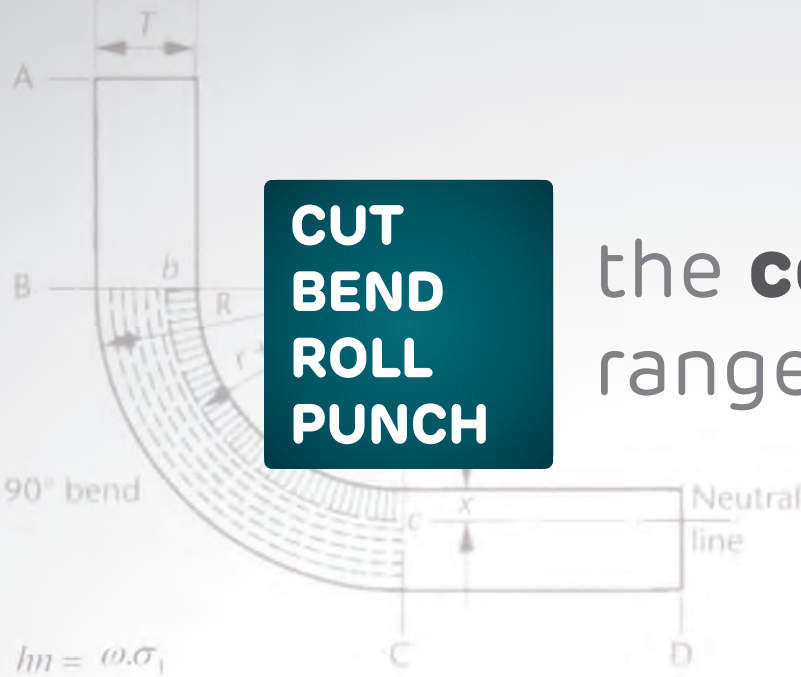


# CUT BEND ROLL PUNCH

the **complete**  
range of **solution**



$$hn = \omega \cdot \sigma_1$$

$$k'n = \omega \cdot KN$$

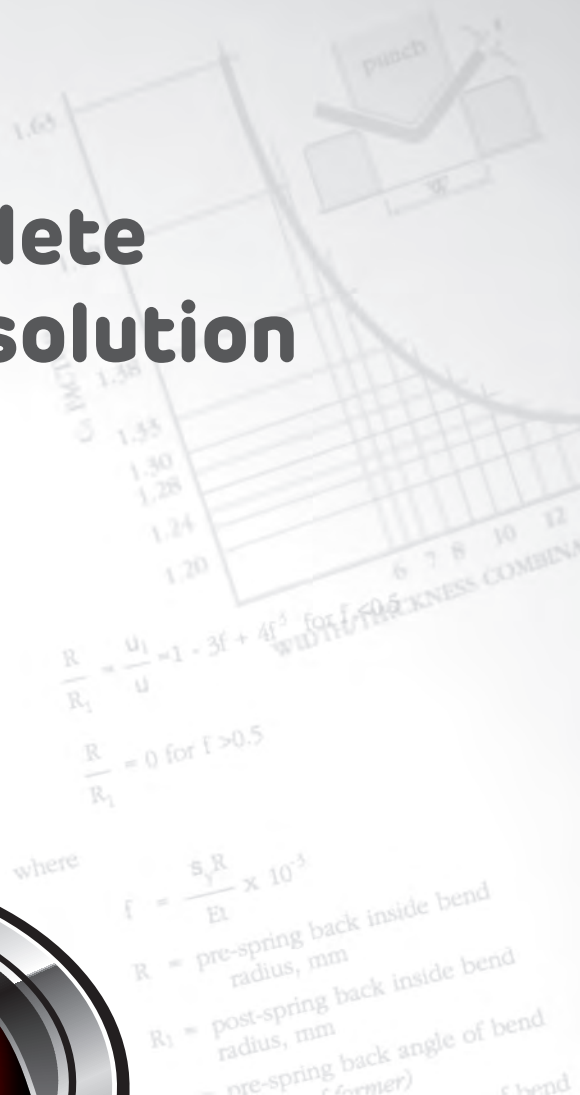
$$k'l' = \rho \cdot c$$

$$hn = \sigma_\eta \cdot mn$$

$$mn = P_{\eta\omega} \cdot k'l' - Q_{\theta,\eta} \cdot k'n$$

$$mn = P_{\eta\omega} \cdot \rho \cdot c - Q_{\theta,\eta} \cdot \omega \cdot KN$$

