



# ishhear

GUILLLOTINE SHEAR



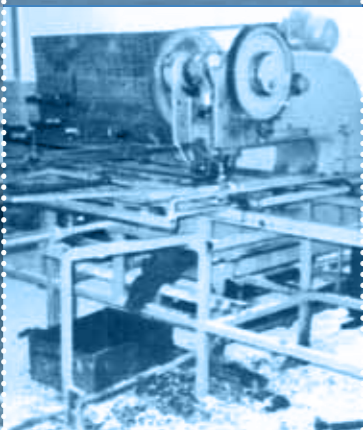
# 1950

MVD produced its first machine .



# 1971

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



# 1974

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.



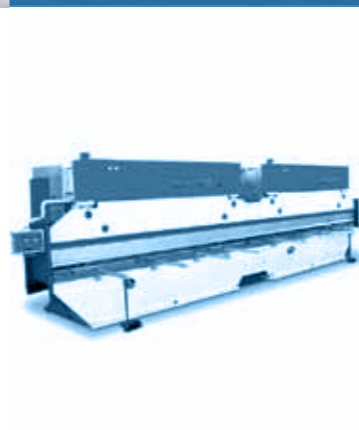
# 1981

Moved to second 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.



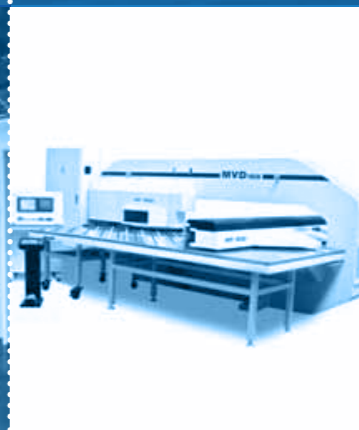
# 2001

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



# 2003

CNC Hydraulic Turret Punch machine was presented to the market.



# 2011

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





## Quality High Technology

**Quality and service support is accepted as principle. Designing and manufacturing are based on reliability, durability and precision.**

Machines are easy to use and are built to be ready for user errors. Machines are designed and analyzed with 3-D supported computer aided programs, precisely machined in moving column CNC machining centres, equipped with world-known equipments and presented to the customers' use after quality control.



# iShear A Series

## MECHANICAL GUILLOTINE SHEAR



## General Features

- ▶ A SERIES Guillotine Shears, suitable for cutting thin sheet material, up to thickness of 4 mm
- ▶ Machine body and upper beam is made of steel constructions, has been designed according minimum stretch and optimum resistance criteria
- ▶ Body, as the manufacture of precise CNC machining center for provide maximum cutting quality and accuracy.

## Standard Equipments

- ▶ Welded one piece steel frame using rigid structural steel
- ▶ Rigid welded monoblock frame provide Maximum cutting accuracy,
- ▶ Digital NC control unit
- ▶ Automatic, Digital controlled motorized back gauge 750mm range (stroke)
- ▶ Schneider-Telemecanique electrical components, with ventilations electrical cabinet
- ▶ 4 Cutting edges blade produced from high alloy steel
- ▶ Mechanical sheet hold down system holds the sheet in place during the cutting process.
- ▶ Simple and Easy operable Blade Gap adjustment system
- ▶ Roller bearings on the table to help feeding sheets to the machine easily
- ▶ Front Support Arms with scale
- ▶ Foot pedal stand and control unit for Single or Multi cutting operations
- ▶ Rear light beams with CE conformity
- ▶ Emergency stop button
- ▶ Back side protections cover
- ▶ Shadow, illuminations cutting line
- ▶ Complete electrical switch board and control panel for 400V AC 3 Phase 50Hz

## Optional Equipments

- ▶ Touch Screen CNC controller
- ▶ Pneumatic sheet support system and sheet sliding
- ▶ Adjustable Angular gauge sliding T slot (0-180 degree) on front
- ▶ Longer Front Support Arms

