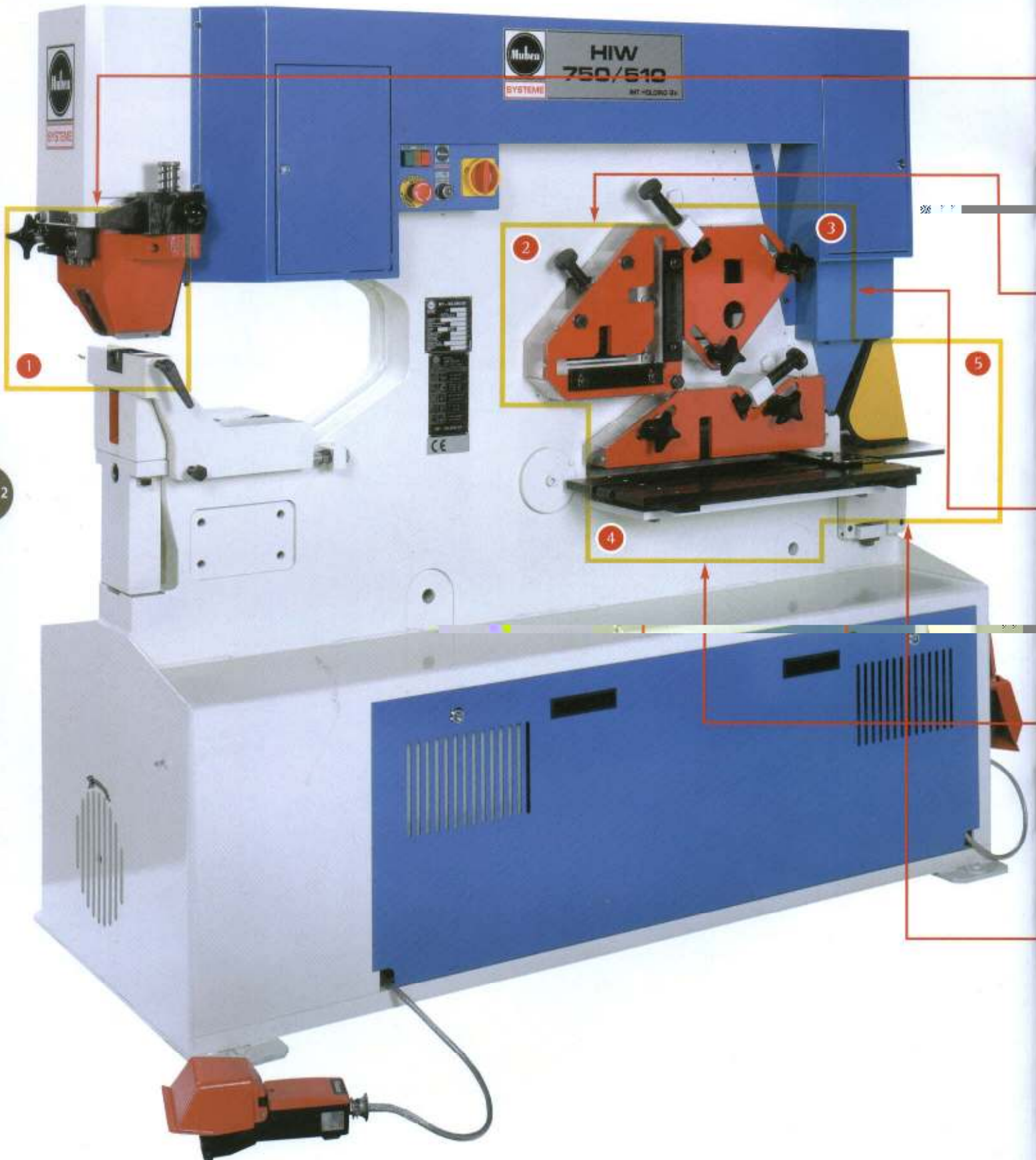




# HIW models



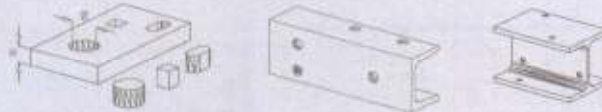
Made in Germany, the modern 'HIW' ironworker is a stable machine which enables you to do several operations at the same time, profiting from a particularly favourable cost-effectiveness ratio.

HIW machines were designed for **hardest** conditions of use. Their advantages of efficiency are completed by a variety of extension possibilities: we would like to refer to our special tools and accessories for extraordinary requirements.

### 1 punch side



For holes up to 1 1/4 inch standard and 6 inch with special equipment. With quick-change device as standard.



### 2 angle shear



The HIW angle shear cuts up to 6 1/8 inch x 1/2 inch. Not only angles of 90°, but also mitre cutting (e.g. for inner frames) is a possible application.



