RATTAN

An ISO Certified Company

- Friction Drop Hammer
- Hot Forging Press
- Roll Forge Reducer
- Bar Cropping Machine
- 'C' Frame Power Press
- 'H' Type Power Press
- Shot Blasting Machine

RATTAN HAMMERS

Works : Mundian Khurd, Chandigarh Road, Near Fortis Hospital, Ludhiana - 141123 (INDIA)

Ph. Works : 0161-2681133, 2685234, 2685235, 098761-20925, Fax : 91 - 161 -2685236, E-mail : info@hammersindia.com

RATTAN HAMMERS LUDHIANA

Gentlemen....

Rattan Hammers"

"RATTAN HAMMERS" an ISO 9001 : 2008 manufacturer of 'RATTAN' brand Forging Hammers, Bar Cropping/Shearing Machines, Hot Forging Presses, Roll Forging Reducers, Trimming Power Press, Shot Blasting Machines & Drop Hammer Spare parts . Our Friction Drop Hammers are most suitable for **Precision Forgings Automobile, Railways, Defense, Aeronautics, Hand Tools, Agriculture, Bicycle, Scaffoldings** and other Forged Engineering Components. Rattan's Forging Hammers are basically designed to better productivity, economy and Longer Durability

"Rattan" Hammers has significant contribution to forging industry and it will further increases by introducing **HOT FORGING PRESSES, BAR CROPPING MACHINES, ROLL FORGING REDUCERS Based on Latest Technology.**

Manufacturers of Rattan Friction Drop Hammers from 300 Kgs to 4000 Kgs capacity and Shot Blasting Machine Table type & tumble type. We are pioneer in the field of designing and manufacturing of heavy machinery like Hot Forging Presses 400 Tons to 1600 Tons Capacity, Power/Trimming Presses 10 Tons to 1000 Tons Capacity, Bar Cropping/Shearing Machines with Auto Loader and Auto Feeder PLC Controlled 50, 75 & 100mm Capacity and Roll Forge Reducers in different capacities.

Our Most Modern unit is fully equipped with foundry for quality castings up to 75 Tons weight per piece, Heavy Steel Fabrication with Modern welding equipments and Stress relieving furnace capacity of 50 Tons with trolley size of 6500mmX2500mmx2500mm. We have several E.O.T. Cranes up to 75 Tons Capacity, Heavy Duty Plano Millers, Floor Type Borers, Table type Borings, CNC Turning Centers, Radial Drills, Vertical, Universal and Bo-Co Millings, Gear Hobbing Machines and Various heavy machines and testing equipments.

RATTAN hammers are guaranteed for one year against any manufacturing defect and are served with prompt after sales service.

We are highly thankful to our valued customer for their co-operration so far and further assure to offer them most economical and productive forging equipments in future.

Gentlemen....

RATTAN HAMMERS LUDHIANA.

Butler
HAFFLOH

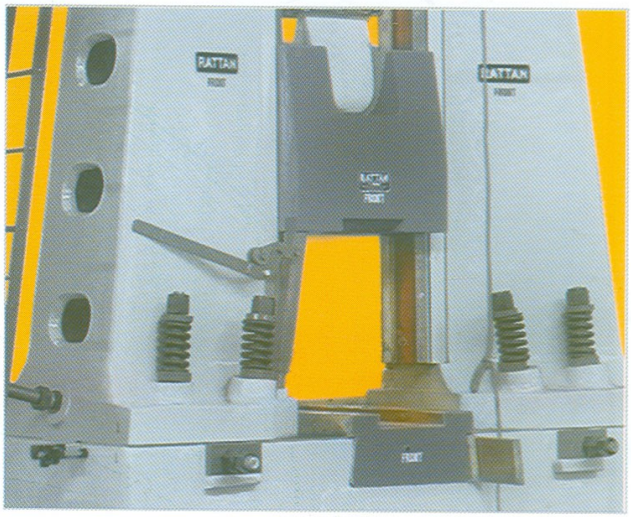
FRICTION DROP HAMMERS

FRICTION DROP HAMMERS

Friction Drop Hammers are most suitable for precision forging for automobile, railways, defence, aeronautics, hand tools, agricultural, bi-cycle and other engineering industries. These are basically designed to achieve better productivity, economy and longer durability. More stress has been given in order to achieve the above results. Technical features of major components of hammers as under:-

Anvil block

It is made of grey cast iron weighing approx. 20 times of nominal capacity of the hammer. It is machined on both top & bottom faces to hold die holder firmly and maintain position of the columns. The die holder fixed in the anvil block is forging from high grade alloy steel all over hardened and it is positioned properly with the help of alloy steel tapered wedge.

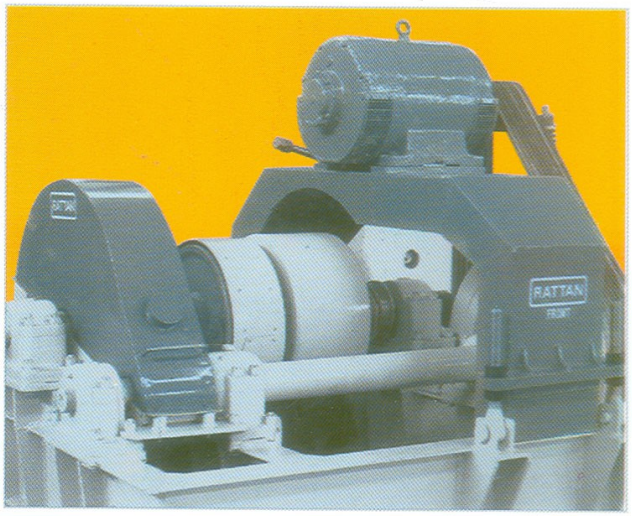


Columns, Slides and Tup

Cast steel columns duly-annealed and machined are very stiff and robust in construction to ensure longer stability. These are positioned by a large spigot on underside of each foot which fits into a machined recess in the anvil block. The columns are locked with the help of tapered wedges of alloy steel to ensure firm alignment of columns which helps in accurate guiding of tup(made out of EN-9 cast steel.) the clearance between the tup and guideways attached to columns is maintained with the help of tapered wedge which brings the columns inward and drawback bolt provided pushes the columns outwards. Synthetic rubber mat is provided on anvil block on which the columns rest. It dampens the induced shock vibrations which increases the life of the tup and columns and also ensures smooth working of the machine for longer period.

