



**LASER ISSE** | GERMANY  
USA  
TURKIYE

# Customized & Automated **Laser Solutions**

Cutting



Welding



Cleaning



Marking



# State-of-the-Art Innovation

## Tailored for your vision

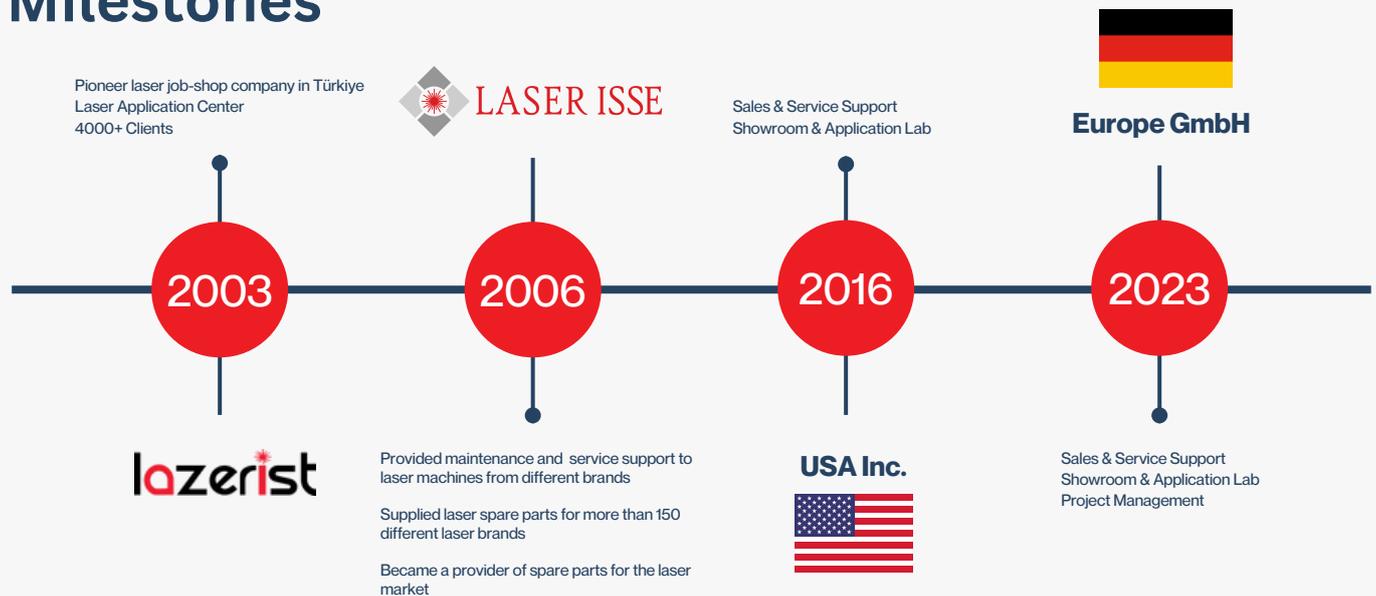
Laser ISSE is a leading Engineering and Automation company specializing in high-quality laser applications. We offer tailored solutions across more than 20 diverse industries, aiming to enhance and **streamline production processes**.

At Laser ISSE, we deliver innovative systems and solutions from initial **project design to final installation**. Our comprehensive services are flexible and supported by dedicated experts to meet your specific needs. We also provide creative mentoring to help clients develop effective strategies for improving production efficiency.

Renowned for our reliability in laser equipment, Laser ISSE has built a strong reputation in both established and emerging markets.

## Laser Innovation Solution Support Expertise

# Milestones



We design and produce the most efficient laser solution for each customer through our key principles: People, Processes, Performances, and Prices.

We also provide dedicated customer support and services throughout our entire project together, starting from our first meeting. From humble beginnings with little more than a dream, we now proudly stand next to globally renowned laser industry leaders.

Laser ISSE's focus is firmly set on satisfying the expectations of each one of our global customers and our determination to become the number one laser solution provider.



Laser  
Cutting

# Coil Fed Laser Blanking

## ONE Line, TWO Solutions



Watch Video

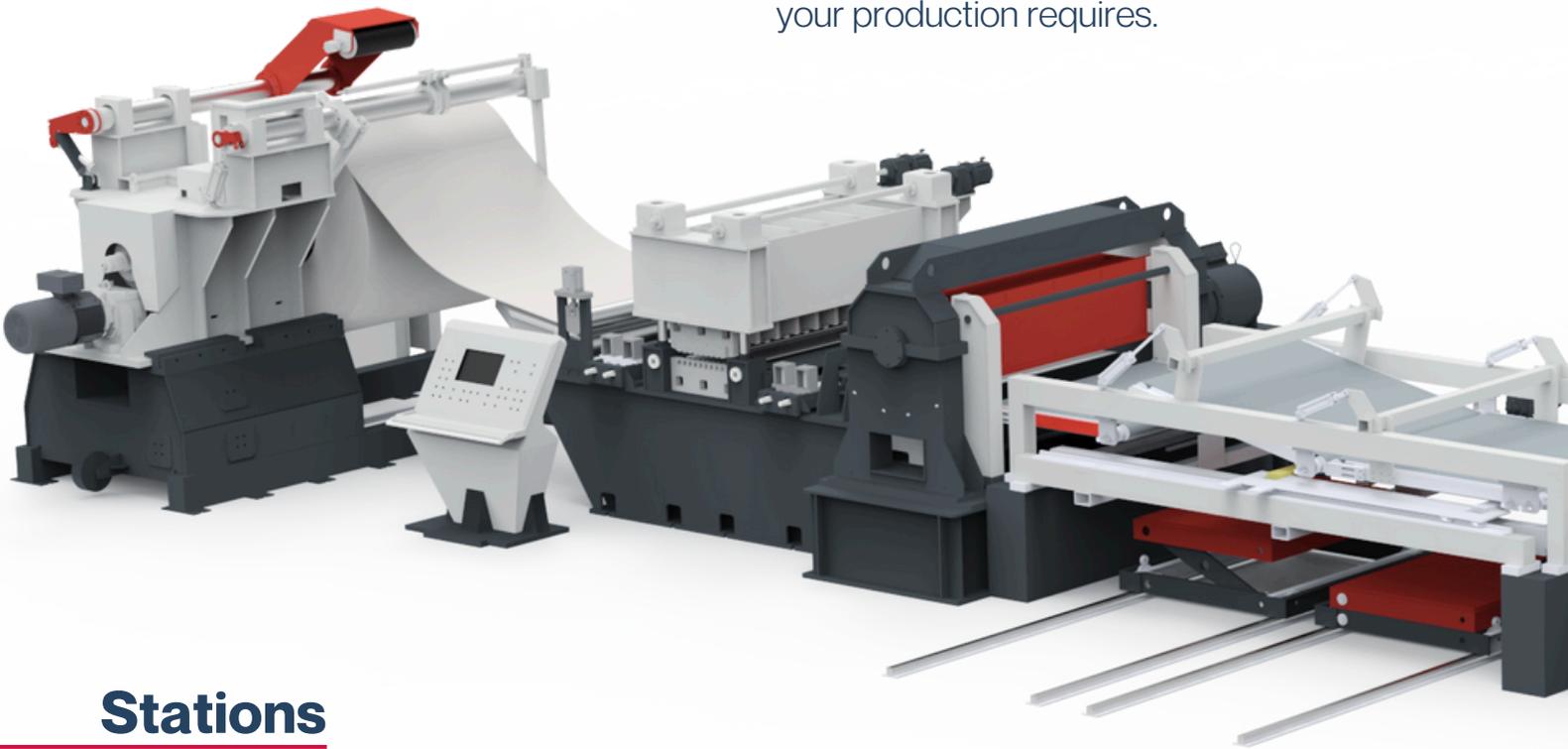
The **Blanking Line** cuts all your custom blanks directly from the coil with our turnkey solutions by utilizing automation for feeding, leveling, cutting and stacking.

