EPIC Online Technology Meeting on Industrial Laser Manufacturing for Naval and Aeronautic Applications

eng. Emanuele Montigiani – EU, Russia Head of Sales

History

SOITAAB GROUP

100% DESIGNED AND MADE IN ITALY

Founded in 1938, Soitaab becomes a major supplier of CNC Cutting Machines and welding equipment for the metal plate industry

Soitaab quickly becomes a qualified supplier to the aerospace, military, shipyards, municipal, and power generation markets

1978 - Soitaab introduces the first CNC Cutting Machine

1983 - Soitaab produces its first laser cutting machine.

2014 – Soitaab moves into state of the art 18.0000 m² manufacturing facility near Milan. **ISO-9001 Certified 2015**

2011 – Fiberline Laser Introduced. First combination plasma/laser machine built at Soitaab

2003 – First Band Saw Introduced. The world's largest Band Saw is produced by Soitaab

1990 – First Water Jet Introduced

What we do

SOITAAB GROUP

100% DESIGNED AND MADE IN ITALY

Thermal and Cold Cutting Solutions for Metal Plate

OXY-FUEL

PLASMA

HIGH POWER

FIBER LASER

WATERJET

Soitaab Capability

Research

Design

Production

Solution

General Pourpose

NAVAL Specific industry

Production: Large Dimension Machine Fiber Laser application

What we do	Lasertech Fiberline S

Solution

<u>with</u>
changing pallet
up to 12.000 mm
plate dimension

<u>with</u>
common cutting area
up to 48.000 mm

Research & Solution: Bevel Capability

What we do	SPT Vertical and Bevel Cutting Head

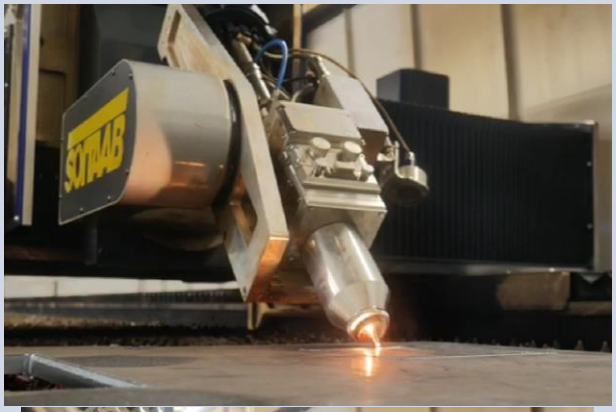
2,5 Dimension Bevel Head

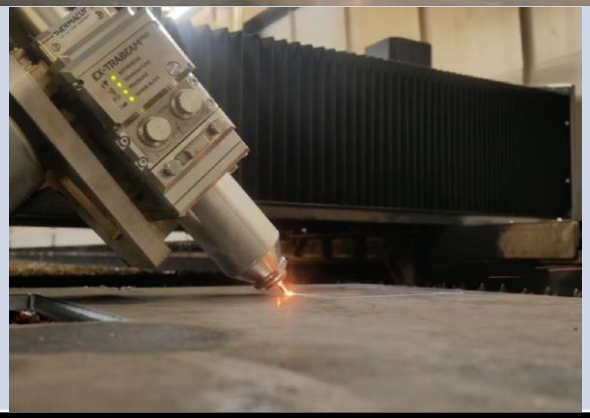