$$\omega = \frac{P_{\eta\omega} \cdot \rho \cdot c}{\sigma_1 + Q_{\theta,\eta} \cdot KN}$$



www.energymission.com

HYDRAULIC PRESS

SCAN FOR LIVE CHAT



**ENERGYMISSION**  
MACHINERIES (INDIA) PVT. LTD.



Energy Mission Machineries (India) Pvt. Ltd. was established in 1999 with strong vision to deliver most reliable & economical solutions in sheet metal industry. Today Energy Mission is one of the fastest growing company with maximum satisfied customer base in India and Abroad.

#### WE ARE LEADING MANUFACTURER OF

- ◆ CNC Servo Hybrid & Synchro Press Brakes
- ◆ NC / Conventional Hydraulic Press Brakes
- ◆ CNC / NC / Conventional Hydraulic Shearing Machines
- ◆ Four / Three Roll Plate Rolling Machines
- ◆ Hydraulic Iron Workers
- ◆ Hydraulic / NC Busbar Cutting, Bending & Punching Machines
- ◆ Single / Double / Triple Action Deep Drawing Presses
- ◆ CNC Servo H & C Type Presses
- ◆ Punching & Blanking Hydraulic Presses
- ◆ CNC V Grooving Machines

#### OUR STRENGTH

- ◆ 22 years of Experience in Manufacturing
- ◆ World Class manufacturing facility spread in 2,50,000 sq.ft
- ◆ Production capacity of 1200 machines per annum
- ◆ More than 5000+ installation across India & Abroad
- ◆ Trained & qualified team of 350 employees
- ◆ Dedicated team for design & development
- ◆ Sales & service network all over India
- ◆ Keen quality control on each component & process
- ◆ Awarded as "Outstanding Entrepreneur of Year" in Year 2008-09 & Year 2014-15

#### OUR VISION

We at "Energy Mission" believe to deliver high quality products at competitive price supported by best service support. To achieve this mission, we have developed in-house manufacturing facilities, focused manufacturing processes with in-depth technology know-how, sales network associates across India & abroad. Enthusiastic team of customer care is always ready to rush within shortest time at the doorstep of customer or any requirements. Our skilled workforce has a proven performance record in satisfying diverse needs of customers around the globe.

# MANUFACTURING FACILITY



## FLOOR BORING MACHINE

- ♦ In house single reference machining Facility ensures required quality parameters.
- ♦ CNC Floor Boring machines with Traverse Travel of 9 mtr & 8 mtr.
- ♦ Heavy duty 360° Machining position Rotary table

## CNC TURNING & VERTICAL MILLING CENTRE

- ♦ High-tech CNC lathe with 8 station turret for precise cylinder component machining
- ♦ CNC Vertical milling machine with 24 stations auto Turret
- ♦ CNC boring machine suitable for Concave & Convex shapes machining.



## CNC PLANO MILLER

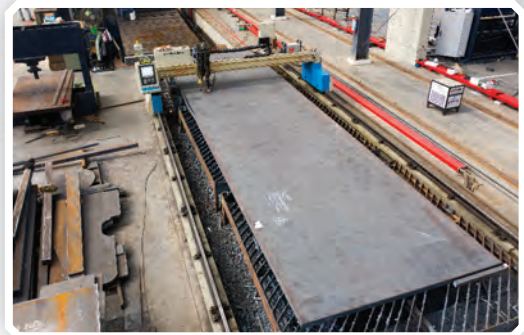
- ♦ CNC Plano Milling machines Up to 6 meter bed length
- ♦ Multiple head Single reference Machining
- ♦ Accurate, repetitive & fast operation reduces Production time & cost