### Shear Cutting

Provides rapid cutting of blanks at any size.

### Laser Cutting

Offers high-speed cutting for straight lines, trapezoids, or any other blank shapes that your production requires.



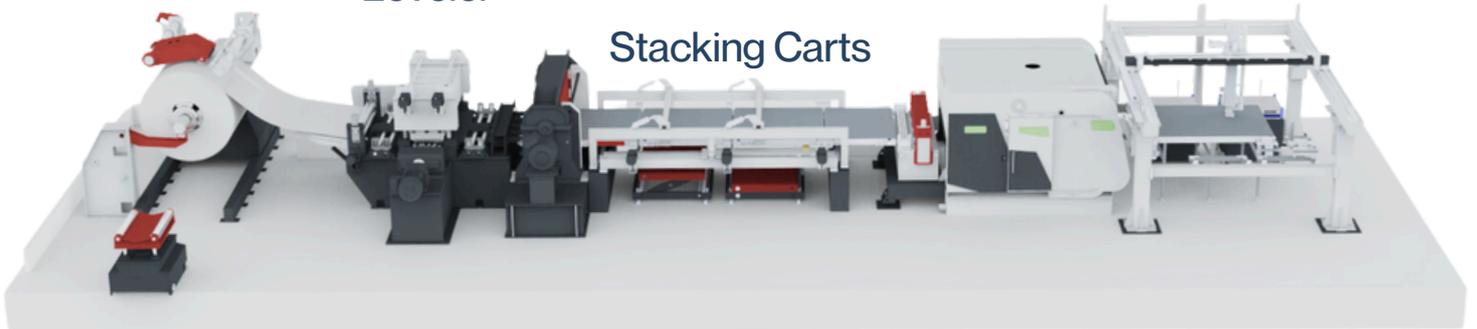
## Stations

Decoiler

Leveler

Stacking Carts

Unloading Gantry



Eccentric Fly Shear

Laser Cutting

## Customize your **Laser Blanking** by

Cone Type Decoiler

Double Head Decoiler

4 or 6 High Leveler

Compact Straightener

Shear

Stacking Station

Servo Feeder

Multi Head & Bridge

Laser Marking Unit

Articulated or Gantry Robot Unloading

## Laser Power

Fiber Laser | 2kW - 15kW

Disk Laser | 4kW - 12kW



## Sectors

Automotive  
HVAC  
Kitchenware

Cutlery  
Industrial Kitchens  
Home Appliances

Shelving & Display  
Steel Service Center  
Lockers & Cabinets

Construction Tools  
Silos  
Steel Tanks

# Coil Fed Laser Blanking



Watch Video

## Laser Blanking Advantages

Less scrap with continuous cutting and nesting

Elimination of die costs changeovers, maintenance

Reduced floor space requirements for raw materials

Multi-material processing abilities

Lower energy consumption

Customized cutting bed sizes

Clean-edged, precise, repeatable cutting process

Less footprint and lower building costs

Stop or "on the fly" cutting



## Technical Specifications

**Decoiler Capacity**  
5 - 32 Tons

**Coil Width**  
20mm - 2150mm  
(.78" - 84.6")

**Material Thickness**  
0.3mm - 6mm  
(.012" - .23")

**Drive System**  
Servo / Linear Motor

**Laser Source**  
Trumpf / IPG / Coherent

**Laser Power**  
2kW - 15kW

**Working Area**  
Custom-made

**Cutting Head**  
Precitec

**CNC**  
Siemens / Fanuc / Beckhoff

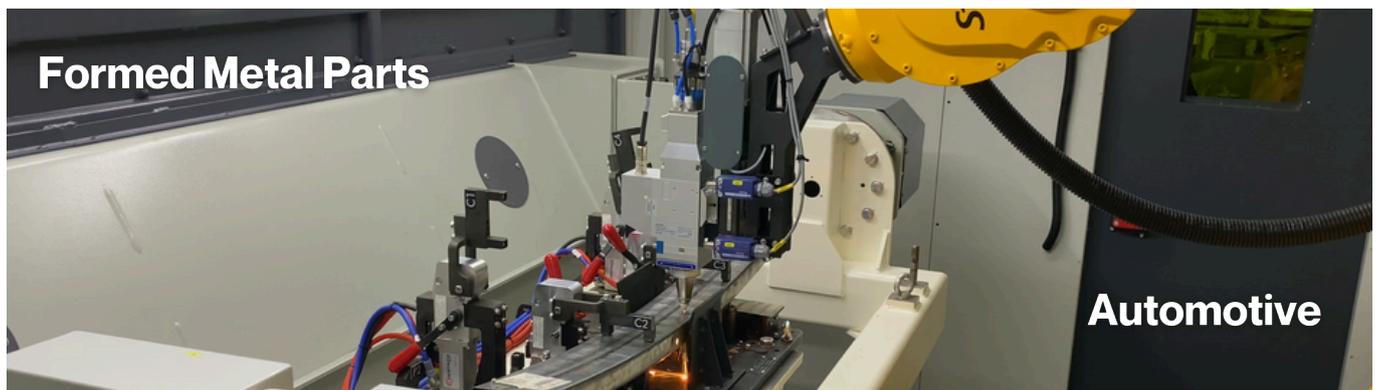
# Robotic Laser Cutting



Watch Video

- Customization
- Positioners
- Fixture Design
- Offline Programming
- Laser Safety Cell

