PRODUCER U.S.A.

HOT CHAMBER DIE CASTING MACHINES & AUTOMATION EQUIPMENT

Producer U.S.A. has been involved in the sale and service of the Producer line of die casting machines since 1993. The Producer Company of Tainan, Taiwan is one of the leading manufacturers of hot chamber automatic die casting machines in the world with over 3500 machines installed worldwide. Producer maintains a state of the art manufacturing facility with its own engineering, machining and assembly facility as well as a complete testing and research and development capability.

It is one of the only companies in Asia with its own facilities, which enable it to control the quality of its products. Unlike other companies marketing die casting machines built in the region that rely on subcontractors for much of their work, Producer uses European and North American techniques and standards in its product line. For that reason, we encourage customers to visit our facilities and see firsthand our inspection area, inventory, machine shop and assembly area.

In partnership with Producer U.S.A., Producer has been able to carve a major presence in the North American die casting machinery market by offering sophisticated technology and proven engineering combined with local sales, service and parts to keep its demanding customer base satisfied.

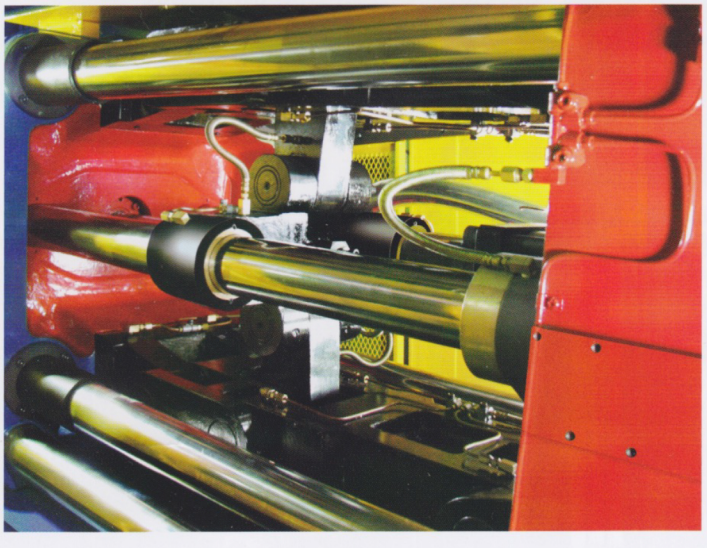
Producer U.S.A. in turn has developed service expertise by frequent visits to the factory for training which compliment its years of experience in the North American die casting machinery market. We in turn offer complete start up training and service as well as follow up service and parts stock to keep our customer base happy.

We have sold and installed many new machines to a variety of customers ranging from smaller job shop die casters to large captive operations with dozens of machines. We can arrange visits and encourage our potential customers to ask for references to hear first hand from satisfied customers.

In the highly competitive die casting business, it is extremely important to know your supplier and trust their service. We deliver what we promise and stand behind our products. Don't take our word for it; ask our growing customer list.

The heart of any die casting machine is the clamping system. Our machines have been designed and built to provide years of trouble free service. We have selected materials, components and designs, which have been proven in some of the harshest environments possible. Many manufacturers have built machines that appear similar to ours, but analyzing their entire structure, our machines come out on top.

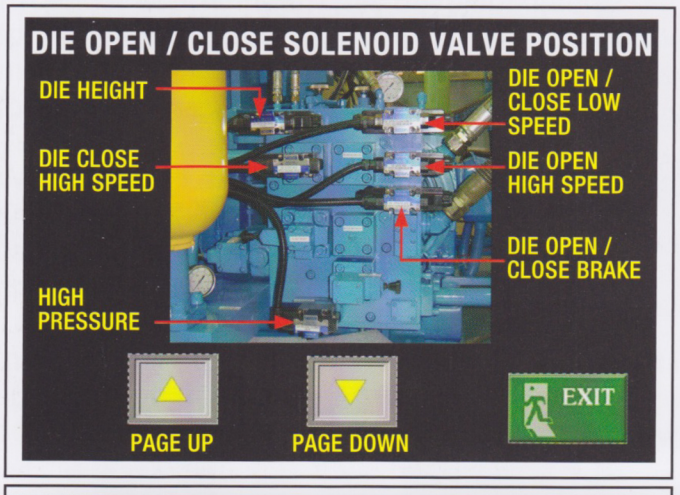
We start out with our unique 6 tie bar design which enables us to provide additional support through the entire three platen assembly. Our platens are cast steel and heat-treated. We do all of our own machining on CNC equipment in our own facility to insure strict control of tolerances. All of our linkage components are FCD55 and heat treated after CNC machining. Tie bars, guide bars and toggle pins are also alloy steel and heat-treated. Our tie bars are N2 heat-treated for durability.

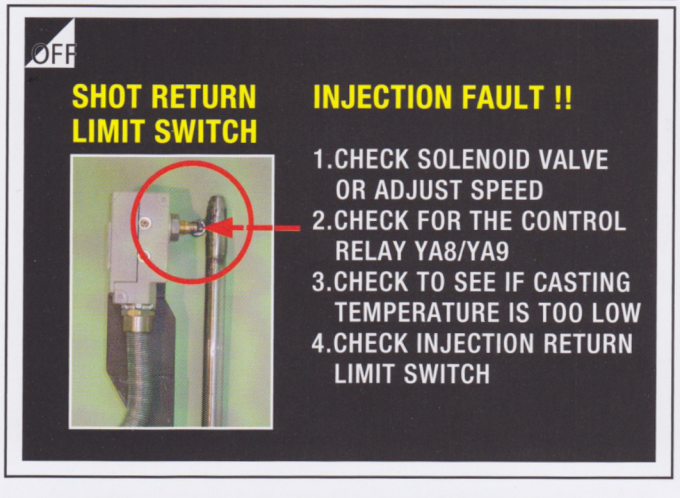


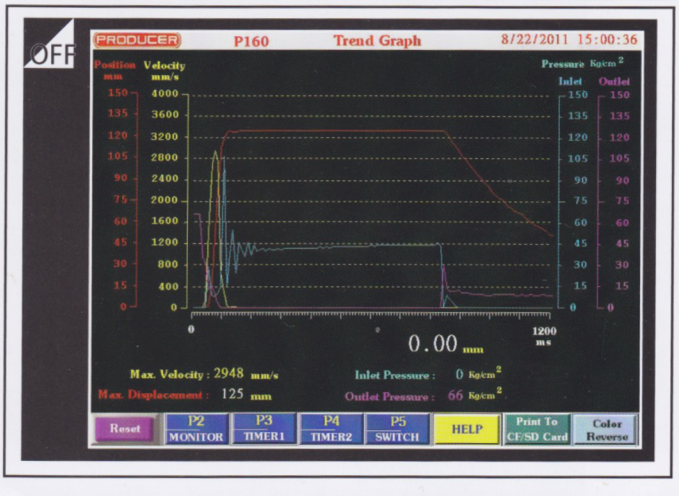
Our toggle linkage uses FCD55 material. In an effort to constantly improve our product line we have recently introduced an oil less bushing system to our linkage components. This has greatly improved the life of the linkage while reducing the frequency of lubrication requirements.

The control systems of all of our machines are designed to provide the highest level of reliability combined with the simplicity of a user-friendly touch screen interface to maximize production and minimize training requirements. We utilize a proven industrial grade programmable logic controller combined with an operator interface that allows control and setup of all operating parameters as well as providing diagnostics and memory for all machine functions.

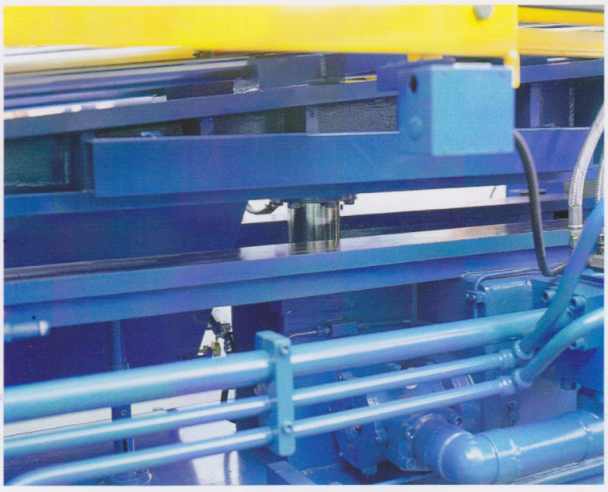
Operators and maintenance personnel can monitor and troubleshoot the entire system from the convenient screen. A live action machine profile, timer and counter access, operation mode changing, core sequencing and input and output monitoring are accessed from this interface.



