## **Enerpac Hydraulic Presses**

Enerpac Hydraulic Presses are available in a variety of capacities and sizes. The press frames are designed for maximum strength and durability. Strong frames and powerful high-pressure hydraulics will provide years of dependable service in many applications.

Enerpac Presses are available in H-Frame, Roll-Frame, Arbor, C-Clamp and Bench models.

Available in capacities from 10 to 200 ton, each Enerpac press consists of three basic high quality components: press frame, power source and hydraulic cylinder.

> > ERPAC 6

These Press features increase productivity and broaden the range of applications:

Side-to-side cylinder movement Lateral movement capability of cylinder in upper bed.

#### Hydra-Lift

Standard on many Enerpac IP-Series Presses, the exclusive Hydra-Lift™ offers effortless adjustment to the press daylight by use of a hydraulic lift.

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## **Press Section Overview**

Available in capacities from 10 to 200 ton, each Enerpac press consists of three basic high quality components: a press frame, a power source and a cylinder.

#### **Press Frame**

Press frames include features like workpiece side-loading and height adjustment of the upper and lower bed.

#### **Power Source**

Depending on the production requirements, Enerpac presses can be powered by manual, air-hydraulic and electric-drive power sources.

#### Cylinder

Depending on the application, double-acting cylinders offer increased efficiency. Check out the Selection Charts for the press best suited for your needs.

#### Gauge

All H-Frame, Roll-Frame and Bench Presses feature an easy to monitor pressure/force gauge for increased safety, gauge adaptor and hose(s).

Capacity ton (kN)	Press type and functions		Series	Page
<b>10 - 200</b> (101 - 1995)	H-Frame Presses	IP	1	148 🕨
<b>50 - 200</b> (498 - 1995)	Roll-Frame Presses	IPR	4	152 🕨
<b>5 - 20</b> (45 - 178)	C-Clamp Presses	A	1	154 🕨
<b>10 - 30</b> (101 - 295)	Arbor Presses	A	1	154 🕨
<b>10</b> (101)	Bench Presses	VLP	Í	154 🕨
-	Custom Hydraulic Presses		-	156 🕨
900 - 90.000 kg	Tension Meters Load Cells	TM LH	0	157 🕨



• The pressframe of the workshop presses are exclusively designed for pressing operations, not for pulling. For pulling applications please contact Enerpac.

In order to fully comply with CE regulations, some presses must be equipped with specific safety components, such as spring centered valves, two-hand control devices, guards or others.

Enerpac standard general purpose presses are supplied without guards, and have a plunger speed of less than 10 mm/second. However, your application may require that measures should be taken to reduce the risk of injury to operators and other personnel by providing appropriate safeguarding, training and conducting a risk assessment, which eliminates or reduces danger.

Health & safety within your workplace is your responsibility, not that of Enerpac.

Advice on such matters is available from your local enforcement agency. If you require any further information on Enerpac accessories that may help you conform to the Machinery Directive or European legislation contact Enerpac.

## **IP-Series, H-Frame Presses**

#### IPE5060A, H-Frame Press



- · Quality welded frame for maximum strength and long life
- Exclusive "Hydra-Lift" bed for effortless adjustment of the vertical daylight (10 ton models are manual)
- Roller head design is standard to allow movement and locking of the cylinder from side to side (10-ton, 25-ton and 30-ton are manual)
- All models in the Quick Selection Chart have been matched to a pump, cylinder, hose, gauge and gauge adaptor offering the complete package.



### Great Possibilities Great Performance



### **Cylinder Mounting Block**

Allows cylinder mounting into a press frame, while also allowing side to side adjustment of cylinder position.



### Hydra-Lift

Allows easy and effortless daylaylight adjustment. Standard on most IP-Series H-Frame Presses.





#### **Pressure & Force Gauges**

All press models include a GF-Series gauge and gauge adaptor, matching the press capacity. GF-Series indicate the

pressure (bar) and force (kN).



### Hoses

All IP-Series H-Frame Presses include hose(s), offering the complete package.

#### V-Blocks

These V-Blocks are designed for easy fixturing of round stock and other non-uniform materials. Featuring precise fit into the press bolster. Page: 151

An Enerpac H-Frame press quickly removes the shaft from this assembly.

