





#### An ISO 9001:2015 Certified Company

#### About Us

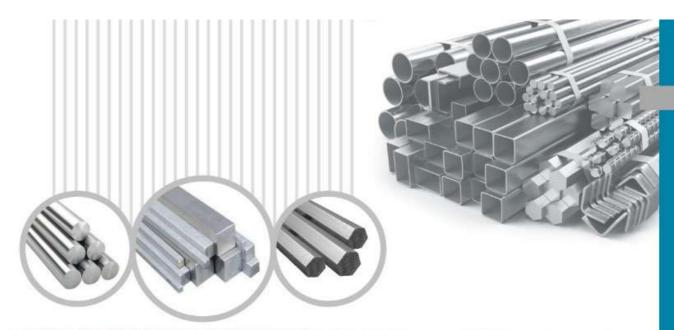
SOHIT ENGINEERING WORKS is a synonym of technology. The company is managed by team of technocrats headed by Mr. Sohit Parmar, who is having over two decades of expertise in sawing industry across the various area Machine Design, R&D, Tolling's & Automation. The Registered office is located at Central India - Bhavnagar - Gujarat.

SOHIT ENGINEERING WORKS focuses to manufacture high quality and reliable Machine & Machinery products at our state of the art manufacturing facilities in Bhavnagar- India. Continuous research and development - always searching for a better way - has enabled us to take advantage of our own advanced precision technologies and sophisticated engineering experience and use them to improve the machines.

The company is committed to supply high premium grade products with strong innovation to ensure the international standards. We believe on establishing customer trust by delivering products and services that meet customer expectations.

Our design and manufacturing engineers keep pace with emerging industrial trends. We closely listen to the needs and concerns of our customers and respond with innovations to help them maintain their competitive edge.







#### **Our Strategy**

We believe to Sale not only product, but also Technology.

We believe to grow with our customers by suggesting accurate product with strong Technical support.

#### Work Methodology

SOHIT ENGINEERING WORKS follows a well-defined work methodology for organized working, which leads to zero errors and higher efficiency to meet customer's timely requirement with continuous developement process. All activities controlled by well experienced engineer's team. The Work Methodology includes.

- Understanding of customer requirement.
- Deep study of existing process system
- Design & selection of suitable product.
- Establish method & paramenters for optimization of process.
- Solution of operational problem.

## **SOHIT-CS-80**

# CNC AUTOMATIC CIRCULAR SAW HIGH SPEED SOLID BAR CUTTING MACHINE

- ▶ High precision machine with the cut-length accuracy upto +/- 0.050mm. Using high precision ball screw with AC servo motor for the super fast and precise movement of the shuttle table. Rigid construction of the slant type cutting head (Model SOHIT-CS-80,Moves on state of the art Linear Motion Guide ways which facilitates very accurate and nearly friction less movement. Because of the use of linear motion guides the life of cutter is substantially increased.
- Micro mist oil used as coolant is clean, eco-friendly and highly effective. No water-flood coolant is used thus no spillage and no dirty shop-floors. No requirement of coolant filtration processing. Swarf generated from cutting is absolutely dry thus the cost-realization of scrap after selling is much better than conventional band-sawing machines. This implies better business economics!
- Ergonomically designed Electric control panel with HMI touch screen, located at the front-bottom for easy operation and maintenance.
- ▶ Back-Lash Free Gear Box using Electro Magnetic Powder Break Mechanism, which improves the cutting finish and enhances the cutter life.
- HMI display feature lot size programmed & cut completed. Program number in use, current drawn by saw motor. etc.
- Excellent cut-surface finish which does not require any facing operations. Thus significant material and production time saving.
- Longer cut pieces can be cut very easily as the shuttle stroke is 1000mm, with multi indexing.
- PLC programmable controlled Auto lubrication system for periodic and desired Quantity lubrication.
- Ergonomically designed machine canopy provides ample space for cutter change, regular check up and preventive maintenance.
- > Variable vice pressure for cutting pipes (Optional)
- Bar loader for rounds, for Automatic transfer of the bars into the machine. (Optional)
- Automatic Bar loader for Square/Hex jobs, for continuous feeding of the bars into the machine. (Optional)



#### **Applications of Circular Saw Machines:**

- Most suitable for cold forge shops as very close weight variation in cut piece
- Forging Units
- Cutting Traders
- Automobile Industries
- Fitting/ Fasteners Manufacturing
- Arms & Ammunitions
- Infrastructure
- Refineries & Petrochemical
- Forging Units to cut end pieces
- End cutting in CNC production centres for Auto components.
- General purpose application where batch cutting required.