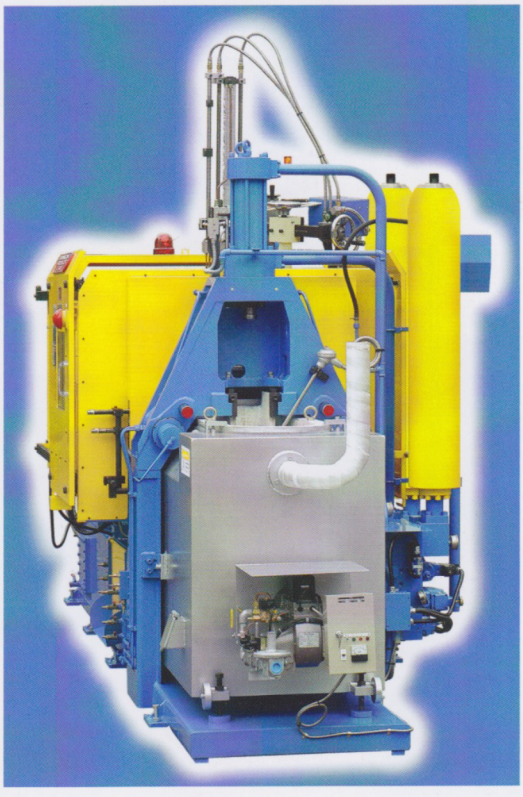




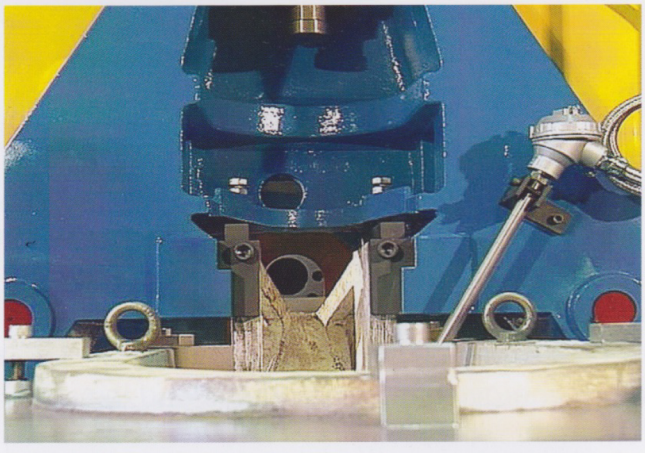
Our latest innovation is the addition of a color touch screen operator interface which incorporates photographs of machine systems whenever an error message appears. This unique feature exclusive to our machines are a major improvement in trouble shooting technology. With the addition of the optional Servo shot system, we have included controls on the interface for setting of the system and an optional shot monitoring system including trend graphs.



Every machine we build shares the same design including standard central motorized die height adjustment utilizing a strong bull gear; large diameter toggle pins and guide bars and a strong ratchet safety system to insure years of safe operation. Larger models (P120 and above) also offer a central hydraulic platform to change shot positions.



The shot ends of our machines are constructed to withstand the severe heat and pressure present in all hot chamber die casting shops. Heavy welded A frames straddle the furnace and allow flexibility for launder systems. The A frame, shot cylinder and front platen are water cooled. Large diameter guide bars are furnished in addition to the nozzle adjustment, which is hydraulically operated and can be set to break away or remain fixed at the customer's option. Because of our six tie bar design, the toggle mechanism can be retracted away from the nozzle area for easy access and maintenance.



Our new dipped style gooseneck design prevents freezeups and reduces porosity by immersing the gooseneck below the metal surface. Our shot ends are further enhanced with the addition of a piston type accumulator for greater efficiency.

Our goosenecks are cast alloy steel with hardened solid bottom sleeves for maximum life. Massive shot cylinder, lines and porting and dedicated shot end manifold with separate accumulator and controls enable the machines to produce high quality flash free castings. The hydraulic manifold has controls for single, two speed and in larger machines (P90 and above) intensification as well as a complete range of control of shot velocity. Many of the adjustments can be made from the operator interface and the others on valving on the manifold. Total adjustability of pressure, velocity and timing as well as memory retention of settings are standard on every machine.

The hydraulic systems on our machines are perhaps the best feature we offer. A high energy efficient motor and pump are located to maximize performance and minimize noise. Separate manifolding for the clamping system, the shot system and on larger machines, the core pull and hydraulic ejector provide efficient delivery of the fluid to enable smooth, trouble free operation. By utilizing separate accumulators for developing closing speed and operating the shot system, we eliminate the need for larger, more energy consuming pumps and this allows lower operating pressure to provide stable performance with less maintenance required.

All machines utilize our proven system that provides a large hydraulic fluid reservoir with baffling to isolate the suction and return sides of our system. Large capacity suction and return line filters insure top performance. A large capacity heat exchanger maintains proper operating temperature for the hydraulic fluid.

All machines feature low pressure closing, automatic recycling, hydraulic multiple pulse ejection, hydraulic multiple sequence core pulls, motorized die height and two speed shot as standard. Speed and pressure can be individually adjusted on most of these features.

Our shot systems are of particular note because we provide extremely high shot pressure and velocity comparable to the most sophisticated and expensive machines in the world. A unique sequence valve arrangement coupled with our proprietary circuit design provides our customers with the ability to tailor each set up to the requirements of the job they are running. Parameters can be saved on a log.

Automatic equipment and accessories for our machines were developed and are built in the same facility as our machines. Everything is designed to interface seamlessly with a minimum of setup required. We offer a dependable, proven vertical rotation extractor, a variety of reciprocating spray systems, a variety of conveyor systems utilizing both water quench and an air cooling tunnel and central hydraulic nozzle position changing. We can supply automatic linkage lubrication, shot monitoring systems, special platen drilling and arrangements, special bases for custom installations and a variety of furnace and fuel options to suit any requirement.

All of our machines come equipped with a full compliment of safety features including hydraulic and electric interlocks, guarding and ratchet safety devices. Safety redundancy is provided in all of our circuit designs and critical backups are included. International safety standards including CE and ANSI as well as prevailing local codes are met or exceeded. Safety signs with pictorial symbols are affixed to all areas of the machine.

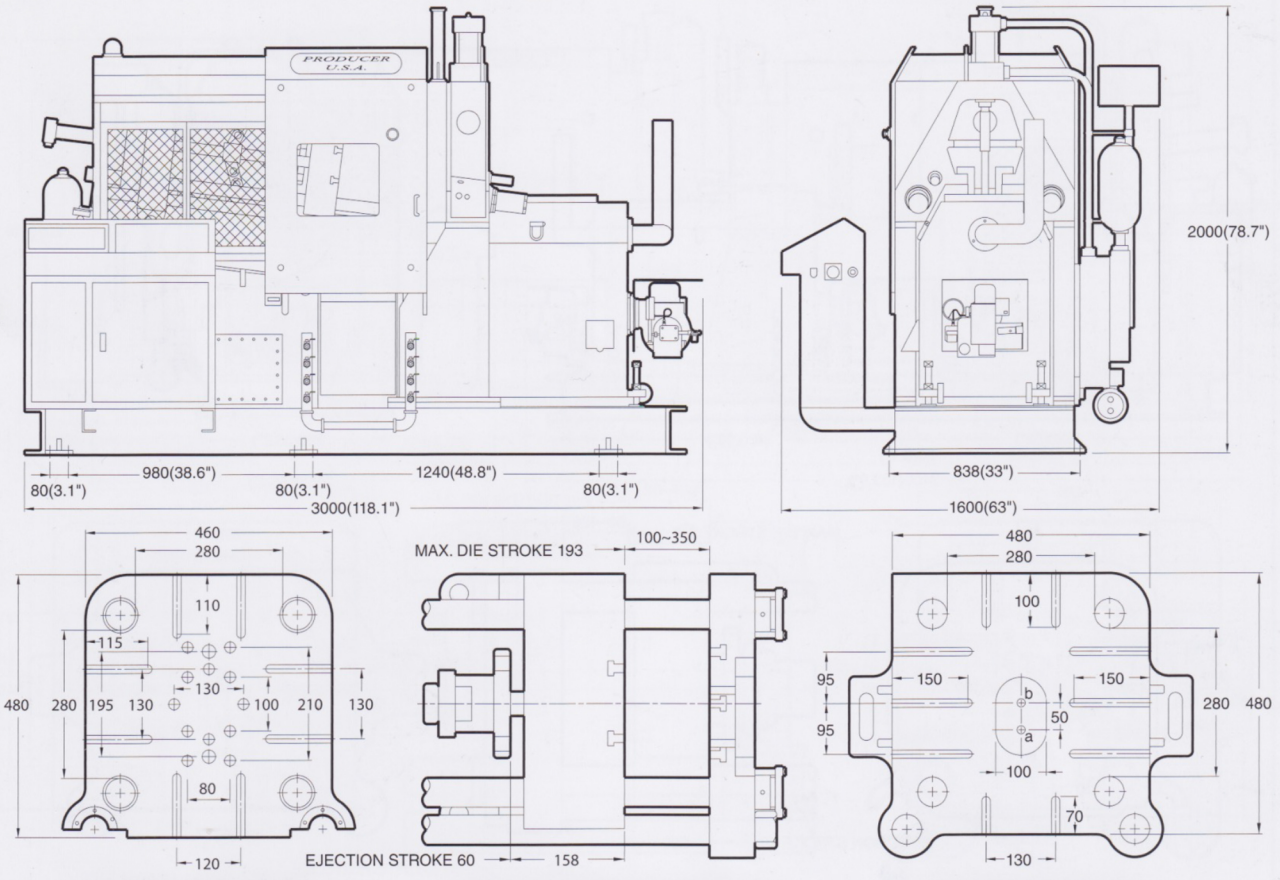
All models are supplied with a complete set of spare parts, tools, manuals, seal kits and filter elements, hand spray gun, die lifting boom (models up to P200), die clamps, leveling pads and a complete water manifold and drain system. Freight on all of our machines is included to the customer's facility. We provide startup and training with every machine and we stand behind our products with a strong warranty and complete stock of spare parts and factory trained technicians to assist our customer base.