▶ Controller



▶ Elgo P9521 NC  
Standard



▶ Cybelec Touch 6  
Optional



▶ Elgo P40  
Optional

▶ Equipments



▶ Pneumatic Sheet Support System  
Optional



▶ Adjustable Angular Gauge  
Optional



▶ Roller Bearing Top Table



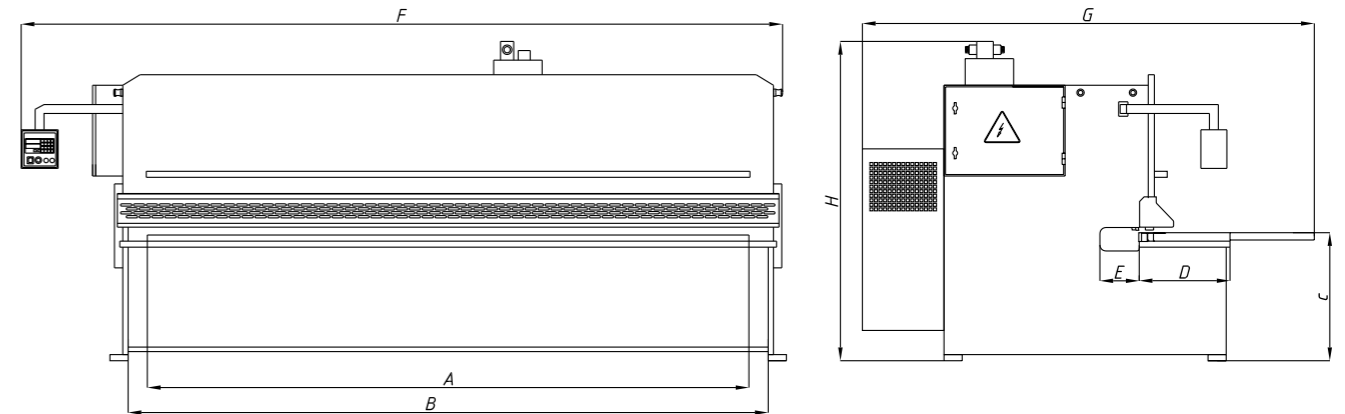
▶ Electrical Cabinet



▶ Rear Protection Light Beams



▶ Back Gauge



▶ Technical Table

iShear A Series		A04-2000	A04-2600	
Cutting capacity	450N/mm <sup>2</sup>	4	4	mm.
Cutting length	A	2100	2600	mm.
Cutting Angle		1,7	1,7	degree
Speed Stroke per Minute		42	34	1/min
Table Height	C	850	850	mm.
Machine Length	F	2500	3100	mm.
Machine Height	H	1350	1350	mm.
Machine Width	G	2250	2250	mm.
Motor Power		7,5	7,5	Kw.
Weight		2500	2900	Kg
Technical specifications are subject to change without notice				
Special capacity machines can be manufactured upon request				

# iShear B Series

HEAVY-DUTY HYDRAULIC SWING BEAM SHEARS



**HIGH SPEED  
CUTTING QUANTITY  
DOUBLE SPEED SYSTEM**

## General Features

- ▶ Special Design MVD swing beam shears provide up to 25 cutting stroke per minute .
- ▶ When cutting thin sheets, up to 50% faster cutting and efficiency gains achieved with high speed,
- ▶ precise cutting is provided for thick materials with slow speed working mode .
- ▶ Manufactured in sizes 3 meters to 6 meters and capacities 6mm to 20mm .
- ▶ Provides high cutting quality with low cutting angle design machine concepts
- ▶ Construction feature has a fixed angle of cut
- ▶ Machine can produce with automatically blade gap and stroke adjustment by CNC controller according to customer's request
- ▶ Machine body and upper beam's made of steel constructions, has been designed according minimum stretch and optimum resistance criteria
- ▶ Body, as the manufacture of precise CNC machining center for provide maximum cutting quality and accuracy.
- ▶ Body, as the manufacture of precise CNC machining center is a single operation
- ▶ Designed Heavy –Duty rigid body concept in order to prevent deflections.
- ▶ Back gauge range (stroke ) 1000 mm .
- ▶ Back gauge accuracy performed with linear ball shaft, without backlash guide
- ▶ Programmable back gauge has 0,1 mm positioning tolerance and retract features .
- ▶ Automatic swing –up feature of backgauge after 1000mm to feed longer sheets easily

