



Plot No-410, Road No-10, GIDC,

Kathavada, Ahmedabad-382430, Gujarat(India).

Phone: +91-79-22900779,

Mobile: +91-98250 34005,+91-93761 28340.

E-mail: info@aakashhydraulics.com
URL: www.aakashhydraulics.com

Hydro-Pneumatic Press:

Brief Description:

"MERCURY" "N" series range of Hydro-Pneumatic Presses, combines the advantages of efficient, low cost pneumatics, to achieve the large output forces associated with hydraulics. The system operates on normal compressed air pressure of 5 bar, using standard pneumatic controls, thus completely eliminating the use of expensive hydraulic power pack and associated control equipment.

The system consists of a hydraulic cylinder, an air to oil intensifier and an oil reservoir, all combined into a compact integral unit. The output ram approaches the work piece at rapid speed (which can be adjusted) under low pressure (hence low force) compressed air. On touching the work piece (at any point along the travel) the intensifier is automatically energized by means of a suitable directional control valve. This results in a high pressure (hence high force) stroke up to a maximum of 24 mm. The ram retracts rapidly at low pressure on completion of the work cycle.

The SALIENT features of "N" Series Hydro-Pneumatic Presses are :

- Very low air consumption, resulting in energy saving of up to 80% over equivalent pneumatic cylinders and 50 % over equivalent hydraulic systems. The Speed of Operation is also much higher than an equivalent standard pneumatic or hydraulic system.
- Compact Cylinder design, which can be mounted in any position.
- Compact, Lightweight Press Frames, which can be mounted on a light work table.
- Simple Design for easy maintenance.
- High stroke frequency because of shorter oil path between the oil reservoir and the output hydraulic cylinder.
- > Force and Speed can be infinitely adjusted.
- Rapid pneumatically operated approach stroke and return stroke. In the "N" Series the return force is larger than the approach force, resulting in the loading of heavier tools for respective tonnages.
- Absolute separation of air and oil chambers. This has been achieved by providing bleed holes between the pneumatic and hydraulic seals. In the event of failure of pneumatic seals, the air escapes to atmosphere through a bleed hole and does not mix with the hydraulic oil. If the hydraulic seals fail, oil escapes from its bleed hole, indicating deterioration of the seal, which can be procured and replaced well before total breakdown occurs.

Advantages of Hydro-pneumatic Presses:

- Uses Compressed air as the power source resulting in reliable, inexpensive components and piping. Completely eliminates the use of expensive hydraulic components and a large oil tank to be filled with a large quantity of expensive hydraulic oil.
- Fast response because of the use of compressed air for rapid approach and retraction.
- Compact and light weight. Can be mounted on a table top. Further there is a saving in floor space occupied by a hydraulic power pack of a hydraulic system.
- Saves up to 50 % in energy input over fully pneumatic and hydraulic systems and 70 % in cost compared to hydraulic systems.
- Easy to maintain because of simple pneumatic elements and sealing components.

Applications:

Mercury low cost "hydro-pneumatic presses are an ideal replacement forexpensive hydraulic presses for varied applications such as riveting, Forming, Clamping, Bending, Straightening, Marking, Punching etc. Low

Pressure Testing Machines • Valve Testing machines • Paper Mill Hydraulics • Hyd Intensifiers • Cylinders and systems





Plot No-410, Road No-10, GIDC,

Kathavada, Ahmedabad-382430, Gujarat(India).

Phone: +91-79-22900779,

Mobile: +91-98250 34005,+91-93761 28340.

E-mail: info@aakashhydraulics.com **URL**: www.aakashhydraulics.com

investment, Energy saving, negligible maintenance, fast action and infinite control over force and speed are the major advantages over equivalent hydraulic systems.

Technical Specifications:

Tonnages : 1T,2T,4T,8T,15T&30T

Strokes : 50, 75, 100 & 150 mm

Power stroke : 6 mm, 12 mm & 24 mm at any point along the travel.

Types : 2 Pillar, 4 Pillar & " C " Frame with & without guided moving platen.

Types of Industry where these presses are mainly used:

Sheet Metal Work :Riveting, Forming, Clamping , Bending, Marking , Punching, Folding , Straightening etc. Also for spreading of bearing cages, Assembly operations in bearing industries, Automobile industries, Gas lighter and kitchen ware appliances manufacturing plants, Electrical switches , Switch gears, Rubber parts, Shaft straightening applications, Bush Pressing applications and many more

Operator's Safety:

The press is operated by means of micro-processor based control card in electrical panel to take care of operator's safety during the operation. This is called as True, Non Tie down, Interlocked Two hand safety operation.

Auto-cycling & Parking Features:

The Press can be operated to have total 9 Nos of power stroke in sequence with auto cycling feature in electrical control panel there by removing the limitation of limited travel of power stroke. Also our parking feature will help you to increase the operating frequency by limiting the reversal travel of ram up to available power stroke through parking system which is available as an option.

Auto-Lube System:

Our new Auto Lubrication feature has greatly enhanced the reliability of our presses. After a set (with jumper on PCB) number of cycles, the auto lube solenoid comes on for a short time. This actuates a built-in pump which injects under high pressure, about 8 drops of oil from the reservoir. This high pressure injection ensures complete lubrication of the entire pneumatic components. The advantage of this system is that lubrication is positive and not dependent on air flow volume as in a standard lubricator of a FRL set. Also the quantity of lubrication is positive and not dependent on any arbitrary setting by machine operator.

We invite you to visit our web-site www.aakashhydraulics.com to have a look of the various types of models available suitable for your application. You are requested to contact us if you would like to have more information or have personal discussion to clarify your queries.

