

# HYDRACROP SERIES



ENGLISH (mm)

**GEKA**   
The steel working company

# HYDRACROP SERIES

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**
- **∅ and ∇ 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.

Hydracrop 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 ∅ and ∇, shearing, rectangular notching and punching.
- Quick change punch.
- Flat bar shearing table with adjustable guides.
- 2 simultaneous work stations.
- Ready for "Production pack" 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 metal applications.

# FEATURES

| SHEARS FOR FLATBAR                      |         |                | 55/110<br>S, SD                  | 80/150<br>S, SD                 | 110/180<br>S, SD                | 165/300<br>S, SD                 | 220/300<br>S, SD                 |
|---|---------|----------------|----------------------------------|---------------------------------|---------------------------------|----------------------------------|----------------------------------|
| Flatbar (with slight deformation)       | mm      |                | 300x15<br>200x20                 | 450x15<br>300x20                | 600x15<br>400x20                | 750x20<br>400x30                 | 750x20<br>400x30                 |
| Length of blade                         | mm      |                | 305                              | 475                             | 605                             | 765                              | 765                              |
| Square bar $\square$                    | 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                 |         |                |                                  |                                 |                                 |                                  |                                  |
| 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 deformation)     | mm      |                | 130x130x13                       | 152x152x13                      | 160x160x16                      | 205x205x25                       | 205x205x25                       |
| SHEARS FOR BARS                         |         |                |                                  |                                 |                                 |                                  |                                  |
| Round bar $\varnothing$                 | mm      |                | 40                               | 45                              | 50                              | 60                               | 60                               |
| Square bar $\square$                    | 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      |                | $\varnothing$ 40x10              | $\varnothing$ 40x14             | $\varnothing$ 40x20             | $\varnothing$ 40x30              |                                  |
|   | mm      |                | $\varnothing$ 20x20              | $\varnothing$ 24x24             | $\varnothing$ 28x28             | $\varnothing$ 34x34              | $\varnothing$ 40x40              |
| Throat                                  | S<br>SD | mm             | 250<br>500                       | 300<br>500                      | 300<br>610                      | 510<br>610                       | 385<br>475                       |
| Stroke                                  |         | mm             | 60                               | 70                              | 80                              | 100                              | 100                              |
| Working height                          |         | mm             | 1085                             | 1095                            | 1165                            | 1110                             | 1110                             |
| GENERAL SPECIFICATIONS                  |         |                |                                  |                                 |                                 |                                  |                                  |
| N° strokes per minute<br>(stroke= 20mm) |         |                | 37                               | 40                              | 28                              | 31                               | 26                               |
| Motor                                   |         | kW             | 5                                | 9                               | 9                               | 15                               | 15                               |
| Net weight                              | S<br>SD | kg             | 1390<br>1750                     | 2070<br>2400                    | 2750<br>3300                    | 5200<br>6300                     | 5900<br>7000                     |
| Gross weight                            | S<br>SD | kg             | 1598<br>2012                     | 2323<br>2760                    | 3162<br>3795                    | 5980<br>7245                     | 6875<br>8050                     |
| Packaging dimensions                    | S<br>SD | m              | 1,67x1,16x2,09<br>2,10x1,16x2,09 | 2,13x1,20x2,05<br>2,31x1,2x2,05 | 2,13x1,20x2,20<br>2,69x1,4x2,20 | 2,83x1,60x2,20<br>2,95x1,60x2,20 | 2,88x1,60x2,40<br>3,04x1,60x2,40 |
| Volume of seaworthy package             | S<br>SD | m <sup>3</sup> | 4,04<br>5,09                     | 4,72<br>6,68                    | 5,62<br>8,28                    | 10<br>10,38                      | 11,06<br>11,67                   |

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



# MODELS

## Hydracrop 55/110

### FEATURES

|  |                            |
|--|----------------------------|
| Shearing of flat plate                           | 300 x 15 mm<br>200 x 20 mm |
| L cut with standard blade<br>(no distortion):    | 120 x 120 x 10 mm          |
| L cut with optional blade<br>(minor distortion): | 130 x 130 x 13 mm          |
| Shearing of $\emptyset$ and $\nabla$ bars        | 40 mm                      |
| Punching capacity $\emptyset$                    | 40 x 10 mm                 |



