# **BAJAJ** Machinery Corporation

# HYDRAULIC SHEARING MACHINE NC - 'BSBN SERIES'

#### STANDARD ACCESSORIES

### (Conventional Hydraulic Shearing Machine):-

- Movable Foot Switch to operate the machine from convenient positions.
- All Hydraulics are of Standard Make Rexroth or Bosch
- All Electric components are from Sneider Telemechanique
- · Stroke Counter with Reset Button
- Hydraulic Hold Downs Automatically calculates the pressure and have pads to avoid marks on soft sheets.
- Front Sheet Support arms of length 1000MM
- High Carbon High Chromium (H.C.H.C.r). Interchangeable blades with four cutting edges.
- Ball Transfers on Bed for easy feeding of the sheet.
- Motorized Backgauge which is ball screw driven and has a swing up function to shear longer sheets.
- Extra Throat Gap for Slitting functions.
- Compact low maintenance hydraulics located above the oil tank
- Adjustable stroke length for short strokes giving full flexible cutting
- Lever operated Blade Clearance with Calibration
- Shadow line Gauging. This light alignment device makes Shearing easy and more accurate.
- · Manual blade gap adjustment system.
- Finger Guard with limit switch.
- American Parker Oil Seals
- Maintenance Tool Kit with all keys and spanners.
- Comprehensive Instruction, Operational and Maintenance Manual in English
- Foundation Bolts
- One Set of Spare Oil Seals and 'O' rings.

# STANDARD ACCESSORIES: - (NC Control Shearing Machine):-

- SWISS CYBELEC DNC60 Controller (Special System For Shearing Machine)
- JAPAN PANASONIC High efficiency AC servo motor and servo drives.
- NC Back gauge with HIWIN Ball Screw

# RESTALL STANDARD ACCESSORIES ARE SAME AS PER • THE CONVENTIONAL HYDRAULIC SHEARING MACHINE •



### DNC60 CYBELEC SWISS CONTROLLER

- Standard-characteristics
- Controls 1 4 Axis
- Keyboard with large keys.
- Monochrome graphic LCD screen 75 x 130 mm
  240 x 128 pixels with automatic contrast correction.
- Internal SRAM memory.
- N2X axes with high speed counting (250 Khz) with
- PID regulator and programmable resolution.

   Conversion Inch/mm, TON/TONS, etc.
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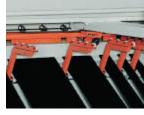
#### OPTIONAL ACCESSORIES

### (Conventional Hydraulic Shearing Machine):-

- NC Control Back Gauge
- Back Gauge with Electronic Reading
- CE Marking
- Rear Guard Doors
- Pneumatic Rear Sheet Support Mechanism
- Universal Protractor Gauge
- Extra Set of Shearing Blades
- Laser Safe Finger Protection
- Light Curtain
- · Oil Cooler
- Automatic Lubrication System
- Vibration Control Mounting Pads
- First Fill of Hydraulic Oil

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### PNEUMATIC SHEET SUPPORT

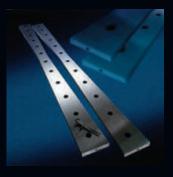
Pneumatic sheet support system provides the user an easy method of working, is an optional function to protect hanging of sheets down and to improve cutting precision during cutting of long and thin sheets.



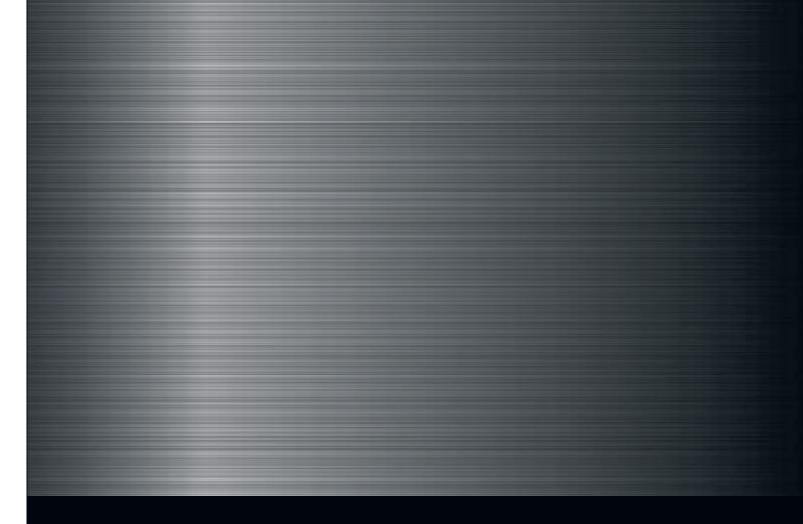
MANUFACTURERS -- EXPORTERS

Since 1979

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# HYDRAULIC SHEARING MACHINE