Thanking You,

Your's Faithfully, For, Aakash Hydraulics,

(Bipin Joshi)

Pressure Testing Machines • Valve Testing machines • Paper Mill Hydraulics • Hyd Intensifiers • Cylinders and systems





Plot No-410, Road No-10, GIDC,

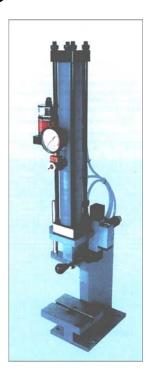
Kathavada, Ahmedabad-382430. Gujarat(India).

Phone: +91-79-22900779,

Mobile: +91-98250 34005,+91-93761 28340.

E-mail: info@aakashhydraulics.com URL: www.aakashhydraulics.com

Hydro Pneumatic Press



Salient Features

- Fast action
- Compact, light weight & vibration free
- Versatile
- Energy efficient
- Low cost









2 Column

4 Column

C Frame

Applications













Blanking

Clamping

Forming

Rivetting

Stamping

Straightening

Aakash Hydraulics



Plot No-410, Road No-10, GIDC,

Kathavada, Ahmedabad-382430. Gujarat(India).

Phone: +91-79-22900779,

Mobile: +91-98250 34005 ,+91-93761 28340.

E-mail: info@aakashhydraulics.com **URL**: www.aakashhydraulics.com

A list of Some of Our Valued Customers for Hydro-pneumatic Press:

1	Acey Engineering Pvt. Ltd.	Bilimora
2	Clipsal Industries Pvt. Ltd.	Rakhial-Ahmedabad
3	Eurolux Lighting	Bhavnagar
4	Ghanahyam Eng. Mech. Pvt. Ltd.	Rajkot
5	Girnar Engineering Works Pvt. Ltd.	Rakhial-Ahmedabad
6	Gujarat Setco Clutch Ltd.	Halol
7	Harsha Engineers Ltd.	Changodar
8	Hundia Industries	Odhav-Ahmedabad
9	Intra Action Company	JodhpurTekra-Ahmedabad
10	J.C.Engineering	Surat
11	J.C.Technotex	Sachin- Surat
12	Jay Chintan Tex -Mach	Sachin- Surat
14	Mamata Machinery Pvt. Ltd.	Vatva-Ahmedabad
15	Metal Products	Odhav-Ahmedabad
16	National Process Pvt. Ltd.	Odhav-Ahmedabad
17	Pall India Pvt. Ltd.	Santej
18	Pall Pharma Lab Filtration Pvt. Ltd.	Santej
19	Paper & Provision Industries	Kapadwanj
20	Persang Alloy Industries	Waghodia
21	PNG Engineering	Vatva-Ahmedabad
22	Radiant Electric Co.	Rajkot
23	RMP Bearings Ltd	Ranpur
24	Sahjanand Lasar Technology	Bapunagar-Ahmedabad
25	Samkin Industries	Ankleshwar
26	Shiv Mular	Naroda-Ahmedabad
27	Shubh Sales	Dariyapur-Ahmedabad
28	Texspin Bearing limited	Ranpur
29	Tulip Disposal Products	Narol-Ahmedabad
30	Turbo-Bearing Pvt. Ltd.	Rajkot
31	Urja Engineers Ltd.	Halol
32	Vajra Bearing Limited	Dhabhasa
33	Vardhman Stamping Pvt. Ltd.	kadi
34	ZEN Engineers Pvt. Ltd.	Ankleshwar-Bharuch
35	XL Plastics	Baroda

Pressure Testing Machines • Valve Testing machines • Paper Mill Hydraulics • Hyd Intensifiers • Cylinders and systems





Hydro Pneumatic Presses



- AUTOMATIC LUBRICATION SYSTEM
- LOW OIL LEVEL SENSOR SYSTEM







Mercury Pneumatics Pvt. Ltd.

MERCURY Hydro Pneumatic Presses are products of extensive development efforts initiated in 1988. Over 13,000 of these time tested, reliable machines are working in various industries all over India as of January 2009.

MERCURY Hydro Pneumatic Presses are efficient, low cost alternative to Hydraulic, Power and Hand operated Presses.

Salient Features

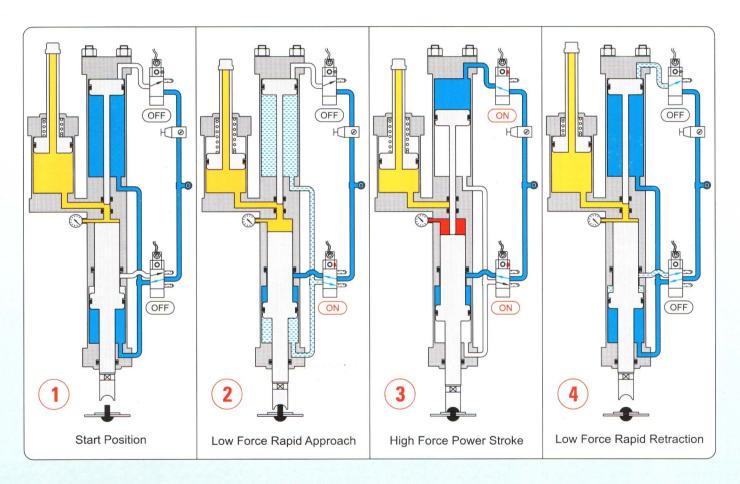
- Fast Action: 2T @ 100 cycles / min. (CPM), 4T @ 60 CPM, 8T @ 40 CPM, 15T & 30T @ 20 CPM.
- Compact, light weight & vibration free : Can be mounted on existing work benches without any foundation.
- Versatile: Force & speed can be varied infinitely. Machine can be mounted in any orientation.
- Energy efficient: 50% to 70% saving over equivalent hydraulic and pneumatic systems.
- Lost cost: Upto 60% cheaper than hydraulic presses.
- Safety: True, non tie down, interlocked Two Hand Safety operation.

