







As a total supplier for sheet metal manufacturing with almost 70 years of experience, Durma understands and recognizes the challenges, requirements and expectations of the industry. We strive to satisfy the ever higher demands of our customers by continuously improving our products and processes while researching and implementing the latest technologies

In our three production plants with a total of 150.000 m² we dedicate 1,000 employees to delivering high quality manufacturing solutions at the best performance to price ratio in the market.



PRODUCTION IS MORE EFFECTIVE NOW

From the innovations developed at our Research & Development Center to the technical support given by our worldwide distributors, we all have one common mission: to be your preferred partner.

Durmazlar offers it's machines to the world markets under the Durma brand.





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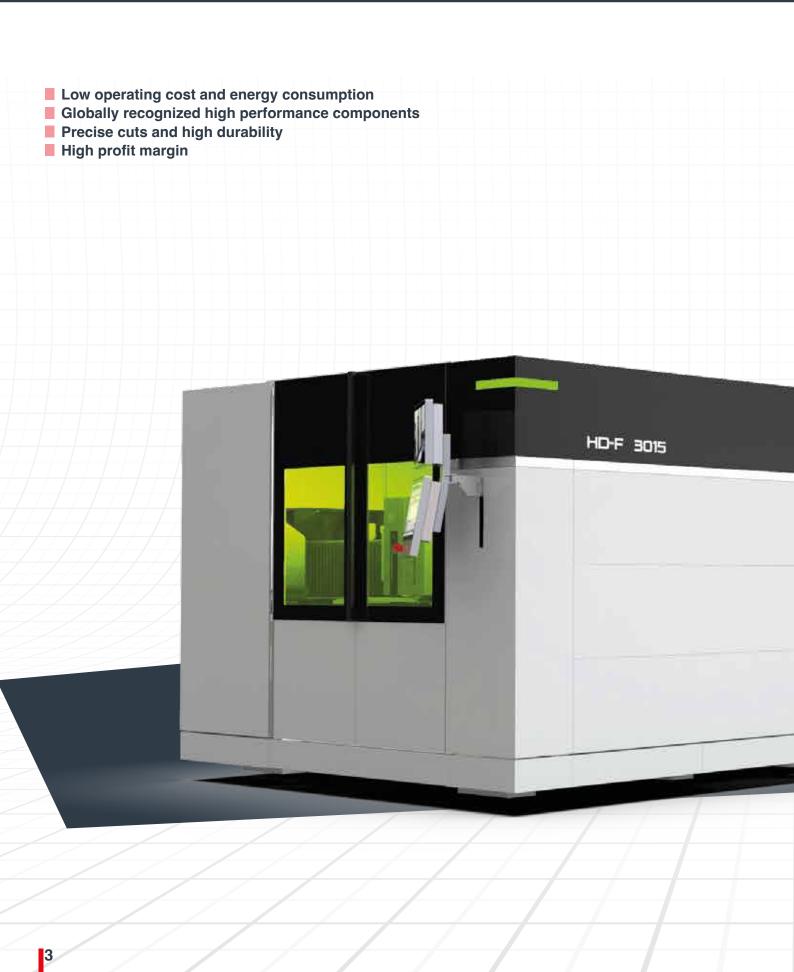
High technology, modern production lines



Top quality components



High quality machines designed in R&D Centre





Fiber Laser Technologies

Fiber lasers outshine with its fast cutting and energy efficiency abilities when especially its compared to CO2 lasers. Easy use, maintenance and service have been achieved by the high technology of Fiber Lasers. Globally recognized efficient components used in DURMA Fiber Lasers add value to your company.

DURMA Fiber Laser is unrivaled with its rigid body structure, perfect filtration system, compact design, efficiency and user - friendliness.

Rack and Pinion Motion System

Axes motion is achieved by rack and pinion design. There are not any intermediate load transmitting elements between the motor and the pinion which otherwise could cause precision losses. High precision helical racks with low clearance make it possible to achieve very high acceleration (synchronized 91.86 ft/s²), speed (synchronized 557.74 ft/min.) and accuracy (0.0012 inch) values.





Fiber Laser Source

Material (Cutting Capacity)*	3 kW	4 kW	6 kW	12 kW	20 kW	30 kW
Mildsteel (S235)	0.625 (0.75) inch	0.75 (0.86) inch	1.18 inch	1.18 inch	1.57(1.95) inch	1.95(2.36) inch
Stainless Steel (304)	0.31 (0.375) inch	0.375(0.5) inch	1 (1.18) inch	1 (1.18) inch	1.57(1.95) inch	1.95(2.36) inch
Aluminium (5083)	0.31 (0.375) inch	0.5 (0.625) inch	1.18 (1.57) inch	1.18 (1.57) inch	1.57(1.95) inch	1.57(1.95) inch
Copper (CU)	0.2 inch	0.25 inch	0.625 inch	0.625 inch	0.625 inch	0.625 inch
Brass (CUZN39 PB3)	0.31 inch	0.375 inch	0.75 inch	0.75 inch	0.75 inch	0.75 inch

*Standard cutting parameters.

Factors such as rust, shell formation, paint, label, pitch shifts on the surface, rolling defects, rusts on the surface of the material, affect the black sheet cutting negatively. The top and bottom surfaces of the material to be cut must be clean. The cutting quality and cutting speeds of sandblasted sheets vary.

Low Operating Costs

- Low energy consumption
- Low cost per component
- Optimised focal distance for all thickness values
- Maintenance free operation
- Compact design, fast installation
- Rigid body structure, high durability

Laser Cutting Head

The laser beam generated in the resonator is transmitted to the cutting head via the fiber cable. The cutting head focuses the beam received from the fiber cable onto the processing surface. The type of material to be cut, its thickness, and the quality of the cut are related to the structure of the optical system. With a single type of cutting head, it offers a complete solution by cutting all thicknesses within its capacity, depending on the laser power. It performs cutting at high-quality standards even in the most challenging cuts and thicker materials.

The valuable optics such as lenses and collimators inside the high-pressure resistant automatic cutting head are protected from particles generated during the cutting process by a low-cost protective glass. The solid and dustproof body ensures a long service life.

Efficient

- Motorized automatic focus position adjustment for faster piercing, piercing thick plates, and cutting materials of different thicknesses.
- Precise distance measurement and quick response.
- Status monitoring with LED indicators.