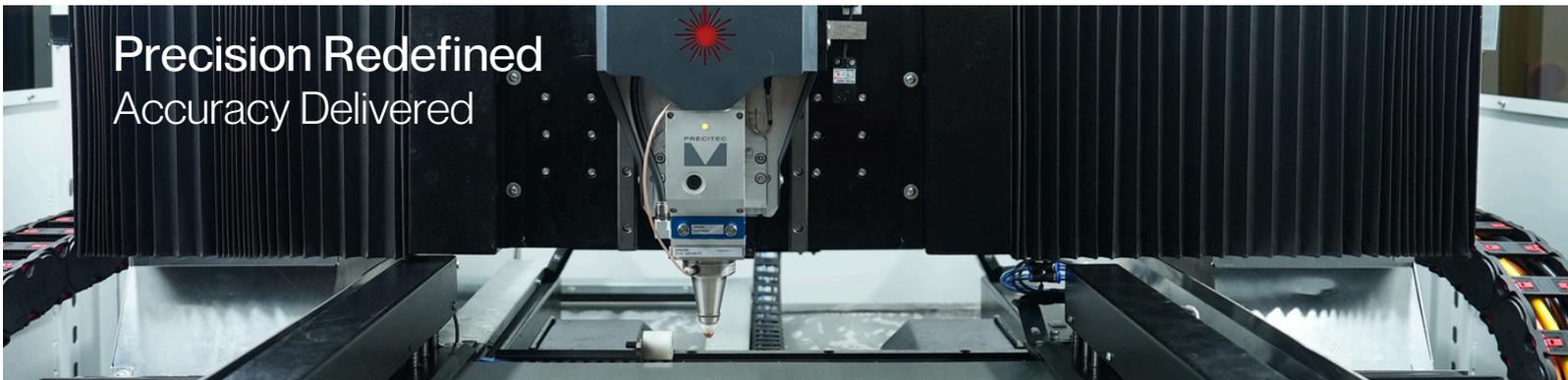
## Increased Productivity through Robotic Automation



# High Precision MICRO CUTTING SOLUTIONS



Watch Video



Precision Redefined  
Accuracy Delivered

## Options

Custom Design Fixture  
Automatic Nozzle Changer

Automatic Nozzle Cleaner  
Fume Extractor

Slatted Conveyor for Scrap  
Purpose-Built Clamping

## Features

High Precision Linear Encoders  
HEAD-Controller  
Slag Position Recognition

Manual / Auto Slider Table  
Fly Cut  
Integrated CAM Software

Granite or Cast Base  
Multi-Touch HMI  
Sheet Edge Detection

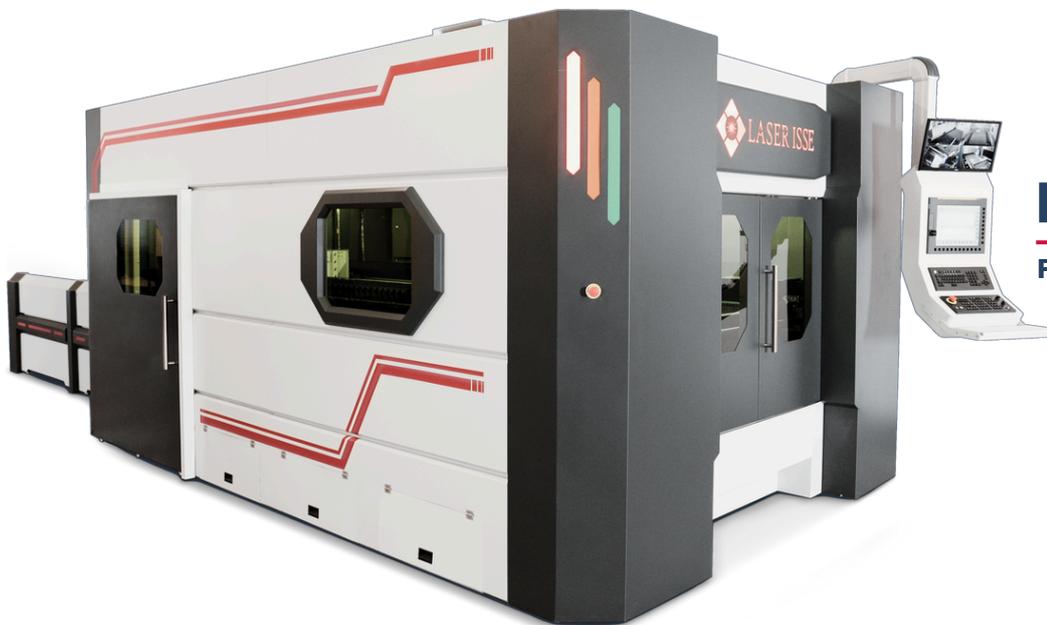
## Technical Specifications

|                     |                      |               |              |           |                     |
|---------------------|----------------------|---------------|--------------|-----------|---------------------|
| Laser Cutting Table | 600x600 mm           | 1000x1000 mm  | 1250x1250 mm |           |                     |
| Laser Power         | Positioning Accuracy | Repeatability | CNC          | Jog Speed | Acceleration        |
| 1kW - 4kW           | ±25 µm               | <10 µm        | BECKHOFF     | 250m/min  | 24 m/s <sup>2</sup> |

Convertible  Coil Fed Laser Blanking

# High Speed

## 2D LASER CUTTING SOLUTIONS



## Laser Power

Fiber Laser | 2kW - 20kW

## Options

Automatic Nozzle Changer  
Nozzle Beam Centering

Slatted Conveyor  
Fume Extractor

Automated Unloading  
Customized Cutting Bed

## Features

Real Time Simulations  
Internal Monitoring Cameras  
Sheet Edge Auto-Detection

Multi-Touch HMI  
Anti-Collision  
Fly Cut

Remote Access  
Lift Up - Down Shuttle Table  
Automatic Nozzle Cleaner

## Technical Specifications

Technical data is subject to change without prior notice.

| Models       | 3015         | 4020         | 6020         | 8020         |
|--------------|--------------|--------------|--------------|--------------|
| Working Area | 3000x1500 mm | 4000x2000 mm | 6000x2000 mm | 8000x2000 mm |