Gear head

Heavy duty gear head fabricated from rolled steel sections is mounted on top of the columns. The drive is through v-belts from high torque A.C. Electric motor via flywheel and reduction gears to the lifter-shaft. Friction lifting system is fitted to lifter shaft which runs on double ball bearings and one central phosphorus bronze bearing which also serves as support to lifter shaft. The friction lifter consists of constantly rotating drum and break lined steel band. This band is anchored at one end to stud in lifter drum and other end is carried by camshaft running though lifter drum which is actuated by lever. The lever is operated with the help of pulling cord tied to lever at one end goes to operating point by passing though capstan bush attached to lifter shaft. When the cord is pulled it tightens on to the rotating capstan bush which operate the lever resulting in tightening of brake around the brake drum with the help of cam shaft. At this stage lifter drum is rotated and tup is lifted with the help of nylon belt provided. On release of cord the spring loaded arrangement help free fall of tup by disengaging friction band immediately from the friction drum. The spring loaded buffer work as a stopper for lifting drum is its rest position. Positive water cooling arrangement is provided to the friction drum to prevent excessive heating.



Salient features of forged products :-

- More strength as grain structure is improved.
- Machining is reduced which helps in material saving.
- Most Suitable for mass-production.
- Cost effective.

Technical Specifications

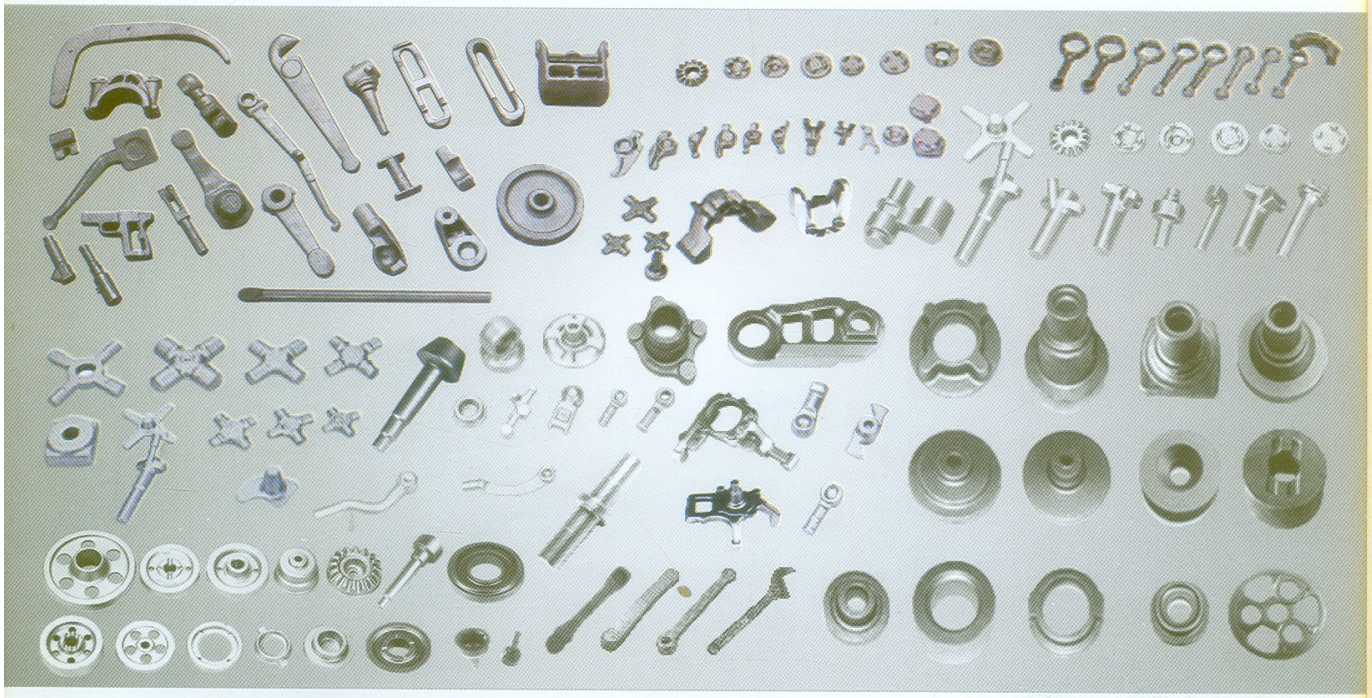
Size of Hammers	Kgs.	300	500	750	1000	1250	1500	2000	2500	3000	3500
Weight of Tup	Kgs.	325	550	800	1100	1300	1550	2100	2600	3100	3600
Space between Slides	mm	360	432	495	542	575	620	670	727	750	780
	Inches	14	17	20	21	23	25	27	29	32	32.5
Stroke maximum	mm	1450	1565	1630	1700	1700	1835	1835	1980	2100	2235
	Inches	57	62	64	67	67	72	72	78	83	88
Max. weight top Die	Kgs.	100	155	225	280	330	460	510	650	740	775
Tup front to back	mm	330	400	430	490	520	550	610	660	700	762
	Inches	13	16	17	19	21	22	24	26	28	30
Total height of Machine	mm	5000	5500	5590	6020	6300	6600	6750	7000	7250	7498
	Ft.	15'6"	18'	18'6"	19'6"	20'6"	21'6"	22'	23'	24'	24'6"
Max. Number of Blows per minute.	Short Storke	95	90	82	75	75	66	66	62	56	51
	Full Stroke	45	44	40	36	36	32	32	30	25	20
Max .weight of Job	Kgs.	½	1	2	3	5	10	15	25	35	40
Gross weight(approx)	M.T.	10	17	26	32	38	48	58	72	82	90
Motor 1440 rpm	HP	20	30	40	50	60	75	100	125	150	180

