



# VP SYNERGIC WELD SOLUTIONS PVT LTD

VPSWSPL - PRODUCTS

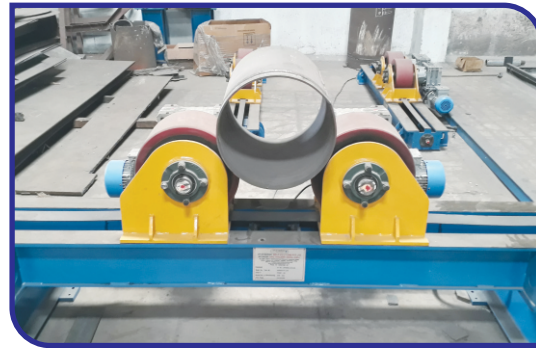
WELDING & CUTTING

INNOVATIVE

SOLUTIONS



## SELF CENTERING / CONVENTIONAL WELDING ROTATORS



### TECHNICAL SPECIFICATION

MODEL	CAPACITY	ROLLER DIA	ROLLER WIDTH	JOB DIA MIN	JOB DIA MAX	LINEAR SPEED M/MIN
VPSWSCR-2	2T	200	80	100	1500	0.1m/min to 10m/min
VPSWSCR-5	5T	250	120	250	2800	
VPSWSCR-10	10T	300	130	300	3200	
VPSWSCR-20	20T	350	180	500	4500	
VPSWSCR-30	30T	400	220	500	5000	
VPSWSCR-50	50T	400	220	500	5000	
VPSWSCR-60	60T	450	2*180	500	5000	
VPSWSCR-80	80T	450	2*180	800	6000	
VPSWSCR-100	100T	500	2*200	800	6000	

- Equipment Structure : Fabricated, Stress relieved and machined – Higher structural rigidity  
 Drive : Dual drive with AC motor driving a reduction gear arrangement.  
 Speed Control : The speed is adjustable for precise speed control within operating range through electronic variable frequency drive.  
 Control Box & Motors : IP45 electric control box and motors  
 Rollers : The rollers are fabricated steel rims with PU, Steel & Rubber rolls  
 Safety Features : Over load disc on PU rolls to prevent rupturing of lined surface due to overload. Electronic & thermal overload protection for drive motor.

### STANDARD FEATURE

- Roller material : Polyurethane (PU), Steel Roll (MS) & Rubber Roll  
 Type of operation : Pendant & remote control box with 05mtrs and digital display in mm/min. control box allows rotating speed adjustment: forward, reverse, and stop  
 Power supply : 415V, 3Ø, 50Hz  
 Diameter variants : Manual by lead screw adjustment & Bolt type adjustment

### \* OPTIONAL

- \* Steel / Rubber lined rollers
- \* Motorized / Manual Bogie
- \* Foot Switch
- \* Anti-creep device

## SELF ALIGNED WELDING ROTATORS



### TECHNICAL SPECIFICATION

MODEL	CAPACITY	ROLLER DIA	ROLLER WIDTH	JOB DIA MIN	JOB DIA MAX	LINEAR SPEED M/MIN
VPSWSAR-5	5T	250	100	250	2500	0.1m/min to 10m/min
VPSWSAR-10	10T	300	120	300	3200	
VPSWSAR-20	20T	350	150	500	3500	
VPSWSAR-30	30T	400	160	500	4500	
VPSWSAR-50	50T	400	160	500	4500	
VPSWSAR-60	60T	450	180	700	5000	
VPSWSAR-80	80T	450	240	800	5500	
VPSWSAR-100	100T	500	240	1000	6000	

- Equipment Structure : Fabricated, Stress relieved and machined – Higher structural rigidity.  
 Drive : Dual drive with AC motor driving a reduction gear arrangement.  
 Speed Control : The speed is adjustable for precise speed control within operating range through electronic variable frequency drive.  
 Control Box & Motors : IP45 electric control box and motors  
 Rollers : The rollers are fabricated steel rims with PU, Steel & Rubber rolls.  
 Safety Features : Over load disc on PU rolls to prevent rupturing of lined surface due to overload. Electronic & thermal overload protection for drive motor.

### STANDARD FEATURE

- Roller material : Polyurethane (PU), Steel Roll (MS) & Rubber Roll.  
 Type of operation : Pendant & remote control box with 05mtrs and digital display in mm/min. control box allows rotating speed adjustment: forward, reverse, and stop  
 Power supply : 415V, 3Ø, 50Hz

### \* OPTIONAL

- \* Steel / Rubber lined rollers
- \* Motorized / Manual Bogie
- \* Foot Switch
- \* Anti-creep device