Laser Power  
2kW - 20kW

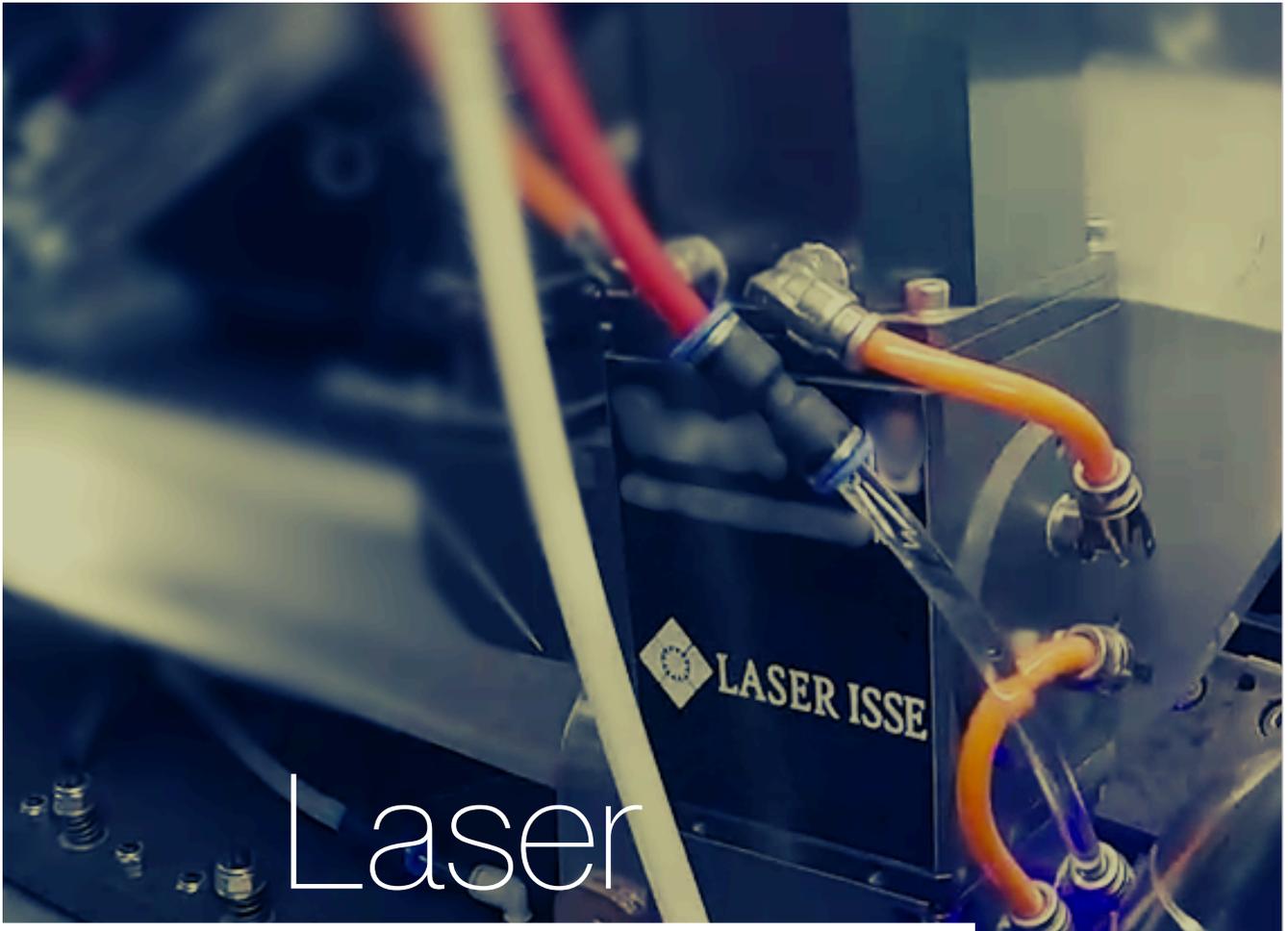
Positioning Accuracy  
±50 µm

Max. Acceleration  
20 m/s<sup>2</sup>

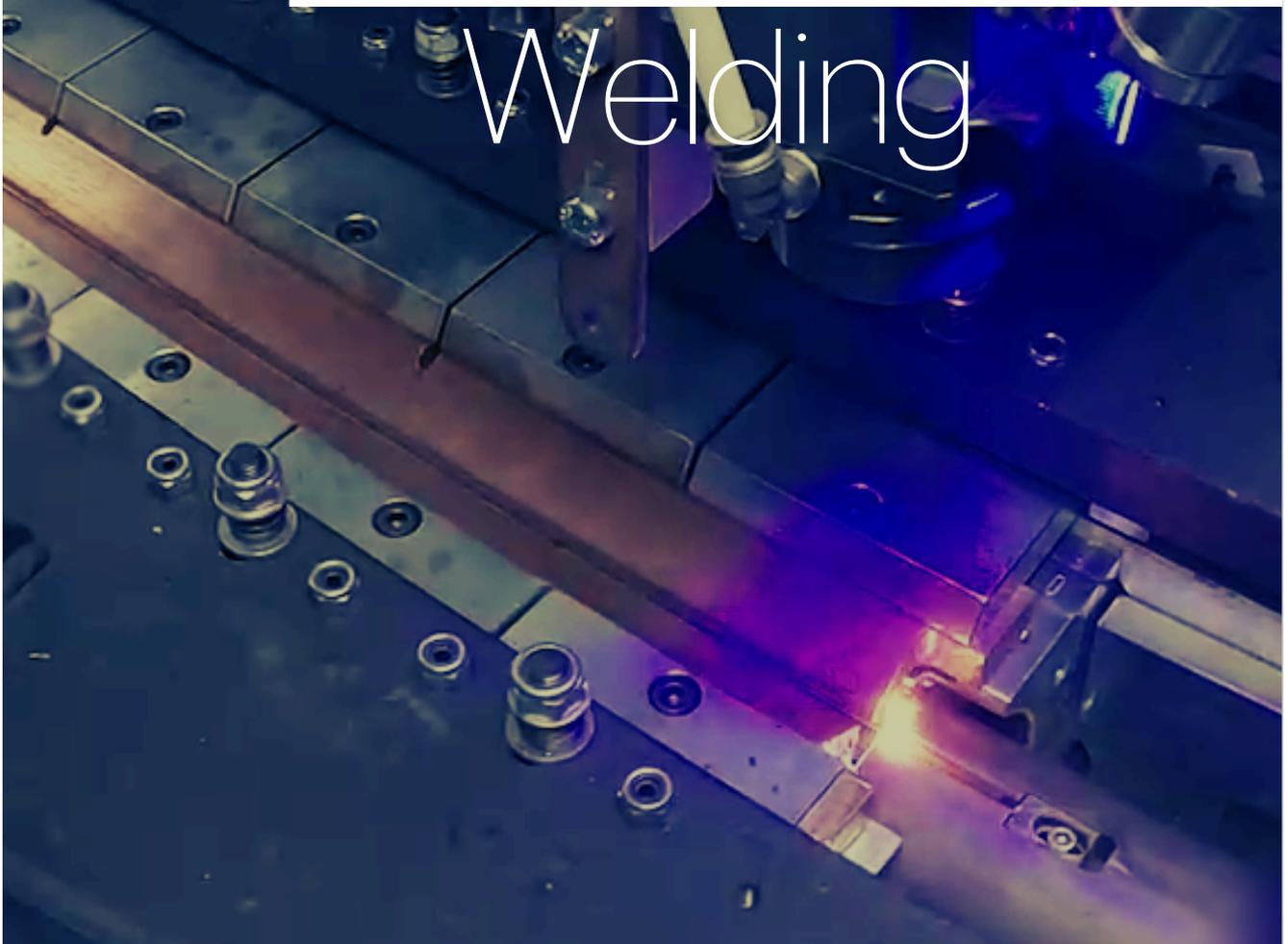
Max. Jog Speed  
≤240m./min

CNC  
FANUC / SIEMENS / BECKHOFF

Repeatability  
<20µm



Laser



Welding

# Safety First

## Protect before Project

These powerful beams of light are used in numerous applications in industrial manufacturing. However, with great power comes great responsibility.