Cutting Capacity	Round Bar	10-80 mm
	RCS Bar	10-65 mm
	Stock Bar Length	3-6 mtr.
	Cut-Off Length	6mm full bar length
	Remnant Length (in mm)	50
	Туре	TCT / HSS
Circular Saw Cutter	Dia. X Thickness Body	285/315x2.0x1.70x32
	Thickness x Bore	4/9/50 & 4/11/63
	Nos. of Mounting Hole & PCD	4/12/90
	Saw Speed by VFD	50-200 mpm
	Coolant	Flood / Micromist
Coolant	Flood Coolant (Optional)	80 Ltrs.
	Tank Capacity	
	Micro-mist Tank Capacity	0.5 Ltrs.
	Air Pressure for Micro-mist	6 Bar
Saw Motor	RPM /Phase / Volts /Hertz	1440/3/ 415/50
Hyd. Motor	Power (KW /HP)	11.2 KW / 15HP
	Power (KW /HP)	2.2 KW / 3 HP
Hydraulics	Tank Capacity	120 Ltrs.
Electricals	Control Volts	24 V DC
	Supply	415 V/3 Ph/ 50 Hz
Floor Space Machine Size	LxWxH without auto loader	2500x2500x1800
	in mm (approx.)	
Weight (Approx.)	Standard Machine	3000 Kgs.

# **SOHIT-CS-80**

SEMI AUTOMATIC CIRCULAR SAW HIGH SPEED SOLID BAR CUTTING MACHINE





**SOHIT-CS-80** 

#### Specifications:

SOHIT
Mild Steel
SOHIT-CS-80
1500 Kg
L 600 X W 750 X H 1500 mm
80 mm
65 mm
115 mm
7.5 HP, 1400 RPM, 3Ph, 440V, 50Hz
TCT / HSS
285 / 315 / 360
95-160 RPM
Manual
Flood / Micromist
24 V DC

#### Other Details:

- Electric motor as per design rating is directly coupled to the reduction gear box and mounted on rigid sliding head having clearance less table for vibration free cutting to optimize production and tool life.
- Output shaft of Gear Box has built-in construction arbor with flange with locking pins (4 Nos.) is provided.
- Single piece construction of cutter arbor with Gear Box shaft givesrun out free rotation to the cutter.
- > The saw speed can be controlled by A.C.Frequency Drive depending upon the application.
- Micro Mist Cooling Arrangement.
- Material indexing manual.
- Manual length setting arrangement is provided.
- Cutter feed through servo motor and ball screw.

#### **Applications of Circular Saw Machines:**

- Arms & Ammunitions
- Infrastructure
- Refineries & Petrochemical
- Forging Units to cut end pieces
- End cutting in CNC production centres for Auto components.
- General purpose application where batch cutting required.



# **SOHIT-400-ATS**



# CNC AUTOMATIC DUAL AXIS SERVO PIPE & BAR CUTTING MACHINE

#### **All Electricals Equipments**

Schneider

#### **All Hydraulic Equipment**

Nachi Japan

All Ball Screw, Shaft & LM Guide

Hiwin

Main Motors / Hydraulic Motors

Siemens / ABB

Gears

DIN - 6 (German Standard)

**Fully Automatic Lubrication System** 



#### Specifications:

Max OD	165mm
Max Size of Bunch	70x70 (any combination)
Max Wall Thickness (ms)	10 mm
Blade Size Applicable	275/ 300/ 315/ 400/ 450/ 500
Machine Weight	2.2 Ton
<b>Machine Dimension Feet</b>	7.0 x 4.6 x 6.0

#### Other Details:

- Auto feed (Bunch Cutting) Auto clamping Auto Cut piece Ejecting, PLC & Servo Control Machine, Length Accuracy within +/- 0.10 mm. programmable up to 5 different lengths.
- Main Motor 7.5 hp, Output RAN = Variable between 20-120
- Material Feeding is servo operated
- Cutting feeding source servo Operated
- Clamping source is hydraulic.