## INFRASTRUCTURE



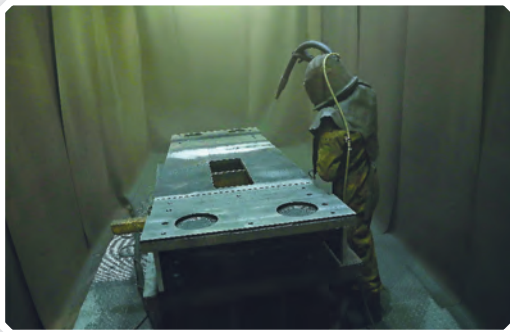
### CNC PLASMA CUTTING

- ◆ Precise & Fast CNC plasma cutting with X & Y controlled axis suitable for 4 mtr wide & 13 mtr long plates.
- ◆ Precise & accurate cutting accelerates manufacturing process.
- ◆ Inbuilt Nesting Facility to reduce wastage & production time



### SHOT BLASTING UNIT

- ◆ Environment Friendly surface preparation Facility to remove rust and corrosive materials from the surface
- ◆ Capacity to handle up to 7 mtr. Long Plates & Assembly Structures



### PAINT BOOTH UNIT

- ◆ Cross Draft type Paint booth facility to make painting & refinishing parts & Fabricated structures
- ◆ Suitable for 10 Mtr. Long Plates & Assembly Structures



# HYDRAULIC DEEP DRAWING PRESS

RANGE | 50 Tons to 2000 Tons



## APPLICATIONS



## ► SALIENT FEATURES

- ✦ Customized Indigenous robust FE Analysed structure design
- ✦ The robust frame is fabricated from UT tested IS2062 grade steel plates
- ✦ Deep drawing presses are available in various designs like Single Action Deep Drawing, Double Action Deep drawing or triple action deep drawing press
- ✦ Adjustable 8 points Self Lubricated (Graphite impregnated bronze material) Oil less guide ways ensure smooth operation & long life of the press
- ✦ Hydraulic Holding plates / Cushion structure with hydraulic cushion arrangement is provided on deep drawing presses
- ✦ Multiple speed for Approach, pressing & return strokes saves cycle time
- ✦ Detachable bolster design
- ✦ Hydraulic Cylinders made of seamless hone tubes & hard chrome plated rod
- ✦ Latest technology PTFE seals with bronze guide Flats in hydraulic cylinders ensure long life
- ✦ Compact Hydraulic systems with Logic, conventional & Servo valves
- ✦ Two-hand operator safety to ensure accident-free operation
- ✦ Specially designed Positive locked load bearing structure for longer life (no load on welding)
- ✦ The frame is machined on FLOOR BORING MACHINE ensuring single reference accurate machining.
- ✦ Illuminated working area

## STANDARD ACCESSORIES

- ✦ Main drive Induction Motor
- ✦ Electric control panel with 'Inch' & Single Cycle selection
- ✦ Pair of foot switch
- ✦ Fine stroke adjustment rod with limit switch
- ✦ Hydraulic panel with glycerine filled pressure gauge & adjustable pressure relief valve
- ✦ Hydraulic Overload Protection
- ✦ Dual Check Safety Electrical Circuit
- ✦ Electrical panel consist of main isolator, star delta starter & back up protection for Motors & control elements
- ✦ Service Platform & Monkey ladder for easy accessibility
- ✦ High speed design with compact manifold & logic valves
- ✦ Positive stopper for ram holding
- ✦ IP 54 class electrical panel & closures

## OPTIONAL ACCESSORIES

- ✦ Microprocessor based PLC based controller with onscreen controls of functions and productivity reports
- ✦ On Screen stroke adjustment of cylinder
- ✦ On Screen pressure & Tonnage setting
- ✦ Ram reversal with pressure sensing or limit sensing by selection
- ✦ Die resting Support Arm
- ✦ Quick Die Hydraulic clamping
- ✦ Hydraulic Die lifting
- ✦ Stress relieved structure
- ✦ Infrared safety curtain interface on front & rear side of machine to ensure safe working on machine
- ✦ Air cooled type Oil Cooler (Heat Exchanger)
- ✦ Low oil level alarm & High oil temperature alarm
- ✦ Transparent Safety cover
- ✦ Robot interface
- ✦ Shock absorber cylinders for blanking sheet
- ✦ Mechanical / Hydraulic Ejector can be provided