Flexible

- Single focus lens for cutting both thin and thick materials
- Design compatible with high Z-axis dynamics
- Automatic focus position adjustment
- Efficient cutting gas flow

User Friendly & Safe

- Thanks to the protective glasses, a dustproof beam path
- LED status indicators
- Collision protection with ceramic part





Filter

It provides a healthy work environment by absorbing smoke, dust and small particles generated during cutting. The filter output can be delivered directly to the factory atmosphere. Businesses remain clean, healthy workspaces are provided for operators. The vibrating dust collection filter is fully automatic. It starts automatically when cutting starts. It is a compact unit with filter cartridges, integrated fan motor assembly and jet-pulse cleaning system. The dirt status of the filter can be easily seen on the panel. Cartridges make the blasting process automatically according to its dirt status.



Chiller

It is a device that provides cooling for the resonator and the optics in the cutting head. It features a water-based cooling system. Thanks to the dual-chamber system, cooling water at different temperatures is delivered to the optics and the laser power supply according to their needs.



Higher Acceleration on Z-Axis

Lighter and strongly rigid bridge does not allow it to vibrate at high speed and obtain high accurate cutting geometry.

During the construction of the bridge all kind of deformations analyzed and prevented.



Shuttle Table

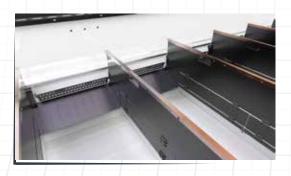
Servo controlled shuttle table system applied to HD-F 3015 (Standard) and HD-F 4020 (Option) series machines reduces the changeover times by 40%.

The shuttle table is fully automatic and maintenance free on all machines. Hydraulic oil is not used and changing the table is fast, soft and has low energy cost.



Multi Chambers High Efficient Suction System

With the multi chambers high efficient system offers the ability to make an equal amount of suction during the cutting operation of the whole machine cutting area.



Scrap Conveyor

In the 3015 model, a conveyor running along the machine that carries scrap parts to a scrap box located at the back of the machine is standard. As an option, there is a horizontal conveyor system available instead of this scrap box. In this system, scraps coming from the large conveyor are transferred to a smaller scrap box via a short conveyor.

This ensures the quickest removal of scrap parts from the working area without stopping the cutting process. The conveyor running along the 3015 machine prevents potential part jams with its jam detection and reverse winding features.





3015 Option

Automatic Nozzle Changer (Option)

Automatic nozzle change feature consists of 26 stations. Before starting cutting, the cutting head replaces the existing nozzle with the one that is suitable for cutting, cleans and calibrates and starts cutting. It also monitors nozzle life.



Durma Auto Nozzle Centering is the process of bringing the laser beam to the nozzle center in order to obtain smooth and quality cuts. For this purpose, a camera is placed on the machine. With this camera, the real time position of the laser beam is detected. If the beam is not on the nozzle center then it is automatically adjusted to the center with the 'Durma Auto Nozzle Centering' application.







Bevel Head ± 45 ° (Option)

Bevel Head for vertical and bevel cuts from 0 $^{\circ}$ to 45 $^{\circ}$. Optimal results provided through the combination of 5 axis interpolation and software . Positive and negative bevel angles in one part.



D-MIX GAS (O2-N2) (Option)

Cutting mildsteel metal is typically done using high-power lasers with a mix gas. This process is performed using a gas mixture consisting of nitrogen and oxygen.

Using a mix gas offers several advantages

- Better cutting results
- Reduction of burrs by 40-70% in medium and thicker mildsteel



Control Panel

The controller has a Durma operator interface and a complete cutting database for all standard pipe cutting applications. The database includes the cutting parameters for standard tubes and profiles (steel, stainless steel, aluminium) for common thickness ranges. Based on these reference values the operator can easily improve the cutting quality for different types of materials.



Durma Cloud

Durma Cloud ensures that machines are accessible and inspectable. It stores machine data and allows for its reuse. Advantages include preventive maintenance, calculation of operating vs. downtime and efficiency, real-time status of your machine, remote monitoring without having to visit the machine, generating reports on cut parts, obtaining historical reports by date range, and reviewing error messages and causes. An additional optional feature is cloud file transfer, allowing users to send nested cutting files directly to the machine via the internet. The operator only needs to select the program and press start.



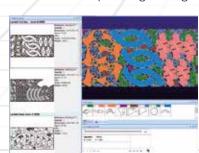
CAD/CAM Software

D-WISE / LANTEK

These are CAD/CAM software specifically designed to automate CNC programming for sheet metal laser cutting machines. They create the most efficient nestings for sheet processing and prepare cutting programs.

- Advanced optimizations
- Fastest cutting and idle motion path calculations to protect the cutting head ceramic parts and prevent sheet deformation
- Real font styles: Fonts supported by the operating system can be directly applied to the material being cut.
- Cutting direction can be clockwise or counterclockwise.
- Advanced corner applications provide perfect corners and high-quality cuts.
- Common Cutting: This feature is especially useful for thick plates and reduces the need for piercing during cutting.





Durma Cloud

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Durma Cloud + File Transfer

An additional optional feature is cloud file transfer, allowing users to send nested cutting files directly to the machine via the internet. The operator only needs to select the program and press start.

D-Mobile

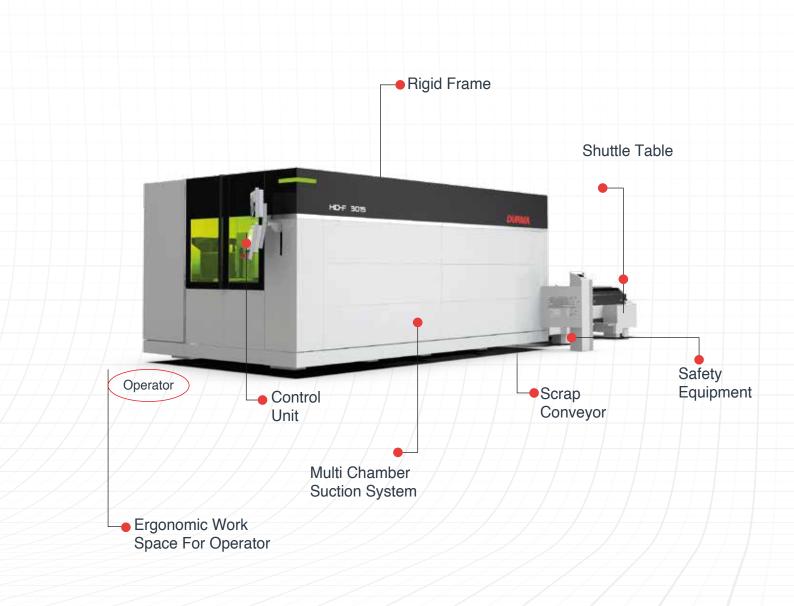
Integrated with the Durma Cloud Web application, D-Mobile is a mobile application that you can instantly monitor the data from your machines via mobile phone with its user-friendly interface and comprehensive features.