BAJAJ

Machinery Corporation

# **HYDRAULIC SHEARING MACHINE**

# **HYDRAULIC SHEARING MACHINE - 'BSB SERIES'**

### SALIENT FEATURES OF CONVENTIONAL AND NC - SHEARING MACHINE

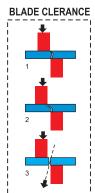
- 1. Rigidly Welded, Mono Block steel frame for minimum deflection under full load.
- 2. Noiseless operation and least impact loads on Blades and foundations.
- 3. International Quality Hydraulic Components with specially designed compact manifolds gives smooth, silent and jerk less operation.
- 4. International Quality branded electrical components ensures trouble free operation over a period of time.
- 5. Movable foot switch to operate the machine from convenient positions.
- 6. Cylinders from high quality forged steel and are precisely honed. Pistons are hard chromed for longer life.

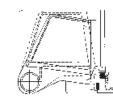
MAIN PARAMETER OF BAJAJ HYDRAULIC SWING BEAM SHEARING MACHINE FOR CONVENTIONAL & NC MODEL														
Model	Shear	Cutting	Distance	Strokes	Backgauge	Shear	Worktable	Throat	Main Motor	Hydraulic	Dimension			Weight
'BSB' / 'BSBN'	thickness	length	between uprights		range	ang <b>l</b> e	height	Depth		oil flow rate	L	I w	Н	(kg)
SERIES	(mm)	(mm)	(mm)	(cycle/min)	(mm)	(°)	(mm)	(mm)	(kw)	Tate	(mm)	(mm)	(mm)	
4x2500	4	2500	2710	25	600	1.5	800	250	7.5	240	3100	1470	1560	4800
4x3200	4	3200	3410	20	600	1.5	800	250	7.5	290	3820	1500	1580	6400
4x6000	4	6000	6100	10	800	1.5	850	250	11	290	6600	2170	1920	16000
6x2500	6	2500	2720	20	600	1.5	800	250	7.5	240	3130	1570	1600	5500
6x3200	6	3200	3420	18	600	1.5	800	250	7.5	290	3840	1610	1620	6600
6x4000	6	4000	4220	15	600	1.5	800	250	7.5	388	4630	1850	1700	8900
6x5000	6	5000	5620	12	600	1.5	850	250	11	380	5700	2020	1870	14000
6x6000	6	6000	6230	10	600	1.5	850	250	11	380	6650	2170	1920	18000
8x2500	8	2500	2760	14	600	1.5	800	250	11	240	3190	1600	1620	6000
8x3200	8	3200	3460	12	600	1.5	800	250	11	380	3900	1680	1650	8500
8x4000	8	4000	4260	10	800	1.5	800	250	11	380	4680	1900	1720	9800
8x5000	8	5000	5255	8	600	1.5	850	250	15	380	5720	2020	1890	16000
8x6000	8	6000	6225	6	600	1.5	850	250	15	380	6700	2350	1950	23000
12x2500	12	2500	2755	9	800	1.5	810	320	18.5	290	3235	2045	1935	8600
12x3200	12	3200	3465	8	800	1.5	810	320	18.5	400	3945	2217	2055	12500
12x4000	12	4000	4265	7	800	1.5	810	320	18.5	450	4745	2217	2255	15000
12x5000	12	5000	5275	5	800	1.5	1000	320	22	450	5780	2417	2355	20000
12x6000	12	6000	6245	5	800	1.5	1000	320	22	450	6750	2570	2500	33000
16x2500	16	2500	2755	8	800	2.5	810	320	22	290	3390	2250	2155	12000
16x3200	16	3200	3485	6	800	2.5	810	320	22	400	4100	2250	2350	15500
16x4000	16	4000	4285	5	800	2.5	810	320	22	450	4850	2300	2320	19500
16x5000	16	5000	5275	4	800	2.5	1000	320	30	450	5880	2450	2450	27000
16x6000	16	6000	6255	4	1000	2.5	1000	320	37	450	6850	2665	2750	35000
20x2500	20	2500	2785	6	1000	2.5	850	320	37	330	3440	2350	2330	18000
20x3200	20	3200	3485	5	1000	2.5	850	320	37	430	4140	2350	2360	22000
20x4000	20	4000	4285	5	1000	2.5	850	320	37	480	4940	2350	2390	25000
					1000									0.1000
25x2500	25	2500	2835	5	1000	2.5	850	320	45	330	3510	2600	2350	21000
25x3200	25	3200	3505	5	1000	2.5	850	320	45	330	4160	2600	2500	26000
25x4000	25	4000	4305	4	1000	2.5	1000	320	45	480	4980	2700	3000	32000
30,43500	22	2500	2005	4	1000	2.5	1000	220	- F	220	3600	2600	2700	35000
32x2500	32 32	2500	2905	4	1000	3.5	1000	320	55 55	330	3600	2600	2700	35000
32x3200		3200	3605	3	1000	3.5	1150	320		400	4300	2600	2700	40000
32x4000	32	4000	4405	3	1000	3.5	1150	320	55	480	5100	2800	3200	46000