HOT FORGING PRESS

HOT FORGING PRESS

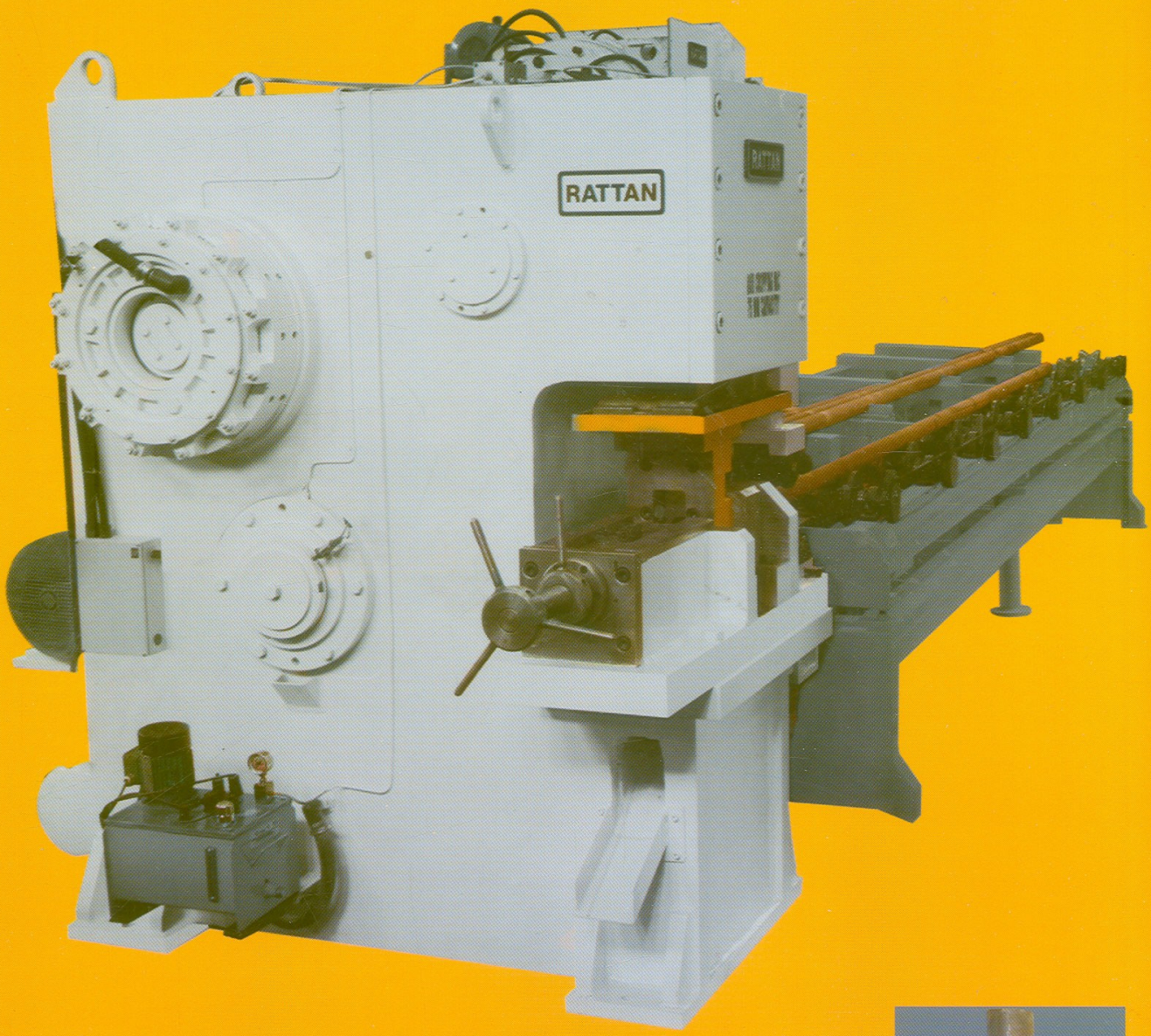
Technical Specifications

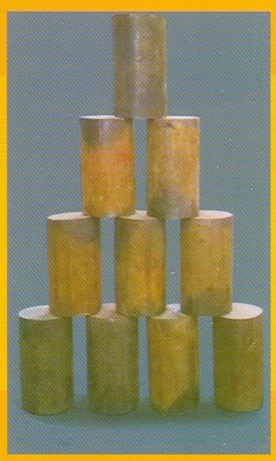
Model.	Units	RHF-400	RHF-600	RHF-750	RHF-1000	RHF-1350	RHF-1600
Capacity	Tonn	400	600	750	1000	1350	1600
Tonnage Rating Point	Mm.	2	3	3	3	4	5
Stroke Length	Mm	160	170	180	250	280	300
Stroke Per Minute	S.p.m	110	105	100	95	90	90
Die Height	Mm.	530	560	540	700	720	720
Adjustment Of Slide	Mm.	6	6	8	10	10	10
Bolster Area (lr X Fb)	Mm.	600X700	680X780	730X890	920X1050	950X1250	1000X1270
Slide Area (lr X Fb)	Mm.	580X600	650X670	720X780	880X900	900X960	970X1000
Side Opening (w X H)	Mm.	320X520	360X580	400X600	460X600	460X680	560X720
Main Motor	Kw	22/30	37/50	45/60	55/75	75/100	90/120
Adjustment Motor	Kwxp	0.5	0.75	1.5	1.5	1.75	1.75
Air Pressure	Kg./cm2	5.5	5.5	5.5	5.5	5.5	5.5
Upper Ejector Type	Mech.	MECH.	MECH.	MECH.	MECH.	MECH.	MECH.
1. Capacity	Tonn	1	1	2	3	5	5
2. Stroke	Mm.	15	20	30	40	50	50
3. Pin Dia.	Mm.	40	50	50	50	55	60
Lower Ejector Type	Air	AIR	AIR	AIR	AIR	AIR	AIR
1. Capacity	Tonn	1.5	2	4	5	6	10
2. Stroke	Mm.	40	40	40	50	50	50
3. Pin Dia.	Mm.	40	50	50	50	50	50