Stay informed with instant notifications

Don't miss significant events in the production process. You can instantly intervene in your machine thanks to the notifications such as "last piece in cut", "machine stopped" and "feedrate is running at a value lower than 100%" that you can receive instantly via the D-Mobile application on your smart devices.

Experience the Difference with Dynamic DURMA Lasers



HD-F VI



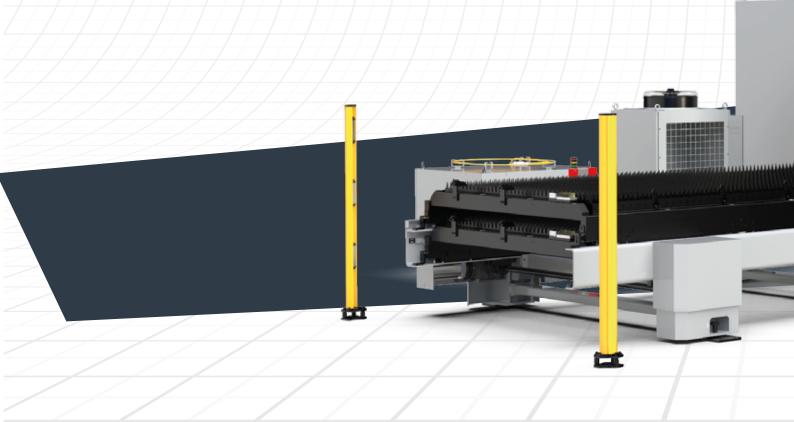
	3015 VI	4020 VI	6020 VI	6025	
X Axis	10'	13' 5"	20'	20'	
Y Axis	5'	6' 8"	6' 8"	8' 5"	
Z Axis	6,3	6,5	6,5	7,3	inch
Max. Sheet Size	10' x 5'	20' x 6' 8"	20' x 6' 8'	20' x 8' 4'	
Max. Sheet Weight (Single Table)	65,6	65,6	65,6	49,15	lbs/ft²
			HD-F 3015		
Max. Speed X Axis			393		ft/min.
Max. Speed Y Axis			393		ft/min.
Max.Synchronized Speed	(X-Y)		557		ft/min.
Max. Synchronized Accel	eration (X-Y)		91		ft/s2
Positioning Accuracy			±0,002		inch
Repeatability			±0,002		inch

HD-F

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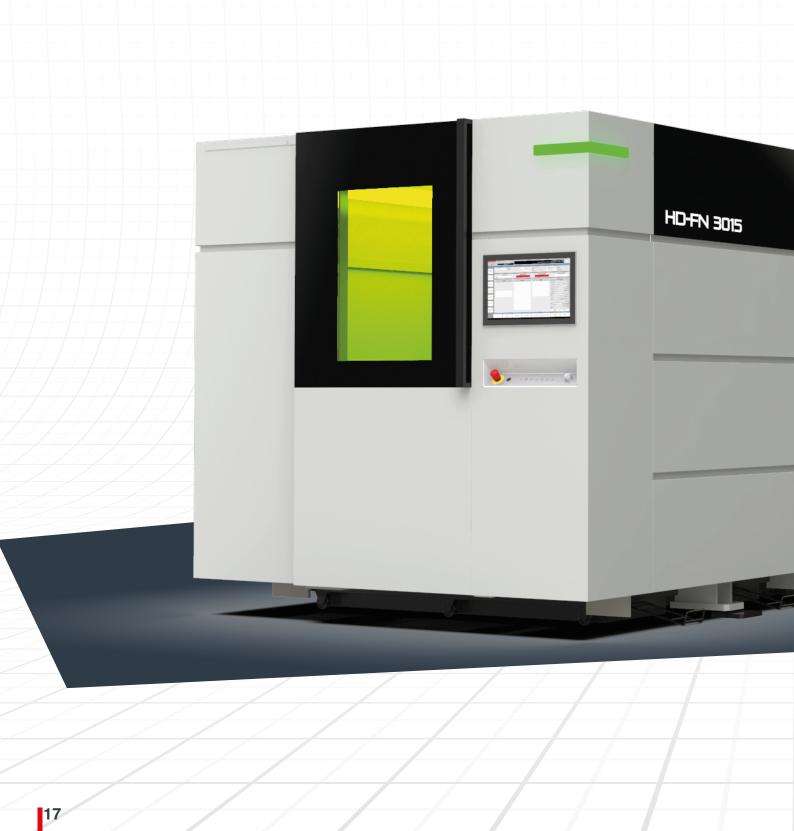
HD-F Teknik Özellikler	3015 IV	
X Axis	10'	
Y Axis	5'	
Z Axis	6,3	inch
Max. Sheet Size	10' x 5'	
"Max. Sheet Weight (Single Table)"	65,6	lbs/ft²

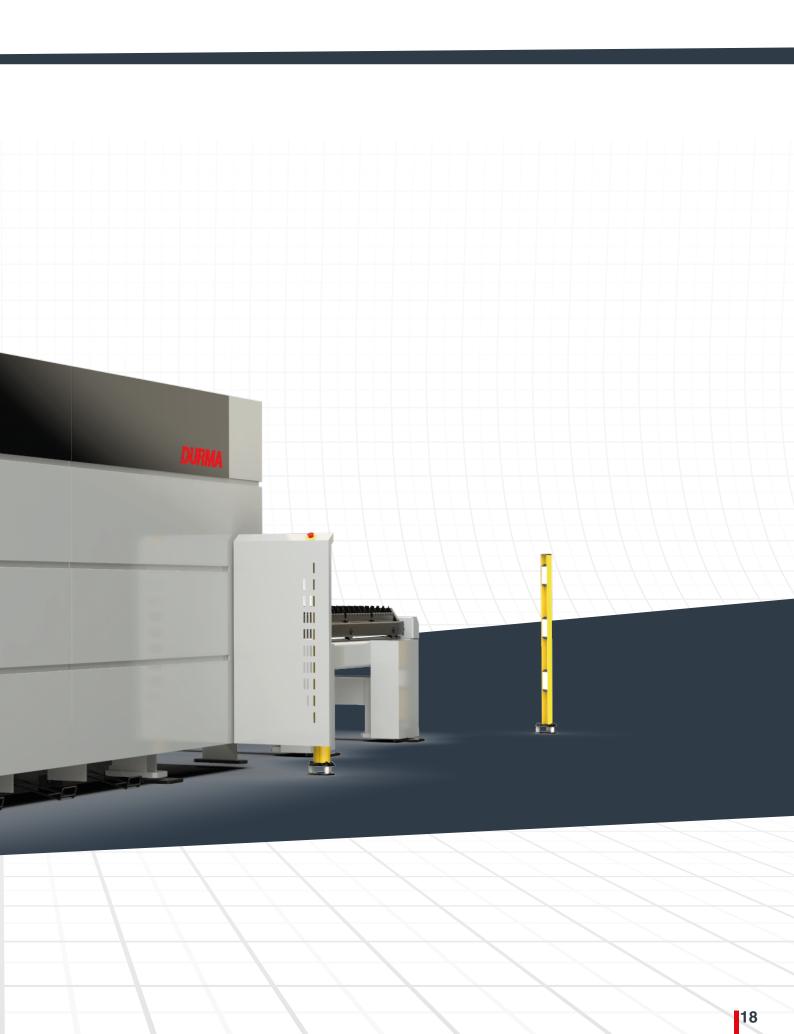
	3015 IV	
Max. Speed X Axis	393	ft/min.
Max. Speed Y Axis	393	ft/min.
Max.Synchronized Speed (X-Y)	557	ft/min.
Max. Synchronized Acceleration (X-Y)	91	ft/s2
Positioning Accuracy	±0,002	inch
Reneatability	+0.002	inch