2-3 : SPECIFICATIONS:

MODELS		P30	P50	P75	P90	P130	P160	P200	DH-P250	DH-P300	DH-P500
Clamping force (at 90 kg/cm²)	ton	33 (at 1015 PSI)	55	82.5 (at 1522 PSI)	99	143 (at 1667 PSI)	185 (at 1667 PSI)	220	308	363	567 (at 1740 PSI)
Tie bar diameter	in	1.96 × 6	2.16 × 4, 1.96 × 2	2.36 × 6	2.55 × 4, 2.36 × 2	3.14 × 6	3.34 × 4, 3.14 × 2	3.54 × 4, 3.14 × 2	3.93 × 6	4.4 × 4, 3.93 × 2	5.31 × 6
Die platen size (H×V)	in	18.1 × 18.9	19.3 × 20	20.5 × 21.6	22.4 × 21.6	26.7 × 24.9	27.5 × 26.3	28.1 × 28.1	32.2 × 35	34 × 36.2	42.1 × 42.1
Between tie bars (H×V)	in	11 × 11	12 × 12	13.38 × 13.38	13.8 × 13.8	15.75 × 15.75	17.5 × 16.3	18.3 × 18.3	20.5 × 20.5	21.2 × 21.2	27.3 × 27.3
Max. Die stroke	in	7.59	7.59	8.46	10.6	11.53	14.25	14.25	15.75	15.75	19.68
Die height	in	3.93 ~ 13.77	3.93 ~ 15.74	3.14 ~ 18.11	3.14 ~ 17.32	3.54 ~ 19.48	4.72 ~ 19.68	5.9 ~ 19.68	7.87 ~ 23.62	7.87 ~ 22.44	11.81 ~ 27.55
Nozzle touch force	ton	3.3	3.3	5.06	5.06	5.94	5.94	5.94	11	11	14.63
Nozzle break stroke	in	5.9	5.9	6.29	6.29	7.08	7.08	9.84	9.84	9.84	11.81
Dia. Injection cylinder	in	2.75	3.14	3.54	3.74	3.93	4.33	4.72	5.11	5.11	5.9
Max. Injection force (at 70kg/cm²)	ton	2.53 (at 870 PSI)	3.3 (at 870 PSI)	4.95	5.5	6.05	7.26	8.69	10.23	10.23	17.38 (at 1035 PSI)
Max. Injection stroke	in	4.72	4.72	4.92	4.92	7.48	7.48	7.87	7.87	7.87	9.84
Standard plunger tip dia.	in	1.5 / 1.77	1.77	1.96	2.16	2.36	2.36 / 2.55	2.75	2.95	2.95 / 3.14	3.54 / 3.93
Total net injection amount (Zn)	lbs	1.32 / 2.09	2.09	2.55	3.06	5.95	5.95 / 6.5	7.9	9.9	9.9 / 11.5	12.8 / 17.1
Melting pot capacity (Zn)	lbs	440	440	573	793	1102	1102	1322	1543	1543	2204
Nozzle position (Center lower part)	in	0, – 1.96	0, – 1.96	0, – 2.36	0, –2.36	0, –3.14	0, – 3.93	0, –3.93	0, –5.9	0, –5.9	0, – 6.9
Max. Casting area	sq.in	18.29 / 25.73	32.8	40.61	52.85	82.61	89 / 104.6	120.9	164.61	193.9 / 221.1	257.5 / 317.6
Casting pressure	PSI	2944 / 2103	2741	3321	3060	2828	3393 / 2886	2973	3060	3060 / 2683	3596 / 2915
Intensifier pressure	PSI	–	–	–	–	1450	1450	1450	1450	1450	1450
Ejection force	ton	2.75	2.75	4.18	4.18	6.6	8.25	9.35	15.18	15.18	26.4
Ejection stroke	in	2.36	2.36	2.75	2.75	3.54	3.54	3.54	3.93	3.93	5.1
Casting cycles (Free)	n/h	1200	1200	1000	900	800	700	650	650	650	500
Working pressure	PSI	1015	1450	1595	1522	1740	1740	1522	1522	1522	1740
Accumulator (Bladder type)	Gal/pcs	2.6 × 2	2.6 × 2	2.6 × 1, 5.3 × 1	5.3 × 2	5.3 × 1, 7.9 × 1	5.3 × 2, 7.9 × 1	5.3 × 2, 7.9 × 1	7.9 × 2, 13.2 × 1	7.9 × 2, 13.2 × 1	7.9 × 1, 13.2 × 3
Oil tank capacity	Gal	39.6	39.6	52.8	52.8	92.4	92.4	158.5	211	211	211
3 Phase induction motor	HP	5	7.5	10	15	15	20	25	40	40	50
220/110VAC transformer	amp	5	5	5	5	5	5	5	5	5	5
Machine weight	ton	4.07	4.4	5.3	5.7	9.6	9.9	11	16	17	29.5
Overall dimensions (L×W×H)	Ft	9.8 × 5.2 × 6.5	9.8 × 5.2 × 6.5	11.1 × 6.5 × 6.6	11.8 × 6.5 × 6.6	15.7 × 6.9 × 7.5	16 × 6.9 × 7.5	16.4 × 6.8 × 7.7	19.1 × 6.2 × 8	19.1 × 6.2 × 8	22 × 6.8 × 9
Injection System		2 stage injection				2 stage injection and intensifier					