### ▶ Controller



▶ Elgo P9521 NC  
Standard



▶ Cybelec Touch 6  
Optional



▶ Delem DAC 310  
Optional

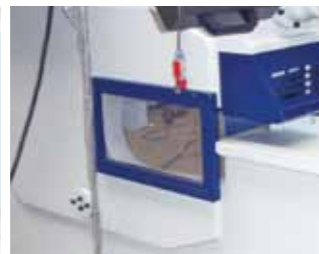
# Standard Equipments

- ▶ NC Controller
- ▶ Easily adjustable with scale blade gap setting system for precise cutting and long life blade's
- ▶ Movable controller arm
- ▶ Roller bearings on the table to help feeding sheets to the machine easily
- ▶ Welded monoblock, heavy steel frame using rigid structural steel produced with modern manufactured methods
- ▶ Automatic, Digital controlled motorized back gauge 1000 mm range (stroke) with ball shaft and guide system.
- ▶ Programmable back gauge, with retract and swing up features for longer sheets
- ▶ Prevents scratching of the sheet with ball on the table
- ▶ Hydraulic Sheet hold down system, holds the sheet in place during the cutting process.
- ▶ Cylinders, processed as precise from solid full material and made honed.
- ▶ Pistons, processed from forged steel, hardened, grinding is done, and chrome-coated.
- ▶ Simple and Easy operations Blade Gap adjustment system
- ▶ Adjustable bottom blade holder
- ▶ Double Speed machine concept
- ▶ Stroke adjustment on the control panel for increase stroke number for short cutting efficiency
- ▶ High Quality alloy material bottom and upper blade for long life
- ▶ Bottom Blade 4 edges, Upper Blade 2 edges
- ▶ No maintenance dry ball joint system
- ▶ Hoerbiger or Bosch Rexroth low maintenance hydraulic block
- ▶ Schneider-Telemecanique electrical components, with ventilations electrical cabinet
- ▶ Foot pedal stand suitable for serial cutting operation and setting blade adjustment
- ▶ Front support arms 1000mm, with scale and flip over stops in T slot
- ▶ Back and side protection covers
- ▶ CE conformity rear light beams
- ▶ Shadow, illuminations cutting line
- ▶ Emergency stop button
- ▶ Oil tank level indicator
- ▶ Complete electrical switch board and control panel for 400V AC 3 Phase 50Hz