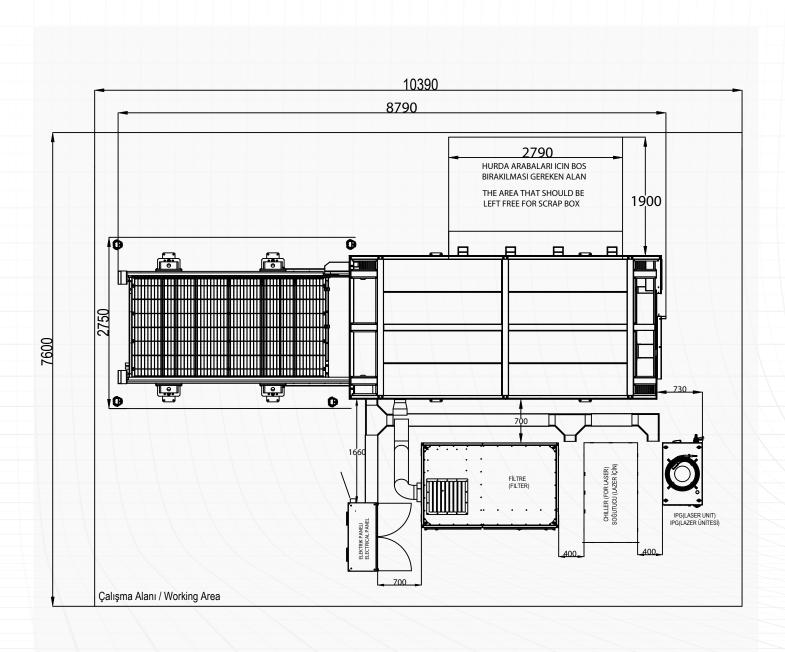
HD-FN
Price & Performance Advantage in Laser Cutting



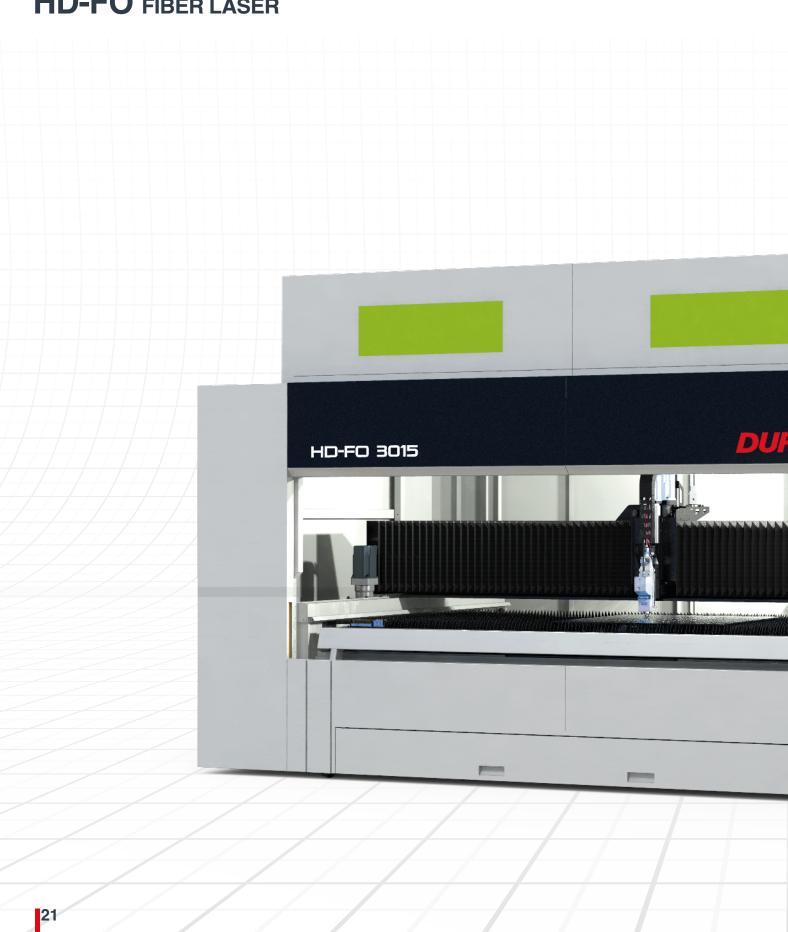


- **Effective Price and Performance**
- Suitable for Increasing Competition
- Laser power up to 20 kW
- High Sensitivity
- Easy to Use and User Friendly
- **Easy to Programmable**
- Low Operating Cost

	3015	4020	6020	
X Axis	10'	13' 5"	20'	
Y Axis	5'	6' 9"	6' 9"	
Z Axis	4.9 (10.6)	4.9 (10.6)	4.9 (10.6)	inch
Max. Sheet Size	10' x 5'	13' 4" x 6' 8"	20' x 6' 8"	
Max. Sheet Weight (Single Table)	49.4 (312kW) 81.6 (15-20kW)	49.4 (312kW) 81.6 (15-20kW)	49.4(312kW) 81.6 (15-20kW)	lbs/ft²
		HD-FN 30)15	
Max. Speed X Axis		328		ft/min.
Max. Speed Y Axis		328		ft/min.
Max.Synchronized Speed	(X-Y)	462		ft/min.
Max. Synchronized Accele	eration (X-Y)	45		ft/s2
Positioning Accuracy		±0,002	2	inch
Repeatability		±0,002	2	inch



