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**YSD**

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All data are approximate.  
Design and specification subject to change  
without prior notice.  
Version:YSD201203



**Applied field:**  
 YSD products maximize clients' economical benefit by its excellent quality and considerable after-sale service, widely used in the field of electrical application, lift, container, ship and boiler manufacture industry etc.

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# YSD PRESENTATION



YSD is a leading manufacturer for sheet metal-forming machines in China. The Company was founded in Huangshi city, China in 1958 by China government in order to produce hydraulic presses.

It has 1300 staff including 200 technicians. Since 1981, YSD began cooperation with LVD, Belgium. Since April, 2009, LVD has 30% shares in YSD.

### Product range:

Hydraulic press brakes (40 ton to 10000 ton, 1.25 to 13.8 meters)

Hydraulic guillotine shears (2m to 16m length, 4mm to 40mm thickness).

Cut to length line: (3mm to 25mm thickness, 1300mm to 2250mm width)

YSD also makes hydraulic press,

nuts/bolts former, ironworker, notching machine, CNC turret punch, CNC laser cutting machine, Fine blanking press, ship frame bender, crimping press, tack welding machine etc.

### Facility:

YSD has Most Modern State of Art Plant, one of the Largest Manufacturer in the world today. Advanced facility and management assure big productivity and delivery on time.

### Technology:

The machines are made under ISO9001 terms, CAD/CAE/CAM/CAPP are adopted in design & manufacturing by using EDS-UG software from USA. The machines are made under technology

license from LVD, Belgium. National research sub-center for metal-forming machines is established in YSD factory.

YSD shears are the only shear brand which was awarded GOLD Brand by China Industrial Ministry.

Key components from worldwide famous suppliers are adopted on YSD machines.

CE Norm machines for Europe market are available.

CSA Norm machines for North America market are available.

### Market shares:

More than 20,000 sets of press brakes and shears have been sold to customers in all kinds of industrial fields all around the world.

During the past decades, YSD keeps holding the biggest exporter for metal-forming machines among all Chinese manufacturers.

YSD has more than 80% market shares for heavy-duty press brakes, CNC tandem press brake and heavy-duty shearing machines in China.

YSD have sales agents or branches in over 72 countries. And every year more than 1000 sets of machines are installed throughout the world.



# Hydraulic Guillotine Shear

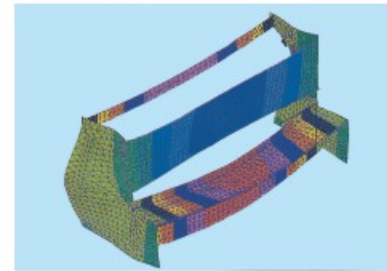
## HGA(K) HGO(K) HGN(K)

## HGS(K) HGB Series



### Frame

The frame has designed by UG software, welding solid steel structure are the resulting fabrication are extremely rigid giving minimal deflection under load.



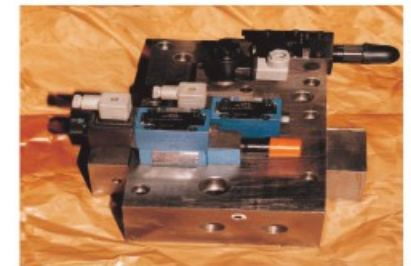
### HOLDDOWNS



They get pressure force from hydraulic system to clamp workpiece before the shear action starts, This force changes proportionally according to the thickness and tensile strength of the steel plate being cut. At the left end, to guarantee better clamping short steel strip by more than one holddown, the holddowns are positioned closer.

### YSD HYDRAULIC SYSTEM

The hydraulic power block and some connections are manufactured by YSD. Extremely reliable and precise REXROTH or VICKERS or BOSCH valves are used for the regulating circuit. There is also a low sound level pump and a large tank with oil level and temperature gauge on oil filter. Double-acting cylinders ensure high reliability and safety.



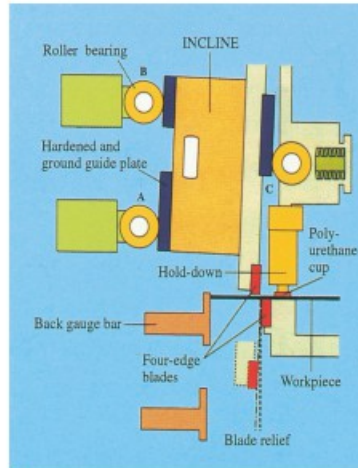
### ELECTRIC SYSTEM



All electrical elements are in accordance with the DIN standard, The machine is fitted with many Telemecanique (France) components which have overload protection function and are easily purchased throughout the world.