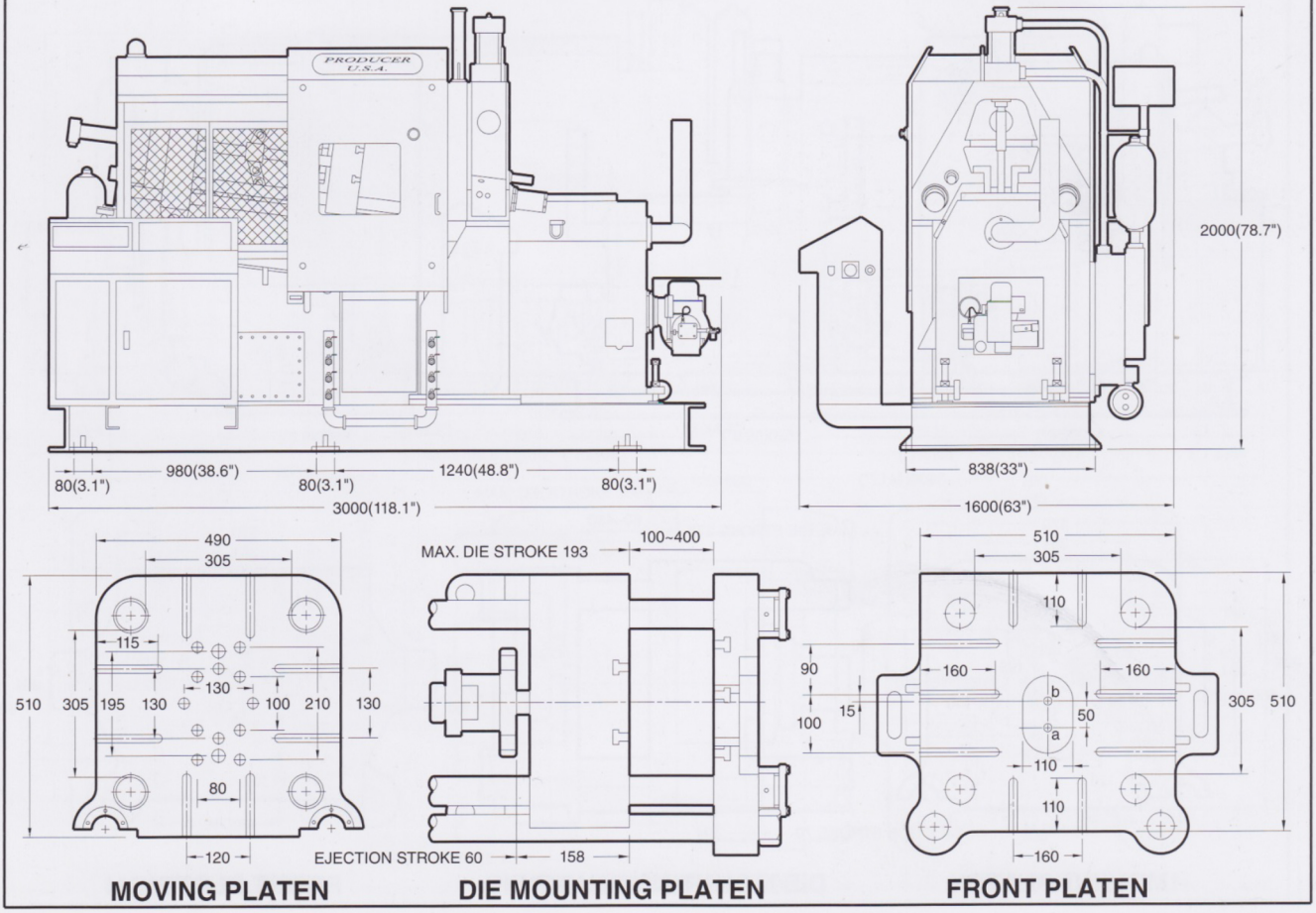
SPECIFICATIONS SUBJECT TO CHANGE

P30 MACHINE EXTERNAL DIMENSIONS



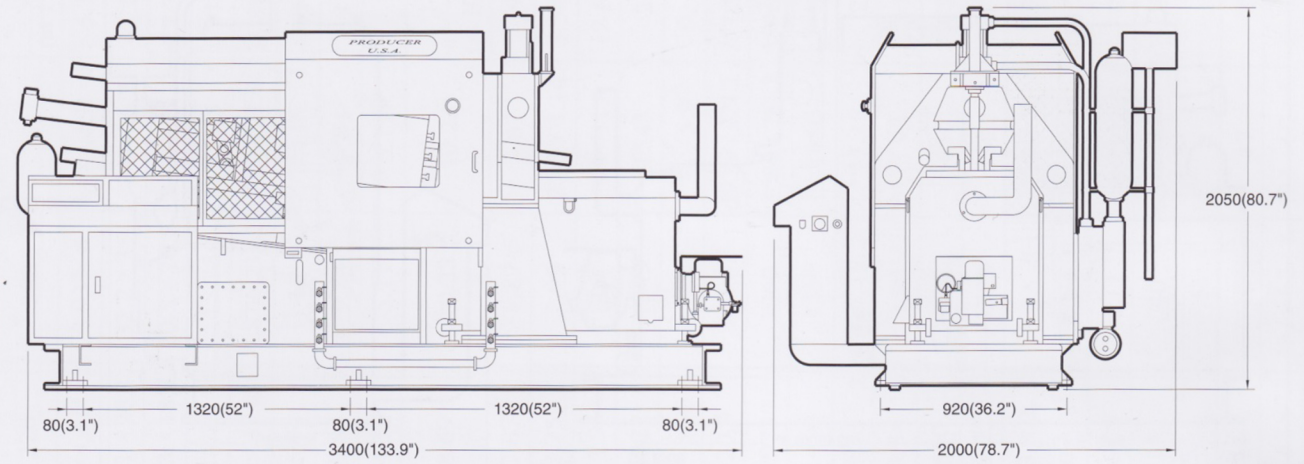
MOVING PLATEN **DIE MOUNTING PLATEN** **FRONT PLATEN**

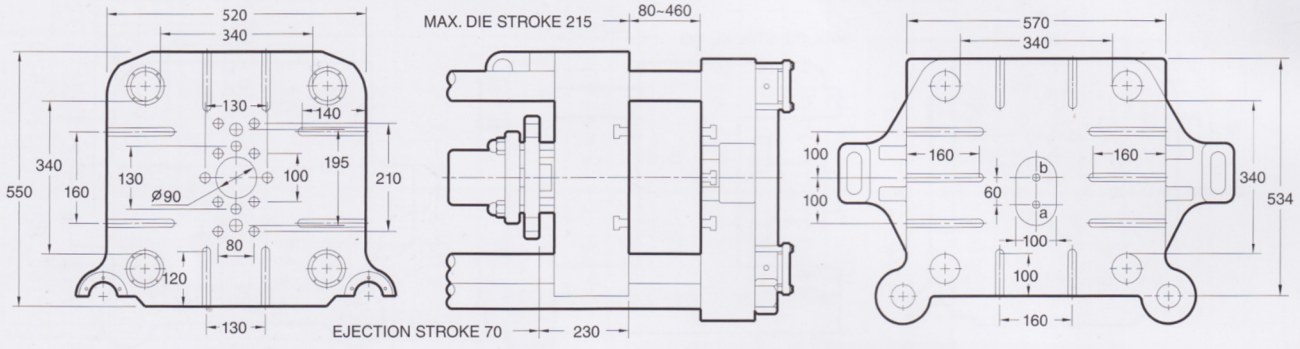
P50 MACHINE EXTERNAL DIMENSIONS



MOVING PLATEN **DIE MOUNTING PLATEN** **FRONT PLATEN**

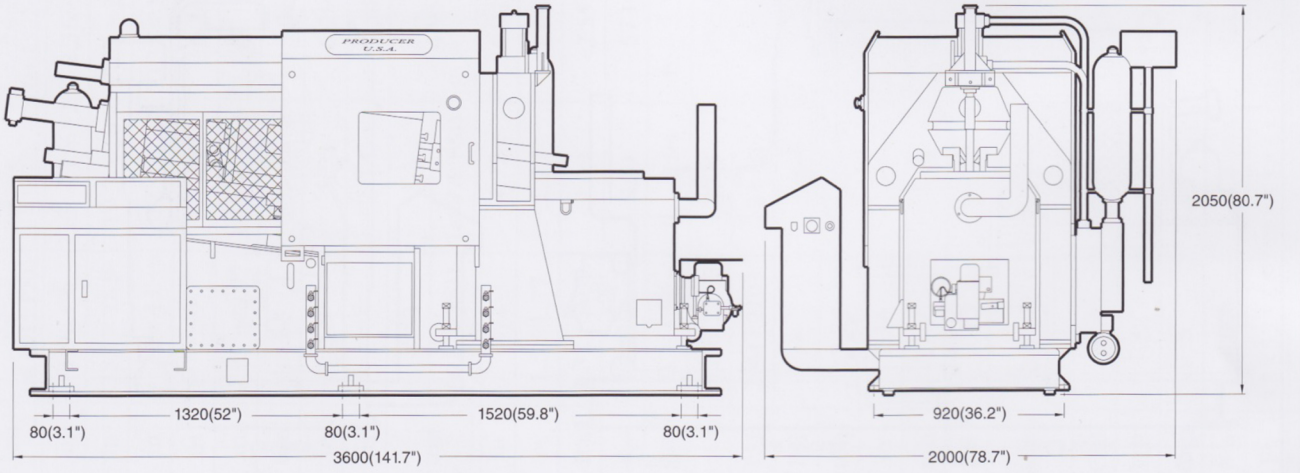
P75 MACHINE EXTERNAL DIMENSIONS

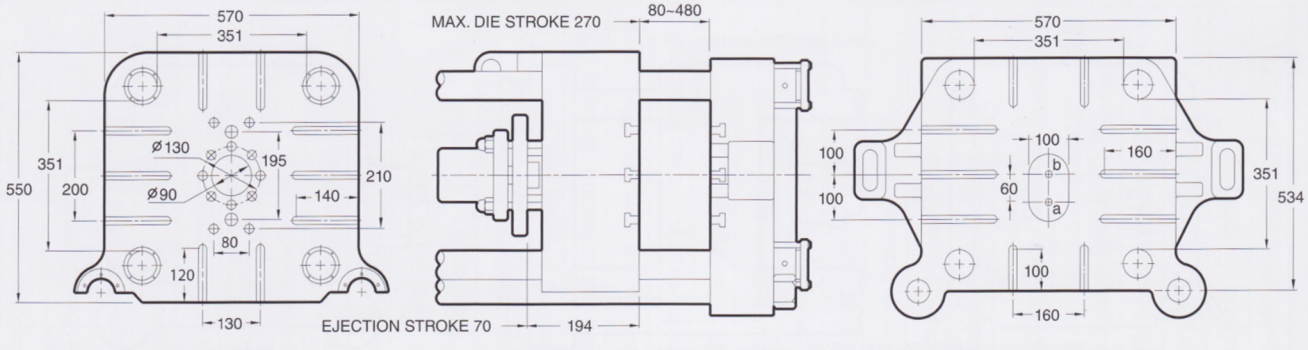




MOVING PLATEN **DIE MOUNTING PLATEN** **FRONT PLATEN**