Vertical Cutting 0°

Bevel Cutting ±45°

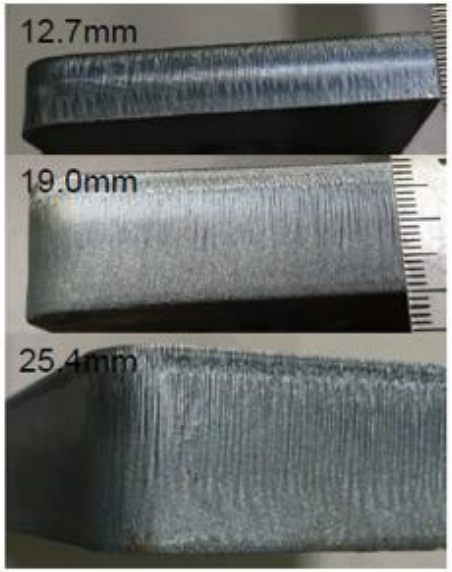
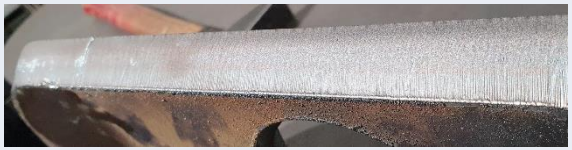
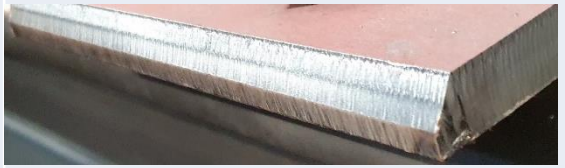
Vertical Cutting

Bevel Cutting



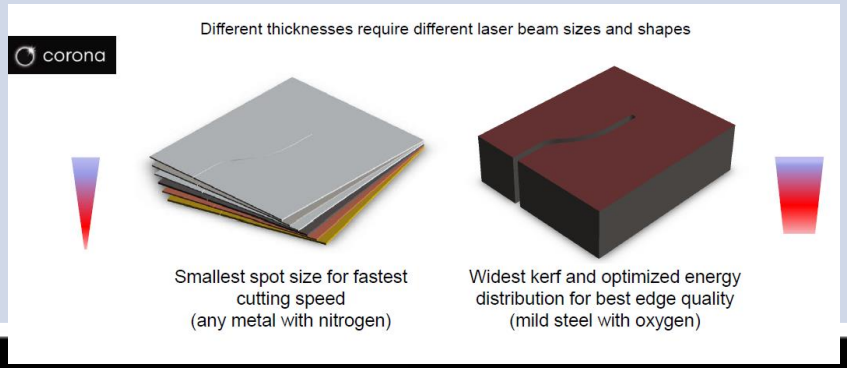


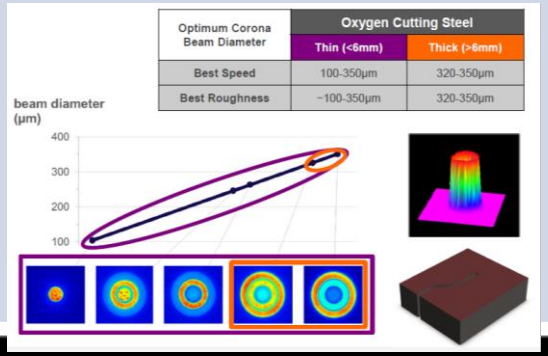
Laser Application: Champfer or Vertical Cutting for Welding Preparation

What we do	«Vertical» Profile	«V» Profile	«Y» Profile
Cutting for Welding Preparation Mild Steel		20 mm Mild Steel V profile 30°	20 mm Mild Steel Y profile 30° 6 mm weld bead
			
			
	30mm 		

Laser Application: Champfer or Vertical Cutting for Welding Preparation

What we look for	«Vertical» Profile	«V, Y, X» Profile
Welding Process	Fiber Welding	Either Conventional Welding Process
Cutting needs	Narrow edge Surface Roughness	Constant Dimensional quality Constant Champfer Angle Surface Roughness
Fiber Laser Possible Solution	<u>High Power Laser</u>: to cover a wide range of Material Thickness <u>Multiple Beam Shaping</u>: to ensure the best quality sourface (Roughness) and wide range of material thickness with lower power @same quality level	





What Epic could do for us – What we could do for the community

Technical Challenge	What we look for	What we could offer
Specific Steel Naval Industry	Fiber Laser Solution	Testing and Application
Cutting Quality	High Power Multiple Power Distribution (beam shaping)	Reaserch for Solution
Champfering application	Opticals High Power Multiple Power Distribution (beam shaping) Nozzle design	Technological comparision Plasma vs. Laser

Welcome to Soitaab !

Thank You