### **FORCE** SERIES

#### STANDART FEATURES

- BRL 401.2 NC Control Unit
- Manual Blade Gap Adjustment
- Full Length Finger Guards Cage
- Lightning
- Shadow line
- Ball integrated front tables
- AC Motorized back gauge, 1000 mm with Automatic swing-up
- Squaring arm with scale & T-Slot & Tilting stop (L= 1000 mm)
- Support arms (L=1000 mm)
- Back Safety System
- Foot Pedal with Emergency Stop Button
- Rexroth Hydraulic System
- Siemens, Telemecanique, Schneider and Mitsubishi brand Electrical Components
- Top and Bottom Blades Made of Böhler Brand Steel

#### **OPTIONAL FEATURES**

- Elgo P40T CNC & Automatic Backgauge and Blade Gap Adjustment
- Pneumatic sheet support system (Back)
- Full Length Flip-up Finger Guards Cage
- 0-180° Front angle gauge
- Sheet Slider (Back)
- Laser Cutting Line
- Oil Heaters
- Oil Fan Cooler
- Manual Central Lubrication
- Motorized Central Lubrication





Machine body produced with advanced technology. Excellent cutting precision.

New generation design with high performance.

#### **GENERAL FEATURES**

FORCE Series NC Hydraulic Guillotine Shears that provide the appropriate solutions for your needs, proved to be user friendly with its advanced technological features produced with high efficiency, precision and performance criteria. The FORCE Series NC Hydraulic Guillotine Shears has proved to be the best and strongest in the industry with its ease of use.

While providing flexibility for different production requirements, the time loss was totally eliminated by targeting high productivity.

- The machine frame is manufactured with advanced technology with very precise tolerances and stress relieved with large welded components.
  All tensile points are designed with large radii and strain accumulation and possible welding cracks are eliminated.
- The lower table and upper table inertia are designed for optimum value for the minimum deformation affecting the cutting quality.
- The top plate is designed to be positioned vertically so that the roller bearings, piston bearings and felts can compensate for vertical loads.
- The hydraulic cylinder is designed as double-sided and honed to a surface quality of 2 microns. Thus, minimum wear resistance is created for the felts. The cylinder bodies are manufactured as SAE 1040 material forged.

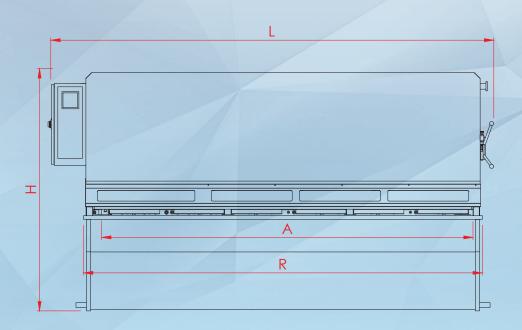
- The hydraulic cylinders are specially designed and the upper table is mounted with cylinder springs and doubly secure to cylinders as spherical connection. At this point, the power that generated during cutting is evenly distributed to the machine body.
- Piston head features: Omega-type felts are fitted with wide bronze bearings, semi-angled sleeves.
- The Hilalsan hydraulic system allows precise usage at all pressure values up to the maximum operating pressure. At the same time, with these pressure values, precise cylinder positioning, synchronization and repeatability are achieved.
- Backgauge system is manufactured in accordance with environmental conditions. Backgauge bearings are made for heavy conditions with double bearers. Scrapping type bearings are used against dust and other particles that will accumulate in the linear guideways against dusty environmental conditions.
- The outer surface of the machine is painted with two layers of paint at least 60 microns in thickness to protect against weather conditions. Paint drying is done gradually in different time and temperature ranges in stateof-the-art ovens.



# FORCE SERIES

FORCE Machine Type	Cutting Length	Cutting Capacity		x. ninute	Angle	of ms	Holddown Force		Course	Speed	wer
		MS (450 N/mm²)	MS (700 N/mm²)	Min.Max. Stroke per minute	Cutting A	Number of Holddowns	Min.	Мах.	Backgouge (	Backgauge	Motor Power
	mm	mm	mm	1/min.	Degree	pcs.	Ton	Ton	mm	mm/sec.	Kw
	A										
2506	2580	6	4	17	1,5	10	3	12	1000	100	11
3006	3080	6	4	15	1,5	13	4	16	1000	100	11
3010	3080	10	7,5	13	2	16	5	20	1000	100	18,5
3013	3080	13	10	13	2,1	19	6	25	1000	100	22
3016	3080	16	12	9	2,25	16	8	40	1000	100	30
4006	4080	6	4	12	1,5	20	10	25	1000	100	11
4010	4080	10	7,5	8	1,5	20	10	25	1000	100	18,5
4013	4080	13	10	8	1,8	20	10	50	1000	100	22

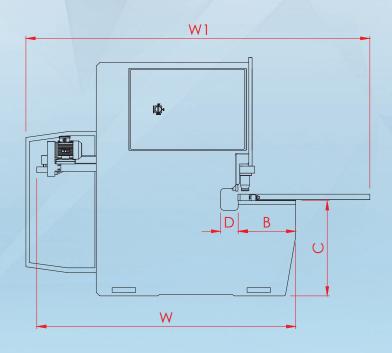
HİLALSAN has right to change catalogue values and machine technical details without notice. Misprints are not restrictive.