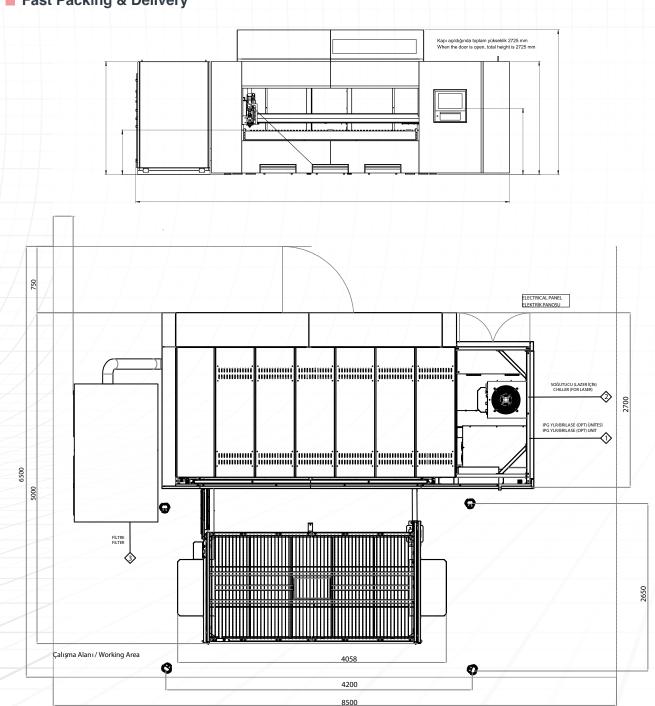
HD-FO FIBER LASER





SPECIFICALLY DESIGNED ACCORDING TO LAYOUT

- User Friendly
- Low Operating Costs
- Quick Opening Front Door
- Easy Access To Cutting Area Compact Bridge
- Design
- Fast Packing & Delivery



HD-FO FIBER LASER

HD-FO Technical Specifications		
X Axis	5'	
Y Axis	10'	
Z Axis	5.5"	inch
Max. Sheet Size	10' x 5'	
"Max. Sheet Weight (For Each Table)"	1609	lbs
Dynamic		
Max. Speed X Axis	295	ft/min.
Max. Speed Y Axis	295	ft/min.
Max. Speed Z Axis	98	ft/min.
Max.Synchronized Speed (X-Y)	416	ft/min.
Max. Synchronized Acceleration (X-Y)	45	ft/s2
Positioning Accuracy	± 0,002	inch
Repeatability	± 0,002	inch

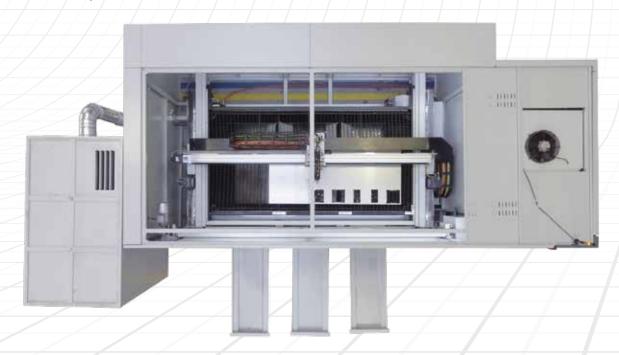
MANUAL CUTTING TABLE

The machine is designed especially for customers who have layout problems. Sheet loading and unloading is extremely easy in cases where no shuttle table is needed.



COMPACT, MODERN AND ERGONOMIC LAYOUT

Helping of the compact layout of the machine, sheet loading, cutting and unloading operations are performed by using less space and less operations.



■ PNEUMATIC SHUTTLE TABLE (Option)

As standard there is a manual cutting table. Optionally, with your 1 or 2 KW power source order, you can get a pneumatic shuttle table.