Sequence of Operation

There are three stages of operation

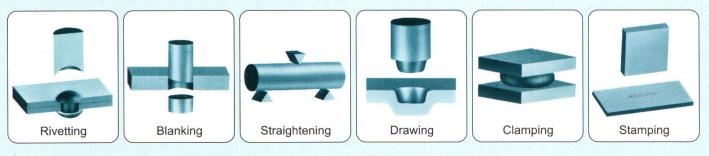
- (a) Initial low force, large travel, fast approach (Fig. 2)
- (b) High force, short travel (6, 12 or 24 mm), Power Stroke (Fig. 3)
- (c) Low force, rapid retraction (Fig. 4)

The low force approach and retraction at 5 bar air pressure results in upto 70% saving in energy.



Typical Applications

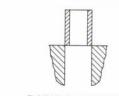
MERGURY Hydro Pneumatic Presses are ideal machines for any application requiring pressing force from 0.4 tonnes to 30 tonnes. They are specially suited for metal forming.





Hydro Pneumatic Press - Optional Features





AUTO CYCLING OF POWER STROKE





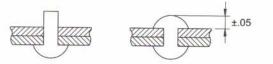
RAPID APPROACH

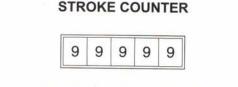
1ST POWER STROKE

2ND POWER STROKE

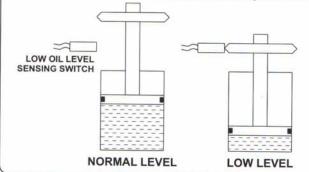
3RD POWER STROKE

POWER STROKE DEPTH CONTROL

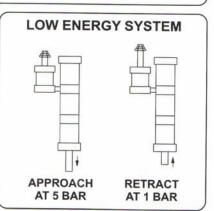












LOW FORCE SENSING





PRESS OPERATION STOPS

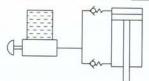
DUAL FORCE CIRCUIT





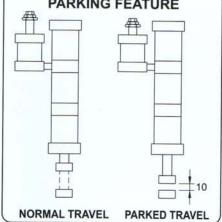


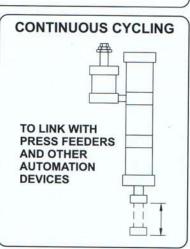
AUTOMATIC LUBRICATION AUTOLUBE ® (Standard Feature)

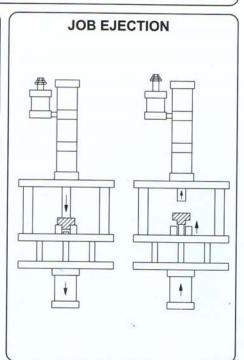


PROGRAMMED POSITIVE **LUBRICATION UNDER** PRESSURE

PARKING FEATURE



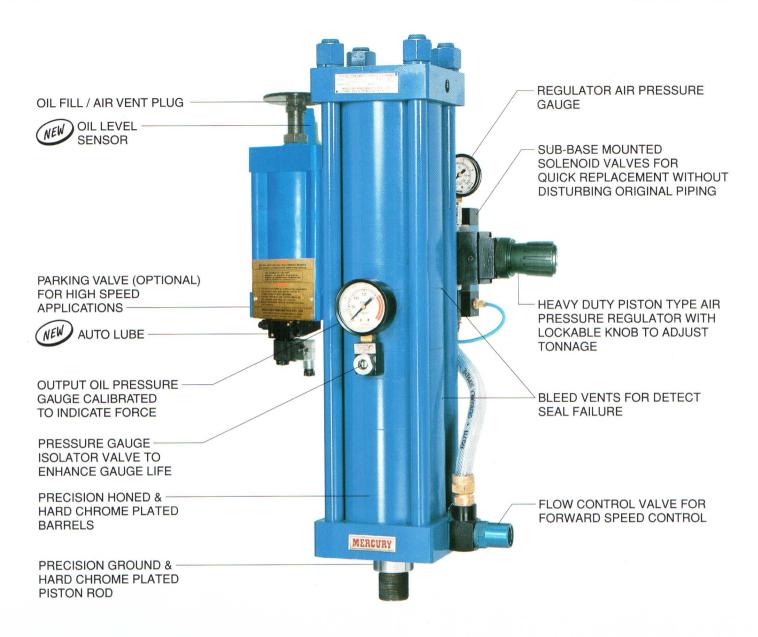






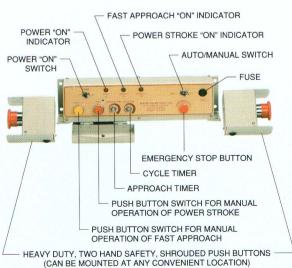
Hydro Pneumatic Press Cylinder





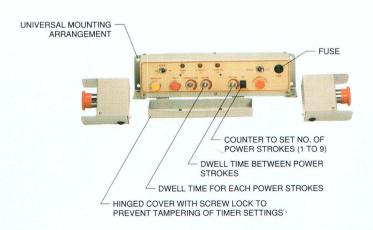
COMPACT "TRUE" TWO HAND "NON TIE DOWN" SAFETY CONTROLS

STANDARD PANEL



AUTOMATIC CYCLING OF POWER STROKE PANEL

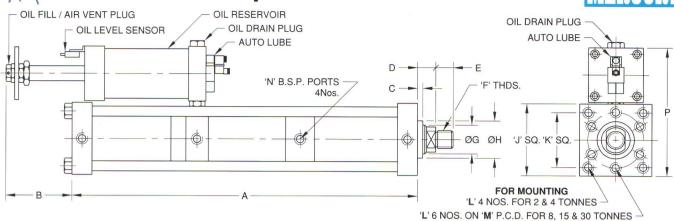
(for applications requiring more than 24mm power stroke)