### BLADE BEAM GUIDE

Three pairs of rollers ensure optimal guide of blade beam, the pair of lower rollers guides (A) offer maximum resistance to horizontal forces, while the pair of upper rollers guides (B) form a reverse torque to balance the cutting beam. The beam is permanently forced against the rollers by third pair of prestressed rollers guides (C) During the cutting action the angled movement of the beam provides a clearance so that precise, straight, vertical cutting edge is obtained , it reduces burrs and friction between the upper and lower blades.



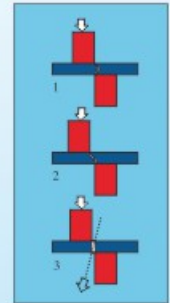
### SHADOW LINE LIGHTING

It's handy and clear with the shadow line lighting for a close and accurate view of the cutting line.

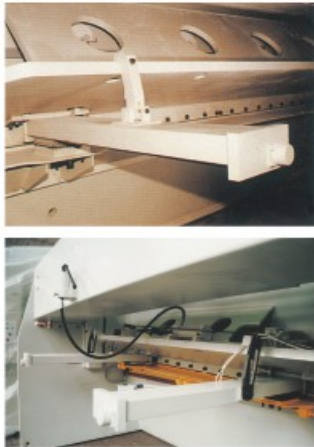


### BLADE GAP

Satisfactory cutting results can only be obtained when the rake angle and blade gap are adjusted correctly according to different material and thickness of steel plates.



### BACKGAUGE



YSD shears have a motorized backgauge operated on the front control panel , Motorized backgauge with digit readout, the reset function can easily effect forward or backward. Backgauge travel can be in inch. Some versions also offer a complete swing-up backgauge as standard to enable the cut of strips wider than the backgauge travel. One of the options available is a hydraulic operated swing away backgauge enabling material to be cut which is beyond the maximum range of the backgauge.

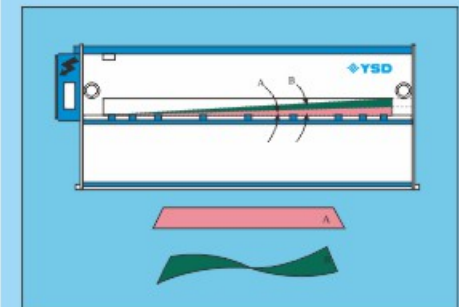
### OPERATION PANEL

The control panel is equipped with a key switch to allow the choice of single or continuous strokes , then operator uses the movable foot switch.



### CUTTING ANGLE

The YSD independent controls for the blade gap and cutting angle are important features to obtain an optimal result and the ideal setting for any kinds of material



### CUTTING LENGTH / STROKES

The cutting length is easily adjusted by a potentiometer on the control panel. Short strokes may be used to cut material shorter than the entire blade length, thus reducing the cutting time and increasing productivity

### HIGH QUALITY BLADE

Made of high carbon hing chrome steel each blade has four cutting edges and are suitable for the cutting of most materials including stainless steel and can be turned three times before regrinding.

**SHIN SHEET SUPPORT DEVICE**



**CE SAFETY GUARD**



**FRONT SUPPORT TABLE**

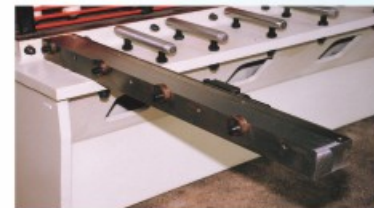


**FRONT LOADING SYSTEM**



**FRONT SUPPORT**

Front supporting squaring arm with T-slots and scale & finger protection & limit stop.



**FRAME THROAT**

No throat or opening throat up to 100mm on frame side is standard . A deep throat is an option by different customers for longer sheet plate than blade length and special cutting width.