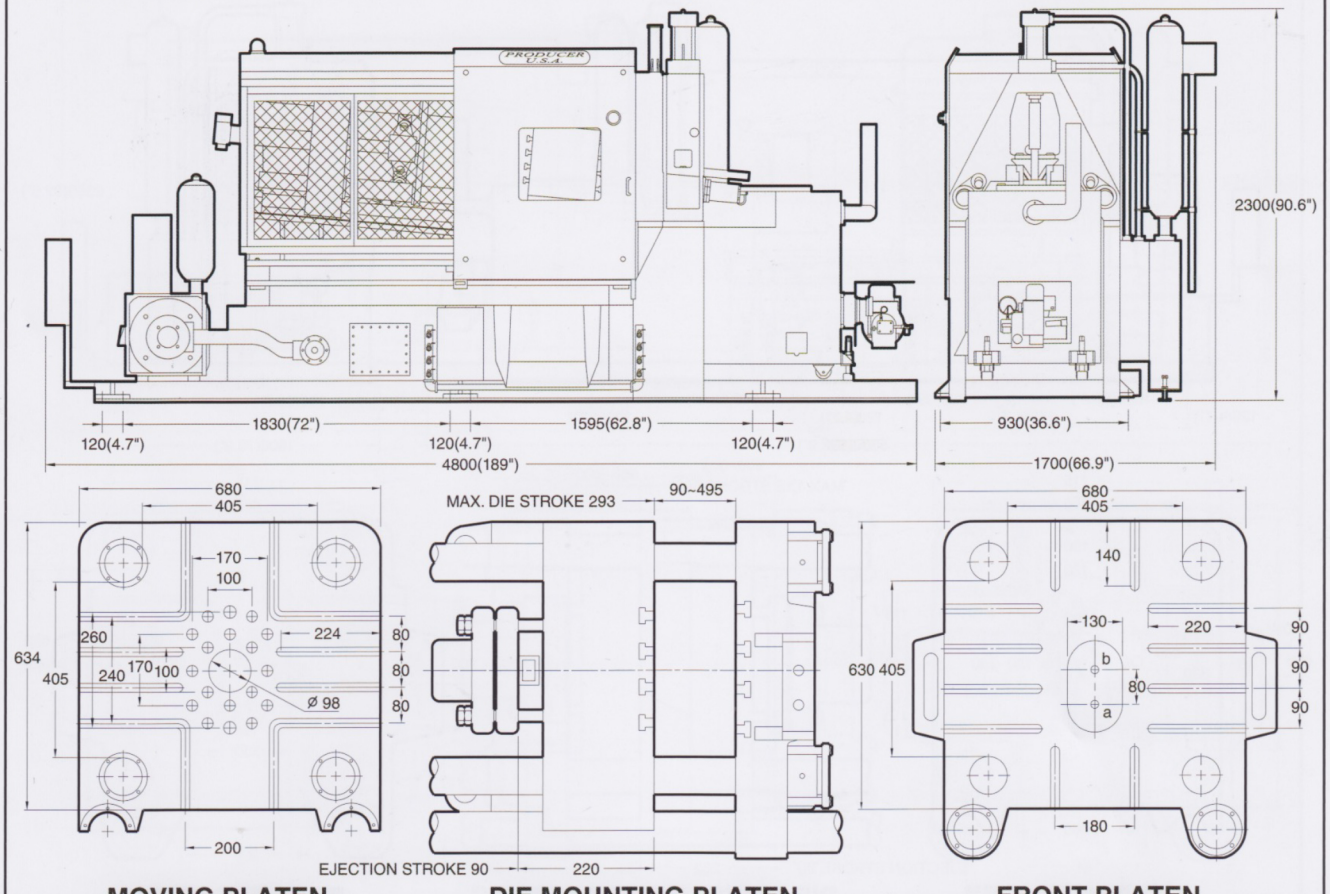
P90 MACHINE EXTERNAL DIMENSIONS





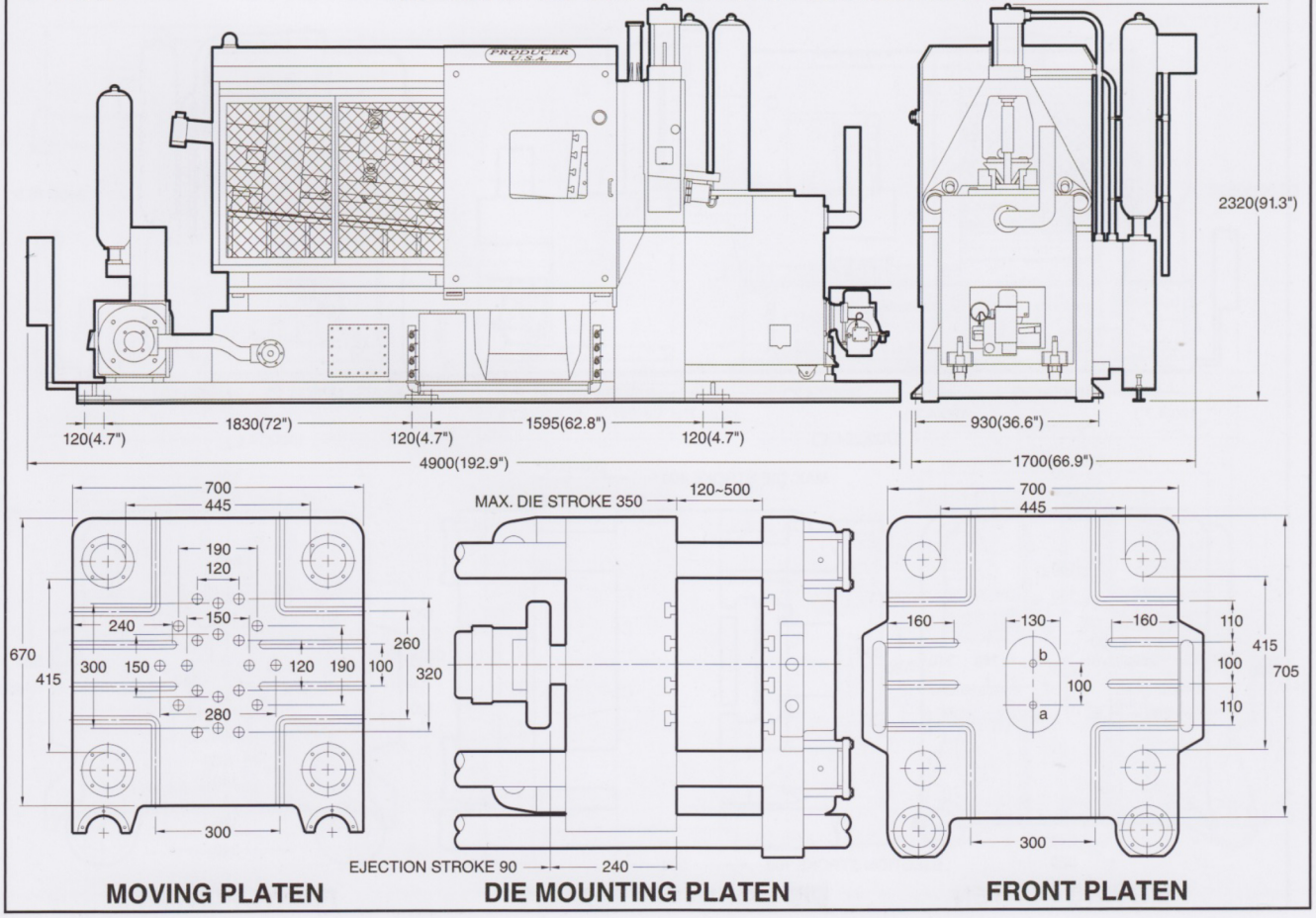
MOVING PLATEN **DIE MOUNTING PLATEN** **FRONT PLATEN**

P130 MACHINE EXTERNAL DIMENSIONS



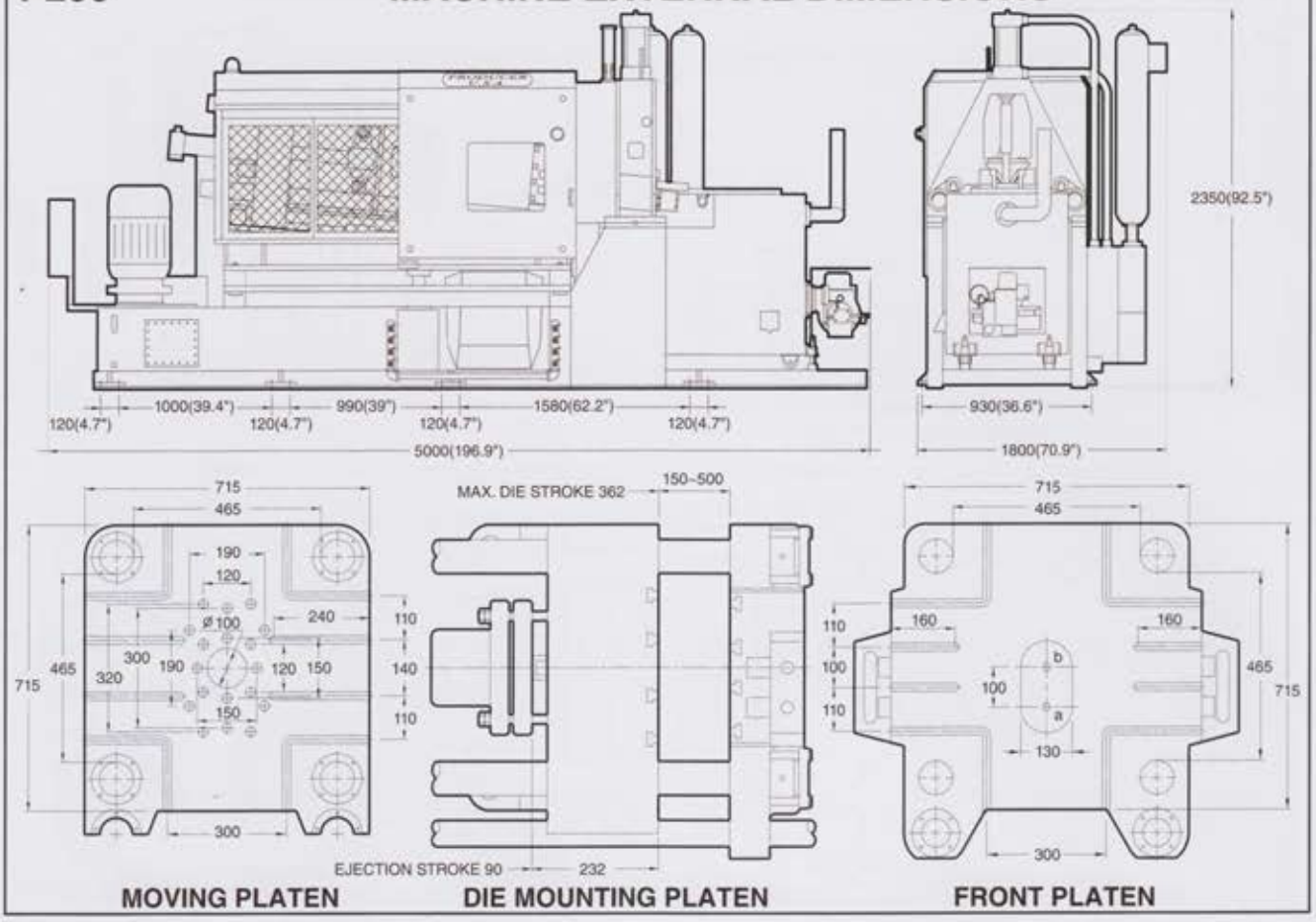
MOVING PLATEN DIE MOUNTING PLATEN FRONT PLATEN

P160 MACHINE EXTERNAL DIMENSIONS

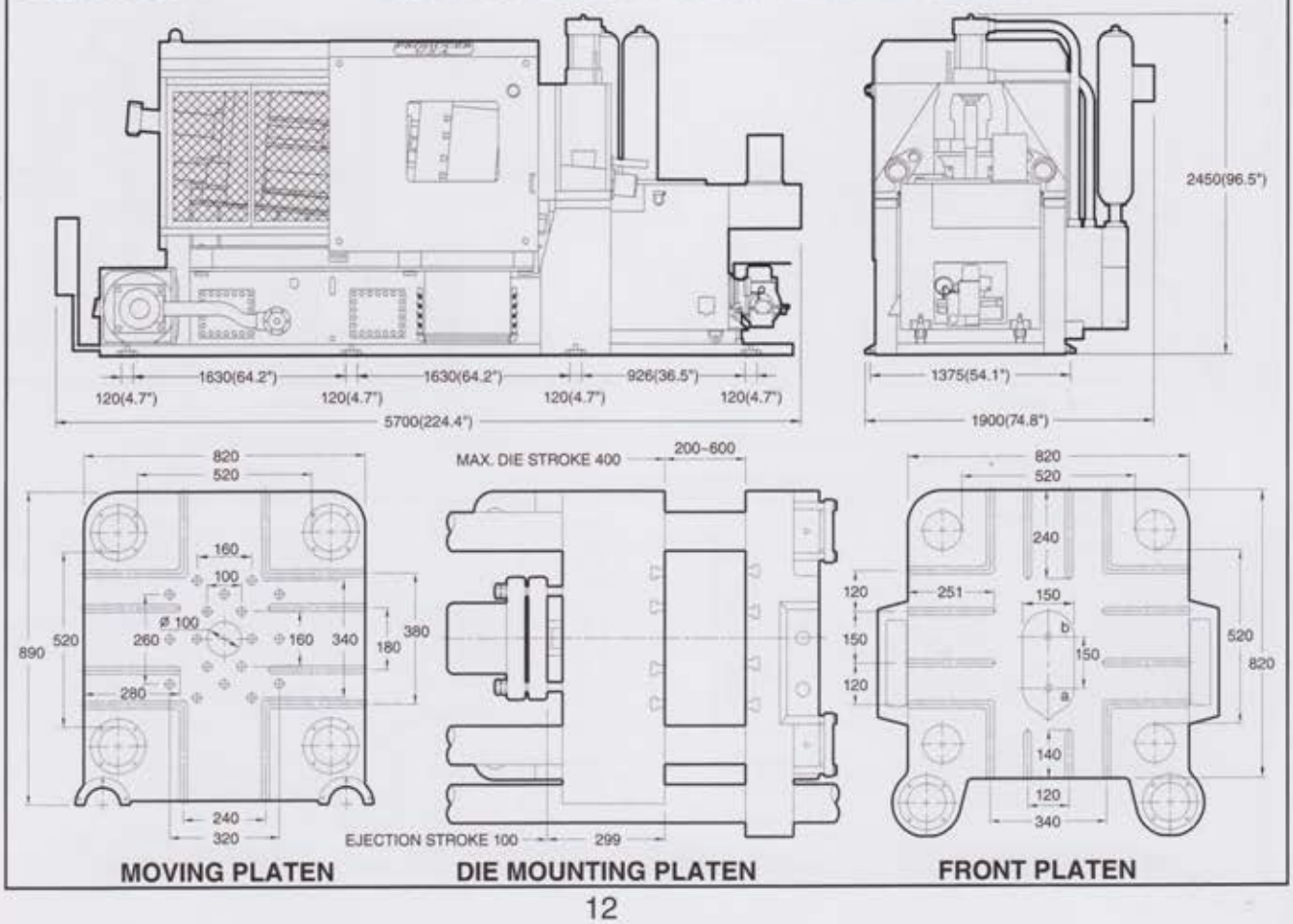


MOVING PLATEN DIE MOUNTING PLATEN FRONT PLATEN

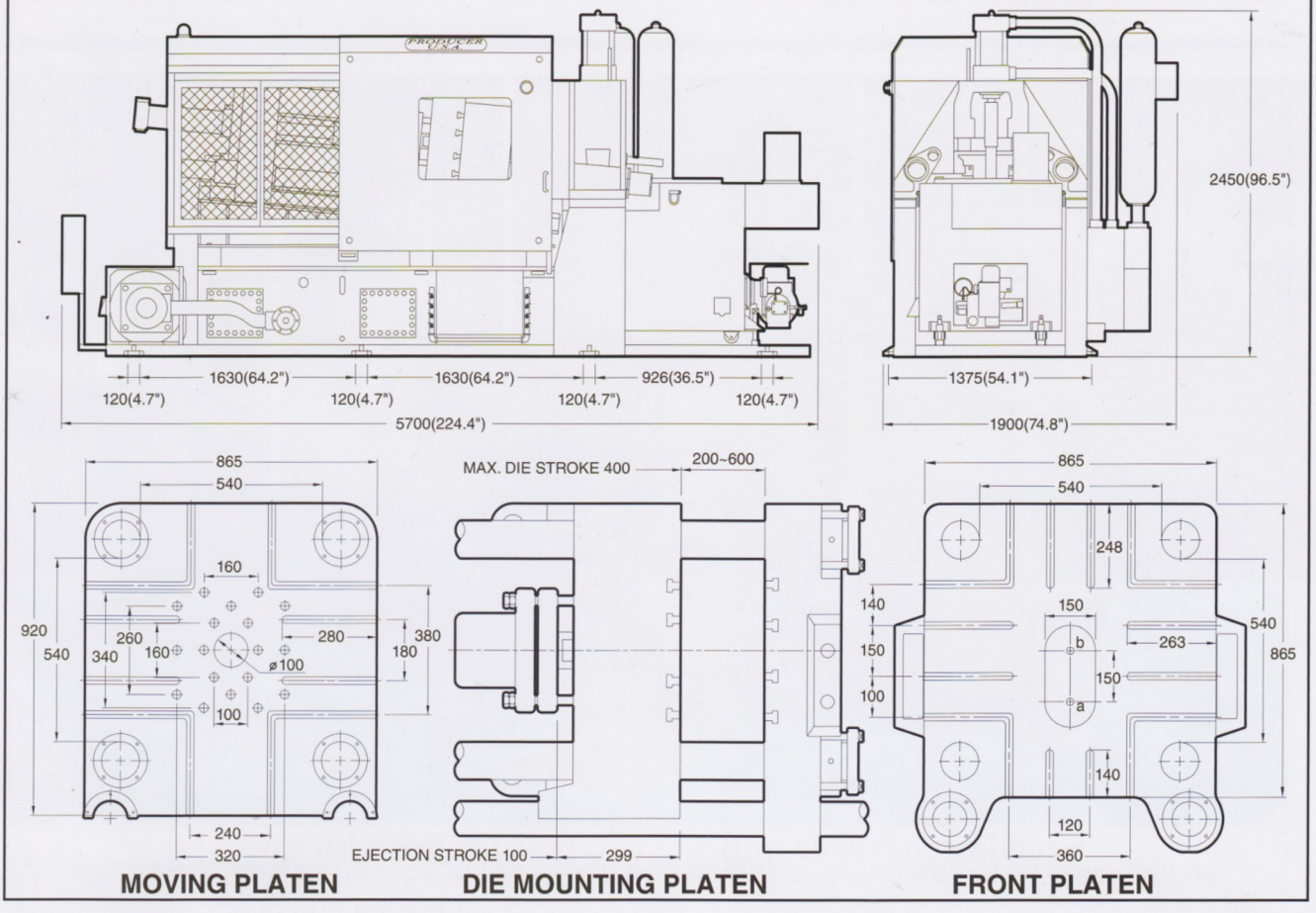
P200 MACHINE EXTERNAL DIMENSIONS



DH-P250 MACHINE EXTERNAL DIMENSIONS