Press Cylinder Dimensions





MODEL No.	TON	Total Stroke	Power Stroke	Α	В	С	D	E	F	ØG	ØН	J SQ.	K SQ.	L	М	N	Р	Q (NL) AIR. CONSU.
N 016-75	1	75	24	639	-	4	19.0	30	M20x1.5	25	45	78	55	M12x1.75	-	1/4"	160	6.8
N 016-100	1	100	24	689	10	4	19.0	30	M20x1.5	25	45	78	55	M12x1.75	-	1/4"	160	7.3
N 016-150	1	150	24	789	10	4	19.0	30	M20x1.5	25	45	78	55	M12x1.75	-	1/4"	160	8.2
N 021-50	2	50	6	493	6	4	19.0	30	M20x1.5	25	45	78	55	M12x1.75	-	1/4"	160	4.0
N 021-75	2	75	6	543	6	4	19.0	30	M20x1.5	25	45	78	55	M12x1.75	-	1/4"	160	4.4
N 021-100	2	100	6	593	106	4	19.0	30	M20x1.5	25	45	78	55	M12x1.75	-	1/4"	160	4.8
N 021-150	2	150	6	693	106	4	19.0	30	M20x1.5	25	45	78	55	M12x1.75	=	1/4"	160	5.7
N 024-75	2	75	12	639	-	4	19.0	30	M20x1.5	25	45	78	55	M12x1.75	-	1/4"	160	6.8
N 024-100	2	100	12	689	10	4	19.0	30	M20x1.5	25	45	78	55	M12x1.75	-	1/4"	160	7.3
N 024-150	2	150	12	789	10	4	19.0	30	M20x1.5	25	45	78	55	M12x1.75	-	1/4"	160	8.2
N 026-75	1.95	75	24	680	-	4	22.0	35	M24x2	32	55	108	78	M16x2	-	1/4"	205	13.6
N 026-100	1.95	100	24	730	-	4	22.0	35	M24x2	32	55	108	78	M16x2	-	1/4"	205	14.5
N 026-150	1.95	150	24	830	-	4	22.0	35	M24x2	32	55	108	78	M16x2	-	1/4"	205	16.2
N 041-50	4	50	6	534	-	4	22.0	35	M24x2	32	55	108	78	M16x2		1/4"	205	8.0
N 041-75	4	75	6	584	-	4	22.0	35	M24x2	32	55	108	78	M16x2	-	1/4"	205	8.8
N 041-100	4	100	6	634	86	4	22.0	35	M24x2	32	55	108	78	M16x2	-	1/4"	205	9.7
N 041-150	4	150	6	734	86	4	22.0	35	M24x2	32	55	108	78	M16x2		1/4"	205	11.4
N 044-75	4	75	12	680	- 4	4	22.0	35	M24x2	32	55	108	78	M16x2		1/4"	205	13.6
N 044-100	4	100	12	730		4	22.0	35	M24x2	32	55	108	78	M16x2	-	1/4"	205	14.5
N 044-150	4	150	12	830	21	4	22.0	35	M24x2	32	55	108	78	M16x2	-	1/4"	205	16.2
N 046-75	4.35	75	24	717	-	4	24.0	35	M36x2	50	75	145	-	M16x2	105	1/2"	265	30
N 046-100	4.35	100	24	767	20	4	24.0	35	M36x2	50	75	145	1-	M16x2	105	1/2"	265	32
N 046-150	4.35	150	24	867	20	4	24.0	35	M36x2	50	75	145	0=	M16x2	105	1/2"	265	36
N 081-50	8	50	6	571	-	4	24.0	35	M36x2	50	75	145	19	M16x2	105	1/2"	265	18
N 081-75	8	75	6	621		4	24.0	35	M36x2	50	75	145		M16x2	105	1/2"	265	20
N 081-100	8	100	6	671	116	4	24.0	35	M36x2	50	75	145	14	M16x2	105	1/2"	265	22
N 081-150	8	150	6	771	116	4	24.0	35	M36x2	50	75	145	9=	M16x2	105	1/2"	265	25
N 084-75	8	75	12	717		4	24.0	35	M36x2	50	75	145	-	M16x2	105	1/2"	265	30
N 084-100	8	100	12	767	20	4	24.0	35	M36x2	50	75	145	15	M16x2	105	1/2"	265	32
N 084-150	8	150	12	867	20	4	24.0	35	M36x2	50	75	145	7-	M16x2	105	1/2"	265	36
N 086-75	7.25	75	24	760		4	24.5	50	M56x3	80	90	182	-	M20x2.5	125	1/2"	330	52
N 086-100	7.25	100	24	810	90	4	24.5	50	M56x3	80	90	182	15	M20x2.5	125	1/2"	330	55
N 086-150	7.25	150	24	910	90	4	24.5	50	M56x3	80	90	182	-	M20x2.5	125	1/2"	330	62
N 151-50	15	50	6	617	33	4	24.5	35	M40x2	56	90	182	-	M20x2.5	125	1/2"	330	33
N 151-75	15	75	6	667	33	4	24.5	35	M40x2	56	90	182	-	M20x2.5	125	1/2"	330	36
N 151-100	15	100	6	717	183	4	24.5	35	M40x2	56	90	182	-	M20x2.5	125	1/2"	330	40
N 151-150	15	150	6	817	183	4	24.5	35	M40x2	56	90	182	1-	M20x2.5	125	1/2"	330	46
N 154-75	15	75	12	760	-	4	24.5	35	M40x2	56	90	182	12	M20x2.5	125	1/2"	330	54
N 154-100	15	100	12	810	90	4	24.5	35	M40x2	56	90	182	-	M20x2.5	125	1/2"	330	57
N 154-150	15	150	12	910	90	4	24.5	35	M40x2	56	90	182	-	M20x2.5	125	1/2"	330	64
N 156-75	14.75	75	24	854	-	4	26.0	50	M56x3	80	90	240	-	M24x3	150	1/2"	420	92
N 156-100	14.75	100	24	894	58	4	26.0	50	M56x3	80	90	240	1-1	M24x3	150	1/2"	420	96
N 156-150	14.75	150	24	994	58	4	26.0	50	M56x3	80	90	240	-	M24x3	150	1/2"	420	104
N 301-50	30	50	6	672	20	4	26.0	40	M48x3	63	90	240	-	M24x3	150	1/2"	420	56
N 301-75	30	75	6	722	20	4	26.0	40	M48x3	63	90	240	-	M24x3	150	1/2"	420	60
N 301-100	30	100	6	772	190	4	26.0	40	M48x3	63	90	240	-	M24x3	150	1/2"	420	64
N 301-150	30	150	6	872	190	4	26.0	40	M48x3	63	90	240	-	M24x3	150	1/2"	420	72
N 304-75	30	75	12	854	-	4	26.0	40	M48x3	63	90	240	-	M24x3	150	1/2"	420	95
N 304-100	30	100	12	894	58	4	26.0	40	M48x3	63	90	240	-	M24x3	150	1/2"	420	99
N 304-150	30	150	12	994	58	4	26.0	40	M48x3	63	90	240	-	M24x3	150	1/2"	420	107