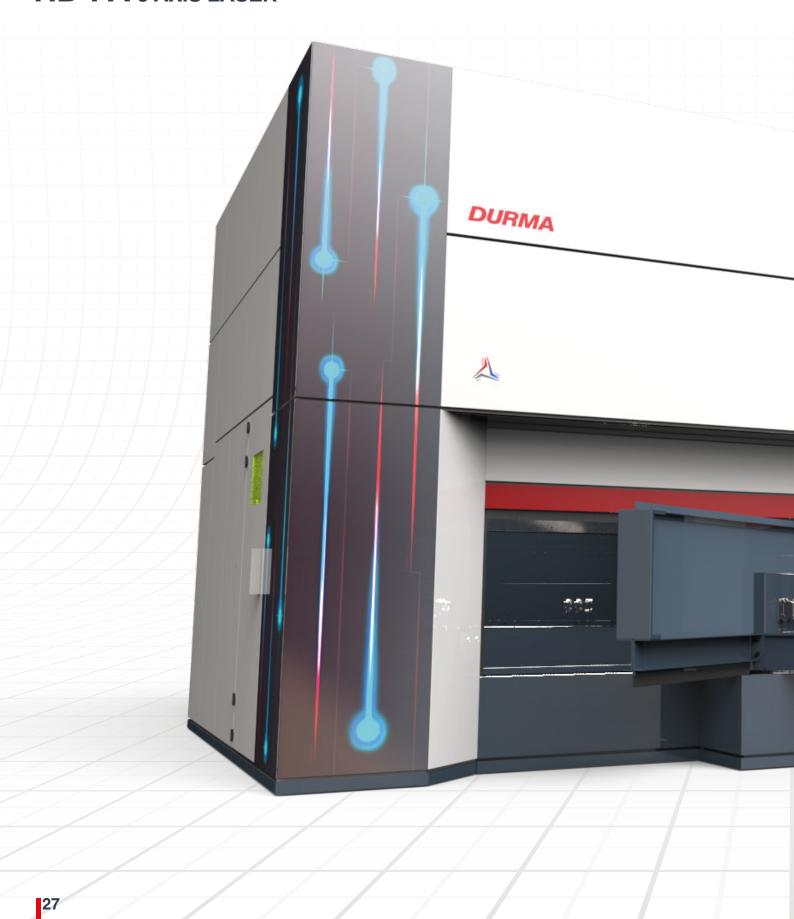


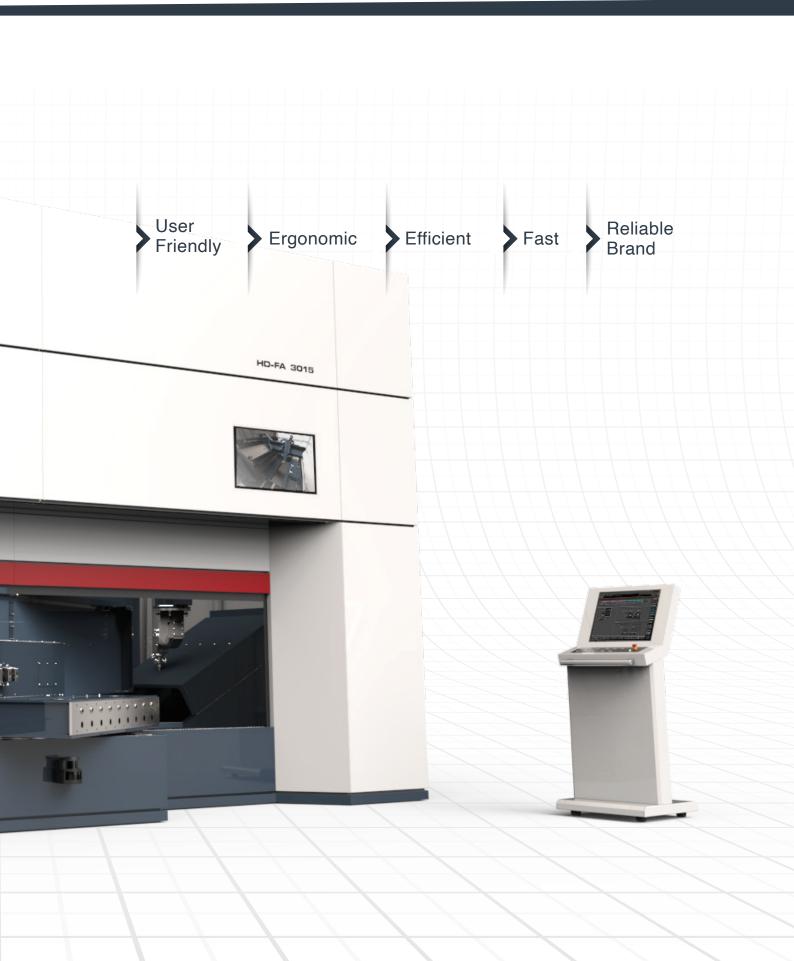
EASY ACCES TO CUTTING AREA WITH BACK DOOR

Rear door for use when cutting is required. This rear door is also used during machine maintenance



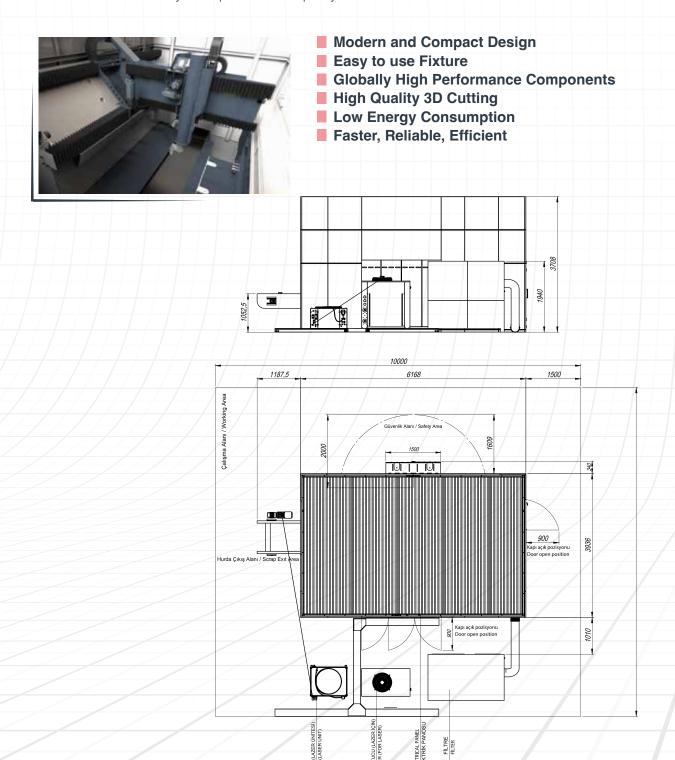
HD-FA 5 AXIS LASER





THE 5 AXIS FIBER LASER SYSTEM FOR AUTOMOTIVE AND AEROSPACE INDUSTRY

DURMA 5 axis fiber laser system will be your best partner for automotive and any other high-sense and 3D complex part production. +%25 increased processing space due to same concept machines. For gratify cutting performance, strong machine frame and rotary table provide best quality.



HD-FA Technical Specifications		
X Axis Stroke	10'	
Y Axis Stroke	5'	
Z Axis Stroke	25,6	inch
B Axis	±135	0
C Axis	±360	°xn
Max. Synchronous Speed	567	ft/min.
Max. Synchronous Accelaration	56	ft/s2
Positional Accuracy	±0.003	inch
Repeatability	±0.003	inch

Machine Dimensions

Machine Size	20' 3" x 12' 11" h= 12' 2"	
Working Area	29' 6" x 32' 9" (Secure Area)	
Rotary Table's Door Length	13'1 "	
Machine Weight	35274	lbs

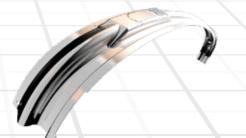
Cutting Thickness				
Material (Cutting Capacity)*	2 kW	3 kW	4 kW	
Mildsteel (S235)	0.5 inch	0.625 inch	0.75 inch	
Stainless Steel (304)	0.25 inch	0,31 inch	0.375 inch	
Aluminium (5083)	0.25 inch	0,31 inch	0.5 inch	
Copper (CU)	0.25 inch	0,31 inch	0.375 inch	
Brass (CUZN39 PB3)	0.12 inch	0,20 inch	0.25 inch	