## TECHNICAL SPECIFICATIONS

MODEL	CAPACITY	RAM STROKE	OPEN HEIGHT	CLOSED HEIGHT	TABLE SIZE	SPEED (MM / SEC)			CUSHION PAD SIZE	BOTTOM CUSHION CAPACITY	BOTTOM CUSHION STROKE	POWER
	M Ton	mm	mm	mm	mm	APPROACH	PRESSING	RETURN	mm	M Ton	mm	Hp
EM DHP 50	50	200	400	200	600 x 600	120	8	140	400 x 400	15	100	7.5
EM DHP 80	80	200	400	200	600 x 600	110	8	135	400 x 400	25	100	10
EM DHP 100	100	300	500	200	750 x 750	115	8	115	500 x 500	30	150	12.5
EM DHP 150	150	300	500	200	750 x 750	130	8	150	500 x 500	40	150	20
EM DHP 200	200	300	500	200	750 x 750	80	5	120	500 x 500	60	150	20
EM DHP 300	300	400	800	400	1250 x 1250	80	5	80	750 x 750	100	200	25
EM DHP 400	400	400	800	400	1250 x 1250	90	7	100	750 x 750	125	200	40
EM DHP 500	500	400	800	400	1500 x 1500	80	6	100	1000 x 1000	150	200	50
EM DHP 600	600	600	1000	400	1500 x 1500	100	6	120	1000 x 1000	180	300	60
EM DHP 800	800	600	1000	400	1750 x 1750	80	6	95	1250 x 1250	225	300	75
EM DHP 1000	1000	750	1200	450	1750 x 1750	85	6	90	1250 x 1250	300	375	100

\* Other Models are available on Request



# HYDRAULIC H-FRAME PRESS

RANGE | 50 Tons to 2000 Tons

## ► SALIENT FEATURES

- ♦ Customized Indigenous robust FE Analysed structure design
- ♦ H Frame presses are designed to take heavy loads
- ♦ Heavy adjustable dovetail guides are capable of taking Axial and side thrusts
- ♦ Suitable for long forming jobs due to rigid close frame structure
- ♦ The cylinder is self guided and outer cylindrical guide arrangements are specially designed to suit the operation requirement for longer life.
- ♦ Optional multiple speed for approach, pressing & return strokes saves cycle time.
- ♦ International quality hydraulic & electrical components to ensure long service life
- ♦ Hydraulic cylinders made of seamless hone tubes & hard chrome plated rod. Latest technology PTFE seals with bronze guide tapes in hydraulic cylinders ensure long life.

These presses are designed for various applications like blanking, trimming & Punching applications. It's unique H Frame design allows to take heavy loads at minimum deformation.



MODEL	CAPACITY	RAM STROKE	OPEN HEIGHT	CLOSED HEIGHT	TABLE SIZE	SPEED (MM / SEC)			POWER
	M Ton	mm	mm	mm	mm	APPROACH	PRESSING	RETURN	Hp
EM HHP 50	50	200	400	200	600 x 600	50	5	60	5
EM HHP 80	80	200	400	200	600 x 600	50	5	60	7.5
EM HHP 100	100	300	500	200	750 x 750	50	5	60	10
EM HHP 125	125	300	500	200	750 x 750	50	5	60	10
EM HHP 150	150	300	500	200	750 x 750	50	5	60	15
EM HHP 175	175	300	500	200	750 x 750	50	5	60	15
EM HHP 200	200	300	500	200	750 x 750	50	5	60	20
EM HHP 300	300	400	800	400	1000 x 1000	40	5	50	30
EM HHP 350	350	400	800	400	1000 x 1000	40	5	50	30
EM HHP 400	400	400	800	400	1250 x 1250	40	5	50	40
EM HHP 500	500	400	800	400	1250 x 1250	40	5	50	50
EM HHP 600	600	600	1000	400	1500 x 1500	40	5	50	60
EM HHP 800	800	600	1000	400	1500 x 1500	40	5	50	60
EM HHP 1000	1000	750	1200	450	1500 x 1500	40	5	50	75

\*\* As per requirement High Speed as well Servo Options are available.