**NC CONTROLLER**

(ELGO –x axis)



(YSD2000s–x axis)



**CNC CONTROLLER**

DAC-360 featuring:  
 Panel based housing  
 Bright LCD screen  
 Backgauge control  
 Retract function  
 Cutting angle control  
 Cutting gap control  
 Stroke length limitation  
 Manual movement of axes  
 Force control

- Standard
- 4.7" monochrome LCD
  - High-quality foil cover with integrated membrane switches
  - Program memory of up to 100 programs
  - Up to 25 steps per program

(E200)



(DAC360)



## HGA(K) Series



Specification	20/4	25/6	31/6
Mild steel (45kg/mm <sup>2</sup> )	4	6	6
Stainless steel(60kg/mm <sup>2</sup> )	2	3	3
Cutting length mm	2000	2500	3100
Max.cutting force KN	100	220	150
Backgauge range mm	750	750	750
Rake angle adjustment	1.5	1.5	2
Strokes per minute	18	18	15
Frame throat mm	30	30	30
Number of holddowns	11	14	17
Volume of oil tank L	144	200	227
Motor power kw	5.5	7.5	7.5
Approx. weight kg	4000	4500	5800
Length mm	2495	2995	3600
Width mm	1750	1750	1750
Height mm	1910	1910	2110

## HGO(K) Series



Specification	25/6	31/6.35	40/6.35
Mild steel (45kg/mm <sup>2</sup> )	6	6.35	6.35
Stainless steel(60kg/mm <sup>2</sup> )	3	3	3
Cutting length mm	2500	3100	4000
Max.cutting force KN	165	145	165
Backgauge range mm	750	750	750
Rake angle adjustment	0.5~2.5	0.5~3	0.5~2.5
Strokes per minute	12	10	8
Frame throat mm	*	*	*
Number of holddowns	14	17	22
Volume of oil tank L	110	110	200
Motor power kw	7.5	7.5	7.5
Approx. weight kg	4700	5500	8000
Length mm	3445	4045	4995
Width mm	1692	1737	1862
Height mm	1615	1750	1900

## HGN(K) Series



Specification	25/8	31/8	40/8	50/8	25/13	31/13
Mild steel (45kg/mm <sup>2</sup> )	8	8	8	8	13	13
Stainless steel(60kg/mm <sup>2</sup> )	4	4	4	4	8	8
Cutting length mm	2500	3100	4000	5000	2500	3100
Max.cutting force KN	220	275	275	245	580	580
Backgauge range mm	750	750	750	1000	1000	1000
Rake angle adjustment	0.5~2.5	0.5~2.0	0.5~2.0	0.5~2.5	0.5~2.5	0.5~2.5
Strokes per minute	17	15	11	8	9	9
Frame throat mm	100	100	100	100	100	100
Number of holddowns	14	17	22	26	14	17
Volume of oil tank L	290	350	400	605	383	449
Motor power kw	11	11	15	18.5	15	15
Approx. weight kg	6000	6500	10800	19000	7500	8700
Length mm	3155	3755	4750	5885	3260	3860
Width mm	1850	1850	1920	2170	2150	2150
Height mm	2180	2180	2325	2520	2320	2320

## HGS(K) Series



Specification	62/6	65/8	62/10	80/10	40/13	50/13
Mild steel (45kg/mm <sup>2</sup> )	6	8	10	10	13	13
Stainless steel (60kg/mm <sup>2</sup> )	3	4	6	6	8	8
Cutting length mm	6200	6500	6200	8000	4000	5000
Max.cutting force KN	132	252	350	430	730	620
Backgauge range mm	1000	1000	1000	1000	1000	1000
Rake angle adjustment	0.5~2.5	0.5~2.5	0.5~2.5	0.5~2	0.5~2	0.5~2.5
Strokes per minute	7	7	7	7	10	7
Frame throat mm	100	750	100	100	200	60
Number of holddowns	32	35	32	42	20	26
Volume of oil tank L	686	720	650	845	561	650
Motor power kw	15	22	22	37	22	30
Approx. weight kg	20000	34000	26000	45000	17000	25500
Length mm	7065	7580	7100	9016	4885	6000
Width mm	2250	2810	2510	2615	2190	2540
Height mm	2650	3140	2840	3000	2490	2960