The intense light can cause severe eye injuries, including permanent blindness and skin burns. Moreover, scattered or reflected beams can be just as dangerous as direct exposure. This is why it is crucial to have robust safety measures in place before operating any laser equipment.

**Laser ISSE Cells** are produced in accordance with IEC 60825-1 standards by using **Lasermet** laser safety equipment, which makes them **Class 1 Laser Safety Cells**.



# FULLY AUTOMATED COIL TO CHIMNEY PRODUCTION LINE



Watch Video



**Decoiler**

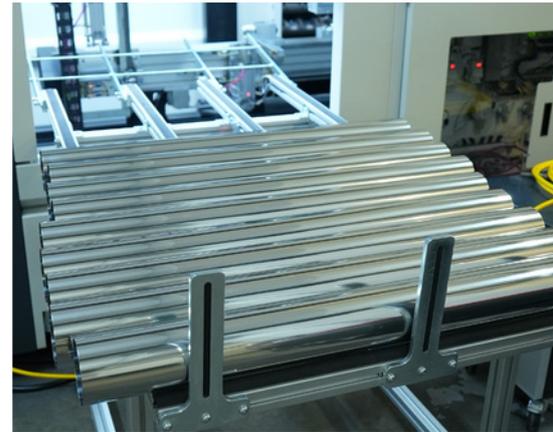
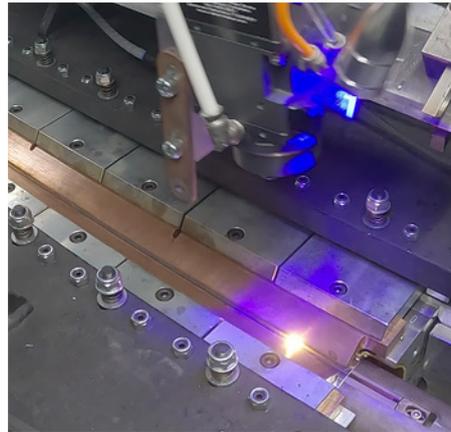
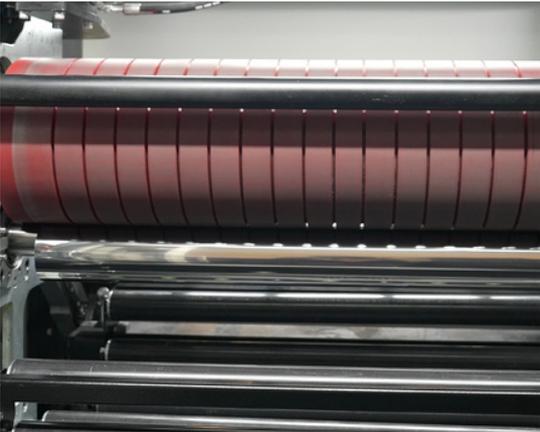
**Straightener**

Fully-Automated production of high-quality tubes & pipes with a **thickness of up to 3 mm**. Laser ISSE provides incredibly adaptable automated pipe production lines that can simultaneously handle **decoiling, roll-forming, and welding**.

This solution converts pipes of various sizes and materials through several interconnected processes into finished pipes suitable for further processing.

Fully-Automated manufacturing lines offer **flexible** and **efficient round and oval tube production**, enabling businesses to stay competitive. It's an ideal solution for production of medium and large batch sizes.

# Outer Case Cylinder Tube Pipe



**1** ROLL-FORMING  
STATION

**2** LONGITUDINAL  
LASER WELDING

**3** STACKING  
UNIT

## Specifications

Diameter Range  
78 mm - 710 mm

Tube Length  
250 mm - 1500 mm

Material Thickness  
0,4 - 3,0 mm

Material  
SS, MS, GI, AL

## Options

End Forming

Beading

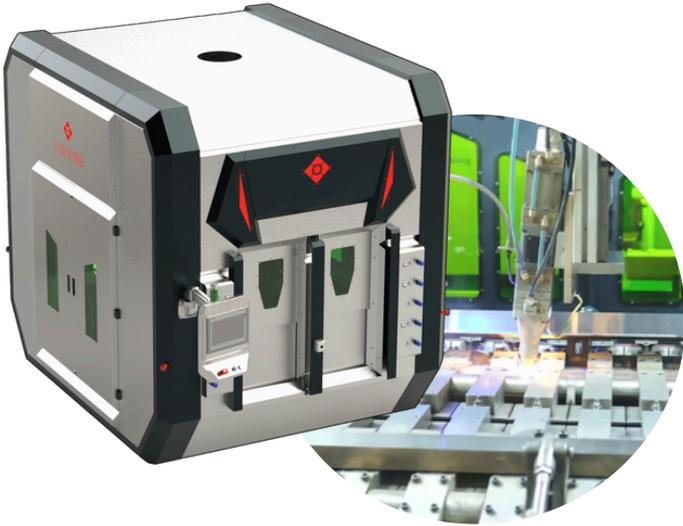
Marking Unit

Automated Transfer to Next Process

## Tube Welding Cell



Watch Video



### Features

- 3 Axis Translation Stages
- Twin Station Clamping Devices
- Robust Rigid Body
- Low Cost Maintenance
- Custom Design HMI
- Different Tube Diameters

## Rotary Indexing Welding Cell



Watch Video



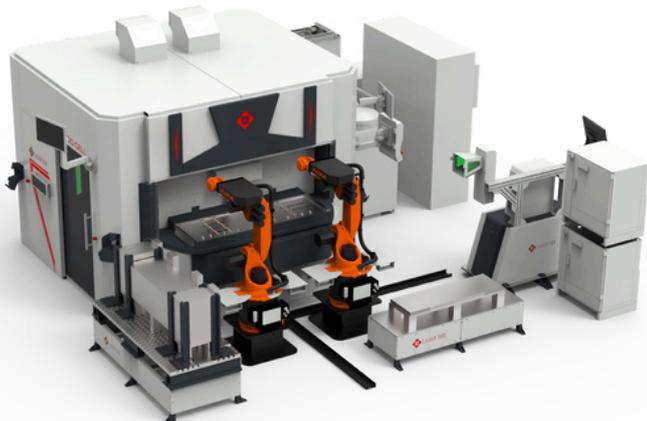
### Features

- Class 1 Laser Safety
- High-Precision Indexing Table
- Optional Process Monitoring
- Offline Programming
- Custom Design Fixtures
- Welding of Various Metal Types

## Tailored Blank Welding Solutions



Watch Video



### Features

- Integrated Seam Tracking Sensor
- Reduced Floor Space Requirements
- <2 Sec Part Loading
- 6 DOF Flexibility
- Angled Welding Line Possibility
- Fixture Integrated Exhaust System
- Custom Design Fixtures
- Optional Process Monitoring



Laser

Marking



# Your Benchmark for Standard Laser Marking Excellence



Watch Video



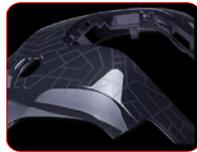
**CLASS 1**  
FREESTANDING UNIT



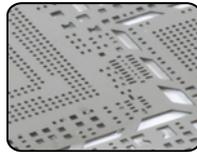
**CLASS 1**  
FREESTANDING  
TURNTABLE UNIT