A fully automatic 2 axis servo controlled machine which as both material feeding and cutter feeding source as servo motor. This fully automatic machine can create 1000 different cutting programs. Each programs will have information such as your given name, nos of pipes in bunch which will be cut, appropriate RPM for the same and defined cutter path with variable cutter travel such as T1, T2, T3 (slow cutter feed at larger load and faster cutting feed at lower load in one single or bunch of pipes). 5 different length combination (within 6 m), and applied cutter thickness. Once this data is created as programmed, then it just needs to be recalled from the drop down when you change job. this reduces 80% of your changeover time, same from human errors and most important, archives best blade life and least cutter cycle time. total length tolerance is maintained with +/- 0.10mm. with exact cut piece counting even with bunch cutting. Machine software has many interlocks which prevent many human errors which is responsible for cutter breakage other accidents. Machine as fully automatic lubrication system which will keep lubricating the all the required parts of the machine on regular intervals. Administrator has full control on the machine utility including data of hours of machines usages and 3 different counters.

## SOHIT-385-ATS



# CNC AUTOMATIC PIPE, TUBE & BAR CUTTING MACHINE

#### All Electricals Equipments

Schneider

**All Pneumatics Equipment** 

**Janatics** 

All Ball Screw, Shaft & LM Guide

Hiwin

**Main Motors** 

ABB

**Auto Lubrication System** 



#### Specifications:

Max OD	115mm
Max Size of Bunch	70x70 (any combination)
Max Wall Thickness (ms)	7 mm
Blade Size Applicable	250 / 275 / 300 / 315 / 350 / 400
Machine Weight	1.5 Ton
Machine Dimension Feet	6.1 X 3.6 X 5.0

#### Other Details:

- Auto feed (Bunch Cutting) auto Clamping Auto Cut piece Ejecting, PLC & Servo Control Machine, Length Accuracy within +/- 0.10 mm.
- Main Motor 3 HP and Variable Frequency Drive Gives Between 22-90 rpm.
- Clamping Source is Pneumatic. (Option of Hydraulic cylinder for heavy cutting.)
- Cutting Feeding is Pneumatic (Option of Hydraulic Cylinder)

Fully automatic cutting machine with bundle cut option. Standard 90° Servo-PLS control machine with 7" touch screen interface with programmable cutting schedule. User can feed in 5 different sized, each size can have counter stopper and resettable counter for complete date keeping. 6 interlock / protection (alarms) eliminate malfunction or accident due human or other circumstantial mistakes/error. Length tolerance withing +/- 0.10 mm. self written software allows continues upgrades which are free for all previous machine owners. On-board error detection system allows immediate help and repair of machine of most of malfunction. Manual use option to use the machine on manual mode. user can feed in actual RPM required on the touch screen, no switch selection or chart calculation like other machine of same class. Input air pressure interlock, low pressure detection cum alarm. This features are not available with any machine of same range. Current Overload Interlock through Software is very accurate, thus prevents blade breakage up to 80%

# SOHIT-350-MA



# MANUAL PIPE, TUBE & BAR CUTTING MACHINE WITH PNEUMATIC CLAMPING & AUTO START

#### Features:

- National Auto Clamp
- Manual Type Manual Feed
- ▶ Clamping Pneumatic

# Specifications:

Square Bar (MS)