## WELDING POSITIONERS



### TECHNICAL SPECIFICATION

MODEL	Load capacity (Kgs)	*Table Rotation Speed(RPM)	*Tilting Speed (RPM)	Table Diameter (MM)	*No of T Slots	*Table Tilting degree	Centre of Gravity (MM)	Eccentricity (MM)	Input Voltage (V)
VPSWP-25	25	0.10 – 1.0	Manual	300	4	0-90°	100	50	415V/3Ø/ 50Hz
VPSWP-50	50	0.10 – 1.0	Manual	300	4	0-90°	100	50	
VPSWP-100	100	0.04 – 0.4	Manual	500	4	0-90°	150	75	
VPSWP-250	250	0.04 – 0.4	Manual	600	4	0-90°	150	75	
VPSWP-500	500	0.05 – 0.5	0.4	750	4	0-90°	200	100	
VPSWP-1000	1000	0.05 – 0.5	0.4	1000	4	0-100°	300	150	
VPSWP-2500	2500	0.05 – 0.5	0.2	1200	4	0-100°	300	150	
VPSWP-5000	5000	0.05 – 0.5	0.2	1500	4	0-110°	300	150	
VPSWP-10000	10000	0.05 – 0.5	0.2	2000	4	0-120°	300	150	
VPSWP-15000	15000	0.03 – 0.3	0.15	2000	4	0-120°	300	150	
VPSWP-20000	20000	0.03 – 0.3	0.15	2500	4	0-120°	300	150	
VPSWP-25000	25000	0.01 – 0.1	0.15	3000	4	0-120°	300	150	
VPSWP-50000	50000	0.01 – 0.1	0.15	3500	4	0-120°	300	150	

- Equipment Structure : Fabricated, Stress relieved and machined – Higher structural rigidity.
- Speed Control : The speed is adjustable for precise speed control within operating range through electronic variable frequency drive.
- Control Box & Motors : IP45 electric control box and motors
- Safety Features : Electronic & thermal overload protection for drive motor.
- Type of operation : Pendant & remote control box with 05mtrs and digital display in mm/min.  
Control box allows rotating speed adjustment: forward, reverse and stop.

#### \* OPTIONAL

- \* Foot / Remote Switch Rotation control
- \* Vertical up/down Lifting of Positioner
- \* Square Faceplate for special requirement
- \* Tooling/Adaptors/fixtures for component holding & clamping.



## WELDING TURN TABLES



### TECHNICAL SPECIFICATION

MODEL	Load capacity (Kgs)	*Table Rotation Speed (RPM)	Table Diameter (MM)	*No of T Slots	Input Voltage (V)
VPSWTT-25	25	0.20 – 2.0	300	4	415V/3Ø/50Hz
VPSWTT-50	50	0.20 – 2.0	300	4	
VPSWTT-100	100	0.15 – 1.5	500	4	
VPSWTT-300	300	0.15 – 1.5	600	4	
VPSWTT-500	500	0.10 – 1.0	750	4	
VPSWTT-1000	1000	0.10 – 1.0	1000	4	
VPSWTT-2500	2500	0.05 – 0.5	1500	4	
VPSWTT-5000	5000	0.05 – 0.5	2000	4	
VPSWTT-10000	10000	0.05 – 0.5	2000	4	
VPSWTT-15000	15000	0.05 – 0.5	2500	4	
VPSWTT-25000	25000	0.01 – 0.1	3000	4	



- Equipment Structure : Fabricated, Stress relieved and machined – Higher structural rigidity.
- Speed Control : The speed is adjustable for precise speed control within operating range through electronic variable frequency drive.
- Control Box & Motors : IP45 electric control box and motors
- Safety Features : Electronic & thermal overload protection for drive motor.
- Type of operation : Pendant & remote control box with 05mtrs and digital display in mm/min. control box allows rotating speed adjustment: forward, reverse, and stop

#### \* OPTIONAL

- \* Foot Switch / Remote control for rotation
- \* No of T Slots
- \* Face plate with extended arm for special requirement
- \* Tooling/Adaptors/fixtures for component holding & clamping.

## HEAD & TAIL STOCK – WELDING MANIPULATORS



### TECHNICAL SPECIFICATION

MODEL	Load capacity (Kgs)	*Table Rotation Speed (RPM)	*Head stock Table Diameter (MM)	*Tail stock Table Diameter (MM)	*No of T Slots	Input Voltage (V)
VPSWHT-500	500	0.15 – 1.50	600	600	4	415V/3Ø/50Hz
VPSWHT-1000	1000	0.15 – 1.50	750	750	4	
VPSWHT-2500	2500	0.15 – 1.50	1000	1000	4	
VPSWHT-5000	5000	0.10 – 1.00	1000	1000	4	
VPSWHT-10000	10000	0.10 – 1.00	1200	1200	4	
VPSWHT-15000	15000	0.05 – 0.50	1500	1500	4	
VPSWHT-20000	20000	0.05 – 0.50	1500	1500	4	
VPSWHT-25000	25000	0.01 – 0.10	2000	2000	4	

- Equipment Structure : Fabricated, Stress relieved and machined – Higher structural rigidity.
- Speed Control : The speed is adjustable for precise speed Control within operating range through Electronic variable frequency drive.
- Control Box & Motors : IP45 electric control box and motors  
: Electronic & thermal overload protection for drive motor. Mechanical locking arrangement for Tail stock.
- Safety Features
- Type of operation : Pendant & remote control box with 05mtrs and digital display. control box allows rotating speed adjustment: forward, reverse and stop



#### \* OPTIONAL

- \* No of T Slots
- \* Face plate diameter may vary to suite customer requirement
- \* Face plate with extended arm for special requirement
- \* with Vertical up/down axis
- \* Moveable Tail stock base.