### **H-Frame Presses**



### Safety Screen

Universal moveable safety screen to be positioned before any press.

- Aluminium safety screen with polycarbonate glass
- Versatile use and protection
- Lockable wheels for easy positioning.

Description	Model Number
Universal Safety Screen	XLPSS1



 Press with safety cage to ensure additional operator safety.

### **IP** Series



### Press Capacity: 10 - 200 ton

Maximum Daylight x Max. Bed Width: 1525 x 1225 mm

Maximum Operating Pressure:

700 bar



**10 ton Bench Presses** For 10 ton VLP-Series Bench Presses selection see:

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Page:

#### **V** QUICK SELECTION CHART

For more technical information see next page.

Press Capacity	Maximum Bed Devlight	Bed Width Model				Cylind	er		<b>ed *</b> /sec)					
ton	Daylight			Туре		Va	lve	Number			Stroke	Rapid	Pressing	
(kN)	(mm)	(mm)	Man.	Elec.	Air	Man.	Elec.	-		ΙЩΗ	(mm)	Advance		
	1525	456		•		•		IPE1215A	•		254	38	3,7	
10	1525	456						IPA1220A			254	23	2,9	
<b>10</b> (101)	1525	456				•		IPH1240A			254	[7,8]	[1,7]	
(101)	1525	456						IPH1234A			254	[11,2]	[1,7]	
	1525	456						IPA1244A			254	23	2,9	
	1388	733		•				IPE2505A			152	17	1,6	
25	1388	733		•				IPE2510A	•		355	30,9	2,8	
(232)	1388	733			•			IPA2520A			355	10	1,3	
	1388	733				•		IPH2531A	•		355	[4,9]	[0,7]	
	1388	733				•		IPA3071A			355	42,0	0,6	
<b>30</b> (295)	1388	733		•				IPE3060A			355	24,3	2,2	
(200)	1388	733						IPH3080A			355	[3,7]	[0,6]	
	1406	745		•				IPE5010A	•		330	20,8	1,9	
	1406	745						IPH5031A			159	[2,3]	[0,3]	
50	1406	745		•			•	IPE5005A			159	7,7	0,7	
(498)	1406	745			•			IPA5073A			330	32,6	3,1	
	1406	745		•			•	IPE5060A		•	330	20,8	1,9	
	1406	745						IPH5080A			330	[17,7]	[0,7]	
	1096	885			•	•		IPA10023A			254	17,4	1,6	
100	1096	885		•				IPE10010A			254	11,1	1,0	
<b>100</b> (933)	1096	885				•		IPH10030A	•		254	[8,8]	[0,3]	
(000)	1096	885		•				IPE10060A		•	330	11,1	1,0	
	1096	885						IPH10080A			152	[8,8]	[0,3]	
<b>50</b> (1386)	1323	1225		•				IPE15065A			330	9,8	1,4	
<b>00</b> (1995)	1323	1225		•				IPE20065A			330	6,8	1,0	

\* [...]= Millimetres per stroke of pump handle.

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# **IP-Series, H-Frame Presses**

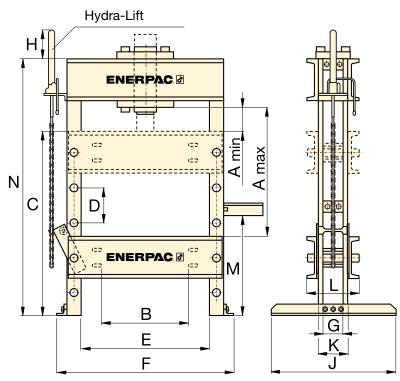


### Hydra-Lift™

Allows easy, effortless daylight adjustment. Standard on all 25 to 200 ton H-Frame presses.

To be used with H-Frame Press Capacity	Hydra-Lift™ Model Number
25 to 100 ton	IPL100
150 and 200 ton	IPL101

**IMPORTANT:** Hydra-Lift<sup>™</sup> is not designed to withstand full cylinder capacity, only to be used for bed positioning.