Bar Cropping Machines

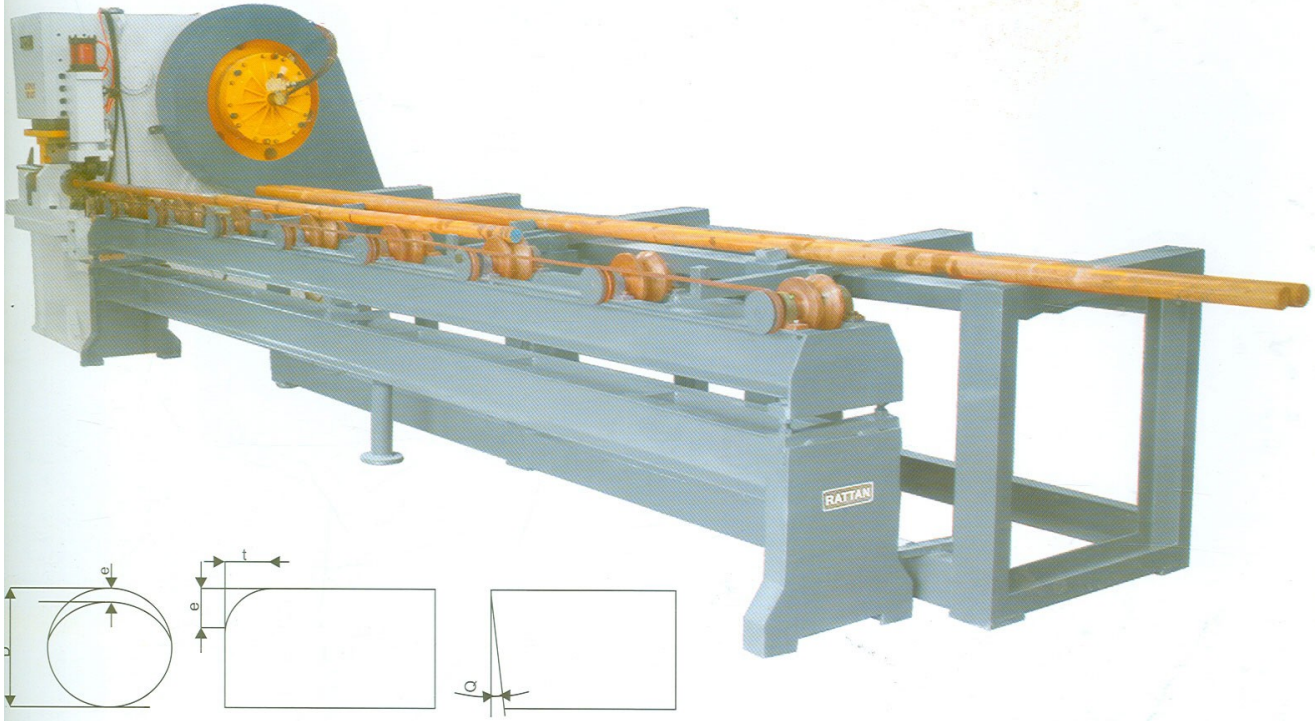
Bar Cropping Machine
WITH AUTO FEEDER





Bar Cropping Machines

Bar Cropping Machine
WITH AUTO FEEDER



Technical Specifications

Bar Cropping

Material	Roundness	Stress Deformation	Taper angle	Weight Variation
JIS grade	S1=1-(e/D)	S2=t/D	0.6	%,(b/D=2)
S3OC	0.952	0.29	1.6	±0.7
S45C	0.967	0.18	1	±0.5
S55C	0.97	0.17	0.8	±0.5