Specification	62/13	70/13	80/13	85/13	90/13	120/13
Mild steel (45kg/mm <sup>2</sup> )	13	13	13	13	13	13
Stainless steel(60kg/mm <sup>2</sup> )	8	8	8	8	8	8
Cutting length mm	6200	7000	8000	8500	9000	12000
Max.cutting force KN	620	620	620	620	620	650
Backgauge range mm	1000	1000	1000	1000	1000	1000
Rake angle adjustment	0.5~2.5	0.5~2.5	0.5~2.5	0.5~2.5	0.5~2.5	0.5~2.0
Strokes per minute	7	5	7	8	6	5
Frame throat mm	60	100	400	300	500	100
Number of holddowns	32	37	42	44	51	61
Volume of oil tank L	686	1200	1600	1600	1600	1600
Motor power kw	30	2X18.5	2X30	2X37	2X30	2X30
Approx. weight kg	28500	40000	55000	65000	80000	150000
Length mm	7100	8170	9090	9650	10300	13760
Width mm	2330	2500	2900	2950	3000	3350
Height mm	2680	3300	3360	3650	4060	5200

Specification	160/13	70/14	25/16	31/16	40/16	50/16
Mild steel (45kg/mm <sup>2</sup> )	13	14	16	16	16	16
Stainless steel(60kg/mm <sup>2</sup> )	8	8	10	10	10	10
Cutting length mm	16000	7000	2500	3100	4000	5000
Max.cutting force KN	720	620	730	850	850	850
Backgauge range mm	1000	1000	1000	1000	1000	1000
Rake angle adjustment	0.5~2.0	0.5~2.5	0.5~3.0	0.5~2.5	0.5~2.5	0.5~2.5
Strokes per minute	3	7	9	8	8	6
Frame throat mm	100	100	300	300	200	100
Number of holddowns	81	37	13	16	20	26
Volume of oil tank L	1800	1200	500	590	560	662
Motor power kw	2X37	2X22	22	22	30	37
Approx. weight kg	248000	40000	11000	12000	18000	28000
Length mm	17320	8170	3265	3865	5020	5935
Width mm	4400	2600	2140	2140	2240	2360
Height mm	5600	3300	2350	2350	2575	2870

Specification	62/16	80/16	21/20	25/20	31/20	40/20	62/20	65/20
Mild steel (45kg/mm <sup>2</sup> )	16	16	20	20	20	20	20	20
Stainless steel (60kg/mm <sup>2</sup> )	10	10	12	12	12	12	12	12
Cutting length mm	6200	8000	2100	2500	3100	4000	6200	6500
Max.cutting force KN	850	850	1270	1270	1370	1270	1400	1400
Backgauge range mm	1000	1000	1000	1000	1000	1000	1000	1000
Rake angle adjustment	0.5~2.5	0.5~2.5	0.5~3.0	0.5~3.0	0.5~2.5	0.5~3.0	0.5~2.5	0.5~2.5
Strokes per minute	7	7	7	7	7	5	5	5
Frame throat mm	100	650	300	300	300	300	100	200
Number of holddowns	32	42	11	13	16	20	32	35
Volume of oil tank L	686	1800	370	500	590	627	1500	1500
Motor power kw	37	2X30	30	30	30	30	2X30	2X30
Approx. weight kg	36000	85000	13000	14000	15000	29000	55000	65000
Length mm	7185	9150	2970	3370	3970	5050	7320	7620
Width mm	2350	3250	2275	2275	2275	2600	2860	2910
Height mm	2860	3520	2470	2470	2470	3140	3390	3430

Specification	80/20	25/25	31/25	40/25	62/25	25/30	31/30	25/40
Mild steel (45kg/mm <sup>2</sup> )	20	25	25	25	25	30	30	40
Stainless steel (60kg/mm <sup>2</sup> )	12	16	16	16	16	20	20	25
Cutting length mm	8000	2500	3100	4000	6200	2500	3100	2500
Max.cutting force KN	1400	1960	2320	1600	2000	2200	2200	3700
Backgauge range mm	1000	1000	1000	1000	1000	1000	1000	1000
Rake angle adjustment	0.5~2.5	0.5~3.0	0.5~2.5	0.5~3.5	0.5~2.5	0.5~3.5	0.5~3.5	0.5~3.5
Strokes per minute	4	6	6	5	3	4	4	3
Frame throat mm	100	300	300	300	100	300	300	200
Number of holddowns	40	13	16	20	32	13	16	13
Volume of oil tank L	1800	828	1068	1100	1200	920	1300	1200
Motor power kw	2X37	45	45	2X30	2X37	55	55	2X37
Approx. weight kg	98000	25000	29000	38000	80000	29000	32000	39500
Length mm	9250	3585	4260	5360	7340	3885	4485	4105
Width mm	3725	2800	2900	2900	3100	2950	2950	3050
Height mm	3760	2835	2885	3420	3615	3085	3085	3375