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**IP-Series H-Frame Presses** 

### ◀ For full features see previous page.

Press Capacity	Press Model	Pump Model		Cylinder Model			H·	Frame P	ress Dime	nsions (m	ım)		
ton (kN)	Number	Number	Page:	Number	Page:	A (max.)	A (min.)	В	С	D	E	F	
	IPE1215A	PUJ1200E	90	RC1010	6	1525	128	Ι	1599	127	456	635	
10	IPA1220A	XA11	114	RC1010	6	1525	128	-	1599	127	456	635	
<b>10</b> (101)	IPH1240A	P392	76	RC1010	6	1525	128	I	1599	127	456	635	
(101)	IPH1234A	P84	78	RR1010	40	1525	128	-	1599	127	456	635	
	IPA1244A	XA11VG	114	RR1010	40	1525	128	I	1599	127	456	635	
	IPE2505A	PUJ1200E	90	RC256	6	1388	180	-	1450	301	733	1028	
25	IPE2510A	ZE3310SE	104	RC2514	6	1388	180	-	1450	301	733	1028	
(232)	IPA2520A	XA12	114	RC2514	6	1388	180	-	1450	301	733	1028	
	IPH2531A	P80	78	RC2514	6	1388	180	-	1450	301	733	1028	
00	IPA3071A	PAM1042	97	RR3014	40	1388	242	-	1450	301	733	1028	
<b>30</b> (295)	IPE3060A	ZE3410SE	104	RR3014	40	1388	242	-	1450	301	733	1028	
(200)	IPH3080A	P84	78	RR3014	40	1388	242	-	1450	301	733	1028	
	IPE5010A	ZE4310SE	104	RC5013	6	1406	195	530	1371	263	745	1085	
	IPH5031A	P80	78	RC506	6	1406	195	530	1371	263	745	1085	
50	IPE5005A	PUJ1200E	90	RC506	6	1406	195	530	1371	263	745	1085	
(498)	IPA5073A	ZA4410MX	116	RR5013	6	1406	195	530	1371	263	745	1085	
	IPE5060A	ZE4410SE	104	RR5013	40	1406	195	530	1371	263	745	1085	
	IPH5080A	P464	78	RR5013	40	1406	195	530	1371	263	745	1085	
	IPA10023A	ZA4210MX	116	RC10010	6	1096	145	600	1296	300	885	1289	
100	IPE10010A	ZE4310SE	104	RC10010	6	1096	145	600	1296	300	885	1289	
<b>100</b> (933)	IPH10030A	P462	78	RC10010	6	1096	145	600	1296	300	885	1289	
(000)	IPE10060A	ZE4410SE	104	RR10013	40	1096	145	600	1296	300	885	1289	
	IPH10080A	P464	78	RR1006	40	1096	145	600	1296	300	885	1289	
<b>150</b> (1386)	IPE15065A	ZE5420SW	104	RR15013	40	1323	307	975	1485	254	1225	1725	
<b>200</b> (1995)	IPE20065A	ZE5420SW	104	RR20013	40	1323	307	975	1485	254	1225	1725	

### **H-Frame Presses**



#### **Optional V-Blocks**

To facilitate positioning of pipes and bars, or placed upside-down, to serve as a convenient worktable.

Featuring precise fit into the press bolster. Each model number includes two V-blocks.

To be used with press model	V-Blocks Model Nr.
10 ton H-frame	A136
25 & 30 ton H-frame	A130
50 ton IP H-frame	A150
100 ton H-frame	A175
150 & 200 ton H-frame	A200R



### **IMPORTANT!**

The pressframe of the workshop presses are exclusively designed for pressing operations, not for pulling. For pulling applications please contact Enerpac.