To Calculate Compressor Power Capacity

1HP = 120 litres of Free Air (NL) Per Minute at 5 Bars.

N = Number of Cycles per minute

Q= Free Air Consumed Per Cycle (From Chart) in Normal Litres (NL)

Power Required = $\frac{Q \times N}{100}$ (H.P.) or $\frac{Q \times N}{100} \times 0.746$ (KW) 120

	Outp	out For	ces (k	(gf.) a	t Inlet A	Air Pre	ssure	of 5 Bar	rs	
Tonnage	1T	1.95T	2T	4T	4.35T	7.25T	8T	14.75T	15T	30T
Approach	60	120	60	120	275	475	275	435	475	435
Power	1050	1950	2050	4000	4350	7250	8585	14750	14800	29175
Return	100	200	100	200	425	700	425	1050	825	1160

To Calculate the cost of electricity

Example :- A 4Tonne, 50mm stroke with 6mm power stroke press is used at 5 bars to cut Aluminium washers from a sheet at the rate of 10 pieces per minute.

- 1) From above chart model N041-50 cylinder consumes 8 NL of air per cycle.
- 2) @ 10 strokes/min air consumption = 8 x 10 = 80 NLPM 3) Electric Power used = $80 \div 120 = 0.67 \text{ HP} \simeq 0.5 \text{ KW/min}$
- 4) Power used per hour (KWH) = 0.5 x 60 = 30 KWH
- 5) Cost of electricity @ Rs 4.5 per KWH = 30×4.5 = Rs. 135 per Hour
- 6) Cost of electricity per cut piece (10 x 60 = 600/hr) = $135 \div 600 = 0.225$ i.e. Rs. 0.225 per piece

Note: Due to constant improvements, dimensions and technical specifications are subject to change without notice.



2 Column Presses

MERCURY



Plain

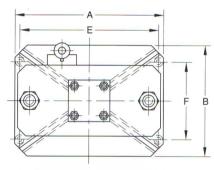


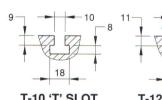
Anti Rotation Guide



Guided Moving Platen

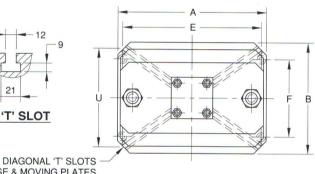
PLAIN (2P--) & WITH ANTI ROTATION GUIDE (2P--R)

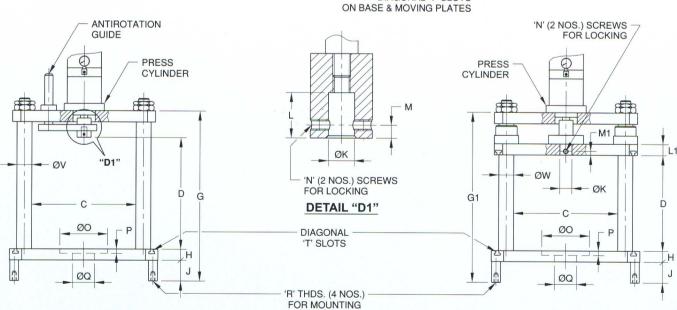




<u>T-10 'T' SLOT</u> <u>T-12 'T' SLOT</u>

WITH GUIDED MOVING PLATEN (2P--G)





PLAIN	WITH ARG	WITH GMP	TON	Α	В	С	D	Е	F	G	G1	Н	J	øĸ	L	L1	М	M1	N	ØO	P	ØQ	R	Т	U	ø۷	øw
2P02	2P02R	2P02G	2	350	240	270	250	320	160	425	459	38	55	20	25	38	6	10	M6	60	18	45	M10	10	215	32	32
2P04	2P04R	2P04G	4	400	300	300	300	364	205	493	534	43	55	25	30	43	10	12	M8	75	18	55	M12	10	270	40	38
2P08	2P08R	2P08G	8	435	300	300	300	405	205	513	564	53	55	25	40	53	10	12	M8	105	20	75	M12	12	265	54	50
2P15	2P15R	2P15G	15	510	325	350	350	465	215	633	694	68	85	30	60	68	10	12	M8	130	25	90	M16	12	285	65	63
2P30	2P30R	2P30G	30	525	350	350	350	480	240	677	765	85	85	40	80	85	12	15	M10	130	25	90	M20	12	310	76	73