## TECHNICAL SPECIFICATION

MODEL	*Boom lift height	*Boom horizontal traverse length	Vertical lift speed	*Boom Travel speed	*Trolley Travel Speed	*Column swivel	Input Voltage (V)
VPSWC&B-1X1	1000mm	1000mm	Fixed speed @ 600 mm/min	100 to 1000mm/min	Fixed speed @ 2000mm/min	Manual / Motorized	415V/3Ø/50Hz
VPSWC&B-2X2	2000mm	2000mm					
VPSWC&B-3X3	3000mm	3000mm					
VPSWC&B-4X4	4000mm	4000mm					
VPSWC&B-5X5	5000mm	5000mm					
VPSWC&B-6X6	6000mm	6000mm					
VPSWC&B-7X7	7000mm	7000mm					
VPSWC&B-8X8	8000mm	8000mm					

## STANDARD FEATURES:

- Tip Load 150 / 300Kgs. (GTAW/GMAW/SAW Single or Multi wire)
- Column & Boom with a travel length in the vertical direction and in horizontal direction for TIG/MIG/SAW/PTA welding application
- Trolley Fixed base or Moveable Base ( Manual/Motorized)
- Safety Anti fall arrangement for boom with limit switch
- Safety Ladder
- 100 mm stroke Motorized X, Y slides
- Cable Management system for Column & Boom
- Speed Control: The speed is adjustable for precise speed control Within operating range through electronic variable frequency drive.
- Control Box & Motors : IP45 electric control box and motors
- Safety Features : Electronic & thermal overload protection for drive motor.
- Type of operation : Pendant & remote control box with 05mtrs and digital display in mm/min. Control box allows rotating speed adjustment: forward, reverse and stop.
- Boom anti-fall safety device on 3X3 column & boom and above only

## \* OPTIONAL

- \* Manual / Motorized Swivel
- \* Flux Recovery unit
- \* Tandem/Multi SAW Application
- \* Track Rails for Trolley movement
- \* Platform for power source, wire drum & accessories



## LONGITUDINAL SEAM WELDERS

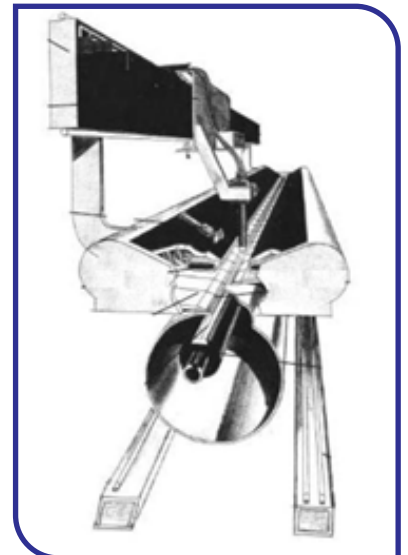
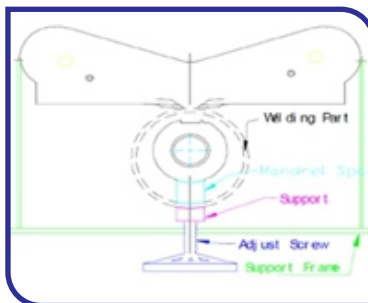
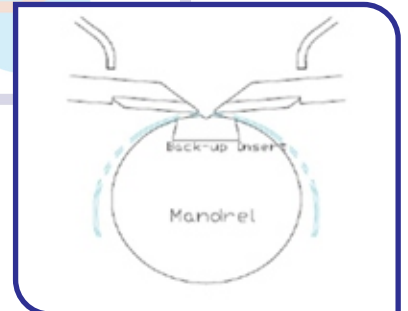
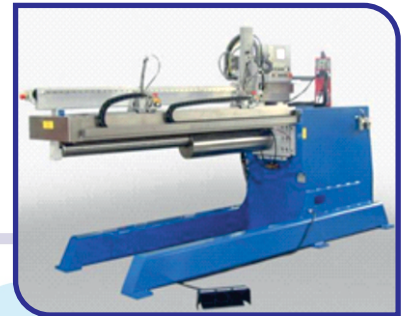


### TECHNICAL SPECIFICATION

We have welding stroke lengths ranging from 400 mm to 6000 mm and component diameter ranging from 70mm to 1500\* mm.

\* Customized sizes and designs are also possible on customer specific requests.

- Designed to suit linear seam welding of cylinders, tanks, flat sheets by GTAW, GMAW, PAW and SAW processes.
- Standard, Precision and Ultra-Precision versions available.
- Can be custom built to meet customer needs.
- Side beam track is fitted with hardened ways for smooth Precise travel.
- Carriages use hardened bearings or rollers as guides and AC/DC Motor drives for linear movement with rack & pinion drive.
- Continuous Foot Amptrol to operate the pneumatic finger banks.
- