### HYDRACROP SERIES





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Where production requires twin operator machines, higher speeds or greater capacity, GEKA provides the solution with the HYDRACROP range with five work stations:

- Punching
- Flat bar shearing
- Section shearing
- $\varnothing$  and  $\square$  shearing
- Notching

5 HYDRACROP MODELS: 55/110, 80/150, 110/180, 165/300, 220/300

The first figure indicates metric tons on the punching end.

The second figure, metric tons on L-shearing end.

The Hydracrop family comes in five models with different capacities: There are two different versions of each model: S and SD.

#### **S VERSION**

- Machines driven by two cylinders.
- 5 work stations, fitted with tools for L, shearing, bars Ø and Ø, shearing, rectangular notching and punching.
- Quick change punch.
- Flat bar shearing table with adjustable guides.
- 2 simultaneous work stations.
- Ready for "Production Kit" comprising:
  - Precision punching table with x & y measuring stops.
  - Precision notching table with x & y measuring stops.
  - One metre "touch & cut" length stop with fine adjusting.
  - Lamp for enhanced vision of cutting zones.
  - 10 sets of round punches and dies.
- Greater speed backed by a powerful hydraulic unit.
- Special equipment for approaching at reduced pressure and slow speed.

#### SD VERSION

 The same features as the S version, but with a deeper throat for larger plate and sheet meta applications.

### **FEATURES**

SHEARS FOR FLATBAR			<b>55/110</b> S, SD	<b>80/150</b> S, SD	110/180 S, SD	<b>165/300</b> S, SD	<b>220/300</b> S, SD
Flatbar (with slight deformation	1)	mm mm	300x15 200x20	450x15 300x20	600x15 400x20	750x20 400x30	750x20 400x30
Length of blade		mm	305	475	605	765	765
Square bar 🛚		mm	25	-	-	-	-
Working height		mm	880	850	960	870	870
Cut of an L leg at 45°		mm	60	80	100	120	120
SHEARS FOR SECTION IRON	1						
Shearing power		kN	1100	1500	1800	3000	3000
L at 90 ° without deformation		mm	120x120x10	130x130 x13	152x152x13	205x205x18	205 x205x18
L at 45 ° (2legs)		mm	70x70x7	70x70x7	70x70x7	70x70 x 7	70x70x7
WITH SPECIAL BLADE							
L at 90 ° (with slight deformatio	n)	mm	130x130x13	152x152x13	160x160x16	205x205x25	205x205x25
SHEARS FOR BARS							
Round bar Ø		mm	40	45	50	60	60
Square bar 🗹		mm	40	45	50	60	60
WITH SPECIAL BLADES							
UPN		mm	120	140	160	180	180
IPN		mm	120	140	160	180	180
NOTCHING							
Plate thickness		mm	10	12	13	16	16
Angle of		mm	100	100	100	120	120
Depth		mm	90	90	90	110	110
Width		mm	42	52	52	58	58
PUNCHING							
Punching power		kN	550	800	1100	1650	2200
Maximum capacity		mm	Ø40x10	Ø40x14	Ø40x20	Ø40x30	
		mm	Ø20x20	Ø24x24	Ø28x28	Ø34x34	Ø40x40
Throat	S SD	mm	250 500	300 500	300 610	510 610	385 475
Stroke		mm	60	70	80	100	100
Working height		mm	1085	1095	1165	1110	1110
GENERAL SPECIFICATIONS							
N° strokes per minute (stroke= 20mm)			37	40	28	31	26
Motor		kW	5	9	9	15	15
Net weight	S SD	kg	1390 1750	2070 2400	2750 3300	5200 6300	5900 7000
Gross weight	S SD	kg	1598 2012	2323 2760	3162 3795	5980 7245	6875 8050
Packaging dimensions	S SD	m	1,67x1,16x2,09 2,10x1,16x2,09	2,13x1,20x2,05 2,31x1,2x2,05	2,13x1,20x2,20 2,69x1,4x2,20	2,83x1,60x2,20 2,95x1,60x2,20	2,88x1,60x2,40 3,04x1,60x2,40
Volume of seaworthy package	S SD	m <sup>3</sup>	4,04 5,09	4,72 6,68	5,62 8,28	10 10,38	11,06 11,67

<sup>•</sup> Capacities based on a material resistance of 45 Kg/mm<sup>2</sup>.





CHANNELS



DOUBLE WING CUT (one of wich is at 45°)



SHEARING



SPOTTING



PUNCHE:



FLAT BAR



H CHANNEL



90° C















PUNCHE



ANGLES



45° CUT













DIINCHES



# Hydracrop 55/110

FEATURES	
Shearing of flat plate	300 x 15 mm 200 x 20 mm
L cut with standard blade (no distortion):	120 x 120 x 10 mm
L cut with optional blade (minor distortion):	130 x 130 x 13 mm
Shearing of Ø and ☑ bars	40 mm
Punching capacity $\varnothing$	40 x 10 mm



## Hydracrop 80/150

FEATURES	
Shearing of flat plate	450 x 15 mm 300 x 20 mm
L cut with standard blade (no distortion):	130 x 130 x 13 mm
L cut with optional blade (minor distortion):	152 x 152 x 13 mm
Shearing of Ø and ☑ bars	45 mm
Punching capacity Ø	40 x 14 mm