Metal  
Engraving



Plastic  
Marking



Micro  
Cutting



2D - 3D  
Engraving



Traceability  
Marking

**Laser Source**  
Fiber - UV - CO2

**Power Range**  
3W - 2000W

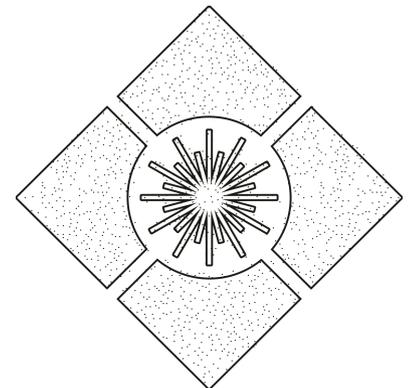
**Marking Field**  
50mm to 1200mm

**Cooling System**  
Air or Water

## Features

Remote Assistance  
User Friendly HMI  
No Consumable Parts  
3D Part Marking & Engraving

Windows Based Controller  
OPC UA Communication  
Integrated QC System  
C-Axis Integration



Invisible Coding



**Twin Station**  
Multi-Axis



**Robotic**  
Laser Marking



**7 Axis**  
Mobile System

## Features

- Robotic Integration
- Rotary Indexing Table
- I/O Connection Support
- Integration to Built-in Line
- Camera Integration
- Product Based Software

Mark  
**On The Fly**



## Advantages



Non-Contact Process



Traceability



SAP, MES Communications



Automation Possibilities



Cost Effective



High-Precision Process



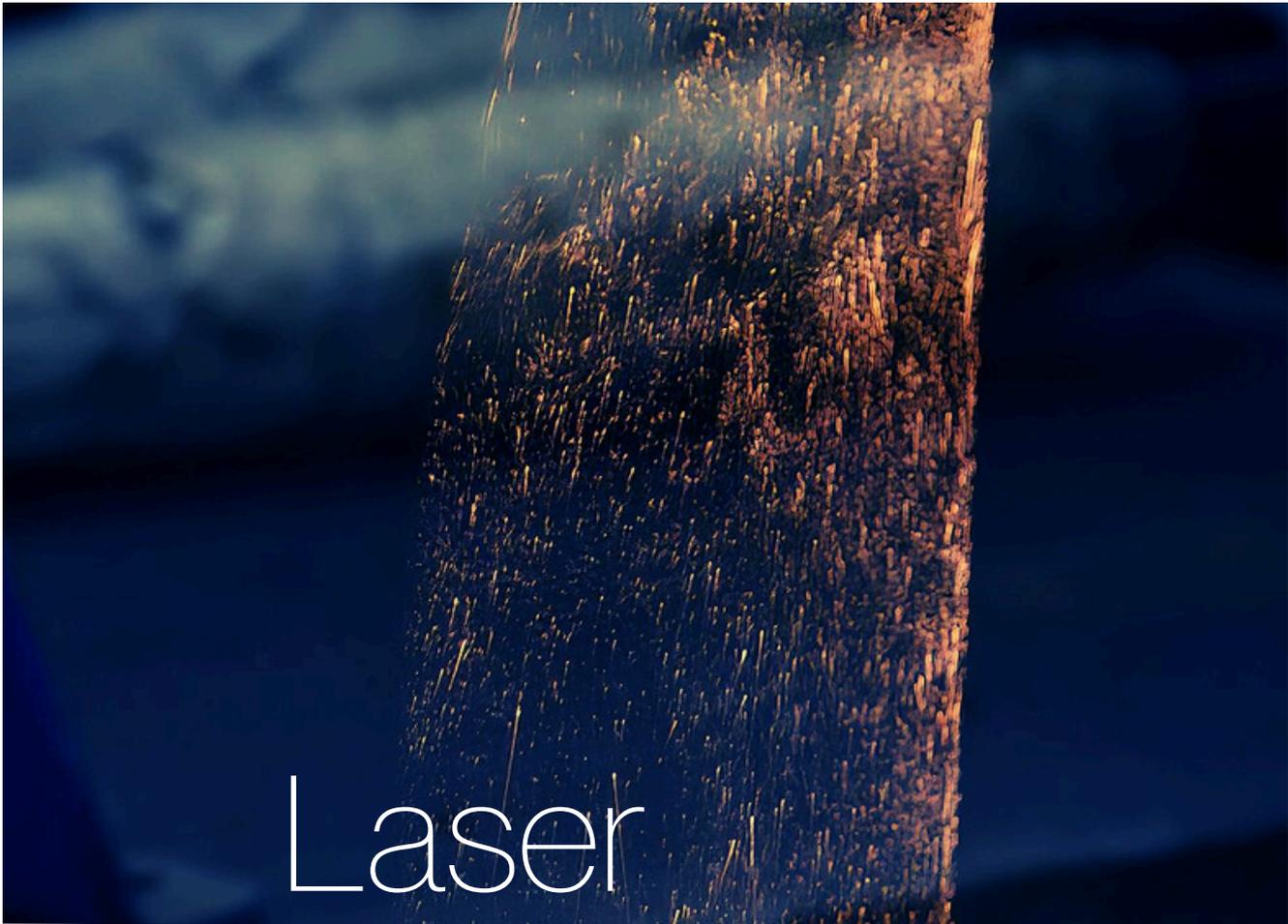
Environmentally Friendly



No Consumables



Fast Application, Robust Results



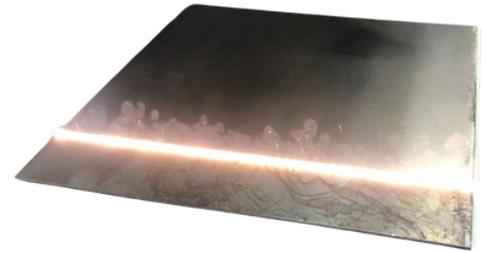
Laser



Cleaning

# The Future of Surface Ablation Environmentally Friendly

Laser cleaning is an innovative technology that removes contaminants, rust, coatings, and other unwanted materials from surfaces without physical contact or environmental harm.



