, Nitrogen 5 - 25 bar	Oxygen 0,2 bar - 2.5 bar, Nitrogen 5 - 25 bar
Machine Weight	16.500 Kg (Chillier, Cutting table Filter dust collector included )	16.500 Kg (Chillier, Cutting table Filter dust collector included )	16.500 Kg (Chillier, Cutting table Filter dust collector included )	22.200 Kg (Chillier, Cutting table Filter dust collector included )

F3 - 2040	F4 - 2040	F2 - 2060	F3 - 2060	F4 - 2060
3 Kw	4 Kw	2 Kw	3 Kw	4 Kw
Fly Optic	Fly Optic	Fly Optic	Fly Optic	Fly Optic
2030 mm. x 4030 mm.	2030 mm. x 4030 mm.	2030 mm. x 6030 mm.	2030 mm. x 6030 mm.	2030 mm. x 6030 mm.
Steel 18 mm	Steel 20 mm	Steel 15 mm	Steel 18 mm	Steel 20 mm
Stainless steel 9 mm	Stainless steel 12 mm	Stainless steel 6 mm	Stainless steel 9 mm	Stainless steel 12 mm
Aluminium 8 mm	Aluminium 10 mm	Aluminium 5 mm	Aluminium 8 mm	Aluminium 10 mm
1750 Kg.	1750kg	2750 Kg.	2750 Kg.	2750kg
4030 mm.	4030 mm.	6030 mm.	4030 mm.	4030 mm.
2030 mm.	2030 mm.	2030 mm.	2030 mm.	2030 mm.
100 mm.	100 mm.	100 mm.	100 mm.	100 mm.
30kw/h	35kw/h	20kw/h	30kw/h	35kw/h
X, Y, Z : 1.2 G	X, Y, Z : 1.2 G	X, Y, Z : 1.2 G	X, Y, Z : 1.2 G	X, Y, Z : 1.2 G
X, Y : 120 meter / minute	X, Y : 120 meter / minute	X, Y : 120 meter / minute	X, Y : 120 meter / minute	X, Y : 120 meter / minute
X and U Parallel, Y and Z 4 axes	X and U Parallel, Y and Z 4 axes	X and U Parallel, Y and Z 4 axes	X and U Parallel, Y and Z 4 axes	X and U Parallel, Y and Z 4 axes
X, U, Y and Z +/- 0.02 mm.	X, U, Y and Z +/- 0.02 mm.	X, U, Y and Z +/- 0.02 mm.	X, U, Y and Z +/- 0.02 mm.	X, U, Y and Z +/- 0.02 mm.
./- 0.01 mm. For 4 axes	./- 0.01 mm. For 4 axes	./- 0.01 mm. For 4 axes	./- 0.01 mm. For 4 axes	./- 0.01 mm. For 4 axes
5" ve 7.5" Focus length	5" ve 7.5" Focus length	5" ve 7.5" Focus length	5" ve 7.5" Focus length	5" ve 7.5" Focus length
Precitec Lasermatic	Precitec Lasermatic	Precitec Lasermatic	Precitec Lasermatic	Precitec Lasermatic
4 pieces Light	4 pieces Light	4 pieces Light	4 pieces Light	4 pieces Light
Compressor Air, Oxygen and Nitrogen Cutting Gas	Compressor Air, Oxygen and Nitrogen Cutting Gas	Compressor Air, Oxygen and Nitrogen Cutting Gas	Compressor Air, Oxygen and Nitrogen Cutting Gas	Compressor Air, Oxygen and Nitrogen Cutting Gas
Oxygen 0,2 bar - 2.5 bar, Nitrogen 5 - 25 bar	Oxygen 0,2 bar - 2.5 bar, Nitrogen 5 - 25 bar	Oxygen 0,2 bar - 2.5 bar, Nitrogen 5 - 25 bar	Oxygen 0,2 bar - 2.5 bar, Nitrogen 5 - 25 bar	Oxygen 0,2 bar - 2.5 bar, Nitrogen 5 - 25 bar
22.200 Kg (Chillier, Cutting table Filter dust collector included )	22.200 Kg (Chillier, Cutting table Filter dust collector included )	27.750 Kg (Chillier, Cutting table Filter dust collector included )	27.750 Kg (Chillier, Cutting table Filter dust collector included )	27.750 Kg (Chillier, Cutting table Filter dust collector included )