Cutting Head

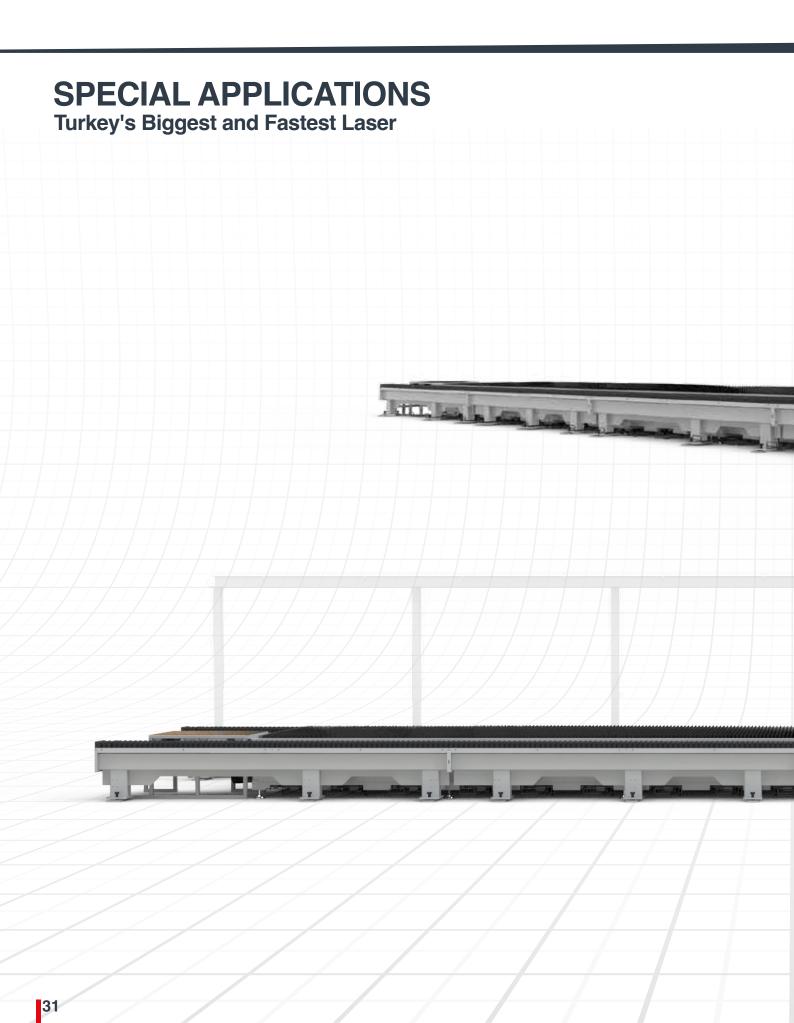
Туре	3D
Focus	Automatic

^{*}Standard cutting parameters.

Factors such as rust, shell formation, paint, label, pitch shifts on the surface, rolling defects, rusts on the surface of the material, affect the black sheet cutting negatively. The top and bottom surfaces of the material to be cut must be clean. The cutting quality and cutting speeds of sandblasted sheets vary.



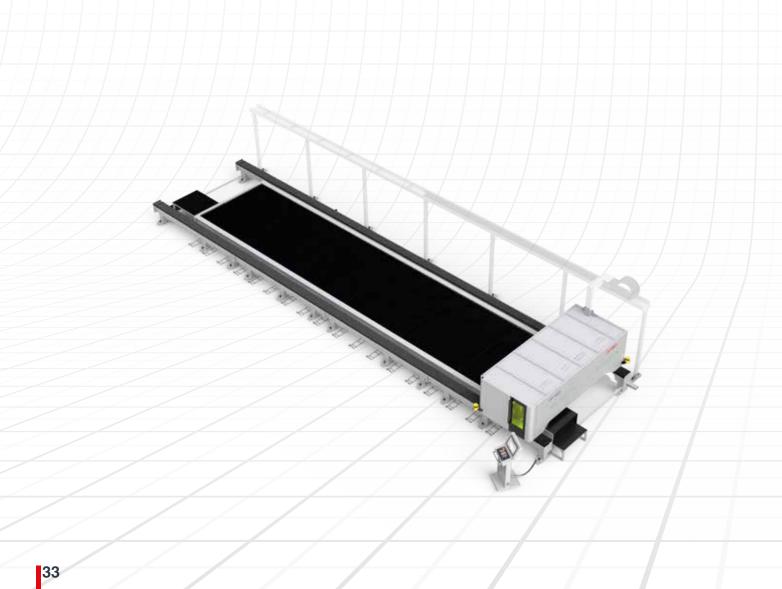






HD-F 20030

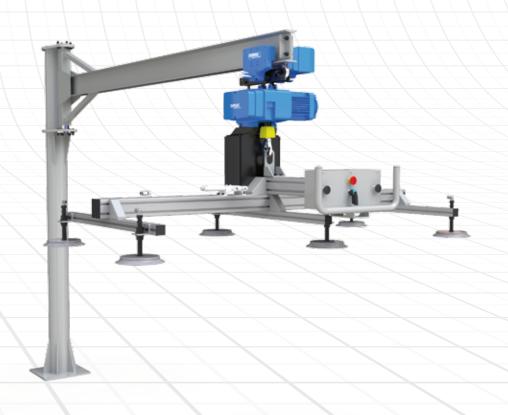
HD-F 20030	Technical Data	
X Axis	66'	
Y Axis	10'	
Z Axis	6.49"	inch
Max. sheet size	66'x10'	
Max. Speed X Axis	196	ft/min
Max. Speed Y Axis	196	ft/min
Max. Speed Z Axis	98	ft/min
Max.Synchronized Speed (X-Y)	278	ft/min
Max. Synchronized Acceleration (X-Y)	45	ft/s2
Positioning Accuracy	±0.002	inch



Automatic Loading – Unloading Units Solutions For Your Process

- Manual loading-unloading systems
- Semi automatic loading-unloading systems
- Automatic loading-unloading systems

M-LOADER 3015 / 4020			
Technical Data	3015	4020	
Sheet Length (Max.)	10'	1' 7,6"- 13' 1,4"	
Sheet Width (Max.)	5'	1' 7,6" - 6' 6,7"	
Sheet Thickness	0,375	0,25	inch
Max. Loading Capacity	794	992	lbs
Vacuum Pad Qty.	6	8	pcs.
Rotation angle (Max.)	260	260	٥
Consumption Values			
Electricity	0,67	0,67	hp
Compressed Air	1,76	1,76	cfm
Compressed Air	101	101	psi