			1	ĺ	1				1	1
Oil Capacity	Throat Depth	Front Arms	Table Width	Table Height	Table Length	Length	Width	Total Width	Height	Approximate Weight
lt.	mm.	pcs.	mm	mm	mm	mm	mm	mm	mm	mm
	D		В	С	R	L	w	W1	Н	Kg.
180	150	3	495	800	2830	3590	2000	3600	1800	5300
180	150	3	495	800	3330	4090	2000	3600	1800	6200
280	150	3	520	820	3350	4120	2050	3650	2000	7800
280	150	3	550	830	3360	4140	2100	3700	2300	10000
400	150	3	550	840	3380	4160	2150	3650	2400	15000
180	150	4	500	820	4370	5150	2050	3650	1950	8500
280	150	4	530	820	4380	5180	2100	3700	2250	11700
280	150	4	580	850	4400	5230	2150	3750	2400	14000



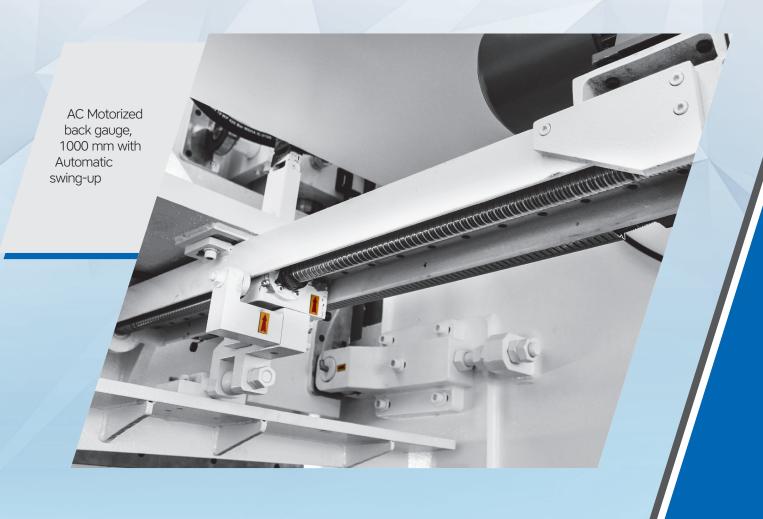
# **HYPER - FORCE** SERIES











# **HYPER - FORCE** SERIES









Pneumatic sheet support system ( Modular )

Manuel Blade Gap Adjustment



0-180° angle gauge

# **HYPER - FORCE** SERIES







Back Safety System





Rexroth Hydraulic System

## **HYPER - FORCE** SERIES

Elgo P40T Colored Touchscreen CNC Control Unit





- Live Color & High Contrast TFT Touch Screen
- Material depending gap, angle and pressure calculation.
- Automatic Gap Adjustment
- Automatic Cutting Angle Adjustment
- Automatic Cutting Length Adjustment
- Automatic Backgauge Correction
- Automatic Backgauge Parking
- Sheet Support
- Hold-down pressure managment
- System Pressure Managment
- Program memory
- Language Selection





BRL 401.2 NC Control Unit





- Use encoder which supply between 5 VDC to 30 VDC
- Inch / Metric measuring unit,
- Measure 0 10 meter,
- 0,1 mm / 0,001 inch sensivity (Adjustable),
- Automatic / Semi Automatic and manual operating mode,
- 10 Different Set Position and Set Count value,
- Optional working with 100 programme, 10 set value
- · Working without set values (Single mode),
- Upper and lower limit definition,
- Double speed position control operation,
- · Warning with error messages,
- Programmable manual movement keys,
- Retraction capability,
- Saves set position and count values when power off,
- Programmable direction models for each axis,

# **HYPER - FORCE** SERIES

#### **OPTIONAL FEATURES**



Oil Cooler with Fan



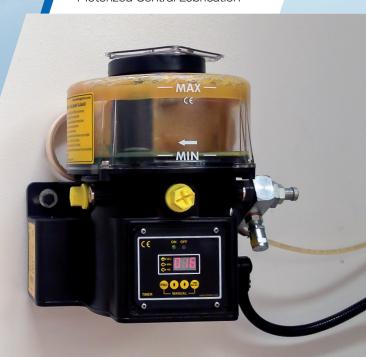


Laser Cutting Line

Motorized Central Lubrication









Leading Technology







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**CNC Press Brake** 



**CNC Press Brake** 



Cnc Variable Rake Hydraulic Guillotine Shear



Nc Guillotine Shear



Guillotine Shear with Reducer



Double Cylinder Hydraulic Iron Worker



Single Cylinder Hydraulic Iron Worker



Hydraulic Drawing Press



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