### 3 bar shear



Cuts round and square bars with the standard knives. With special knives, U-, I- and T-profiles are allowed.



### 4 shearing



Standard equipped with support table. The shear and the hold-down are constructed so even mitre cutting (e.g. for inner frames) is a possibility.



### 5 coper/notcher



Possible for rectangular or, optionally, triangular applications.



# punch side

## 1 punching range

### 1.1 standard

HIW 550	1/8" - 1 1/4"
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### 1.3 optional

HIW	550	750	1000
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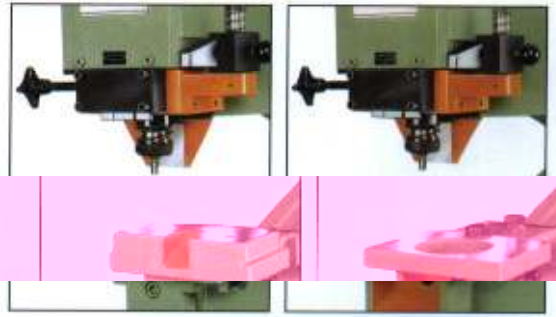


The punch side of the HIW is equipped for a wide variety of punching applications. The standard punching range goes, with a patented quickchange device, up to  $1\frac{1}{4}$ " (HIW 500 - HIW 750) or  $1\frac{1}{2}$ " (HIW 1000). With optional accessories, diameters as big as 6 inches can be punched.

1/8" - 6"	—	no	no
2" - 4"	no	no	no
2" - 6"	—	no	no

Punching range from 1/8" - 2" with saddle plate and two-piece stripper (see p 6 & 7).

Punching range from 1/8" - 6" with saddle plate and two-piece stripper (see p 6 & 7).



### 1.2 alternative



The stripper for clamping the material can be adjusted infinitely to all material thicknesses, so inaccurate adjustment is impossible.



A MUBEA SYSTEME patented quick-change device for punches and dies makes the changeover quickly without any problems.



# punch side

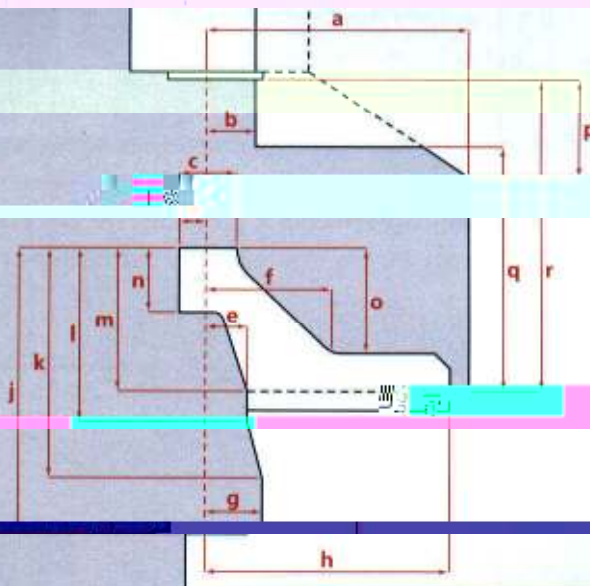
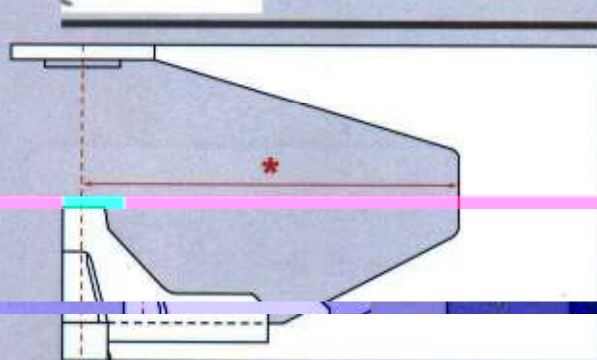
HIW punches are equipped with an infinitely adjustable stroke control. Due to the infinite adjustment, the tool movement can optimally be adapted to the material thickness to be punched. So unnecessary stroke paths are avoided which results in high stroke rates.

All 3 HIW machines are provided with hydraulic spotting devices, controllable via a foot switch, as standard. For the easy spotting of the center mark, the punch can be advanced to the material at reduced speed and with low pressure.

