# Fiber Laser type Smartline



TCI Smartline Fiber Laser series consists of innovative, high-quality machines, manufactured in Spain offering high productivity and minimal maintenance costs. The compact design of Smartline makes it extremely space-saving. It is a high-precision machine with high cutting speeds.

Smartline is equipped with a Precitec cutting head. Easy processing of copper, titanium and brass. All components are delivered from world-class manufacturers and/or are developed and manufactured by TCI.

Various kinds of accessories and components can be delivered for the Smartline Fiber Laser.

### The most important features for Smartline Fiber Laser:

- Compact design.
- CNC with laser control.
- Resonator with reflecting sensors.
- Power output control function for automatic nesting and machining (corners, lead-ins).
- Extremely dynamic equipment.
- Rigidness: transmission of high speed due to the stable construction.
- Safety: Class IV systems.
- Y-axis:1 motor / X-axis: 2 motors that run synchronously.
- Optimal operator safety in the cutting area.
- The machine is protected against vibrations.
- Easy programming with CAD/CAM software.
- Low cooling capacity due to the fibre optics.
- Reduced operational costs due to a modern motor control system with a low power consumption.





Precitech cutting head

# Fiber Laser type Smartline

Best Quality

Max. permitted load	950 kg/m <sup>2</sup>	
Cutting heads	1 pc.	
Max. positioning speed	160 m/min.	
Axial acceleration	19,6 m/s <sup>2</sup>	
Acceleration	2G	
Max. tolerance	± 0,05 mm/m	
Repeatability precision	± 0,025 mm/m	
Power output (IPG)	1 - 6 kW	

### Standard equipment:

- · Cutting table
- Cabinet (for the laser control)
- · IPG fiber laser resonator
- Precitec cutting head
- TCI HMI 5.0 machine software
- CAD/CAM software, Lantek Expert Cut
- Automatic table exchanger (some models)
- · Cooling system
- Exhaust system with filter
- Class IV safety system CE-approved

## **Optional equipment:**

- Loading/unloading system
- Exhaust system
- · Rofin fiber laser resonator
- Piercing sensor
- Collection of workpieces and trimmings
- Tower system 4.0
- Dual proportional valve control system for different gas pressures and special system for high-pressure cutting
- CNC Fanuc 31iLB
- · Aut. nozzle cleaning
- · Aut. focus control
- MultiTouch screen with remote control
- Ultra fast height regulation
- TCI Smart Touch 6.0
- TCI Fly Cutting 3.0
- TCI Fast Piercing 2.0
- TCI aut. cutting system 3.2 (aut. job list)





Loading/unloading

Tower system

Туре	Watt	Cutting length	Cutting width	Cutting capacity
	W	X - mm	Y- mm	Z - mm
Smartline 3015	1000-6000	3000	1500	100
Smartline 4020	1000-6000	4000	2000	100

# Fiber Laser type Smartline & Speedline

Best Quality

### **Controls:**







Mach One

SmartTouch HMI V 6.0

#### Fiber Laser resonator:

- Smartline and Speedline have integrated IPG fiber laser source
- The fiber laser resonator is kinetically suspended
- Power: 1 6 kW
- Contains communication system with control unit and closed cooling circuit
- Direct control of all fiber laser functions
- General power management
- High speed perforation
- Edge processing function
- Cutting library/cutting data
- Fly-Cutting



IPG resonator



Rofin resonator