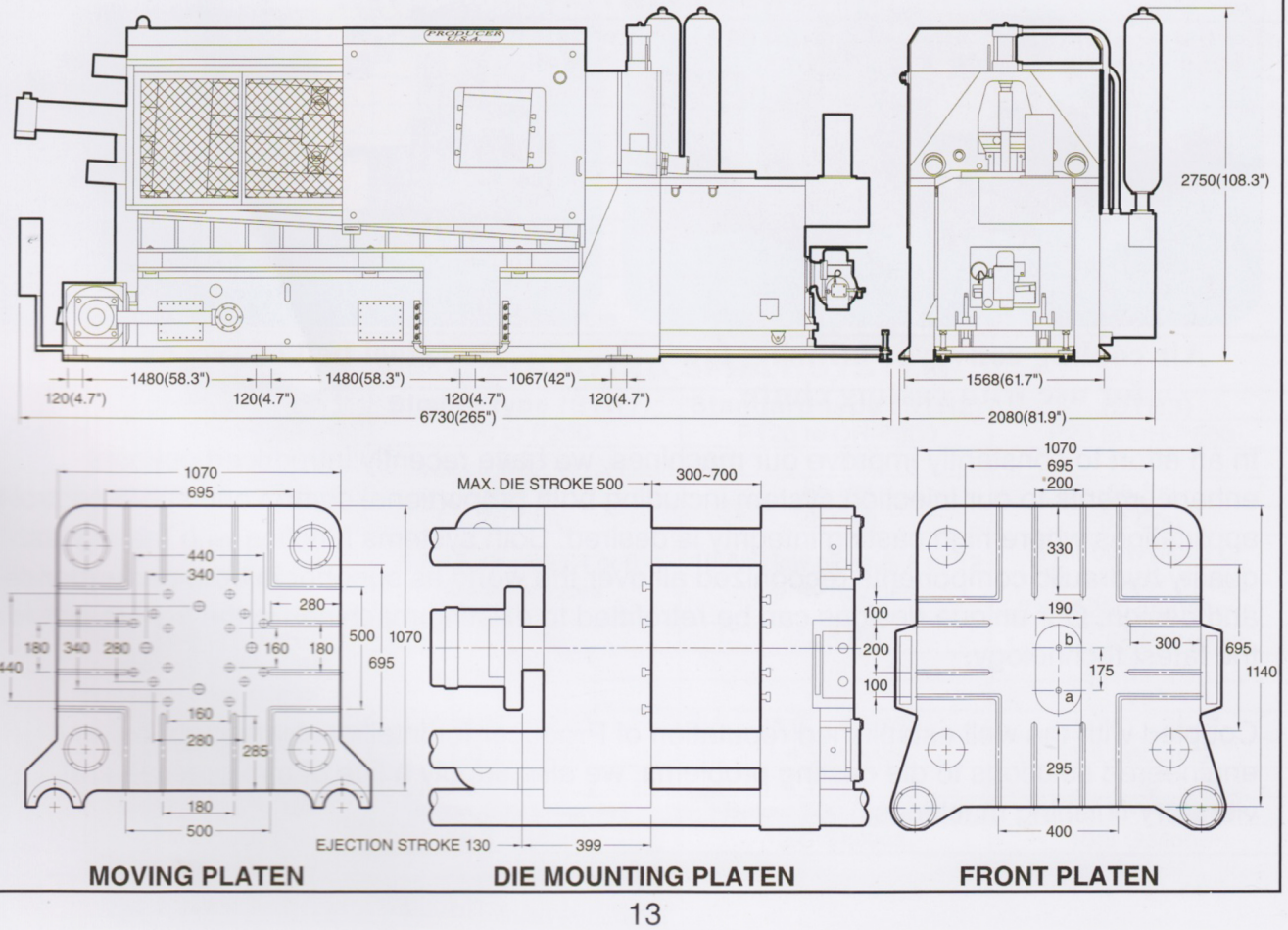


DH-P300 MACHINE EXTERNAL DIMENSIONS



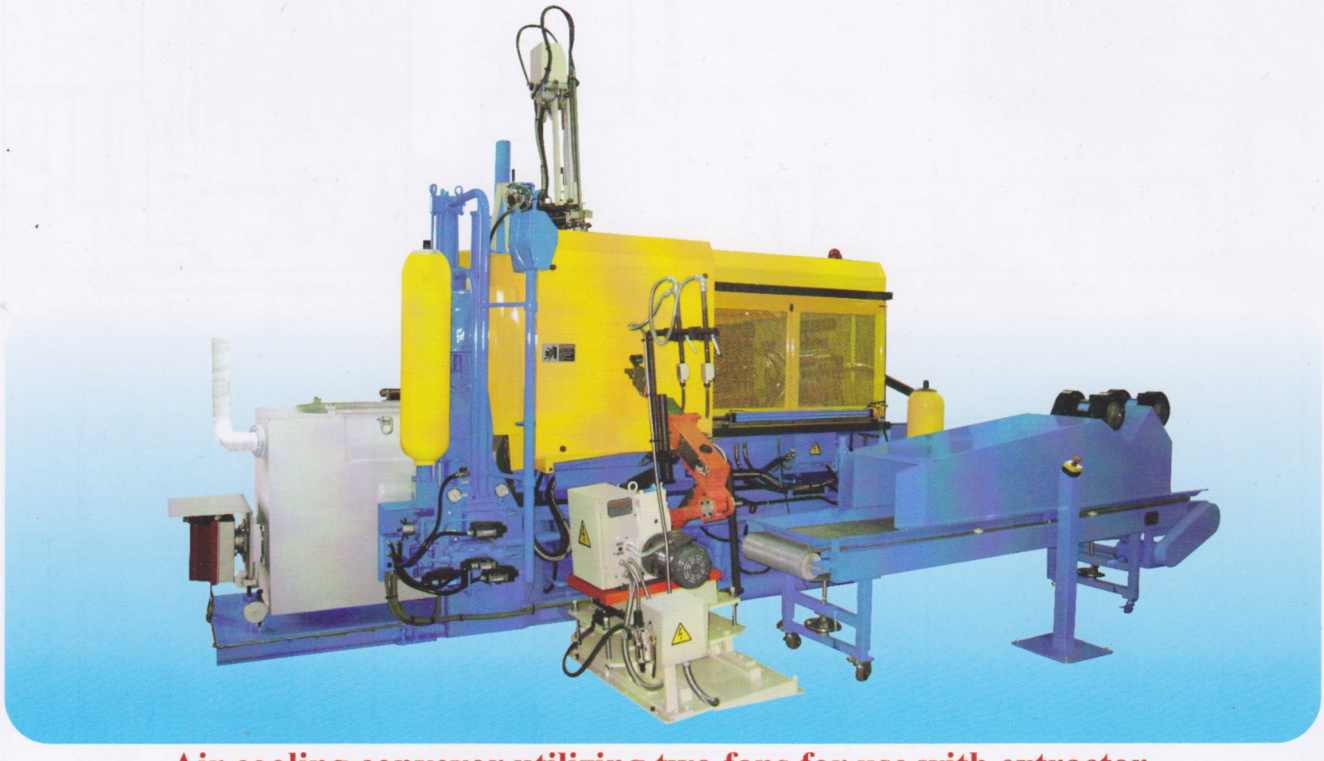
MOVING PLATEN DIE MOUNTING PLATEN FRONT PLATEN

DH-P500 MACHINE EXTERNAL DIMENSIONS



MOVING PLATEN DIE MOUNTING PLATEN FRONT PLATEN

AUTOMATION EQUIPMENT FOR DIE CASTING MACHINERY



Air cooling conveyor utilizing two fans for use with extractor

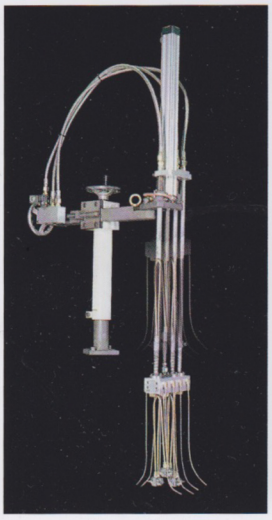
Air cooling conveyor utilizing fan for use with casting chute

Dry steel belt conveyor

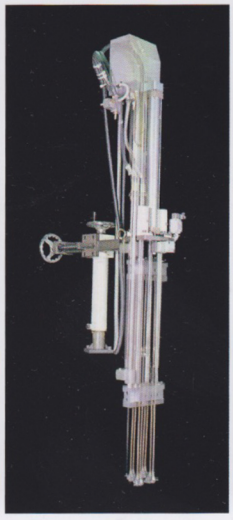
In an effort to constantly improve our machines, we have recently introduced optional enhancements to our injection system including both proportional control and servo control for applications where high casting integrity is desired. Both systems function with the highest quality hydraulic components recognized all over the world as superior in both performance and design. Our unique designs can be retrofitted to existing machines in the field to provide the latest technology.

