

HST-LE series Large throat deep gas-liquid booster press machine



Working principle and application

The gas-liquid booster press machine requires no hydraulic system; it only needs 4-7 kg of compressed air to generate a high-pressure output force of 1-20T. It uses a pneumatic-hydraulic booster cylinder and a pneumatic-electric control unit as the power actuator. After connecting to a 220V power supply, the high-pressure gas generated by the compressor is delivered to the electromagnet via an air supply pipe. The movement of the electromagnet, controlled by a foot switch or other control methods, controls the working state of the pneumatic-hydraulic booster cylinder on the machine, completing punching and other processing operations. By changing different molds, it achieves multi-purpose economic benefits. Currently, it is widely used in metal stamping, tight assembly, riveting connections, embossing, bending profiles, profile welding, extrusion forming, flattening and straightening, riveting and forging, sheet metal forming, mold punching, and steel cutting.

Technical parameters

Parameters/Pressure	Unit	HST-LE-02	HST-LE-03	HST-LE-05	HST-LE-08	HST-LE-10
Preload stroke	mm	100	100	100	100	100
Boosting stroke	mm	10	10	10	10	10
Action frequency	times/minute	25-30	25-30	25-30	20-25	20-25
Driving method	High-pressure air drives the booster cylinder to perform oil-gas conversion for press-fitting operations.					
Power connection	V	Single-phase AC220V, 50HZ				
Ambient temperature	℃	0~40 No fogging				
Closure height D	mm	210-300	210-300	210-300	220-350	220-360
Workbench Size J*I	mm	400*300	400*300	400*300	400*300	450*340

Deep throat C	mm	130/240	130/240	130/240	130/220	160/230
Mold shank hole size F	Ø	25H7	25H7	25H7	30H7	30H7
Pressure holding time	s	0-9999				
Operation method		Double button/foot switch				
Control Mode		Molding mode/Pressure fitting mode				
Safety protection		Two-hand switch/ Safety light grid				
T-slot width G	mm	12	12	12	12	14
Mounting hole spacing T*B	mm	450*300	450*300	450*300	450*300	500*300
Mounting hole diameter R	Ø	12	12	12	12	14
Platform face diameter E	Ø	32	32	32	40	40
Base dimensions J*A*H	mm	400*640*682	400*640*682	400*640*682	400*650*762	450*700*812
Equipment weight (approx.)	KG	175	180	195	245	335
Air source pressure	Mpa	0.4-0.7				
Use air pressure	Mpa	Theoretical output force (KG)				
0.4	Mpa	1230	1990	4000	5020	6250
0.5	Mpa	1540	2490	5000	6280	7820
0.6	Mpa	1850	2990	6000	7530	9380
0.7	Mpa	2160	3480	7000	8790	10950
Remark		Equipment structural parameters can be customized. Red indicates optional accessories, which are not included in the standard model.				

Model Selection Guide

Model	Maximum pressure(T)	Maximum travel(mm)	Force Stroke(mm)	On-Off mode(M/F)	Pressure digital display	Safety light grid
HST-LE	02	50	5	M:Hand-on mode	S	G
	03	100	10	F:Foot pedal mode		
	05	150	15			
	08	200	20			
	10	250	25			
	15	300	30			
	20					