Main Wotor HP	3 HP / ABB N	лаке
<b>Coolant Motor</b>	0.1 HP	
Output RPM	40 / 80 RPM	
TotalWeight	210 Kg	
Dimensions (Floor)	2.6f x 3.5f	
Saw Angle	90 degree	45 degree
Round Pipe	95 mm	75 mm
Square Pipe	90x90 mm	70x70 mm
Round Bar (MS)	38 mm	25 mm

38 x 38 mm

25 x 25 mm

3 HD / ARR Make



UP TO W.T. UP TO OD	0.8	2.0	4.0	6.0	9.0
25	OK	OK	OK	OK	NOT POSSIBLE
50	OK	OK	OK	Max. Cutting Capacity	NOT POSSIBLE
70	OK	OK	OK	Max. Cutting Capacity	NOT POSSIBLE
90	OK	OK	Max. Cutting Capacity	NOT POSSIBLE	NOT POSSIBLE

# **SOHIT-350**



# SEMI AUTOMATIC PIPE, TUBE & BAR CUTTING MACHINE

#### Features:

- Semi Automatic type, Auto Clamp, Auto Cutting Manual Feed
- Feed = hydro-pneumatic, clamping=pneumatic

Main Motor HP	3 HP / ABB Ma	ake
<b>Coolant Motor</b>	0.1 HP	
Output RPM	65 / 32 RPM	
Total Weight	560 Kg	
Dimensions (Floor)	2.6f x 3.5f	
Saw Angle	90 degree	45 degree
Round Pipe	110 mm	90 mm
Square Pipe	100x100 mm	90x90 mm
Round Bar (MS)	50 mm	30 mm
Square Bar (MS)	50 x 50 mm	30 x 30 mm



UP TO W.T. UP TO OD	0.8	2.0	4.0	6.0	9.0
25	ОК	OK	ОК	ОК	ОК
50	OK	OK	OK	OK	Max. Cutting
70	OK	OK	OK	OK	Max. Cutting Capacity
90	ОК	OK	Max. Cutting Capacity	NOT POSSIBLE	NOT POSSIBLE
110	ОК	OK	Max. Cutting Capacity	NOT POSSIBLE	NOT POSSIBLE

# **SOHIT-385**



# SEMI AUTOMATIC PIPE, TUBE & BAR CUTTING MACHINE

#### Features:

- Newly designed Heavy Duty Gearbox with all hardened and grind helical gears
- ZERO backlash for Life > Smooth Cutting even at heavy load
- Perfectly suitable for SS pipe and high carbon tube cutting Max blade life
- Semi automatic type, Auto clamp Auto cut Manual feed -- Matrix stopper.
- ▶ feed=hydro-pneumatic clamping= pneumatic
- > Option of VFD fitting for variable RPM, Overload interlock

Option of input-pneumatic pressure interlock

#### **Technical Cutting Specifications:**

Main Motor HP	3 HP / ABB Make
<b>Coolant Motor</b>	0.1 HP
Output RPM	35 / 90 RPM
Total Weight	600 Kg
<b>Dimensions (Floor)</b>	2.6f x 3.5f
Saw Angle	+45 - 90 - 45 degree
Round Pipe	114 mm
Square Pipe	100 x 100 mm
Round Bar (MS)	50 mm
Square Bar (MS)	50+50 mm



UP TO W.T. UP TO OD	0.8	2.0	4.0	6.0	9.0
25	OK	ОК	ОК	ОК	ОК
50	OK	OK	OK	OK	OK
70	OK	OK	OK	OK	Max. Cutting Capacity
90	OK	OK	OK	Max. Cutting Capacity	NOT POSSIBLE
110	OK	OK	OK	Max. Cutting Capacity	NOT POSSIBLE

