

Plate Heat Exchanger and Sheet Metal Forming Solution





—Shenyang Heavy Forge Hydraulic Press Manufacture, Ltd

- One of largest and most reputable hydraulic press machine manufacturer since 1965 year
- More than 50 years' experience and excellence in designing and manufacturing high quality hydraulic machine
- First in China to build 10,000 ton press in year of 1985, 36,000 ton press in year of 2009 and 68,000 ton press in year of 2011.
- Specializing in large components pressing 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, CE Certification
- Exported more than 20 countries and installed hundred of press machines

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, China 110034



YR27 Sheet Metal Stamping Hydraulic Press For Plate Heat Exchanger plates

The machine is mainly used for forming and stamping large sheet shell such as titanium, stainless steel plate heat exchanger plates. 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 Parameters		Unit	Value								
Nominal Force		Tonnage	3000	4000	6000	7000	10000	12000	15000	20000	30000
Pressure		Мра	78	75.8	76.5	89	88.5	90.4	90.8	88.5	91
Stroke		mm	200	200	200	200	200	200	250	300	300
Speed	Fast Down Speed	mm/s	50	50	50	50	50	50	50	50	50
	Pressing Speed	mm/s	0.2-0.3	0.2-0.3	0.2-0.3	0.2-0.3	0.5-0.6	0.5-0.6	0.5-0.6	0.2-0.3	0.2-0.6
	Return Speed	mm/s	30	30	30	30	30	30	30	30	30
Daylight Height (Max)		mm	450	450	450	450	450	450	500	600	600
Shut Height (Min.)		mm	250	250	250	250	250	250	250	300	300
Worktable(length*width)		mm	1000x1600	1000x1800	1300x2300	1300x2500	1600x2500	1600x2500	1800x2800	1600x3200	1800x3800
Motor Power		KW	22	22	45	45	55	75	90	180	180
Outline size of main machine(L*W*H)		mm	1600x1600x 3600	1700x1800x 3600	2100x2300x 4400	2100×2500× 4500	2500x2410x 5120	2500x2410x 5120	2900x2800x 5900	2400x3200x 5800	3000x3800x 6680









YR27-20000/3000/40000 SHEET FORMING HYDRAULIC PRESS

YR27-10000/12000/15000 SHEET FORMING HYDRAULIC PRESS

YR27-6000/7000/8000 SHEET FORMING HYDRAULIC PRESS

YR27-3000/4000/5000 SHEET FORMING HYDRAULIC PRESS



YS26 Punching and Trimming Hydraulic Press for Plate Heat Exchanger plates

YS26 Hydraulic press is suitable for punching holes and trimming edge of plate heat exchanger plates. It also can be used for pressing plastic materials, punching, forming, trimming metal sheet. It can be connected to YR27 plates stamping forming hydraulic press to connect a plate production line of heat exchanger.

The structure of the machine is three beams, four columns, with the cylinder on top. The machine has independent mechanism, hydraulic and electric control system. It has centralized button-control system with PLC manual and semi-auto work modes for selection. The working pressure and fixed stroke can be adjusted. The action of cylinder quick down, work feed, increasing pressure and return etc. can be done by this machine automatically.



Main pa	aramaters	Unit	Value	
Nomi	nal force	Tonnage	100/200/300/500	
Pre	essure	Мра	25-28	
St	troke	mm	200	
	Closing Speed	mm/s	50	
Speed of sider block	Clamping Speed	mm/s	12	
	Opening Speed	mm/s	60	
Daylight I	Height (Max)	mm	400	
Worktable	(length*width)	mm	900x900/ 1500x1500	













Production Line

The production line is widely used for forming large type of heat exchanger plate. It is mainly composed of YR27 Sheet Stamping hydraulic press, YS26 hydraulic punching and trimming press, a decoiler, a blank feeder, conveyor system, a hydraulic elevator, a clamping, NC size measurer and automation robots systems. It has functions of feeding material, decoiling, punching, pressing.









12500T PHE's Plates Production Line in India







Web: <u>www.syhpress.com</u>

Email: info@syhpress.com

Tel: + 86 24 89334005

Add: Fangxihu Village, Economic & Technology Zone, Huanggu District, Shenyang City, Liaoning, China 110034

YS51 Vulcanizing Hydraulic Press For Plate Heat Exchanger Gaskets



YS51 Vulcanizing Hydraulic press is for plate heat exchanger gasket vulcanizing production. It also can be used for moulding compression UHMWPE, PP, PE etc. plastic materials hot forming. The structure of the machine is frame structure, with the cylinders on bottom. The machine has independent hydraulic system and PLC electric control system. It has centralized button-control system with manual and semi-auto work modes for selection. There are two moving devices installed in the front and rear of the machine for moving mould inside/outside of machine. It can be connected with heating system for plate heat exchanger gasket vulcanize production.

Main pa	aramaters	Unit	Value			
Nomi	nal force	Tonnage	640 1000		2400	
Pre	essure	Мра	16.3 17.7		20	
Stroke		mm	300	300	300	
Speed of sider block	Closing Speed	mm/s	10	10	10	
	Opening Speed	mm/s	10	10	10	
Daylight I	Height (Max)	mm	300	300	300	
Worktable(length*width)	mm	800x1800	1000x2000	1600x3600	
Moto	r Power	KW	11	17	30	

Our Technology: Prestress Steel 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 68,000T capability and 22 meters height. The total weight of the press is around 2000 ton. It is one of the largest presses in the world. The Photo 2&3 showed our Robot is manufacturing press by wire winding technology.







Photo 2 Photo 3