4 Column Presses





Plain

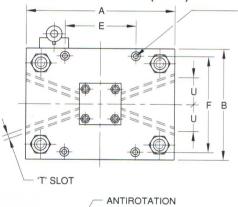


Anti Rotation Guide



Guided Moving Platen





GUIDE

"D1"

14-

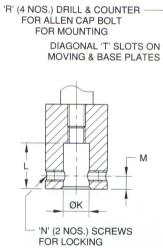
ØQ

- ØV

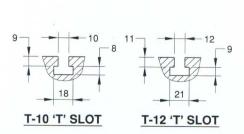
G

PRESS

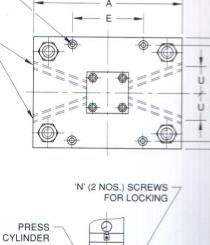
CYLINDER



DETAIL "D1"



'R' THDS. (4 NOS.) FOR MOUNTING



ØW

ØO

WITH GUIDED MOVING PLATEN (4P--G)

		-	ØQ	-			+
N	ØO	Р	ØQ	R	Т	U	øv
M6	60	18	45	M10	10	75	30
M8	75	18	55	M12	10	75	35
M8	105	20	75	M12	12	75	54
M8	130	25	90	M16	12	80	60

M1

- ØK

WITH ARG	WITH GMP	TON	Α	В	С	D	Е	F	G	G1	Н	J	ØK	L	L1	M	M1	N	ØΟ	Р	ØQ	R	Т	U	øv
4P02R	4P02G	2	340	250	270	250	200	220	417	445	32	53	20	25	32	10	10	M6	60	18	45	M10	10	75	30
4P04R	4P04G	4	383	300	300	300	225	270	480	516	38	47	25	30	38	10	12	M8	75	18	55	M12	10	75	35
4P08R	4P08G	8	484	300	350	300	275	270	513	564	53	55	25	40	53	10	12	M8	105	20	75	M12	12	75	54
4P15R	4P15G	15	500	325	350	350	275	285	621	677	62	80	30	60	62	10	12	M8	130	25	90	M16	12	80	60
4P30R	4P30G	30	510	350	350	350	275	310	659	734	72	80	40	80	72	12	15	M10	130	25	90	M20	12	90	70
	4P04R 4P08R 4P15R	ARG GMP 4P02R 4P02G 4P04R 4P04G 4P08R 4P08G 4P15R 4P15G	ARG GMP TON 4P02R 4P02G 2 4P04R 4P04G 4 4P08R 4P08G 8 4P15R 4P15G 15	ARG GMP ION A 4P02R 4P02G 2 340 4P04R 4P04G 4 383 4P08R 4P08G 8 484 4P15R 4P15G 15 500	ARG GMP ION A B 4P02R 4P02G 2 340 250 4P04R 4P04G 4 383 300 4P08R 4P08G 8 484 300 4P15R 4P15G 15 500 325	ARG GMP ION A B C 4P02R 4P02G 2 340 250 270 4P04R 4P04G 4 383 300 300 4P08R 4P08G 8 484 300 350 4P15R 4P15G 15 500 325 350	ARG GMP ION A B C D 4P02R 4P02G 2 340 250 270 250 4P04R 4P04G 4 383 300 300 300 4P08R 4P08G 8 484 300 350 300 4P15R 4P15G 15 500 325 350 350	ARG GMP ION A B C D E 4P02R 4P02G 2 340 250 270 250 200 4P04R 4P04G 4 383 300 300 300 225 4P08R 4P08G 8 484 300 350 300 275 4P15R 4P15G 15 500 325 350 350 275	ARG GMP ION A B C D E F 4P02R 4P02G 2 340 250 270 250 200 220 4P04R 4P04G 4 383 300 300 300 225 270 4P08R 4P08G 8 484 300 350 300 275 270 4P15R 4P15G 15 500 325 350 350 275 285	ARG GMP ION A B C D E F G 4P02R 4P02G 2 340 250 270 250 200 220 417 4P04R 4P04G 4 383 300 300 300 225 270 480 4P08R 4P08G 8 484 300 350 300 275 270 513 4P15R 4P15G 15 500 325 350 350 275 285 621	ARG GMP ION A B C D E F G G1 4P02R 4P02G 2 340 250 270 250 200 220 417 445 4P04R 4P04G 4 383 300 300 300 225 270 480 516 4P08R 4P08G 8 484 300 350 300 275 270 513 564 4P15R 4P15G 15 500 325 350 350 275 285 621 677	ARG GMP ION A B C D E F G G1 H 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 4P04R 4P04G 4 383 300 300 300 225 270 480 516 38 4P08R 4P08G 8 484 300 350 300 275 270 513 564 53 4P15R 4P15G 15 500 325 350 350 275 285 621 677 62	ARG GMP ION A B C D E F G G1 H J 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 4P04R 4P04G 4 383 300 300 300 225 270 480 516 38 47 4P08R 4P08G 8 484 300 350 300 275 270 513 564 53 55 4P15R 4P15G 15 500 325 350 350 275 285 621 677 62 80	ARG GMP ION A B C D E F G G1 H J ØK 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 4P08R 4P08G 8 484 300 350 300 275 270 513 564 53 55 25 4P15R 4P15G 15 500 325 350 350 275 285 621 677 62 80 30	ARG GMP ION A B C D E F G G1 H J ØK L 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 4P08R 4P08G 8 484 300 350 300 275 270 513 564 53 55 25 40 4P15R 4P15G 15 500 325 350 350 275 285 621 677 62 80 30 60	ARG GMP ION A B C D E F G G1 H J ØK L L1 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 4P08R 4P08G 8 484 300 350 300 275 270 513 564 53 55 25 40 53 4P15R 4P15G 15 500 325 350 350 275 285 621 677 62 80 30 60 62	ARG GMP ION A B C D E F G G1 H J ØK L L1 M 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 10 4P04R 4P04G 4 383 300 300 300 225 270 480 516 38 47 25 30 38 10 4P08R 4P08G 8 484 300 350 300 275 270 513 564 53 55 25 40 53 10 4P15R 4P15G 15 500 325 350 350 275 285 621 677 62 80 30 60 62 10	ARG GMP TON A B C D E F G G1 H J ØK L L1 M M1 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 10 10 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 4P08R 4P08G 8 484 300 350 300 275 270 513 564 53 55 25 40 53 10 12 4P15R 4P15G 15 500 325 350 350 275 285 621 677 62 80 30 60 62 10 12	ARG GMP ION A B C D E F G GI H J ØK L LI M MI N 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 10 10 M6 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 4P08R 4P08G 8 484 300 350 275 270 513 564 53 55 25 40 53 10 12 M8 4P15R 4P15G 15 500 325 350 275 285 621 677 62 80 30 60 62 10 12 M8	ARG GMP ION A B C D E F G G1 H J ØK L L1 M M1 N ØO 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 10 10 M6 60 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 4P08R 4P08G 8 484 300 350 275 270 513 564 53 55 25 40 53 10 12 M8 105 4P15R 4P15G 15 500 325 350 275 285 621 677 62 80 30 60 62 10 12 M8 130 </td <td>ARG GMP ION A B C D E F G GI H J ØK L LI M MI N ØO P 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 10 10 M6 60 18 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 18 4P08R 4P08G 8 484 300 350 300 275 270 513 564 53 55 25 40 53 10 12 M8 105 20 4P15R 4P15G 15 500 325 350 375 275 285 621 677 62 80<!