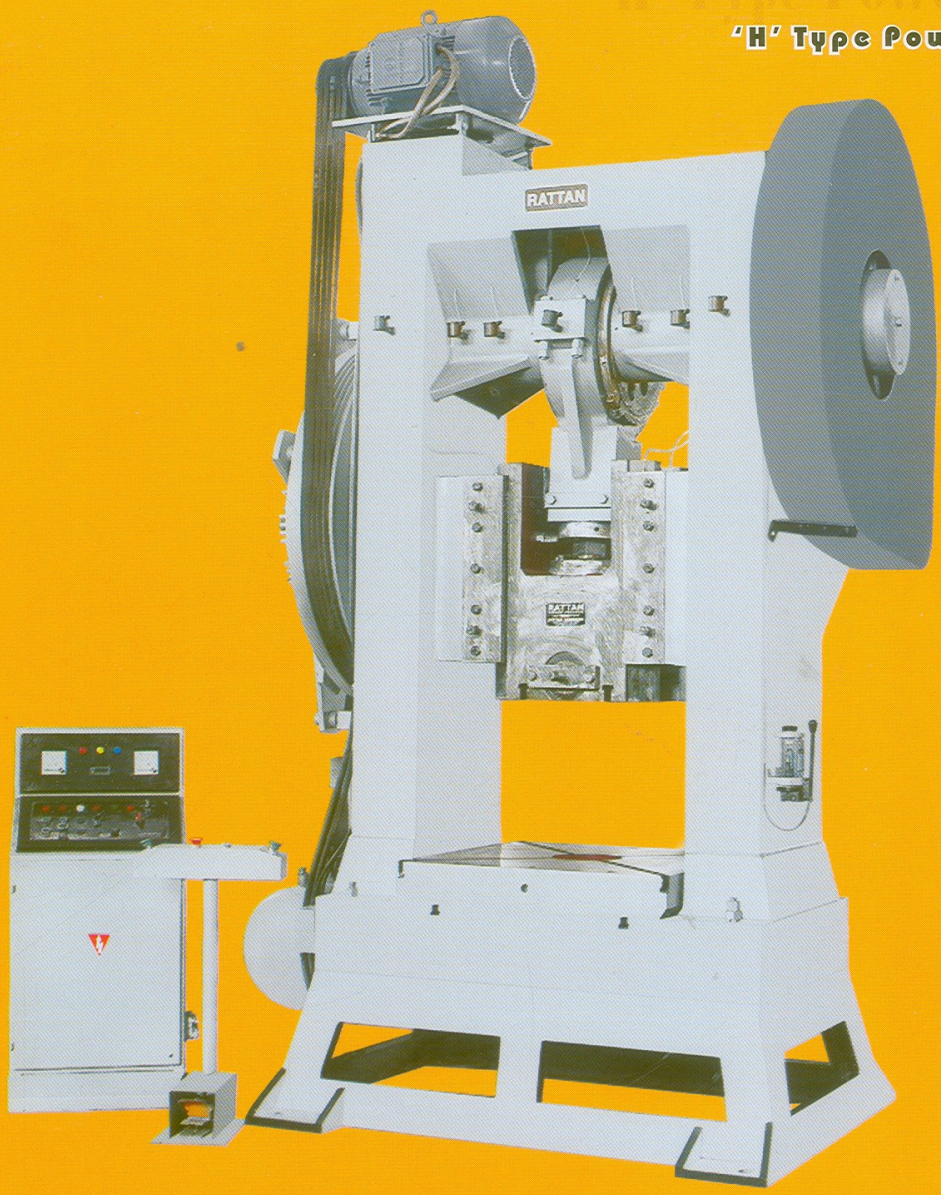
Technical Specifications

Bar Cropping

Model		50	75	100
Number of Cuts per minute	max. n-1	40	35	25
Round M.S/Alloy	max. mm	50/40	75/65	100/80
Square	max. mm	40	60	90
Measuring Length	mm	35/300	50/300	50/300
Bar Length	max. m	6	6	6
Loading Table Capacity	tons	3	5	8
Clutch and Brake type	PNEUM.	PNEUM.	PNEUM.	PNEUM.
Installed Power	Hp	13	23	35
Main Motors Power	Hp	10	20	30
Air presure	Kg/cm2	5.5	5.5	5.5
Bar Lifter	PNEUM.	PNEUM.	PNEUM.	PNEUM.
Oil Lubrication	Auto.	Auto.	Auto.	.Auto.
Electrical Control	PLC	PLC	PLC	PLC
Weight Aprox.	kg	10000	16000	22000

'H' TYPE POWER PRESS

'H' Type Power Press



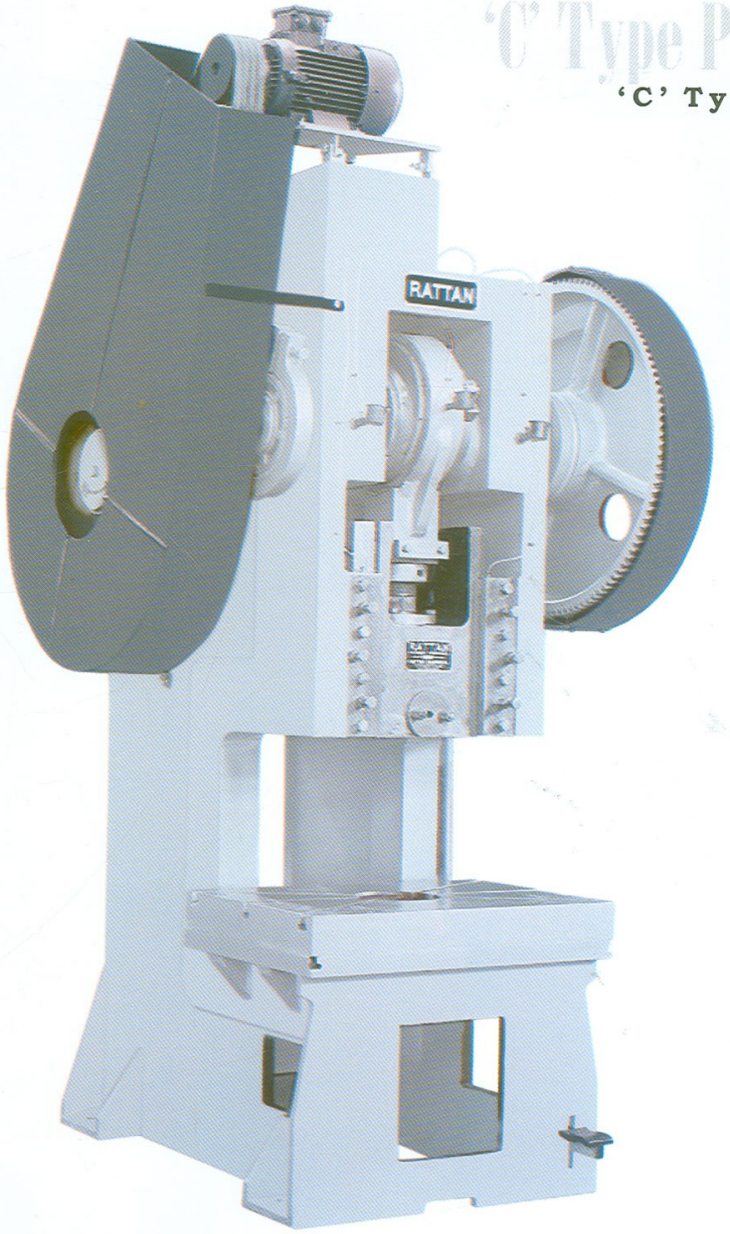
Trimming Presses (H-Type)

Capacity in Tons	10	20	30	50	75	100	150	200	250	300	400	500	600
Table Size MM	350 x350	400 x400	450 x450	475 x500	533 x585	555 x600	625 x650	750 x800	850 x850	900 x900	1000 x1000	1100 x1000	1200 x1000
Distance Table to RAM	240	254	280	300	350	375	450	450	500	550	600	700	700
Stroke	68	75	75	90	100	100	125	150	150	175	200	200	200
Punch Hole	28	32	32	32	38	38	45	63	63	63	63	75	75
Stroke Per Minute	90	80	70	60	50	45	40	35	35	35	35	30	30
Bore In Table	100	125	125	150	175	200	225	250	250	250	300	350	350
Ram Adjustment	38	45	45	45	45	50	50	50	50	50	50	60	60
HP Required 1440 RPM	2	2	3	5	5	75	10	15	20	30	40	50	60
Pully Size	125	125	150	150	150	150	175	200	200	225	225	225	225