## Equipments



▶ Automatic swing –up feature of back gauge after 1000mm sheets back gauge



▶ Throat



▶ Roller Bearing Top Table



▶ Blade Gap Adjustment system



▶ Front Finger Protection Open able 1000 mm



▶ Rear Protection Light Beams



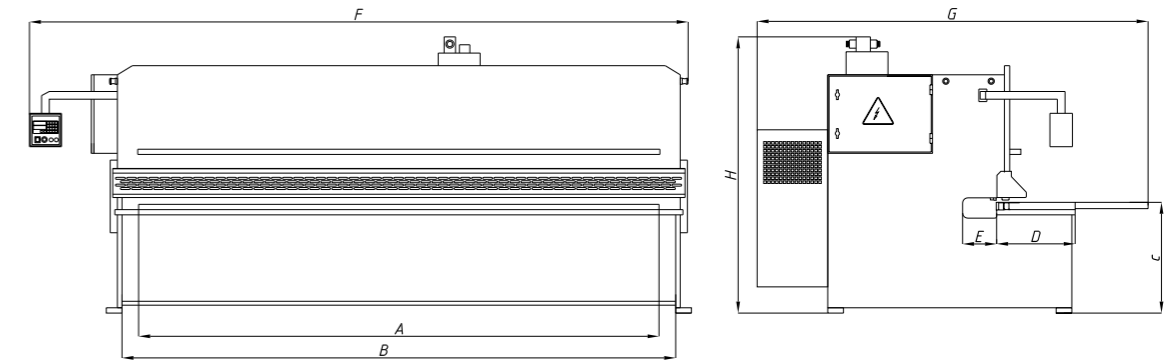
▶ Adjustable Angular Gauge **Optional**



▶ Pneumatic sheet support system **Optional**

# Optional Equipments

- ▶ CNC AUTOSET (bladegap,stroke) OPTIONS Automatically stroke, blade gap adjustment by CNC
- ▶ Controller Cybelec Touch6 or Delem DAC310 (automatically calculations according material type and thickness, cutting lengths ).
- ▶ Pneumatic sheet support system
- ▶ Cybelec Touch 6 Touch panel CNC controller
- ▶ M25 CNC Controller
- ▶ Delem DAC 310 CNC Controller
- ▶ Adjustable Angular Gauge for cutting angle parts 0-180°
- ▶ Front Finger Protection Open able 1000 mm
- ▶ Special Throat 500mm
- ▶ Front finger protection light barriers with CE conformity
- ▶ Special Blade for kind of cutting material
- ▶ Longer Front Support Arms
- ▶ 220-240V 60hz operating voltage
- ▶ 440-480V 60hz operating voltage
- ▶ 220-240V 60Hz and 440V-480V 60 Hz double operating voltage (by preliminary preparation)



## Technical Table

iShear B series	B06-3000	B08-3000	B10-3000	B13-3000	B16-3000	B20-3000	B06-4000	B08-4000	B10-4000	B12-4000	B14-4000	B16-4000	B20-4000		
Cutting capacity (450N/mm2)	6	8	10	13	16	20	6	8	10	12	14	16	20	mm.	
Cutting capacity (700N/mm2)	4	5	6	8	10	13	4	5	6	8	9	10	13	mm.	
Cutting length	A	3000	3000	3000	3000	3000	4000	4000	4000	4000	4000	4000	4000	mm.	
Cutting angle		1,5	1,9	2	2,1	2,25	2,75	1,5	1,5	1,5	1,8	1,8	2	2	degree
Hold Down Cylinder		12	13	14	14	17	17	18	18	17	17	18	18	18	Unit
Speed Stroke per minute / High Speed		18/23	13/19	13/19	10/14	7/10	7/10	10/14	13/20	11/17	9/15	6/20	5/16	4/15	1/min
Distance Between Columns	B	3230	3230	3240	3240	3290	3290	4230	4240	4240	4320	4350	4375	4390	mm.
Table Height	C	850	850	850	860	850	900	850	850	865	915	900	900	960	mm.
Table Width	D	500	580	600	620	625	655	600	630	630	660	660	680	710	mm.
Throat Depth	E	--	250	250	250	200	150	250	250	250	250	250	100	250	mm.
Backgauge Travel Distance		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	mm.
Stroke		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	mm.
Machine Length	F	4300	4330	4350	4400	4450	4450	5340	5350	5370	5450	5450	5480	5700	mm.
Machine Height	H	1650	2150	2200	2400	2400	2600	2150	2200	2380	2400	2400	2420	2850	mm.
Machine Width	G	2620	2850	3100	3150	3250	3450	2900	2950	3000	3000	3050	3100	3150	mm.
Oil tank capacity		160	230	230	230	315	350	220	220	280	370	370	370	370	lt.
Motor Power		11	15	22	22	30	45	11	22	22	30	30	30	45	Kw.
Weight		6000	8000	9000	11000	16500	21000	10200	12500	16500	19000	20000	23000	27000	Kg.
Technical specifications are subject to change without notice															
Special capacity machines can be manufactured upon request															