--</td--><td>ARG GMP ION A B C D E F G G1 H J ØK L L1 M M1 N ØO P ØQ 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 10 10 M6 60 18 45 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 18 55 4P08R 4P08G 8 484 300 350 30 275 270 513 564 53 55 25 40 53 10 12 M8 105 20 75 4P15R 4P15G 15 500 325 350 375 285 621</td><td>ARG GMP ION A B C D E F G G1 H J ØK L L1 M M1 N ØO P ØQ R 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 10 10 M6 60 18 45 M10 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 18 55 M12 4P04R 4P08G 8 484 300 350 300 275 270 513 564 53 55 25 40 53 10 12 M8 105 20 75 M12 4P15G 15 500 325 350</td><td>ARG GMP ION A B C D E F G GI H J ØK L LI M MI N ØO P ØQ R T 4P02R 4P02G 2 340 250 270 250 220 417 445 32 53 20 25 32 10 10 M6 60 18 45 M10 10 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 18 55 M12 10 4P08R 4P08G 8 484 300 350 350 275 270 513 564 53 55 25 40 53 10 12 M8 105 20 75 M12 12 4P15G 15</td><td>ARG GMP ION A B C D E F G G1 H J ØK L L1 M M1 N ØO P ØQ R T U 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 10 10 M6 60 18 45 M10 10 75 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 18 55 M12 10 75 4P15R 4P15G 15 500 350 350 350 275 285 621 677 62 80 30 60 62 10 12 M8 130 25 90 M16</td></td>	ARG GMP ION A B C D E F G GI H J ØK L LI M MI N ØO P 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 10 10 M6 60 18 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 18 4P08R 4P08G 8 484 300 350 300 275 270 513 564 53 55 25 40 53 10 12 M8 105 20 4P15R 4P15G 15 500 325 350 375 275 285 621 677 62 80 </td <td>ARG GMP ION A B C D E F G G1 H J ØK L L1 M M1 N ØO P ØQ 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 10 10 M6 60 18 45 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 18 55 4P08R 4P08G 8 484 300 350 30 275 270 513 564 53 55 25 40 53 10 12 M8 105 20 75 4P15R 4P15G 15 500 325 350 375 285 621</td> <td>ARG GMP ION A B C D E F G G1 H J ØK L L1 M M1 N ØO P ØQ R 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 10 10 M6 60 18 45 M10 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 18 55 M12 4P04R 4P08G 8 484 300 350 300 275 270 513 564 53 55 25 40 53 10 12 M8 105 20 75 M12 4P15G 15 500 325 350</td> <td>ARG GMP ION A B C D E F G GI H J ØK L LI M MI N ØO P ØQ R T 4P02R 4P02G 2 340 250 270 250 220 417 445 32 53 20 25 32 10 10 M6 60 18 45 M10 10 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 18 55 M12 10 4P08R 4P08G 8 484 300 350 350 275 270 513 564 53 55 25 40 53 10 12 M8 105 20 75 M12 12 4P15G 15</td> <td>ARG GMP ION A B C D E F G G1 H J ØK L L1 M M1 N ØO P ØQ R T U 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 10 10 M6 60 18 45 M10 10 75 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 18 55 M12 10 75 4P15R 4P15G 15 500 350 350 350 275 285 621 677 62 80 30 60 62 10 12 M8 130 25 90 M16</td>	ARG GMP ION A B C D E F G G1 H J ØK L L1 M M1 N ØO P ØQ 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 10 10 M6 60 18 45 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 18 55 4P08R 4P08G 8 484 300 350 30 275 270 513 564 53 55 25 40 53 10 12 M8 105 20 75 4P15R 4P15G 15 500 325 350 375 285 621	ARG GMP ION A B C D E F G G1 H J ØK L L1 M M1 N ØO P ØQ R 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 10 10 M6 60 18 45 M10 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 18 55 M12 4P04R 4P08G 8 484 300 350 300 275 270 513 564 53 55 25 40 53 10 12 M8 105 20 75 M12 4P15G 15 500 325 350	ARG GMP ION A B C D E F G GI H J ØK L LI M MI N ØO P ØQ R T 4P02R 4P02G 2 340 250 270 250 220 417 445 32 53 20 25 32 10 10 M6 60 18 45 M10 10 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 18 55 M12 10 4P08R 4P08G 8 484 300 350 350 275 270 513 564 53 55 25 40 53 10 12 M8 105 20 75 M12 12 4P15G 15	ARG GMP ION A B C D E F G G1 H J ØK L L1 M M1 N ØO P ØQ R T U 4P02R 4P02G 2 340 250 270 250 200 220 417 445 32 53 20 25 32 10 10 M6 60 18 45 M10 10 75 4P04R 4P04G 4 383 300 300 225 270 480 516 38 47 25 30 38 10 12 M8 75 18 55 M12 10 75 4P15R 4P15G 15 500 350 350 350 275 285 621 677 62 80 30 60 62 10 12 M8 130 25 90 M16