'C' TYPE POWER PRESS

'C' Type Power Press

'C' Type Power Press



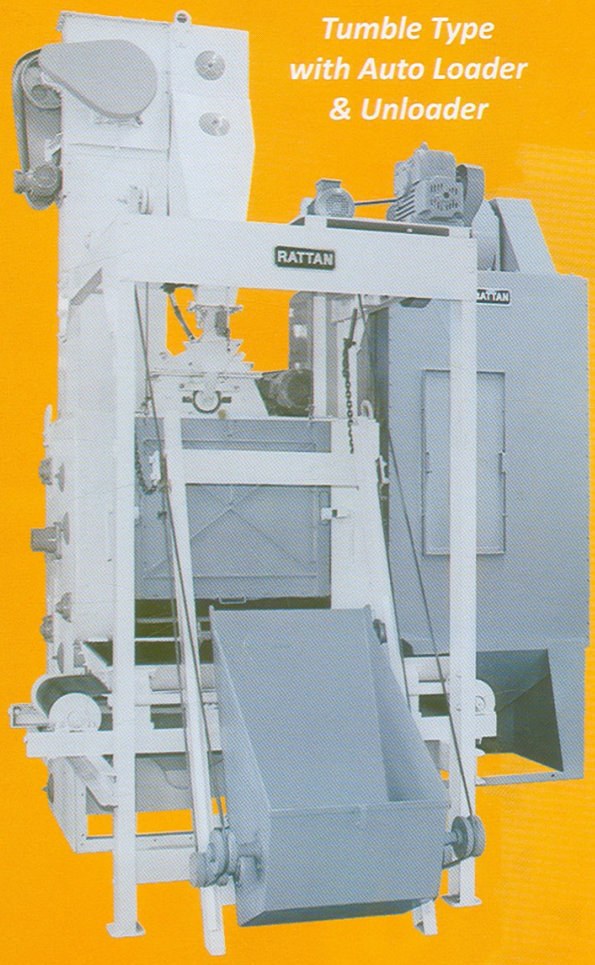
Trimming Presses (C-Type)

Capacity in Tons	10	20	30	50	75	100	150	200
Table Size MM	355 x430	400 x505	450 x525	450 x600	530 x760	600 x890	700 x1000	750 x1100
Distance Table to RAM	240	254	280	300	350	375	430	450
Stroke	68	75	75	90	100	100	125	150
Punch Hole	28	32	32	32	38	38	45	63
Stroke Per Minute	90	80	70	60	45	45	40	35
Bore In Table	100	125	125	150	175	200	225	250
Ram Adjustment	28	45	45	45	45	50	50	50
HP Required 1440 RPM	2	2	3	5	5	75	10	15
Pully Size	125	150	150	150	150	150	175	200