### IP **Series**



Press Capacity: 10-200 ton

Maximum Daylight x Max. Bed Width: 1525 x 1225 mm

Maximum Operating Pressure: 700 bar

		H-Fran	i	Press Model				
G	Н	J	К	L	М	N	(kg)	Number
-	-	755	100	210	818	1829	98	IPE1215A
-	-	755	100	210	818	1829	81	IPA1220A
-	-	755	100	210	818	1829	81	IPH1240A
-	-	755	100	210	818	1829	98	IPH1234A
-	-	755	100	210	818	1829	89	IPA1244A
101	336	762	133	309	855	1930	264	IPE2505A
101	336	762	133	309	855	1930	298	IPE2510A
101	336	762	133	309	855	1930	256	IPA2520A
101	336	762	133	309	855	1930	263	IPH2531A
101	336	762	133	309	855	1930	301	IPA3071A
101	336	762	133	309	855	1930	339	IPE3060A
101	336	762	133	309	855	1930	273	IPH3080A
127	222	914	212	394	790	1930	523	IPE5010A
127	222	914	212	394	790	1930	430	IPH5031A
127	222	914	212	394	790	1930	440	IPE5005A
127	222	914	212	394	790	1930	541	IPA5073A
127	222	914	212	394	790	1930	533	IPE5060A
127	222	914	212	394	790	1930	489	IPH5080A
160	222	950	268	468	663	1930	787	IPA10023A
160	222	950	268	468	663	1930	809	IPE10010A
160	222	950	268	468	663	1930	764	IPH10030A
160	222	950	268	468	663	1930	823	IPE10060A
160	222	950	268	468	663	1930	752	IPH10080A
257	175	1148	382	582	1094	2273	1900	IPE15065A
257	175	1148	382	582	1094	2273	1951	IPE20065A



### **Pressure & Force Gauges**

All press models include a GF-Series gauge and gauge adaptor, matching the press capacity. GF-Series indicate the pressure (bar) and force (kN).

Press Gauge Adaptor Capacity Model Model Number Number

ton (KN)		
<b>10</b> (101)	GF10B	GA2
<b>25</b> (232)	GF20B	GA2
<b>30</b> (295)	GF835B	GA3
<b>50</b> (498)	GF50B	GA2
<b>100</b> (933)	GF871B	GA3
<b>150</b> (1386)	GF200B	GA3
<b>200</b> (1995)	GF200B	GA3

For more information on gauges, please refer to the System Components section.





### **Spring Centred Valves**

To convert standard VM-Series manual valves use the spring centered valves kits.

For valve model	Model Number
VM33, VM43	VMC3343K
VM33L, VM43L	VMC3343KL

## **IPR-Series, Roll-Frame Presses**

Shown: IPR5075A



- · Quality welded frame for maximum strength and long life
- · Frame rolls easily on 4 steel roller bearings
- Exclusive 'Hydra-Lift' bolster for effortless adjustment of the vertical daylight
- Standad roller head design allows lateral movement and locking of the cylinder up to 300 mm left or right of centre
- All models in the quick selection chart have been matched to an electric pump, double-acting cylinder, hose and gauge, offering the complete package
- Roll-Frame design features a stationary bed with the ability to support heavy loads
- Hydraulic clamp cylinder locks roll-frame into position.

## Expert Designed Versatility



### Hydra-Lift™

Allows easy, effortless daylight adjustment. Standard on all IPR-Series Roll-Frame Presses.

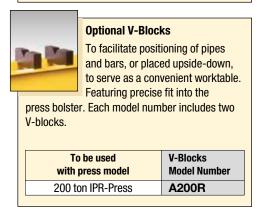
To be used with IPR-Roll-Frame Press Capacity	Hydra-Lift™ Model Number
50 & 100 ton	IPLR100
200 ton	IPLR101

**IMPORTANT:** Hydra-Lift<sup>™</sup> is not designed to withstand full cylinder capacity, only to be used for bed positioning.



#### Cylinder adjustment

Cylinder adjustment allows horizontal side to side cylinder positioning.



#### **V** SELECTION CHART

Press Capacity	Vertical Daylight A		Maximum Bed Width	Electric Pump		Press Model Number		Double-Acting	Cylinder	Spe (mm,	
ton (kN)	(m min.	m) max.	E (mm)	Model Number	Page		<b>Stroke</b> (mm)	Model Number	Page	Rapid Advance	Pressing
<b>50</b> (498)	131	922	813	ZE4410SE	104	IPR5075A	334	RR5013	40	20,8	1,9
<b>100</b> (933)	320	1208	886	ZE5410SW	104	IPR10075A	333	RR10013	40	14,5	2,1
<b>200</b> (1995)	376	1138	1222	ZE5420SW	104	IPR20075A	330	RR20013	40	7,2	1,0

### **Roll-Frame Presses**

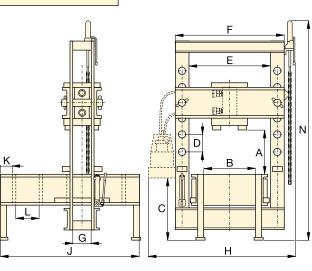


▲ For offshore application high capacity spring loaded cylinders need to be assembled and tested. A special 100 ton roll frame press, with long stroke cylinder has been constructed. All movements are operated and monitored through a PLC controlled pendant.