## Hydracrop 80/150

### FEATURES

|  |                            |
|--|----------------------------|
| Shearing of flat plate                           | 450 x 15 mm<br>300 x 20 mm |
| L cut with standard blade<br>(no distortion):    | 130 x 130 x 13 mm          |
| L cut with optional blade<br>(minor distortion): | 152 x 152 x 13 mm          |
| Shearing of $\emptyset$ and $\nabla$ bars        | 45 mm                      |
| Punching capacity $\emptyset$                    | 40 x 14 mm                 |



## Hydracrop 110/180

### FEATURES

|  |                            |
|--|----------------------------|
| Shearing of flat plate                           | 600 x 15 mm<br>400 x 20 mm |
| L cut with standard blade<br>(no distortion):    | 152 x 152 x 13 mm          |
| L cut with optional blade<br>(minor distortion): | 160 x 160 x 16 mm          |
| Shearing of $\emptyset$ and $\nabla$ bars        | 50 mm                      |
| Punching capacity $\emptyset$                    | 40 x 20 mm                 |



## Hydracrop 165/300

### FEATURES

|   |                            |
|---|----------------------------|
| Shearing of flat plate                        | 750 x 20 mm<br>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 $\varnothing$ and $\nabla$ bars   | 60 mm                      |
| Punching capacity $\varnothing$               | 40 x 30 mm                 |



## Hydracrop 220/300

### FEATURES

|   |                            |
|---|----------------------------|
| Shearing of flat plate                        | 750 x 20 mm<br>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 $\varnothing$ and $\nabla$ 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:



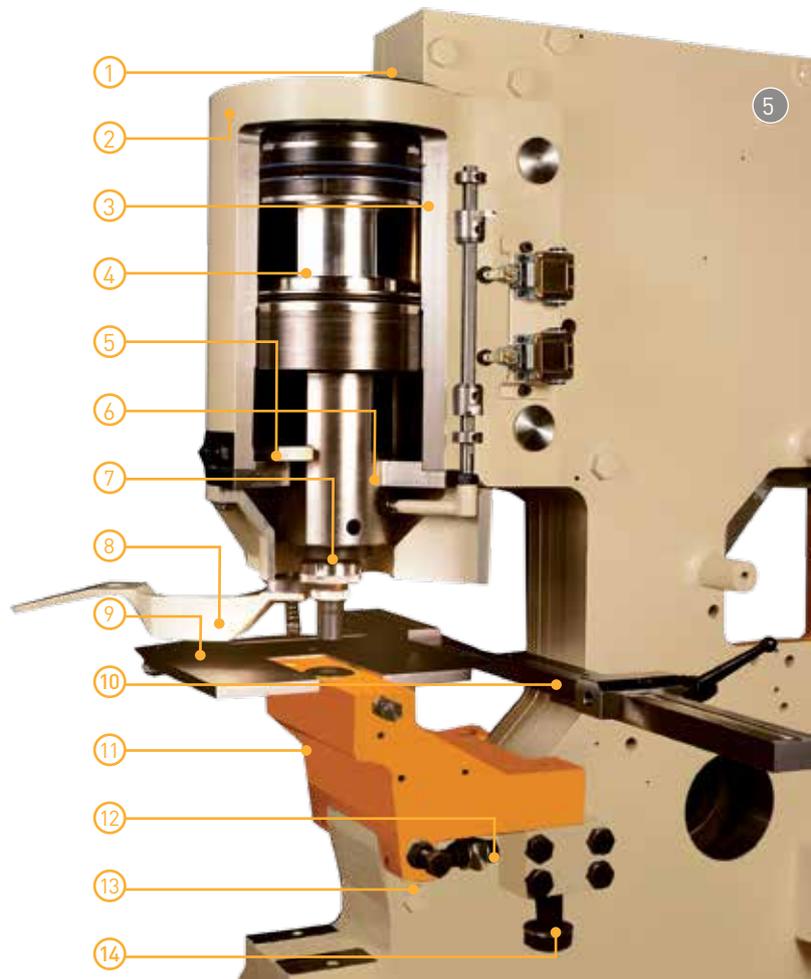
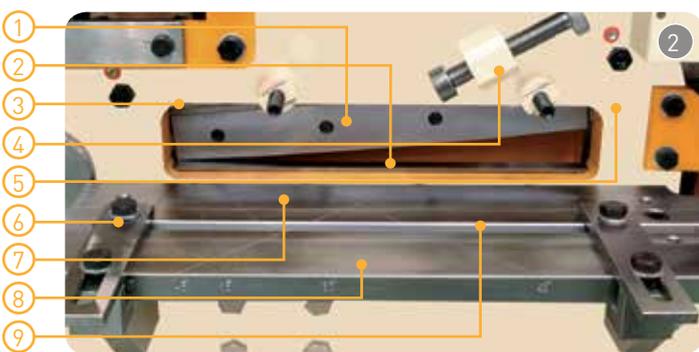
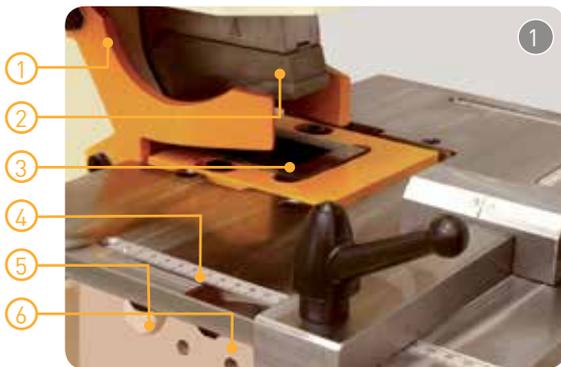
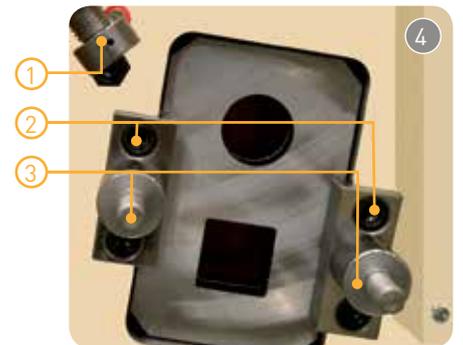
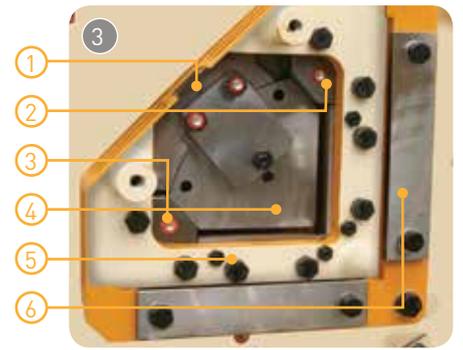
"Touch & cut" electrical end stop  
1 meter long