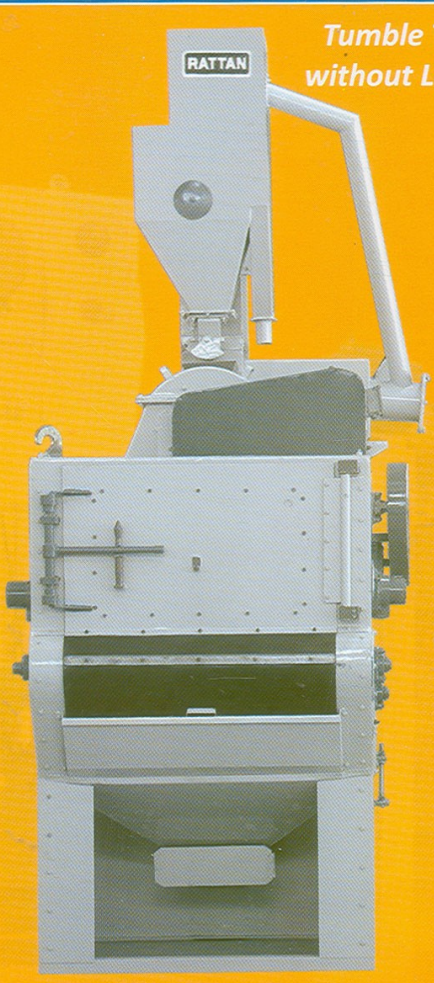
Also Available in Pneumatic Clutch

Shot Blasting Machines

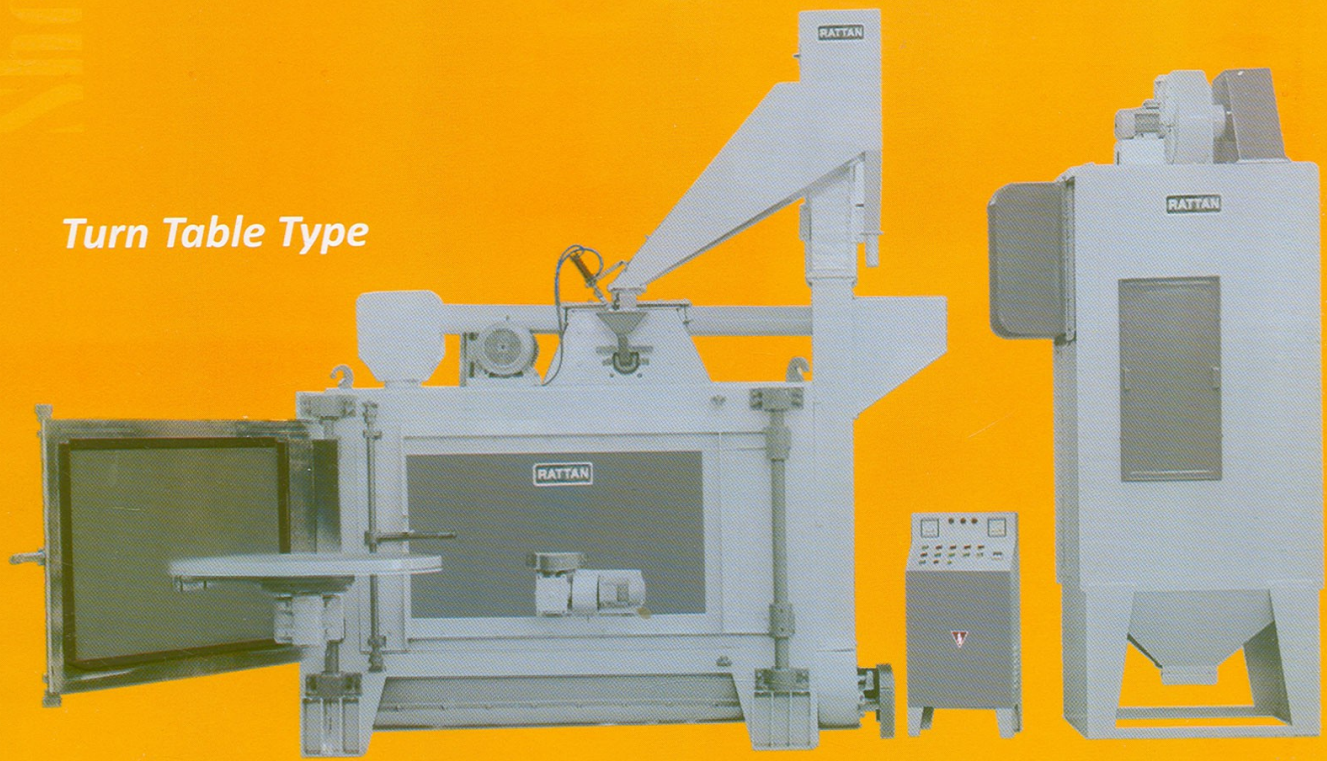
Tumble Type with Auto Loader & Unloader



Tumble Type without Loader



Turn Table Type



Shot Blasting Machines

Tumble Type & Turn Table Type

Tumble Type & Turn Table type Shot Blasting Machine manufactured by us are available in specific chamber sizes. The design and fabrication of these machines are backed by a decade of experience. We have been successful in developing these machines through sustained research & development works and we can say that these are the best available in the market.

The Tumble type & Turn Table type machines are categorized on the basis of their chamber & table size. Detailed specifications of the various models are given below. All the vital components of machines are fabricated from high alloy martensitic white iron & EN-9 material. The heart of the machine I.E. the rotor is dynamically balanced so as to make it free from any sort of vibration.

Dust collector is offered as an optional accessory along with the machine. Technical specification :-

Technical Specifications

Tumble Type

MODEL	CHAMBER SIZE	MACHINE DIMENSIONS LxWxH	CONVEYOR DRIVE	ROTOR DRIVE MOTOR	BLOWER DRIVE MOTOR	ELEVATOR DRIVE MOTOR	LOADER DRIVE MOTOR	UNLOADER DRIVE MOTOR	ROTOR DIA	BATCH CAPACITY	WT. OF MACHINE (APPROX)	TYPE OF DUST COLLECTOR
RSHB-2027	20"X27"	9'X5'x12'	1.0 H.P	5.0 H.P	3.0 H.P	1.0 H.P	1.0 H.P	1.0 H.P	305 MM	150-200 KG	2500 K.G	Dry Type Of Dust Collector
RSHB-2736	27"X36"	10'X6'X13'	1.0 H.P	7.5 H.P	3.0 H.P	1.0 H.P	1.0 H.P	1.0 H.P	380 MM	300-350 KG	4000 KG	Dry Type Of Dust Collector
RSHB-3642	36"X42"	11'X7'X15'	2.0 H.P	10 H.P	5.0 H.P	2.0 H.P	2.0 H.P	2.0 H.P	380 MM	550-600 KG	7000 KG	Dry Type Of Dust Collector

Turn Table Type

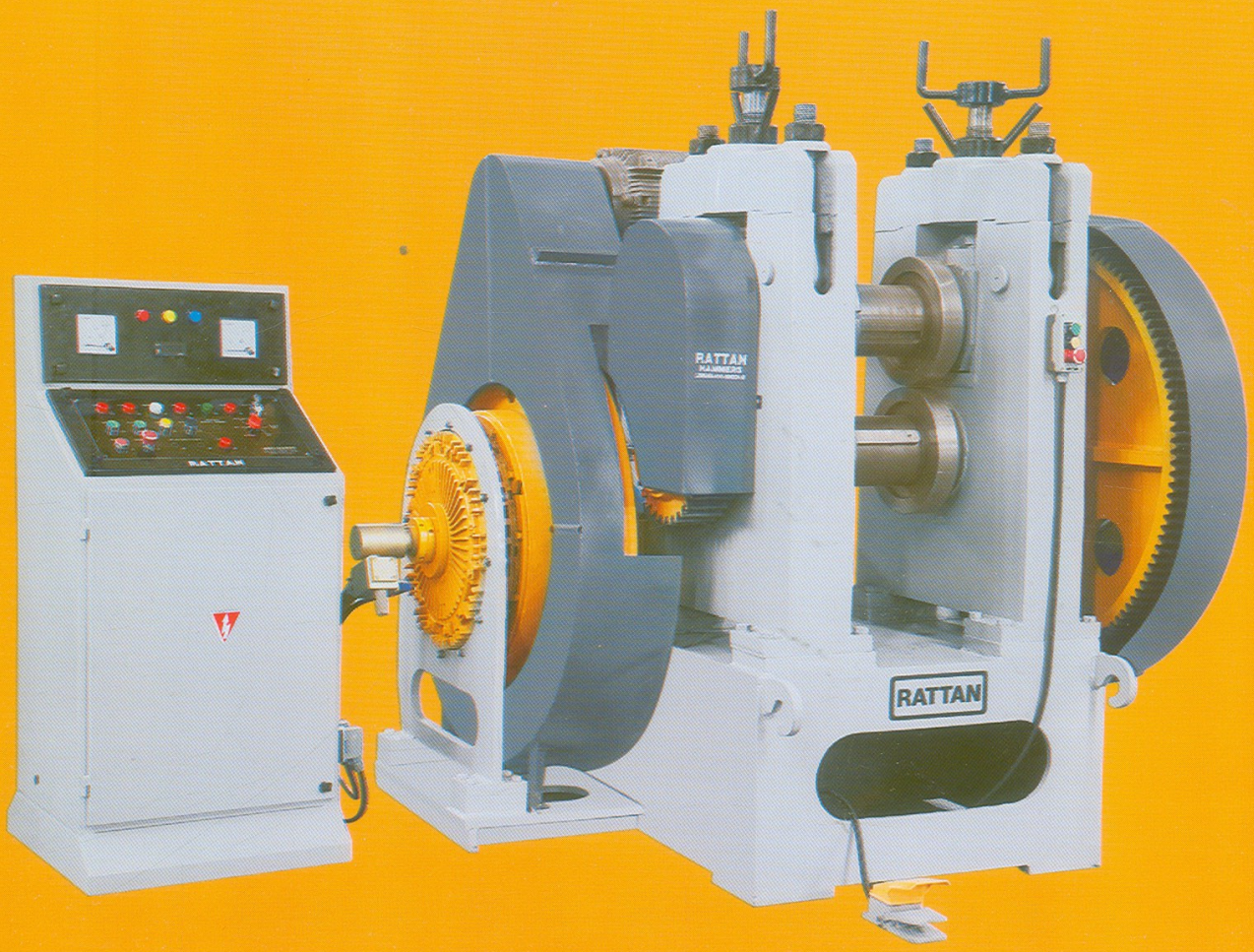
MODEL	CHAMBER SIZE	MACHINE DIMENSIONS LxWxH	TABLE DRIVE	ROTOR DRIVE MOTOR	BLOWER DRIVE MOTOR	ELEVATOR DRIVE MOTOR	ROTOR DIA	BATCH CAPACITY	WT. OF MACHINE (APPROX)	TYPE OF DUST COLLECTOR
RSHB-C 48"	73"X44"	99"X75"X54"	1.0 H.P	12.5 H.P	3.0 H.P	2.0 H.P	482 MM	400-500 KG	6500 K.G	Dry Type Of Dust Collector
RSHB-C 72"	93"X73"	134"X105"X80"	2.0 H.P	15H.P	5.0 H.P	2.0 H.P	482 MM	800-900 KG	9000 KG	Dry Type Of Dust Collector
RSHB-C 96"	121"X10	156"X130"X105"	2.0 H.P	15 H.P	5.0 H.P	2.0 H.P	482 MM	1200-1300 KG	12500 KG	Dry Type Of Dust Collector

