iLaser
FIBER LASER
MVD Produces its first machine

The production of “Heavy-duty Press Brakes and Guillotine Shears” started and MVD had the distinction of being the first Turkish manufacturer for heavy press brakes and shears.

The first sheet metal working machine “perforation press” was presented to the market.
1981

1981 Moved to a new factory and added the production of 4 roll bending machines and Expanded Metal presses in the next years. Thus, a great variety of machines were presented in sheet metal working industry.

1994

MVD produced the first tandem press brake in Turkey.

2001

Finalised the CE conformity procedures and had its machines CE marked.

2003

CNC Hydraulic Turret Punch machine was presented to the market.

2011

Fiber Laser Cutting and Plasma cutting machines were presented to the market.

2015

Hybrid Press Brake manufacturing started.

2018

Servo Press Brake manufacturing started.
iLaser FIBER LASER
Sheet Metal Cutting Machine

NEW CONCEPT
THANKS TO MVD RESEARCH & DEVELOPMENT CENTER

Ready to Start: Machine, laser source, head & control - all connected during transport
Compact: Fits in a regular truck, less installation time, less foot print
Operator friendly: Easy open side covers and easy maintenance access.
Making sure of starting the machine same as factory settings and adjustments.
Analyzed, tested Bridge, Frame, and Structural design.

www.mvd.com.tr
iLaser FIBER LASER ENHANCING POWER

General Specifications

Designed with high precision criteria, rigid body. Power transmission by Rack & Pinion system.
- IPG or nLight laser resonators
- IPG or OMI chiller units
- Precitec Procutter Laser Cutting Head
- Advanced CNC controller, wide Touch Screen
- Faster, powerful loading unloading shuttle table
- Operator friendly interface
Sales and Service Network
90 Countries

High performance technology
quality precision
speed accuracy productivity
Motorized focus position adjustment for automatic machine setup and piercing work.

Real-time status monitoring over the CNC panel or mobile app.

**Cutting Head**

World’s most known and trusted Precitec ProCutter Laser Cutting Head

- **Led Status Indicators**
  - Motor system state
  - Head temperature
  - Pressure
  - Glass heat/pollution status

- **Protective Glass**
  Protecting the optics against dirt and fume, monitoring of attendance and contamination, tool-free, easy change cartridge

- **Auto Height Adjusting Sensor**
  Keeping the cutting height same all over the sheet metal, assuring high-quality cuts by the capacitive sensor in the head.

- **Auto Motorised Focus System**
  Motorized focus position adjustment for automatic machine setup and piercing work

- **Smart status display**
  Real-time status monitoring over the CNC panel or mobile app.
CNC Control Unit

ESA and LYNCA CNC Controllers 21” wide touch screen, with easy use panel design all controls are at your fingertips

Camera Monitoring System
By remote access or next to the control panel, you are able to watch the work process real-time

CNC Control Panel
- Windows operating system
- Multi-touch graphic screen
- Multifunctional keyboard, button/joystick/speed potentiometer
- EtherCAT communications for data transfer or machine control
- Enhanced Database for cutting parameters, for different type materials and thicknesses
- Fly Cut functions for same direction high-speed cutting
- “No Piercing” technology for thin materials, efficiency time and cost improvements
- Better results at thick cuts, by prioritizing all piercings process before regular cutting
- Remote connection to PC
- Multi-language support
- Enhanced sheet metal recognition software
- Referencing and sheet alignment functions
- Setting different user-login levels for operators/maintenance/admin
- Multi-functional workpiece job order search/recall function

www.mvd.com.tr
Power Source

Perfect Cutting Perfect Beam Quality

Multi Mode Fiber Laser Resonators
- IPG, nLight and Raycus various resonator options
- Optimum focus diameter
- Maintenance free technology
- Continuous perfect beam quality with a laser beam is transmitted by the fiber core through the fiber cable.
- High efficiency, low consumptions of electricity fiber laser technology, 5-6 times the lower running cost
- Possibility to cut Steel, Stainless Steel, Aluminum, Copper, Brass, Titanium and various materials

Chiller Unit
- IPG or OMI options
- Digital micro processing controlled industrial purpose chiller unit
**Automatic Part Nesting**
- Libellula and Lantek options
- Offers perfect nesting efficiency for automatic or manual part nesting
- Copy, move, reverse, turn alignment manual, semi-automatic, functions geometrical working
- Advanced nesting algorithm optimizes the use of a material, minimizing scrap.
- Can work with standard sheets stocked in the warehouse and/or with scraps obtained from previous processes.

**Conventional Nesting**
Scrap rate 31.7%

**Advance Nesting**
Scrap rate 22.2%

**High Accuracy, Speed and Stability**
- Automatic cutting path determination
- Time/Cost analyses
- Simulation before actual cutting
- Smart Part importer / Exporter from CAD system, DXF, DWG, IGES, Step etc file formats
- Part Drawing module, call parts, automatic or manual nesting, machining, CNC codes generates, Sheet metal stock searching etc
- Various input/output methods, film burning, specialized piercing, fast laser, micro-joints, head direction management, edge binding
- Complicated functions and programmable cad cam system for Common cut, micro joint, lead in lead out parameters.

**Automatic Camera Nesting and Referencing**
The advanced camera system can recognize and measure the location, size of a randomly placed sheet on the table.
Allows you to place and do nesting for parts
Helps you start just in a few seconds
**CNC Controlled Shuttle Table**

The shuttle table and pallet change system allows convenient loading of new sheets or unloading of finished parts while the machine is cutting another sheet inside the working area. Maximizing the productivity and minimize the material handling times

Rigid, fast loading/unloading table

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**Nozzle Cleaning And Head Calibration**

Automatic cleaning of dirt stuck to the nozzle during cutting
Auto cutting head calibration

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**Laser Beam Safety Glasses**

Eye protection glass for operators safety
Dust Collection Filter

Fully automatic dust collection filter absorbs all the harmful dust, fume, particles from the laser cabinet. With high sucking capacity making sure of better cutting environment.

Conveyor

Removes scrap pieces from the working area without interrupting the cutting process.

Camera Monitoring System

By remote access or next to the control panel, enabling to watch the work process real-time anywhere.
# Technical Specifications

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* Technical specifications may change without advance notice