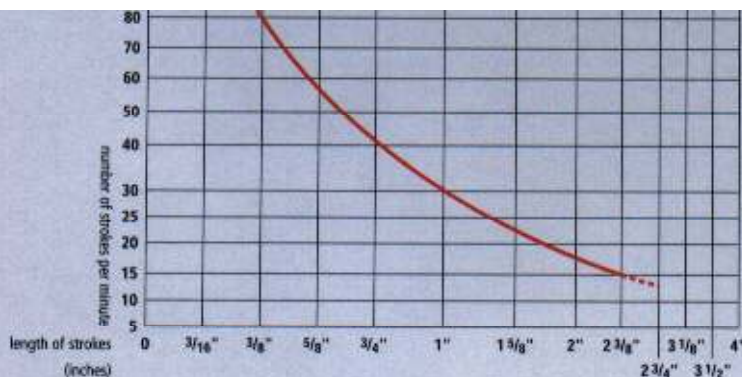
In order for independent working of the punching device, the punch operates separately from the flat, angle and bar shear or the copier/notcher. This means that the HIW machines are controllable by 2 separate foot switches.

The large applications of HIW models are also due to the possibility of having, instead of the standard throat, a large throat.

*	HIW 550	HIW 750	HIW 1000
standard throat	12"	12 1/2"	13 1/2"
large throat	20"	20"	24"



HIW	a	b	c	d	e	f	g	h	i	k	l	m	n	o	p	q	r
550/305	12	2 1/16"	1 1/8"	7/16"	1 1/16"	3	2 1/16"	9 1/8"	12 1/16"	10 1/16"	7 1/8"	5 1/8"	2 7/16"	3 1/16"	4 1/8"	9 1/8"	12 1/8"
550/510	20	2 1/16"	1 1/8"	7/16"	1 1/16"	3	2 1/16"	9 1/8"	12 1/16"	10 1/16"	7 1/8"	5 1/8"	2 7/16"	3 1/16"	4 1/8"	9 1/8"	12 1/8"
750/320	12 1/2"	2 1/16"	1 1/8"	7/16"	1 1/8"	4 1/8"	2 1/8"	11 1/8"	16	13 1/8"	9 1/16"	7	2 1/8"	5 1/16"	4 1/8"	11 1/8"	15 1/8"
750/510	20	2 1/16"	1 1/8"	7/16"	1 1/8"	4 1/8"	2 1/8"	11 1/8"	16	13 1/8"	9 1/16"	7	2 1/8"	5 1/16"	4 1/8"	11 1/8"	15 1/8"
1000/340	13 1/2"	2 1/16"	2 1/16"	1 1/16"	1 1/16"	5 1/8"	2 1/8"	12 1/8"	16 1/16"	13	9 1/8"	8 1/16"	3 1/8"	5 1/8"	4 1/8"	13 1/8"	17 1/16"
1000/610	24	2 1/16"	2 1/16"	1 1/16"	1 1/16"	5 1/8"	2 1/8"	12 1/8"	16 1/16"	13	9 1/8"	8 1/16"	3 1/8"	5 1/8"	4 1/8"	13 1/8"	17 1/16"

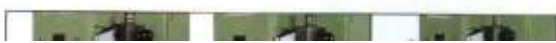


necessary minimum for the infinite stroke adjustment.


**HIW models**  
**systematic punching**

**1 standard equipment**

CARRIER PUNCH SADDLE



1/4" to 1 1/4" at HIW 1000.



Punching operations exceeding the range of up to 1 1/4" resp. 1 7/8" can be performed on MUBEA SYSTEME punches without problems. For this purpose, an **expandable modular construction system** was developed. Due to this modular construction system, set-up times and tooling costs are considerable reduced.

**2 punching range from 1/8 to 2 inch**

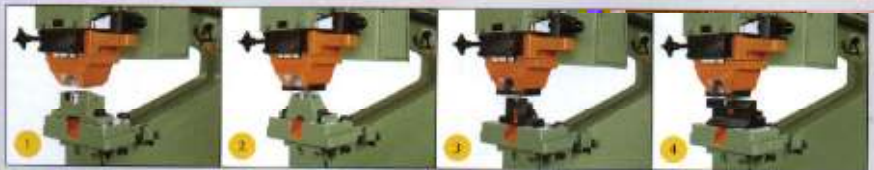
with two-piece stripper:  
saddle plate and saddle support piece



\* standard equipment:  
punch holder and quick-change device for punches



**2.1 possibilities of application: see 1 to 4**



1 punching attachment for tools from 1/8" to 2"

2 saddle top for dies from 1/4" to 1 1/4"

3 saddle top for web punching at small channel and I-beam sections - for dies from 1/8" to 1/2"