Set of ten round punches and dies



Work light with magnetic Base





## 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 punch
- 3.- Rectangular notching
- 4.- Table with scaled measuring stops, included in production kit
- 5.- Cross centring bolts
- 6.- Fixing holes special tooling

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## Shearing of flat bar

The excellent stability of the monoblock blade-holder, 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.

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## 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.
- 2.- 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 Ø and ∅ bars

The GEKA HYDRACROP machines are fitted as standard with blades for cutting Ø and ∅ bars. Furthermore, this station has been designed bearing in mind the shearing of other sections such as L, I, T for which a large stock of blades is available.

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

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## Punching station

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

- 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.
- 10.- 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.

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## Electric cabinet

Manual selector switch / electrical limit switch."Inching" 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

With more than 80000 happy and satisfied customers worldwide and more than 90 years experience.



### Proven quality, design and craftsmanship

ISO 9001 and OHSAS certifications besides 90 years experience and a continuous benchmarking policy.



### Complete after sales service

Permanent stock and next day delivery of consumables, accessories and parts. After sales assistance by GEKA's qualified engineers.



### Great versatility

More than 50 different machine models and over 8000 different accessories. GEKA offers the highest range in accessories and optional equipment in the market.



### Produced & manufactured in the European Union

Conversely other manufacturers, GEKA is the only ironworker fully produced by Geka in the UE.



### Continuous innovation

New Bendicrop 85, C2PL, Alfa 500, Alfa 150, Gamma Traction, Sigma110...



### Worldwide distribution network

With more than 60 distributors and present in more than 85 countries in 5 continents.



### 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 precisely defined standards.

**GEKA**   
The steel working company

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