## Advantages



NON - CONTACT  
PROCESS



AUTOMATION  
POSSIBILITIES



NO  
CONSUMABLES



HIGH-SPEED  
PROCESS



COST  
EFFECTIVE



MINIMAL THERMAL  
EFFECT



HIGH-PRECISION  
PROCESS



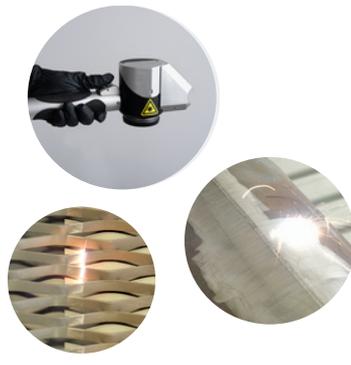
FAST APPLICATION  
ROBUST RESULTS

## Handheld Cleaning

Anytime, Anywhere



Watch Video



- Ergonomic Design
- Continuous Operation
- Multiple Parameter Settings
- Adjustable Scanning Modes
- Lightweight for Extensive Use
- No PC Requirement
- Touch Screen Customized HMI

Handheld Device can be used as a Standard Engraving System with Z-Axis



ARTIFACT  
RESTORATION



MOLD  
CLEANING



CONTAMINATION  
REMOVAL



AEROSPACE  
PARTS CLEANING



WELDING & COATING  
PRETREATMENT



FACADE & FASCIA  
CLEANING



SURFACE  
PREPARATION



RUST  
REMOVAL



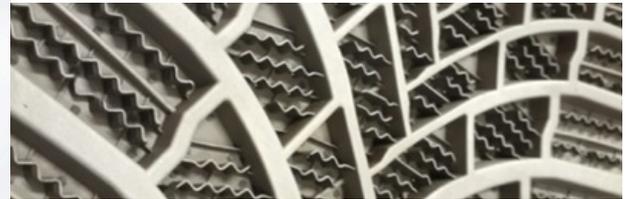
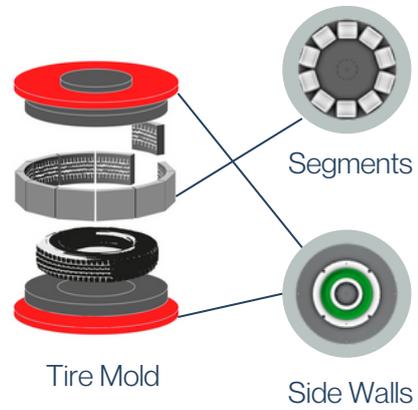
PAINT  
REMOVAL