# DEPTH

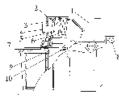
With the help of extra throat depth, it is possible to cut longer sheets than the standard cutting length, thus avoiding extra workmanship costs due to the longer sheets.





### **STRUCTURE**

- 1 Oil Tank and Hydraulic assembly 6 Nitrogen Cylinder
- 2 Installation for light beam shadow 7 Protector
- 3 Blade beam
- 4 Operation Table
- 5 Main cylinder



- 8 Back Gauge Motor
- 9 Gap
- 10 Back Gauge Bar

# BSB - 3200 x 8MM BAJAJ **ELECTRIC PANNEL** 00000000 Electronic and Electrical parts are Back Gauge made of accepted brands available of all over the world like SIEMENS CUTTING LENGTH STROKE 4 The cutting Length is easily adjusted by a potentiometer on the front control panel. Short strokes may be used to cut material shorter that the entire blade length, thus reducing the cutting time and increasing



#### BALL TRANSFER ON BED PLATE Our machines are fitted with Ball transfers on the bed plate. This helps in the easy feeding /

### sliding of the work piece. PROTECTION COVER

The front side of the hold downs is closed with a fixed protection cover for the safety of the operator.



### HOLD DOWN CYLINDERS

Hold Down cylinders adjust their pressure according to thickness and tensile strength of the plate being cut. They can work separately. Bottom of the Hold Downs, are fitted with soft pads in order to prevent any sort of marks on softer sheets which are to be



### EASY BLADE GAP ADJUSTMENT

Perfect cutting quality could be provided by making the right blade gap adjustment. Perfect cutting quality adjustment could be done, easily by manual driven eccentric



### TOOL BOX & MOVABLE FOOT SWITCH

Our machines are fitted with a Tool Box, which consists all the necessary and relevant tools and tackles like Foundation Bolts, Grease Pump, Tool Kit, Oil Pump, Instruction / Maintenance Manual, Spare Oil Seals and 'O' Rinas.

Also the machine is equipped with a Movable Foot Switch, in order to operate the machine from any convenient position.



### CUTTING BLADES

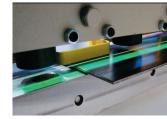
We use High Carbon High Chromium (H.C.H.C.r) shearing blades in our machines. These are four edge reversible blades and can cut most of the materials including Stainless Steel, Insulation Sheets, Aluminium Sheets etc.



### MOTORIZED BACK GAUGE

BMC Shears have a motorized back gauge which is operated form the front of the machine. Back Gauge movement is provided by guide shafts and Lead Screw / Ball Screw (Depending as per Models) shafts with bearings working without a gap.

In BMC, we offer a Swing - Up back gauge to enable the cut of strips and sheets wider than the back gauge travel.



### SHADOW LINE CUTTING

It is handy and clear with the shadow line lighting for a close and accurate view of the cutting line.



### **SWING BEAM STRUCTURE**

In swing beam design shares the top beam is pivoted precisely and connected with special bearings. These swing beam machines are designed and manufactured to withstand constant load of maximum capacity.