4 saddle top for flange punching at small channel and I-beam sections - for eccentric dies from 1/8" to 1 1/4"



saddle top for dies from 1/4" to 2" - from 1/8" to 1 1/4" with reducer inserts (picture 1)



saddle top for dies from 1/4" to 1 1/4" - from 1/8" to 1/2" with reducer insert (picture 2)



see picture 3



see picture 4

HIW models

# systematic punching



## 1 punching range from 1/4" to 6 inch

with saddle plate and support and two-piece stripper



1/4" to 2"  
lower part of  
stripper with 3  
stripper plates



punch holder  
1/4" - 2"  
Cap nut M64

saddle top for dies from  
1/4" to 2" - from 1/4" to  
1 3/8" with reducer  
inserts (picture 5)

saddle top for dies from  
1/4" to 1 1/4" - from 1/4"  
to 1/2" with reducer  
insert (picture 6)



distance plate: 1/4" - 2"

special saddle support piece



5 punching attachment for tools  
from 1/4" to 2"

6 saddle top for dies  
from 1/4" to 1 1/4"



9 saddle top for web punching  
at small channel and I-beam  
sections - for dies from 1/4"  
to 1/2"

10 saddle top for flange punching  
at small channel and I-beam  
sections - for eccentric dies from  
1/4" to 1 1/4"



2" to 4"

4" to 6"

lower part of stripper  
with 2 stripper plates

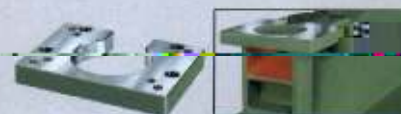
lower part of stripper  
with 2 stripper plates



saddle top for dies  
from 2" to 4"

saddle top for dies  
from 2" to 6"

punch holder



distance plate: 2" to 6"

special saddle support piece



7 punching attachment for tools  
from 2" to 4"

8 punching attachment for tools  
from 4" to 6"



see picture 9

see picture 10

**Mubea**  
SYSTEME

HIW models

# angle shear



The slide and angle steel upper knife are firmly screwed to each other and build 1 unit. Furthermore, the stationary knives are flat, without any support or adjustment elements and screwed firmly to the machine plate. Therefore, the knives have only cutting and no guiding jobs which results in excellent cuttings.

Also in the shearing area, the HIW machines are equipped with a comfortable stroke adjustment, so achieving fast working speed is easy.



The high capacity angle shear cuts angles up to 6 1/2" x 1/2" (HIW 1000). Thanks to the exactly working shear slide with its adjustable guides and the precisely manufactured knives, perfect cutting results free of burr are achieved.





The design of the angle shear and the construction of the hold-down is made so that angle steel can be cut at mitre, e.g. for the production of inner frames.




HW models

# bar shear



The standard knives for cutting round and square steel to length can be quickly and simply exchanged for optional knives which cut section steel.

- 1 optional channel knife
- 2 optional knife for I-beams
- 3 standard steel knife



Due to the special slide design at HW machines, sections can be fed in lying flatwise or on the leg – the material does not lie diagonally on the point. Thanks to the vertical position of the knives, inexpensive roller conveyors with flat rollers can be used.

**Hubea**  
SYSTEME

HIW models

## flat bar shear



HIW machines are, already standard, equipped with support tables. The adjustable stop rail of the tables ensures exact cuts: at 90° and at mitre. The rugged, precisely adjustable hold-down facilitates a good view to the cutting line and thus exact working after marking out.

**1 standard option**



The knife movement can be adapted to the respective material dimension via the stroke adjustment of the shear. In connection with the electric contact length stop, high production figures can be reached.

**2 patented bevelling shearing system**



The design of the flat bar shear and the construction of the holddown is such that the cut pieces are welded together easily and firmly.




Lower and upper knife are equal in construction, so they can be interchanged. Not only the lower knife, but also the upper knife has 4 cutting edges at the HIW machines.

There are no modifications or adjustments necessary for cutting the entire flat steel capacity range: from the thinnest material up to the maximum capacity.

HIW models

# coper/notcher





MUBEA SYSTEME HIW machines are standard equipped with the versatile rectangular coping tool or, optional, with the triangular notching tool. The change is simplicity itself.


Furthermore, HIW machines have also an automatic adjustment of the coping stroke as standard, effecting that the upper knife of the coper is always guided in the lower knife when coping.

**optional**


The coper / notcher was designed, so special optional coping / notching tools, as for instance tools for round-off flat steel, slot tools and tube notching tools can be inserted.




rectangular coping tool




triangular notching tool




support table with 2 adjustable stops




rounding-off tool



tube notching tool



special coping tool



**Mubea**  
SYSTEME

HW models

## punches and dies



12

The extensive range of available punches and dies is what makes MUBEA SYSTEME punching machines so flexible.

The wide variety, nearly 2000, of sizes and shapes, listed in our special catalogue, is the result of decades of practical experience.

MUBEA SYSTEME punches and dies are available in a large series from high-quality steel on modern systems. Therefore, they are especially budget-priced and can be delivered from stock.

Eccentric dies can be used with the normal punches, which implies another saving in your budget.



Our range makes it possible that almost every hole in angle, U- and I-profile can be made.