# SOHIT-400-SH



# SEMI AUTOMATIC FULLY HYDRAULIC SLANT HEAD PIPE & BAR CUTTING MACHINE

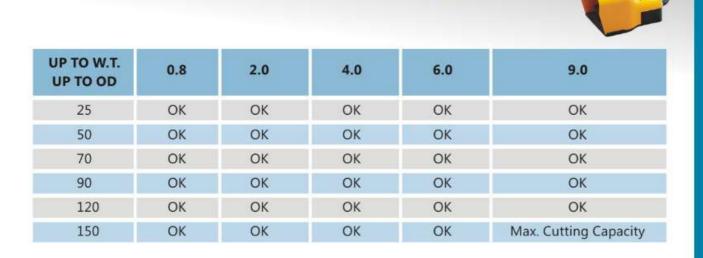
#### **Acute Features:**

Semi automatic type,

Auto clamp - Auto cutting - Manual feed

Feed - Hydraulic, Clamping = Hydraulic

7.5 HP
0.1 HP
L 20 rpm - 70 rpm (std.)
H 35 rpm - 120 rpm (std.
960 Kg
3.6f x 4.9f
90 - 45degree
165 mm
135x135 mm
60 mm
50 x 50 mm



# SOHIT-385-HA



## SEMI AUTOMATIC HIGH SPEED ALUMINIUM PIPE, TUBE, BAT & ALL KIND OF PROFILE CUTTING MACHINE



#### **Acute Features:**

- Semi automatic ytpe, Auto clamp Auto cut Manual feed, Matrix stopper
- Feed = hydro pneumatic, clamping = pneumatic

Main Motor HP	3 HP / ABB Make	Saw Angle	+45 - 90 -45 0	legree
<b>Coolant Motor</b>	Noga Cool (Israel)	Round Pipe	@90 degree	@45 degree
Output RPM	2800	Square Pipe	110mm	90mm
TotalWeight	450 Kg	Round Bar (MS)	100 x 100 mm	90 x 90 mm
Dimensions (Floor)	3.2f x 4.0 f	Square Bar (MS)	150 x 75 mm	100 x 75 mm

# **SOHIT-385-AUTO**



# CNC AUTOMATIC HIGH SPEED ALUMINIUM PIPE, TUBE, BAR & ALL KIND OF PROFILE CUTTING MACHINE

#### **Acute Features:**

- > Auto feed (bunch cutting) Auto clamping Auto cut piece Ejecting,
- PLC Control Machine, pneumatic Length feeding, Accuracy within +/- 0.2 mm.
- Main motor 3HP (2800), Output RPM = Variable between 2000-4800.
- Clamping Source is Pneumatic,

#### **Cutting Feeding Source - Hydro Pneumatic**

Fully automatic cutting machine with bundle cut option. standard 90, PLC control machine with 3.5" mono screen interface or 7" inch touch screen interface.Length tolerance within +/- 0.10 mm. self written software allows continues upgrades which are free for all previous machine owner. On-board error detection system allows immediate help and repair of machine of most of malfunction. Manual use option to use the machine on manual mode.



pan
S / ABB
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Max OD (Hollow)	120mm		
Max Size of Bunch	70x70 (any combination)		
Max Solid Alu. Size	65.0 mm		
Blade Size Applicable	300 / 350 / 400		
Machine Weight	850 Kg.		
Machine Dimension Feet	6.1 X 3.6 X 5.0		

# SOHIT-100-NH



### **SEMI AUTOMATIC PIPE & TUBE** NOTCHING MACHINE

#### **Acute Features:**

- Semi Automatic type, Auto clamp, Auto Notch - Manual feed, Matrix stopper
- Feed = hydro / pneumatic, clampig = pneumatic
- Option of Input-pneumatic pressure interlock



#### Specifications:

Main Motor HP	3 HP	Notching Angle	90 degree	45 degree
<b>Coolant Motor</b>	0.1 hp	Max. Round Pipe	50mm	35mm
Output RPM	320-1700 RPM	Max. Square Pipe	50 x 50 mm	35 x 35 mm
TotalWeight	260 Kg	Max. Notch Radius	25 mm	25 mm
Dimensions (Floor)	2.6 f x 3.9 f	Min. Notch Radius	5 mm	5 mm



Manufacture by:

### SOHIT ENGINEERING WORKS

Mfg. & Exporter: All types of Pipe, Tube & Bar Cutting Machine

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