## APPLICATIONS

- ♦ Forming of various automobile parts
- ♦ Various embossing shapes in sheet metal
- ♦ Straightening of I-beam and plates
- ♦ Dish end forming
- ♦ Forming of different shapes in sheets & plates
- ♦ Blanking, Trimming & Punching Applications



# HYDRAULIC C-FRAME PRESS

RANGE | 30 Tons to 300 Tons

## ► SALIENT FEATURES

- ♦ Customized Indigenous robust FE Analysed structure design
- ♦ C Frame presses are available in various table sizes and throat depth designs to facilitate the various job requirement.
- ♦ Suitable for jobs which need three side open area accessibility
- ♦ The cylinder is self guided and outer cylindrical guide arrangements are specially designed to suit the operation requirement for longer life.
- ♦ Optional multiple speed for approach, pressing & return strokes saves cycle time.
- ♦ International quality hydraulic & electrical components to ensure long service life
- ♦ Hydraulic cylinders made of seamless hone tubes & hard chrome plated rod. Latest technology PTFE seals with bronze guide tapes in hydraulic cylinders ensure long life.
- ♦ Open Throat welded Structure



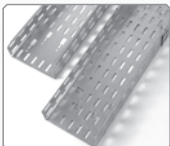
These presses are designed for various applications like straightening, trimming, Punching & stamping applications. Its unique design offers the flexibility & ease of operation as three sides are open.

MODEL	CAPACITY	RAM STROKE	OPEN HEIGHT	CLOSED HEIGHT	TABLE SIZE	NO. OF STROKE / MIN	THROAT DEPTH	POWER
	M Ton	mm	mm	mm	mm	CON. 25MM STROKE	mm	Hp
EN CHP 20	20	100	350	250	300 x 300	8	150	2
EM CHP 30	30	100	350	250	400 x 400	8	200	3
EM CHP 40	40	100	350	250	400 x 400	13	200	5
EM CHP 50	50	125	400	275	400 x 400	11	250	5
EM CHP 80	80	125	400	275	500 x 500	14	300	7.5
EM CHP 100	100	150	600	450	600 x 600	16	300	10
EM CHP 125	125	150	600	450	600 x 600	16	300	10
EM CHP 150	150	200	600	400	750 x 750	16	300	15
EM CHP 175	175	200	600	400	750 x 750	16	350	15
EM CHP 200	200	200	600	400	750 x 750	16	400	20

\*\* As per requirement High Speed as well Servo Options are available.

## APPLICATIONS

- ♦ Hole, capsule & Square Punching in various sections & plates
- ♦ Various embossing shapes in sheet metal
- ♦ Straightening of round bar, I-beam & plates
- ♦ Punching & cutouts in panel enclosure & busbar
- ♦ Bending of sheet metal and plates
- ♦ Forming of different shapes in sheets & plates
- ♦ Blanking, Trimming, Punching & Stamping Applications in plates





# HYDRAULIC SERVO PRESS

RANGE | 50 Tons to 300 Tons

## ► SALIENT FEATURES

- ✦ Customized Indigenous robust FE Analysed structure design
- ✦ Available in H Type, C Type & Pillar Type Design
- ✦ Specially designed Positive locked load bearing structure for longer life
- ✦ High-Speed Ram movements ensure Higher productivity & lesser cycle time
- ✦ Energy Efficient - Reduce power consumption up to 60% in different operating of condition
- ✦ High positioning accuracy & repeatability
- ✦ High up & down Ram speed up to 180mm/sec, Drawing speed up to 20 mm/sec
- ✦ Microprocessor based PLC based controller with on screen controls of functions and productivity reports
- ✦ Silent & smooth machine operation with Very low noise level
- ✦ The frame is machined on FLOOR BORING MACHINE ensuring single reference accurate machining
- ✦ Stable hydraulic oil temperature ensures consistent accuracy
- ✦ Detachable bolster design
- ✦ Illuminated working area



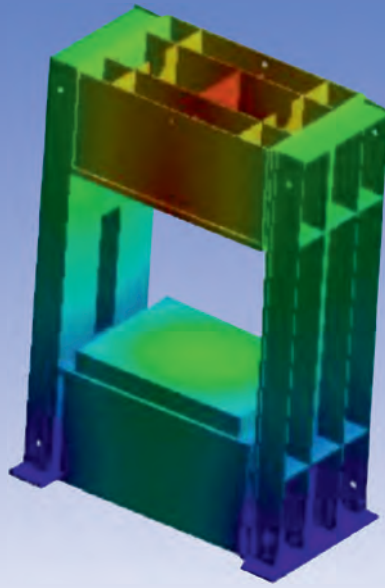
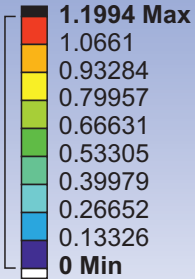
## STANDARD ACCESSORIES

