

HEAT EXCHANGER PLATE AND LARGE SHEET METAL COMPONENTS SOLUTION





SHENYANG HEAVY FORGE HYDRAULIC PRESS MANUFACTURE, LTD

- One of largest and most reputable hydraulic press machine and cylinder manufactures
- 50 years' experience and excellence in designing and manufacturing premium quality hydraulic machine
- First in China to build 36,000 MT press machine cylinder
- Specializing in supplying PHE industry and producing hydraulic press machine for plate heat exchanger and large sheet metal components ranging from 1,000 to 40,000MT capacity
- Produce line include 21 categories and over 60 models
- Honored Postdoctoral Research Station for Chinese best university in science-Tsinghua University
- ISO9001: 2008 Certified

We provide best service and consulting to our international customers. We will thoroughly analyze your requirements and custom made the machine. We have professional experience to communicate and conduct our international clients to find what they need.

Please feel free to contact us at info@syhpress.com or visit our China Plant at Fangxihu Village, Economic & Technology Zone, Huanggu District, Shenyang City, Liaoning,





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YR27 Sheet Metal Forming Hydraulic Press

The machine is mainly used for forming large sheet shell such as titanium, stainless steel and heat exchanger platen, etc. It also can be used for forming large cover parts.

The machine is designed with the structure of pre-tension wire wound type which ensures reliable operation, small dimension and light weight. It has independent electric control system and hydraulic system. The electric system is controlled by PLC program. It has centralized button-control system with manual and semi-auto work modes for selection. Work pressure and speed of work feed can be adjusted.

This series of machines have a pressure display device, temperature display alarm device, counting display device, keeping pressure time setting device etc. It has stable working performance, perfect keeping pressure performance, accurate delaying time and high automation. The machine is equipped with quick mould-changing device. It can be connected to YS26-450 plate punching hydraulic press to form a plate production line of heat exchanger, which can significantly improve the efficiency of plate production.





Main Feature

- Main cylinder and frame is designed by Prestress Steel Wire Wound structure. which is reliable, small size and light weight. The working life can achieve more than 15 years.
- · Main frame is made of the whole casting steel, which is very strong and avoids the possibility of deformation compare with welding type structure. It also ensure the precision&reliable of the pressing. The working life of the pressing can achieve more than 10.000.000 times.
- · In order to guarantee the precision and load resisting ability, there is a ball bearing between piston and slider.
- · In the full loading, the deflection of working table is only in 0.05mm/m-0.10mm/m, which guarantees the precision of pressing.



- · The main cylinder is designed by advance antileakage seal technology and metal becket expanding seal technology, which significantly increases the reliable of sealing.
- The piston of main cylinder adopts two metal welding technology which can increase the reliability and abrasion resistant of cylinder. The working time
- requirements of return speed, the press is designed with returning mechanism, which can make the slider stop at any position and self-locking.



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Main Parameters		Unite	Value								
Nominal Force		Tonnage	3000	4000	6000	7000	10000	12000	20000	22000	30000
Pressure		Мра	96	96	95	100	98	106	98	100	100
Stroke		mm	250	250	250	250	300	300	300	150	200
Speed of sider block	Closing Speed	mm/s	30	30	30	30	30	30	30	100	30
	Clamping Speed	mm/s	0.2-0.3	0.2-0.3	0.2-0.3	0.2-0.3	0.1-0.3	0.1-0.3	0.2-0.3	2	0.2-0.6
	Opening Speed	mm/s	30	30	30	30	30	30	30	100	30
Daylight Height (Max)		mm	500	500	500	500	600	600	600	500	500
Shut Height (Min.)		mm	250	250	250	250	300	300	300	350	300
Worktable(length*width)		mm	1000x1600	1050x1800	1300x2500	1300x2500	1600x2500	1600x2500	1700x3200	1600x3400	1950x3900
Motor Power		KW	18.5	22	45	45	48.5	48.5	90	540	180
Outline size of main machine(L*W*H)		mm	1600x1600x 3800	1800x1660x 3610	2500x2100x 4400	2500x2150x 4400	2500x2410x 5120	2500x2410x 5120	3200x2700x 6000	3400x2700x 6000	3900x3160x 6680









YR27-20000/22000/30000 SHEET FORMING HYDRAULIC PRESS

YR27-10000/12000/15000 SHEET FORMING HYDRAULIC PRESS

YR27-6000/7000/8000B SHEET FORMING HYDRAULIC PRESS

YR27-3000/4000/5000 SHEET FORMING HYDRAULIC PRESS



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YS26 Hydraulic Punch Press

The structure of the machine is three beams, four columns, with the cylinder on top. It is suitable for pressing plastic materials, punching, forming, trimming and bending of metal sheet. It also can be connected to YR27 sheet forming hydraulic press to form a plate production line of heat exchanger.

The machine has independent power mechanism and electric control system. It has centralized button-control system with manual and semi-auto work modes for selection. The working pressure and the work feed speed can be adjusted. The action of cylinder quick down, work feed, increasing pressure and return etc. can be done by this machine. The working performance is stable. It is suitable for punching and forming of heat exchanger sheet.



Main p	aramaters	Unite	Value		
Nomi	nal force	Tonnage	450		
Pre	essure	Мра	28.5		
S	troke	mm	200		
	Closing Speed	mm/s	50		
Speed of sider block	Clamping Speed	mm/s	12		
	Opening Speed	mm/s	60		
Daylight	Height (Max)	mm	600		
Retu	rn force	KN	400		
Worktable	(length*width)	mm	1500x1680		
Moto	r Power	KW	30		
Outline size of m	ain machine(L*W*H)	mm	2000x1680x2700		





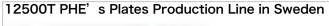
Production Line

The production line is widely used for forming large type of heat exchanger plate. It is mainly composed of YR27 Sheet forming hydraulic press, YS26-450 hydraulic trim press, a decoiler, a blank feeder, conveyor system, a hydraulic elevator, a clamping & sending machine, NC size measurer and general operation panel etc. It has functions of feeding material, decoiling, punching, pressing. The production line is easy to operate and significantly improves the efficiency of plate production.

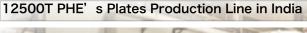


3500T PHE's Plates Production Line in China













Our Technology: Wire Winding

Our cylinders and frames are wound with of pre-stressed wire to ensure the safest and most reliable pressure containment system available today. With only compressive forces occurring in the frame, fatigue properties are excellent and the risk of crack propagation is eliminated. Our award winning technology of pre-stressed wire wound cylinders and frames is a highlight of our R&D excellence. This is an advanced technology even in the world stage.

There are following features:

- 1. Fatigue properties are excellent. The frame and cylinder have more than 15 year service life.
- 2. Loading stress properties are excellent. The wires bear the force instead of stress concentration. It ensure the containment system more safe and reliable.
- 3. Decrease the cost. This technology significantly decrease the weight of machine compared with traditional structure and cut the cost.
- 4. Avoid crack risk. This design utilizes the wire (normally in thousands metes) wound around the forged piece core of a frame and cylinder to make sure the machine can work continuously in a long time without crack risk.
- In 2009, we participated and manufactured the frame and cylinder of world's biggest set,
 China self-developed-36,000 ton vertical extruder by our prestress steel wire wound technology. (Photo 1)
- In 2011, we participated and manufactured a special muti-function press. The press has 66,000T capability and 22 meters high. The Photo 2&3 showed our Robot is manufacturing by wire winding technology.







Photo 2



Photo 3