# Hydracrop 110/180

FEATURES	
Shearing of flat plate	600 x 15 mm 400 x 20 mm
L cut with standard blade (no distortion):	152 x 152 x 13 mm
L cut with optional blade (minor distortion):	160 x 160 x 16 mm
Shearing of Ø and ☑ bars	50 mm
Punching capacity $\varnothing$	40 x 20 mm

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## Hydracrop 165/300

FEATURES	
Shearing of flat plate	750 x 20 mm 400 x 30 mm
L cut with standard blade (no distortion):	205 x 205 x 18 mm
L cut with optional blade (minor distortion):	205 x 205 x 25 mm
Shearing of Ø and ☑ bars	60 mm
Punching capacity $\varnothing$	40 x 30 mm



### Hydracrop 220/300

FEATURES	
Shearing of flat plate	750 x 20 mm 400 x 30 mm
L cut with standard blade (no distortion):	205 x 205 x 18 mm
L cut with optional blade (minor distortion):	205 x 205 x 25 mm
Shearing of ∅ and ☑ bars	60 mm
Punching capacity $\varnothing$	40 x 40 mm



### PRODUCTION PACK

To obtain maximum output, GEKA provides its customers with the Production kit at a symbolic price, which comprises:



"Touch & Cut" Electric Lenght Stop 1 meter long



Set of 10 Round Punches and Dies



Work Light with Magnetic Base

### WORKING STATIONS





#### **Notching Station**

This station of the machine has been designed to mount several optional accessories, all of which are normally held in stock.

- Triangular notching at 90°.
- Punching equipment.
- Pipe notching equipment.
- Radiusing of flat bar ends.
- Radiusing corners.
- Notching of footings, etc. ng corners.
- 1.- Rectangular Punch
- 2.- Rectangular Stripper
- 3.- Rectangular notching lower blades
- 4.- Table with scaled measuring stops, included in Production Kit
- 5.- Cross centring Frame bolts
- 6.- Tapped holes for special tooling



#### Shearing of flat bar

The excellent stability of the monoblock bladeholder, which is controlled at the each end, makes it possible to mount a long upper blade with a proven geometry to obtain optimum shearing quality. The radial system allows a generous cutting capacity as a result of the force multiplier effect.

- 1.- Upper blade with special geometry.
- 2.- Lower blade.
- 3.- Supplement shearing angle control of upper blade, for shearing without deformation.
- 4.- Guide fixing screw.
- 5.- Clearance control of blade-holder.
- 6.- Adjustable guides 45° right and left.
- 7.- Clearance control between shear blades.
- 8.- Flat plate/bar shearing table.
- 9. Slotted guide positioning with coverage of the entire blade length.



#### L cutting angle

Fully aware of the importance of distortion free shearing, GEKA has designed a patented system of a floating upper blade that travels along a rectilinear line and is able to shear angles without any deformation or loss of material (single cut); All GEKA Hydracrop models ensure the distortion problem caused by the conventional radial system is now a problem of the past.

- 1.- Safety protection.
- Upper shear blade guides.
- 3.- Lower shear blade guides.
- 4.- Upper shear blade without deformation.
- 5.- Blade gap adjustment screws.
- 6.- Adjustable Support.



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#### Cutting of Øand ☑ bars

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The GEKA HYDRACROP machines are fitted as standard with blades for cutting  $\varnothing$  and  $\square$  bars. Furthermore, this station has been designed bearing in mind the shearing of other sections such as  $\coprod$ ,  $\coprod$ ,  $\top$ ,  $\top$  for which a large stock of blades is available.

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- 1.- Adjusting bolt and height setting of the guide.
- 2.- Blade holding flanges.
- 3.- Guide fixing bolts.



#### **Punching station**

Fitted with an independent cylinder creating a large, flexible, universal workstation easily adaptable for mounting special tools and "die

- 1.- Cylinder support
- 2.- Split double acting cylinder.
- 3.- Limit switches for punch travel setting.
- 4.- Generous travel for bending, deep-drawing, forming jobs etc
- 5.- Adjustable generous non-turning guiding.
- 6.- Additional guiding for damping of offset forces and protection of hydraulic seals.
- 7.- Quick punch change.
- 8.- Adjustable material stripper.
- 9.- Table with millimetre scales, included in production kit.
- Adjustable measuring stop.
- 11.- Gooseneck die-holder for punching channel and section.
- **12**.- Adjustable bolster locking device X axis.
- 13.- Adjustable bolster locking device Y axis.
- 14.- Fixing bolt at base of gooseneck.

#### Electric cabinet

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Manual selector switch / electrical limit switch. 'Inching / Jogging" selector switch.

Easily removable cover to access hydraulic unit.

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### **GEKA GROUP** Quality Know-how Service



#### World leader in punching and shearing solutions

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#### Complete after sales service



#### **Great versatility**



#### Produced & manufactured in the European Union



#### Continuous innovation



#### Worldwide distribution network

With more than 60 distributors and present in more than 85



#### All GEKA machines are special order

Every new GEKA machine is one of a kind. Our designers develop solutions suited to your specific needs. We manufacture each GEKA in our own facilities according to



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