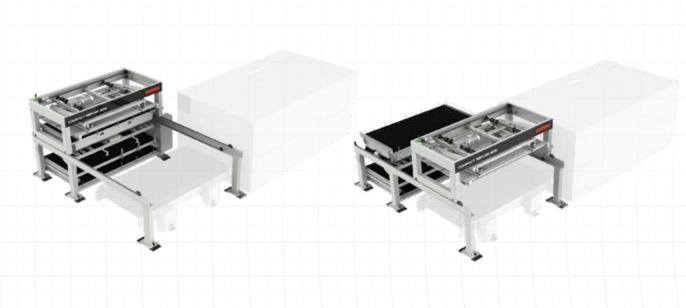
Technical Data	3015	4020	
Sheet Length (Max.)	1' 7,6"- 10'	1' 7,6" - 13' 1,4"	
Sheet Width (Max.)	1' 7,6" - 5'	1' 7,6" - 6' 6,7"	
Sheet Thickness	0,02 - 1,00	0,02 - 1,00	inc
Max. Loading Capacity	1980	3530	lbs
/acuum Pad Qty.	12	18	pcs
Total Cycle Time	"60-75 (depends on loading height)"	"60-85 (depends on loading height)"	sec
Working Area	13' 9" x 13' 5" h= 7' 5"	18' 1" x 17' 8" h= 8' 11"	
Rotation angle (Max.)	90	90	0
Electricity	4,02	5,36	hp
Compressed Air	3,53	5,89	cfr
Compressed Air	101	101	ps

COMPACT SERVER (H Type)			
Teknik Özellikler	3015	4020	
Min. Sheet Size	2' 8" x 2' 8"	2' 8" x 2' 8"	
Length	3' 4", 5', 6' 8", 8' 2", 10'	3' 4", 5', 6' 8", 8' 2", 10' 11' 6", 13' 4"	
Width	3' 4", 4' 1" - 5"	3' 4", 4' 1" - 5", - 6' 8"	
Thickness	0.02" - 1"	0.02" - 1"	inch
Max. Sheet Size	10' x 5'	13' 5" x 6' 8"	
Max. Sheet Load	11023	14330	lbs
Max. Sheet Stack Heighti	9,84	9,84	inch
Cycle Time	60	70	sec.
Unloading Station Max. Stack Height	3,35	3,35	inch
Unloading Station Max. Stack Weight	6613	8818	lbs
Double Sheet Dedector	yes	yes	
Sheet Separation System	yes	yes	

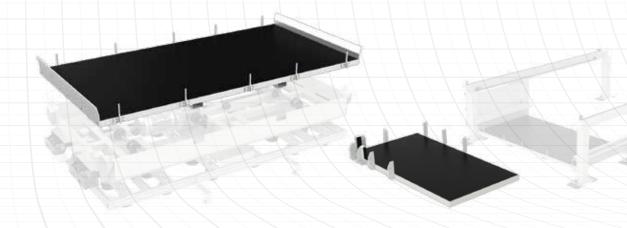
- COMPACT DESIGN
- Space-Saving
- Easy Integration
- Cost-Effective Solution
- Low Maintenance Cost



AUTOMATIC FORK MOVEMENT OPTION



ADDITIONAL SHELF OPTION



Operational Continuity and High Production Capacity

Enhances production capacity with uninterrupted loading and unloading operations. The machine can continue operating while the unloading process is in progress

Technical Data	3015	4020	6020	
Min. Sheet Size	3' 4" - 3' 4"	3' 4" - 3' 4"	3' 4" - 3' 4"	
Length	3' 4" - 5' - 6' 8" - 8' 2" - 10'	3' 4"- 5', 6' 8"- 8' 2"- 10' - 11' 6"- 13' 4"	3' 4"- 5' - 6' 8" - 8' 2" - 10' - 11' 6" - 13' 4" - 19' 8"	
Width	3' 4" - 4' 1" - 5'	3' 4" - 4' 1" - 5' - 6' 8"	3' 4" - 4' 1" - 5' - 6' 8"	
Thickness	0,02 - 1	0,02 - 1	0,02 - 1	inch
Max. Sheet Size	10' x 5'	13' 4" x 6' 8"	20' x 6' 8"	
Max. Loadable Sheet Loading Weight	11000 lbs	13220	19840	lbs
Max. Sheet Loading Height	9,8	9,8	9,8	inch
Cycle Time	50	60	80	sec
Dual Sheet Sensor	yes	yes	yes	
Sheet Separation System	yes	yes	yes	



Technical Specifications	3015	4020	6020	
Min. Sheet Size	3' 4" - 3' 4"	3' 4" - 3' 4"	3' 4" - 3' 4"	
Length	3' 4" - 5' - 6' 8" - 8' 2" - 10'	3' 4"- 5', 6' 8"- 8' 2"- 10' - 11' 6"- 13' 4"	3' 4"- 5' - 6' 8" - 8' 2" - 10' - 11' 6" - 13' 4" - 19' 8"	
Width	3' 4" - 4' 1" - 5'	3' 4" - 4' 1" - 5' - 6' 8"	3' 4" - 4' 1" - 5' - 6' 8"	
Thickness	0,02 - 1	0,02 - 1	0,02 - 1	inch
Max. Sheet Size	10' x 5'	13' 4" x 6' 8"	20' x 6' 8"	
Max. Sheet Metal Loading Weight That Can Be Loaded On The Pallet	6614	8818	11023	lbs
Pallet Numbers	10	10	10	pcs.
Total Loadable Sheet Weight	66138	88184	110231	lbs
Max. Sheet Loading Height	3,35	3,35	3,35	inch
Cycle Time	50	60	80	sec.
Dual Sheet Sensor	yes	yes	yes	
Sheet Separation System	yes	yes	yes	
Electric Power	30,8	50,9	53,6	hp
Compressed Air	49,4	49,4	49,4	cfm
Compressed Air	101	101	101	psi



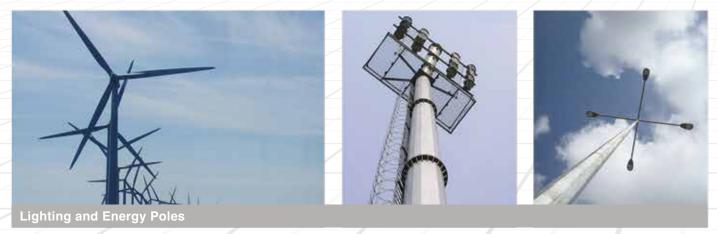
SPECIAL APPLICATIONS



Industrial Machines







FAST ON SERVICE AND SPARE PARTS

DURMA provides the best level of service and spare parts with qualified personnel and spare parts in stock. Our experienced and professional service personnel are always ready at your service. Our professional training and application enriched courses will give you an advantage to use our machinery.



Product Groups

































Durma International



durmainternational



durmaint



durmamachines



Durmazlar





Durmazlar Makina San. ve Tic. A.Ş. OSB 75. Yıl Bulvarı Nilüfer-Bursa /

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