'C' Frame Presses

MERCURY





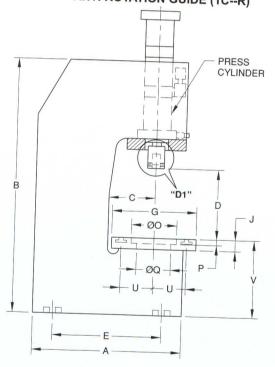
Plain

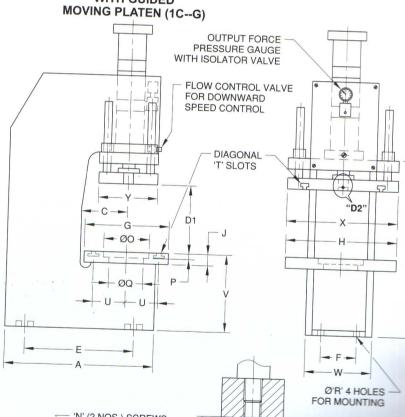
PLAIN (1C--) & WITH ANTI ROTATION GUIDE (1C--R)

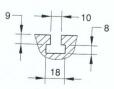
Anti Rotation Guide

WITH GUIDED

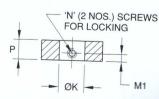
Guided Moving Platen







11 12 9





T-10 'T' SLOT

T-12 'T' SLOT

DETAIL "D2"

DETAIL "D1"

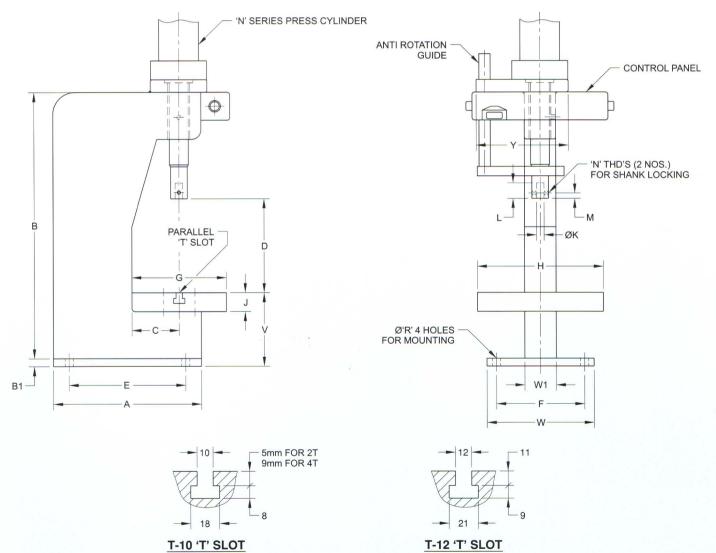
PLAIN	WITH	WITH	TON												_						-			-	-					
	ARG	GMP	TON	Α	В	С	D	D1	E	F	G	Н	J	ØK	L	L1	М	M1	N	ØO	Р	an	ØR	s	-					
1C02	1C02R	1C02G	2	465	767	125	255	221	400	85	200	000								1		DQ	חש	5	1	U	V	W	X	Y
1C04	1C04R	1C04G	Δ	550	890			-			230		38		25				M6		18		13	566	10	75	239	180	266	200
1C08			-7		090	150	310	269	480	120	280	280	43	25	30	43	10	12	MR	75	12	55	13	004			-			
	1C08R	1C08G	8	640	984	175	300	249	575	150	330	350	52	25												100		225	337	200
1C15	1C15R	1C15G	15	700	1149	200	350													105				715	12	100	322	296	408	230
1C30	1C30R	10000								150	380	380	62	30	60	62	10	12	M8	130	25	90								
1000	1030H	1C30G	30	750	1217	200	350	275	680	175	380	380	72	40	80	70	40	400				00	17	003	12	125	3/2	311	431	250
											-	555	12	40	OU	12	12	10	MIO	130	25	90	17	892	12	125	397	365	500	250



Compact 'C' Frame Presses







MODEL No.	TON	Α	В	B1	С	D	E	F	G	Н	J	ØK	L	М	N	R	T	٧	W	W1	Υ
3C02R	2	245	437	12.5	65	200	200	120	120	150	27	12	30	10	M6	13	10	115	150	35	103
3C04R	4	345	470	15	75	200	300	170	140	200	35	16	30	10	M6	13	10	150	200	50	138
3C08R	8	415	545	20	100	250	320	200	180	250	35	25	30	10	M6	13	12	180	230	72	184
3C15R	15	495	630	-	100	200	420	100	175	300	50	30	40	10	M8	13	12	200	276	276	276