# iShear C Series

CNC VARIABLE RAKE ANGE HYDRAULIC GUILLOTINE SHEARS



## General Features

- ▶ Machine body and upper beam's made of steel constructions, has been designed according minimum stretch and optimum resistance criteria
- ▶ Body, as the manufacture of precise CNC machining center for provide maximum cutting quality and accuracy.
- ▶ Body, as the manufacture of precise CNC machining center is a single operation
- ▶ Designed Heavy –Duty rigid body concept in order to prevent deflections
- ▶ Back gauge range (stroke) 1000 mm.
- ▶ .Back gauge accuracy performed with linear ball shaft, without backlash guide
- ▶ Programmable back gauge has 0,1 mm positioning tolerance and retract features .
- ▶ Automatic swing –up feature of back gauge after 1000mm to feed longer sheets easily
- ▶ C series CNC Hydraulic automatic cutting angle operated shears, provides high cutting quality in the widest range of materials type and sheets thickness.
- ▶ C Series shears automatically calculate and apply; cutting angle, blade gap adjustment, stroke of the cutting length, back gauge positioning according material type and thickness with CNC controller and servo hydraulic valve.
- ▶ Cutting angle automatically adjusted according sheet thickness, this features provide high and precise cutting quality and reduced twisting or torsion effects of thin and narrow parts also .
- ▶ When cutting thin and short parts, Stroke reduced, performed number of stroke, speed increase .
- ▶ Prevent user errors, increases blade life
- ▶ Top beam precise movement provided with hardened slide ways and pulley

### ▶ Controller



▶ Cybelec DNC 60



▶ MVD M25



▶ Delem DAC 360



▶ Cybelec Touch 6



# Standard Equipments

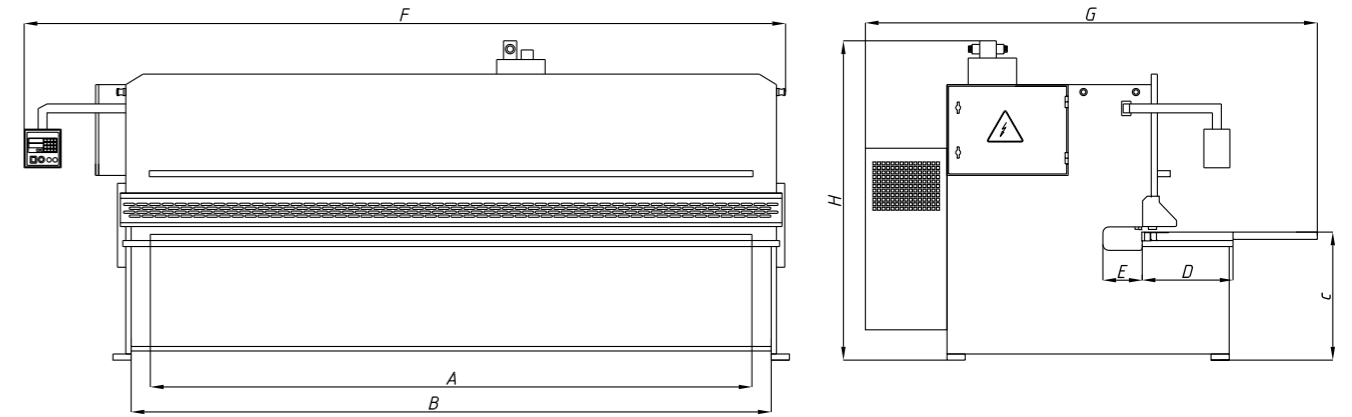
- ▶ CNC controller
- ▶ Easily adjustable with scale blade gap setting system for precise cutting and long life blade's
- ▶ Movable controller arm
- ▶ Roller bearings on the table to help feeding sheets to the machine easily
- ▶ Welded monoblock heavy steel frame using rigid structural steel produced with modern manufactured methods
- ▶ Automatic, CNC controlled motorized back gauge 1000 mm range (stroke) with ball shaft and guide system .
- ▶ Programmable backgauge, with retract and swing up features for longer sheets
- ▶ Prevents scratching of the sheet with ball on the table
- ▶ Pressure adjustable Hydraulic sheet holder system, protect sheet parts when cutting process
- ▶ Cylinders, processed as precise from solid full material and made honed .
- ▶ Pistons, processed from forged steel, hardened, grinding is done, and chrome-coated.
- ▶ Automatic cutting angle adjustment operation
- ▶ Automatic blade gap adjustment operation
- ▶ Automatic stroke adjustment operation
- ▶ Adjustable bottom blade holder provide high precise robust set for long life blade
- ▶ Adjustable cutting length on the control panel, increase speed number of stroke for short parts
- ▶ High Quality alloy material bottom and upper blade for long life
- ▶ Bottom Blade 4 edges, Upper Blade 4 edges
- ▶ No maintenance dry ball joint system
- ▶ Hoerbiger or Bosch Rexroth low maintenance hydraulic block
- ▶ Schneider-Telemechanique electrical components, with ventilations electrical cabinet
- ▶ Foot pedal stand suitable for serial cutting operation and setting blade adjustment
- ▶ Front support arms 1000mm, with scale and flip over stops in T slot
- ▶ Back and side protection covers
- ▶ CE conformity rear light beams
- ▶ Shadow, illuminations cutting line
- ▶ Emergency stop button
- ▶ Oil tank level indicator
- ▶ Stroke hits Counter
- ▶ Complete electrical switch board and control panel for 400V AC 3 Phase 50Hz