- ✦ Main drive High Torque Servo Motor with Controls
- ✦ User Friendly 7" Touch Screen Interface HMI
- ✦ Production Counters (Total, Batch)
- ✦ Mould Data Storage memory & Management System
- ✦ On Screen stroke adjustment of cylinder
- ✦ On Screen pressure & Tonnage setting
- ✦ Compact Hydraulic systems with Logic, conventional & Servo valves
- ✦ Hydraulic Overload Protection
- ✦ Ram reversal with pressure sensing or limit sensing by selection
- ✦ Long lasting slide Guiding Arrangement
- ✦ Dual Check Safety Electrical Circuit
- ✦ Service Platform & Monkey ladder for easy accessibility
- ✦ Positive stopper for Ram holding
- ✦ IP 54 class electrical panel & closures
- ✦ Two-hand operator safety to ensure accident-free operation

## OPTIONAL ACCESSORIES

- ✦ Infrared safety curtain interface on front & rear side of machine to ensure safe working on machine.
- ✦ Stress relieved structure
- ✦ Low oil level alarm
- ✦ High oil temperature alarm
- ✦ Transparent Safety cover
- ✦ Robot interface
- ✦ Industry 4.0 interface

**C:Static Structural**  
 Total Deformation  
 Type: Total Deformation  
 Unit: mm  
 Time: 1  
 29-12-2021 21:40



We carry out Finite element analysis for all customised / standard Press structures with in house design studio.

FEA is a computerized analysis & stimulation of structure under load to ensure stability & Rigidity.

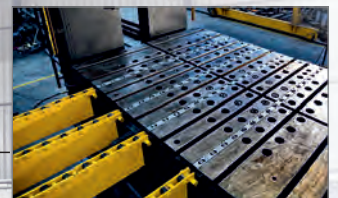
**OPTIONAL ACCESSORIES**



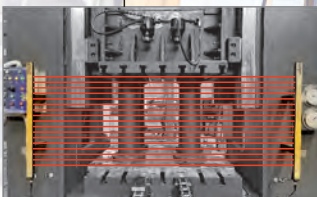
Adjustable 8 points  
 Self-Lubricated (Graphite impregnated bronze material)  
 Oil less Guide ways



Quick Die Hydraulic clamping



Hydraulic Die lifting



Infrared safety curtain interface on front & rear side of machine.



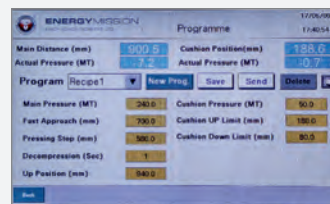
Die resting Support Arm



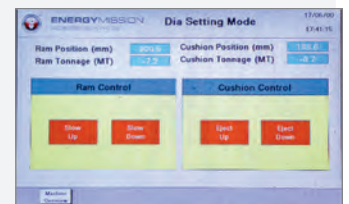
Two-hand operator safety to ensure accident-free operation



On Screen pressure & Tonnage setting



On Screen stroke adjustment of cylinder



Manual Die setting mode



## ACHIEVEMENT



**AWARDED AS  
"OUTSTANDING  
ENTREPRENEUR  
OF YEAR" IN YEAR  
2008-09 & YEAR 2014-15**

## PRODUCTS



CNC Press Brake



NC / Hyd. Press Brake



Hyd. Press Brake



Double Pinch Plate Roller



CNC / NC Shearing Machine



Hyd. Shearing Machine



Busbar Machine



Iron Worker Machine



Hyd. Deep Drawing Press



Hyd. C & H - Frame Press



Hyd. Servo Press



CNC V Grooving

## SOME OF OUR CLIENTS



**ENERGYMISSION**  
MACHINERIES (INDIA) PVT. LTD.

**SCAN FOR LIVE CHAT**  
**+91 99790 66669**



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