Coupled with the well established reputation of Producer for intelligently thought out and engineered solutions to die casting problems, we also supply a line of trim presses and vibratory finishing machines.

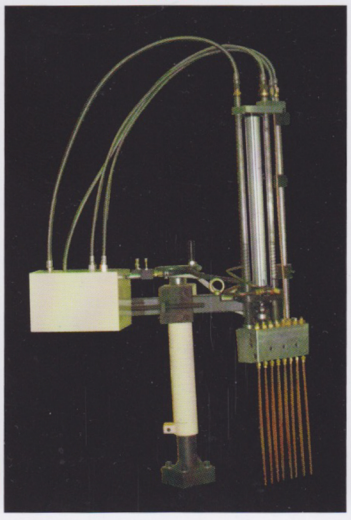
Model STR1



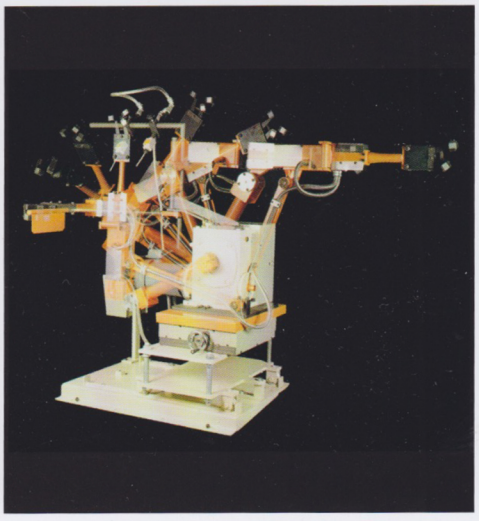
Model STR2



Model STR3



Vertical Rotation Extractor model E30



RECIPROCATING SPRAY SYSTEM

Machines can be fitted with furnaces fueled by gas, oil or electric depending on the customer's needs. Controls can be provided in any language the customer needs to insure complete understanding of the operation and maintenance of the machine by local technicians.

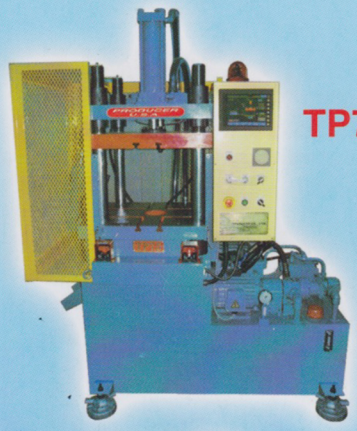
Our equipment meets or exceeds the safety and operation standards of all countries our equipment is sold in and constantly monitors new developments to insure compliance with upgrades as they are introduced.

VERTICAL ROTATION EXTRACTOR

MODELS	E30 integrated with two claw	E30 integrated with three claw	E35 integrated with movable base
Applicable die casting machine	P90 and below	P120 to DH-P300	DH-P500
Motor specifications	2Hp	2Hp	2Hp
Air pressure required	85 Psi	85 Psi	85 Psi
Stroke	60"	63.75"	75.6"
Side movement stroke	2.55" ~ 3.93"	2.55" ~ 3.93"	2.55" ~ 3.93"
Grip clamping force	105 Lbs	132 Lbs	132 Lbs
Arm swivel	90 Degrees	90 Degrees	90 Degrees
Minimum cycle time	6 ~ 8 Seconds	6 ~ 8 Seconds	6 ~ 8 Seconds
Air consumption	12 Cfm per cycle	12 Cfm per cycle	21 Cfm per cycle

RECIPROCATING SPRAY SYSTEM

MODELS	Simple type (STR1)	Standard type (STR2)	(STR3)
Applicable die casting machine	P50 to P200	P120 to DH-P500	P20 to DH-P500
Die height range	10.23"	11.81"	10.23"
Air pressure required	85 Psi	85 Psi	85 Psi
Air consumption	26 Cfm	26 Cfm	38 Cfm
Spray configuration	8 Air blow pipes-4 or 6 Spray nozzles	10 Air blow pipes-6, 8 or 12 Spray nozzles	8 Air blow pipes or 16 Air blow pipes (DH-P250 and above)
Release agent pressure	7.25 Psi	7.25 Psi	29 Psi
Compressed air connection	1/2"	1/2"	1/2"
Release agent connection	3/8"	3/8"	3/8"
Total stroke	17.7" ~ 25.6"	21.6" ~ 23.62"	15.74" ~ 25.6"
Reciprocation time	1.4 Seconds	1.4 Seconds	1.4 Seconds
Adjustable bracket stroke	7.48"	7.48"	7.48"
Total rotation adjustment	Below 300 Degrees	Below 300 Degrees	Below 300 Degrees
Pressure tank capacity	15.8 Gallons	15.8 Gallons	15.8 Gallons



TP7.5

TP20

Specifications for trim presses:

MODEL No.		TP7.5	TP20
Max. trim force	ton	8.25	22
Max. pull out force	ton	1.98	4.62
Max. stroke	in	9.84	25.6
Max. daylight (ram up)	in	13.77	28.54
Daylight (shut height)	in	3.93	2.95
Tie bar diameter	in	ψ2.36 x 4	ψ2.95 x 4
Distance between tie bars	in	15.74 x 15.74	23 x 11
Die space (moving platen)	in	22.8 x 22.8	36 x 20
Die space (base platen)	in	22.8 x 22.8	36 x 24
Hole size in base platen	in	4.72	12 x 12
Height to base platen	in	35.4	35.4
Floor space	in	51.1 x 36.6	63 x 53.1
T-slots in platen	n/a	1/2 ~ 12 UNC	5/8 ~ 11 UNC
Electric motor	hp	3	10
Rapid closing speed	rpm	201	468
Pressing speed	rpm	35	78
Return speed	rpm	157	354
Power supply	n/a	220 ~ 480 VAC	220 ~ 480 VAC
Air (80 psig) pipe size	n/a	3/8" NPT	3/8" NPT
Oil tank capacity	gal	26.4	52.8
Approx. shipping weight	ton	1.43	2.64
Overall dimensions (LxWxH)	in	61 x 36.6 x 73.2	63 x 45.6 x 122

We are proud to introduce our improved four post hydraulic trimming presses available in four popular sizes. Starting from our original design, we processed feedback from our customers and upgraded many features to make the presses function better with superior maintenance features. They now include a PLC with a color touch screen operator interface with diagnostics and alarm screens with pictorial troubleshooting. An improved non contact micro pulse transducer enables accurate and simple stroke adjustment and a memory feature allows retention of preset parameters. Standard features include a light curtain, dual main ratchet pullbacks and a redundant top ratchet, non contact push buttons and interlocked side and rear guarding. Simplified hydraulics and oil less bushing system with dust seals are also provided.

CE ISO 9001 Application

NADCA® MEMBER

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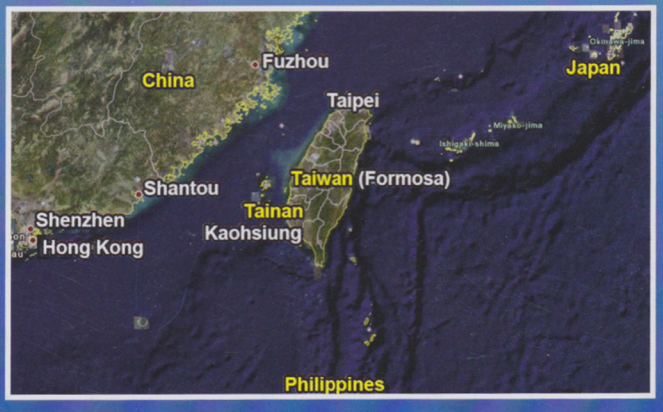

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Our factory is located in Tainan, Taiwan with excellent shipping and courier service all over the world. In addition, we maintain a complete parts stock and factory trained technicians in our facility ready to serve our customer base.

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