### **IMPORTANT!**

M

The frameworks of the presses are exclusively designed for pressing operations, not for pulling. For pulling applications please contact Enerpac.



### **IPR Series** Capacity: 50 - 200 ton Maximum Daylight x Width: 1208 x 1222 mm Maximum Operating Pressure: 700 bar **Pressure & Force Gauges** All press models include a GF-Series gauge and gauge adaptor, matching the press capacity. GF-Series indicate the pressure (bar) and force (kN). Press Gauge Adaptor

Capacity	Model Number	Model Number					
ton							
50	GF50B	GA2					
100	GF871B	GA3					
200	GF200B	GA3					
For more information on gauges, places refer							

For more information on gauges, please refer to the System Components section.



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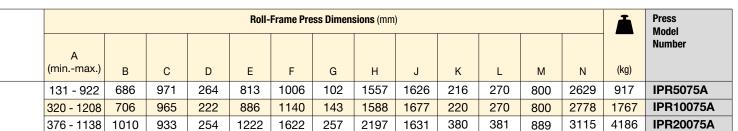


### Spring Centred Valves

Manual valves on electric and air pumps of Enerpac presses are Spring Centred Valves. The handle will automatically move into the position when released

Page:

neutral valve position when released.



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## **C-Clamps, Arbor and Bench Presses**

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• Shown from left to right: A220, A330, A310



### **C-Clamp Presses**

- 5, 10 and 20 ton capacity
- Operational in all positions.

### **Arbor Presses**

- 10 and 30 ton capacity
- Foot mounting holes for horizontal or vertical positioning
- · Machined working surfaces for easier fixturing
- Slotted back to simplify loading and unloading of longer parts.

### **VLP-Series Bench Presses**

 10 ton press with hand pump or air pump, cylinder, hose, gauge and gauge adaptor.



Shown: VLP106P142

#### ▼ A310 Arbor Press



#### ▼ SELECTION CHART

Press Type	Press Maximum Capacity Vertical Daylight		Maximum Press Bed Model Width Number		Recommended cylinder * must be ordered separately					
	ton (kN)	(mm)	(mm)		** Must be limited to 20 ton.	Page:				
	<b>5</b> (45)	165	51	A205	5 ton RC-cylinder *	6				
C-Clamp	<b>10</b> (101)	228	57	A210	10 ton RC-cylinder *	6				
•	<b>20</b> (178)	305	69	A220	25 ton RC-cylinder **	6				
Arbor	<b>10</b> (101)	230	135	A310	10 ton RC-cylinder *	6				
ALDOL	<b>30</b> (295)	254	178	A330	RC308 *	6				

Press Maximum Capacity Daylight (mm)			Bench Press Model Number		nder included					
υαρασιτγ	Dayiiyi	<b>II</b> (11111)	Pump Type Pump			Page:		Cylinder	Page:	
ton (kN)	Vertical	Horizontal		Man.	Air	Model Nr.	$\square$	(mm)	Model Nr.	$\square$
<b>10</b> (101)	430	435	VLP106P142	•		P142	76	156	RC106	6
<b>10</b> (101)	430	435	VLP106PAT1		•	PATG1102N	112	156	RC106	6

## The Standard Workshop Tools



### Push Pin A183

For applications requiring precision pressing, such as shaft removal and insertion. This attachment fits 10 ton cylinders and requires the

use of a threaded adaptor saddle  $(\ensuremath{\textbf{A13}}).$ 





#### Smooth Saddle A185

For pressing applications of delicate parts, such as aluminium castings, this saddle (see item 11 on page 183) decreases surface

marks during the pressing application. Requires 10 ton cylinder and threaded adaptor saddle (**A13**).



#### **Optional V-Blocks**

To facilitate positioning of pipes and bars, or placed upside-down, to serve as a convenient worktable. Each modelnr includes 2x V-block.