## Equipments



# Optional Equipments

- ▶ Pneumatic sheet support system
- ▶ Front Finger Protection Open able full length
- ▶ Adjustable Angular Gauge for cutting angle parts 0-180°
- ▶ Longer Front Support Arms
- ▶ Special Throat 500mm
- ▶ Front finger protection light barriers with CE conformity
- ▶ Special Blade for kind of cutting material
- ▶ 220-240V 60hz operating voltage
- ▶ 440-480V 60hz operating voltage
- ▶ 220-240V 60Hz and 440V-480V 60 Hz double operating voltage (by preliminary preparation)



## Technical Table

iShear C series	C06-3000	C08-3000	C10-3000	C13-3000	C16-3000	C20-3000	C06-4000	C08-4000	C10-4000	C13-4000	C16-4000	C20-4000	C10-6000	C13-6000	C16-6000	C20-6000		
Cutting capacity (450N/mm2)	6	8	10	13	16	20	6	8	10	13	16	20	10	13	16	20	mm.	
Cutting capacity (700N/mm2)	4	5	6	8	10	13	4	5	6	8	10	13	6	8	10	13	mm.	
Cutting length	A	3000	3000	3000	3000	3000	4000	4000	4000	4000	4000	4000	6050	6050	6050	6050	mm.	
Cutting angle		0,5-2	0,5-2,5	0,5-3	0,5-3	0,5-3	0,5-3	0,5-3	0,5-3	0,5-3	0,5-3	0,5-3	0,5-3	0,5-3	0,5-3	0,5-3	degree	
Hold Down Cylinder		12	12	14	14	17	14	17	17	17	17	18	18	26	26	26	Unit	
Speed Stroke per minute / High Speed		10/15	10/15	11/15	11/15	11/15	10/14	9/13	9/13	9/13	8/12	8/12	5/12	5/12	5/9	5/7	1/min	
Distance Between Columns	B	3450	3450	3470	3470	3500	3500	4460	4470	4470	4470	4500	4500	6470	6470	6650	mm.	
Table Height	C	775	855	855	855	855	870	830	850	900	900	950	900	1230	1240	1255	mm.	
Table Width	D	520	600	620	640	640	700	600	630	650	700	720	800	845	920	1100	mm.	
Throat Depth	E	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	mm.	
Backgauge Travel Distance Stroke		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	mm.	
Machine Length	F	3800	3850	4380	4400	4450	4500	5300	5350	5400	5400	5450	5500	8600	8600	8650	mm.	
Machine Height	H	2010	2170	2250	2450	2500	2700	2200	2350	2350	2530	2700	2850	3120	3150	3200	mm.	
Machine Width	G	2350	2650	2950	3050	3100	3150	2700	2850	2950	3050	3150	3250	3200	3200	3250	mm.	
Oil tank capacity		140	230	230	230	315	370	230	230	280	370	370	370	300	305	430	lt.	
Motor Power		11	18,5	18,5	22	30	30	11	15	22	22	30	30	30	30	37	Kw.	
Weight		6000	7500	9000	12000	16000	19000	10000	12000	14000	16500	21000	23000	27000	30000	40000	50000	Kg.
Technical specifications are subject to change without notice																		
Special capacity machines can be manufactured upon request																		

# Special Applications



7100-13mm



Swing up feature back gauge up to 1000mm sheet parts



6100-20mm



6100-6mm



3100-20mm



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