# Twin Station Laser Cleaning

## Tire Mold Cleaning Cell



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Passenger Car



Light Truck



Truck

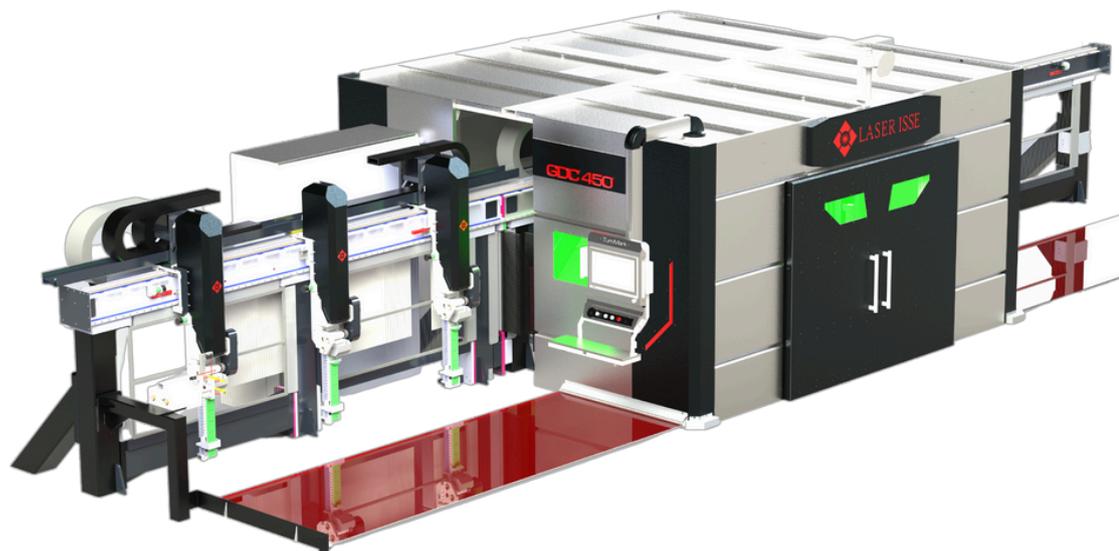
Wide Range of Work Capability

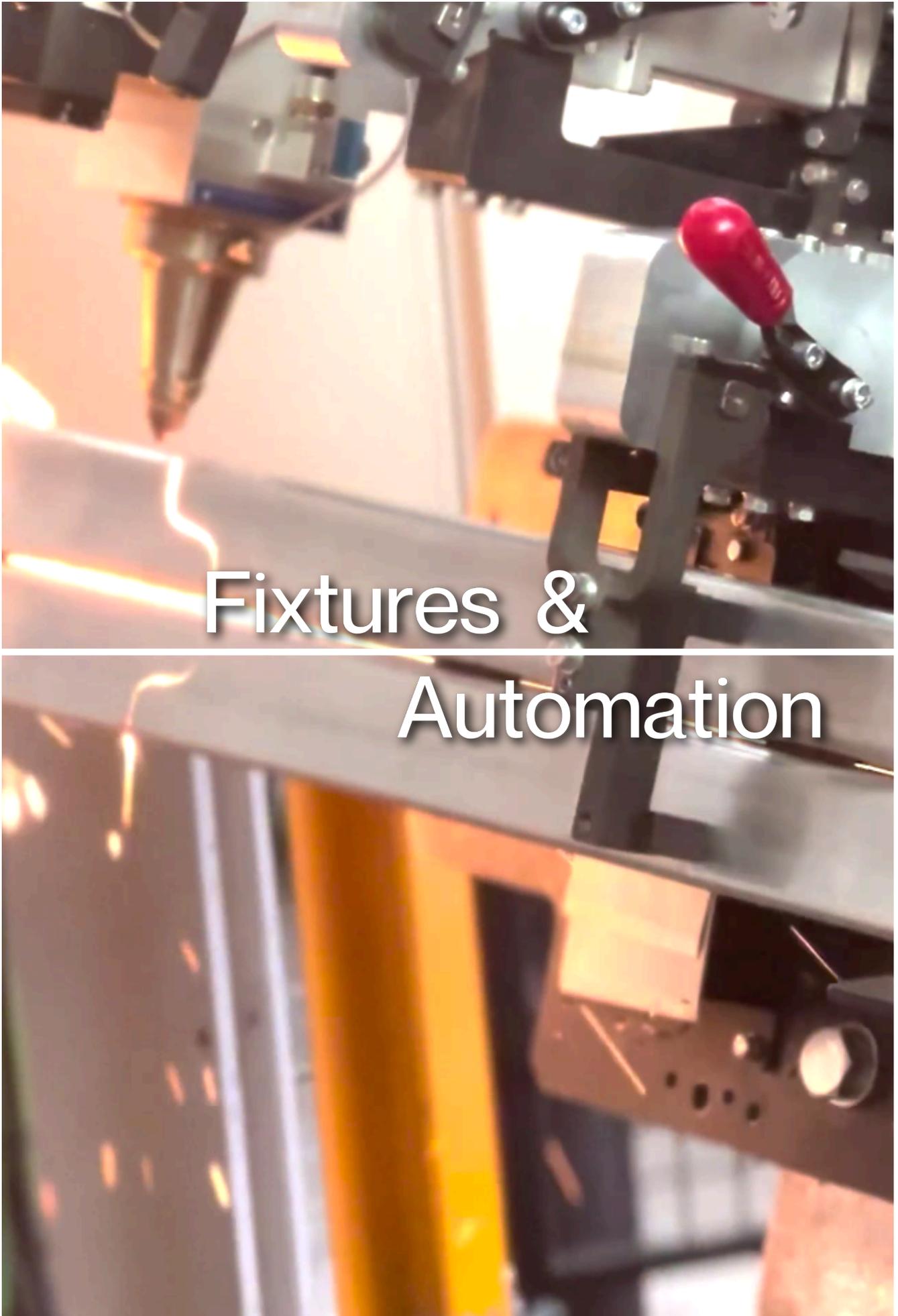
# C450 GDC

## Busbar Epoxy Cleaning



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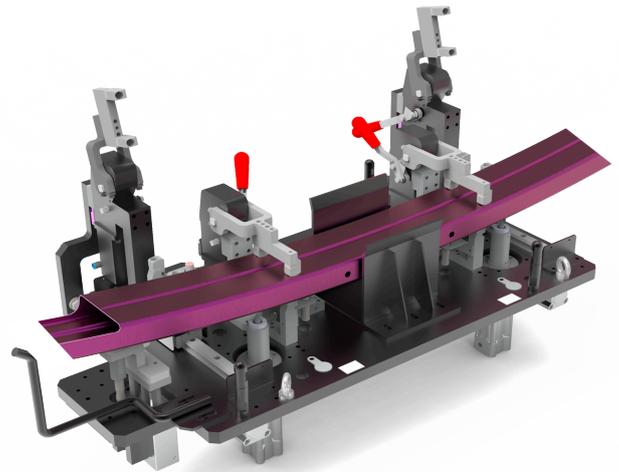


Fixtures &

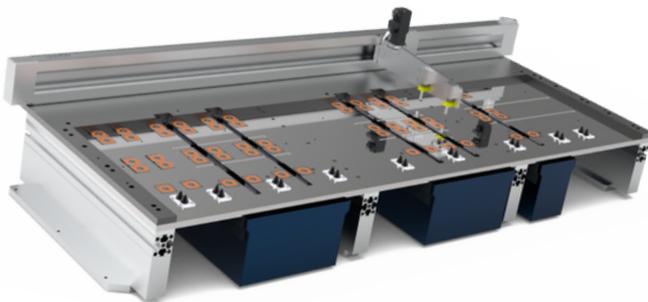
Automation

## Cutting Fixture

Adaptive Clamps for Accurate Cutting Path  
Destaco / Tünkers Power Clamps  
Fixture Grounding Pins  
Internal Exhaust  
Fixture Identification  
Calibration Ball



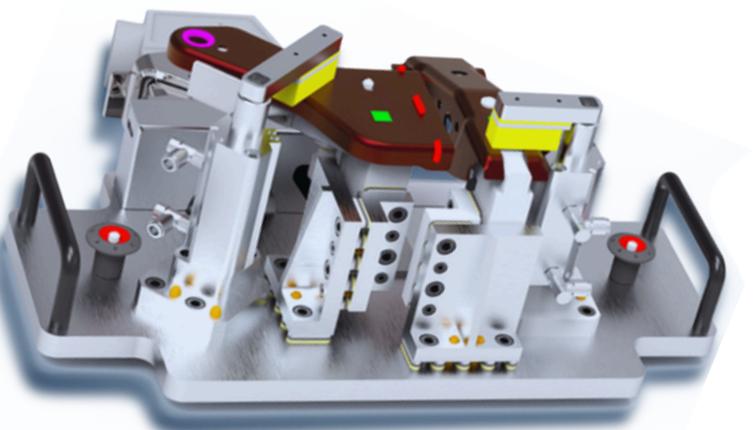
## Welding Fixture



Adaptive Clamps  
Gap Checkers  
Part Measurement  
POKA-YOKE  
Electro-Magnets  
Servo-Driven Universal Fixture  
Laser Welding Requirements  
Communication between Cell and Fixture

## Marking Fixture

Automatic Clamping  
Fast Replacement for Marking Process  
Marking & Cleaning Process  
One Coupling for Air/Electricity  
Lightweight



# Boiler Jacket Production Line



Watch Video



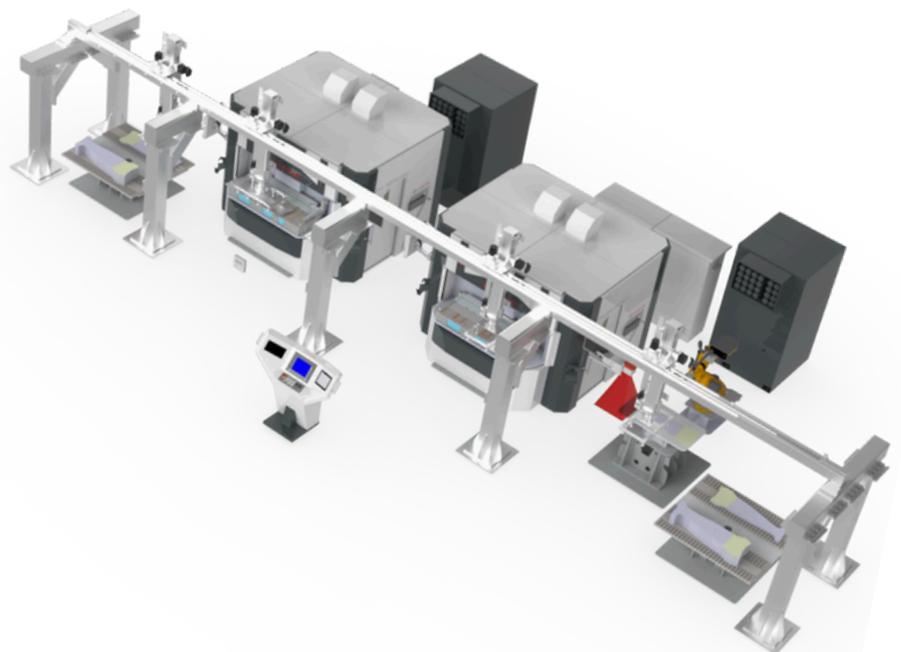
## Steps

- 1 Stacking
- 2 Transfer
- 3 Cleaning
- 4 Cutting
- 5 Rolling Station
- 6 Rotary Table
- 7 Welding
- 8 Marking
- 9 Unloading

# Tailor Welded Blank Automated Production Line

## Steps

- 1 - Loading
- 2 - Ablation or Wire Feeding
- 3 - Welding
- 4 - Marking
- 5 - Quality Control
- 4 - Unloading



Transform your methods with automated laser solutions.

# All Laser Solutions

## Under One Roof



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