 
 To be used with press model
 V-Blocks Modelnr.

 10 ton VLP-Bench Presses
 VB10

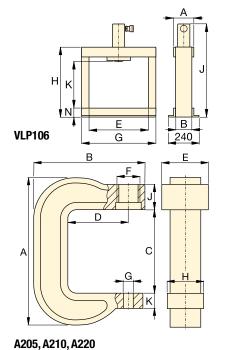


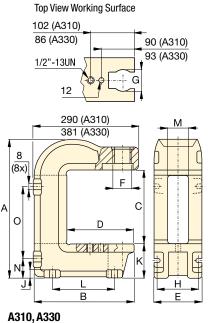
IMPORTANT! For high-cycle production applications, the C-Clamp and Arbor presses should be limited to 50% of their capacity.

## **C-Clamps, Arbor and Bench Presses**



▲ RC308 cylinder mounted in A330 Arbor Press powered by a PATG-Turbo Air pump for controlled pressing of bearings for sprockets of weaving machines. The V152 Pressure Relief Valve controls the pressing force.





A VLP Series



Capacity: **5 - 30 ton** 

Maximum Daylight x Width: 430 x 435 mm

Maximum Operating Pressure:

700 bar



Pumps and Cylinders

Pump, cylinder, hose, gauge and gauge adaptor for C-Clamps and Arbor Presses must be ordered separately.



VB10 V-Blocks are used in this VLP106P142 bench press to bend flat steel bar. The hydraulic pressure can be checked with the gauge.

 Press Dimensions (mm)											<b>i</b>	Press Model Number			
A	В	С	D	E	F	G	н	J	К	L	М	N	0	(kg)	
291	203	165	95	73	11⁄2" -16 UNS	26	51	66	25	-	-	-	-	7	A205
406	283	228	152	83	2¼ <b>"-1</b> 4 UNS	26	76	64	41	-	-	-	_	17	A210
 540	346	305	152	121	3⁵/ <sub>16</sub> "-12 ∪NS	26	95	70	44	-	-	-	_	38	A220
 414	281	230	184	151	2¼ <b>"-1</b> 4 UNS	63	122	19	95	175	65	54	219	28	A310
 563	356	254	188	178	3 <sup>5</sup> / <sub>16</sub> "-12 UNS	63	140	28	168	203	67	99	276	100	A330

Speed (mm/s) **				i	Bench Press Model Number						
Rapid Advance	Pressing	A	В	E	G	н	J	к	N	(kg)	Model Number
{2,5} **	{0,6} **	110	80	435	542	620	748	430	80	49	VLP106P142
10,0	1,8	110	80	435	542	620	748	430	80	54	VLP106PAT1

\*\*  $\{\ldots\}$  = advance speed in mm per handpump stroke.

## **Custom Hydraulic Presses**

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With decades of experience and in-house capabilities look to Enerpac to help find solutions to your customization needs.

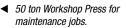
Next to our large range of standard workshop presses, Enerpac offers the possibility of customization. Because many customers have specific requirements, we offer turn-key project management, including design, engineering and manufacturing. As the market leader, we listen to our customers and with our world wide experience we offer the best solutions, especially when safety is not negotiable. Whether a longer stroke, wider frame or complete new design is required, our custom product group has many years of experience in multiple industries to deliver a solution that meets or exceeds expectations.



 Fully Automated PLC-Controlled 1800-Ton, High-Accuracy Press. The pressing and heating cycle, during the production of magnetic acceleration coils, required high force and high- accuracy to ensure absolute quality



 600 Ton High-Accuracy Collar Press. For the production of accelerator coils, sheet metal needs to be formed into a specific shape and size.



### **Overview Custom Presses**



▲ Enerpac's hydraulic presses can be configured to fulfill a broad range of applications. Each press is designed and manufactured according to customer specifications and in cooperation with our engineering team.

### **CUSTOMIZABLE FEATURES:**

- Capacity
- Cylinder Stroke
- Pump Type
- Controls
- Guarding
- Daylight Dimensions

### **CONFIGURATIONS:**

- Vertical and horizontal press
- Cylinders mounted in upper and lower bolsters
- Height built to customer specifications
- Daylight (vertical and horizontal) built to customer specifications