Salient Features :

1. Blast Cabinet : Elevator Abrasive Cleaning System, Abrasive Cleaning system, Automatic Abrasive Flow Control Valve, Abrasive Storage Tank, Blast Wheel Assembly complete unit with drive mechanism.
2. Cabinet Liner : The entire blast cabinet is lined with long life manganese steel fibers / NI Hard.
3. Endless perforated nylon rubber conveyor having rubber thickness 18/20mm supported by three rollers and having tensioning arrangement.
4. Fabric Bag type Dust collector with dynamically balance blower and casing with tubular fabric bag with spaking mechanism. Ducting to connect dust collector unit to main work cabinet is provided. Sufficient length of ducting is provided to keep dust collector close to main cabinet of the machine. Damper valve is provided in ducting.
5. Control Panel : Vertical independent control panel with ammeter, voltmeter, contractor, push buttons, switch fuse and the main overload relay with inbuilt single phase precentor, HRC fuses indicator lamps are provided. All these components are of reputed make.
6. Electric Motors : 3 Phase 415+ 6% AC, 50 HZ + TEFC Induction Motors of reputed make like Bharat Bijlee Ltd., ABB, Kirloskar ,Seimens make etc. Are used.

Roll Forge Reducer

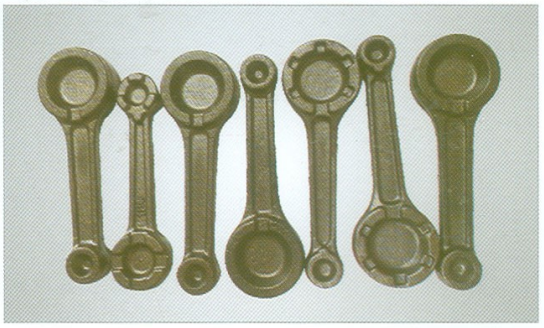
Roll Forge Reducer

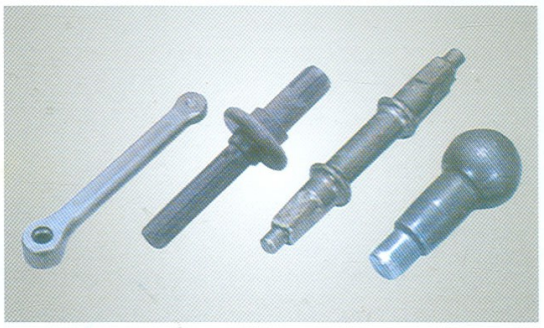


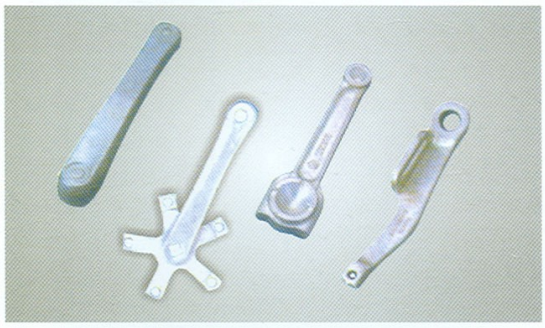
Technical Specifications

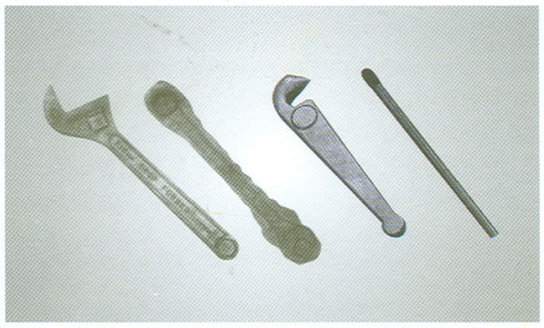
Roll Forging Machine

S. NO.	Model.	UNITS	RF-140	RF-170	RF-220
1	Roller Dia	MM	140	170	220
2	Roller Center Distance	MM	250	310	360
3	Forge Roll Effective Width	MM	220	240	260
4	Roll Forge Center Adjustment	MM	5	10	10
5	Maximum Mat. Dia	MM	30	45	60
6	Maximum Mat. Length	MM	400	500	600
7	Stroke Per Minutes	S.P.M	50	45	45
8	Clutch Type		Pneumatic	Pneumatic	Pneumatic
9	Air Pressure	Kg/cm2	5.5	5.5	5.5
10	Main Motor	KW	7.5/10	15/20	18.5/25









FEATURES

» In comparison with the forging press in the extension of the molding property, the extension rate may be multiplied at about 3 to 4 times and/or above.

» The natural molding is absolutely defect-free. The roller design makes the pre-shaping before forging feasible.

» Skilful operator is not required, and easy to operate, adjust, and install molding fixture.

» Molds are exchangeable, and in reverse motion this is substantially stable and easy to maintain.

RH

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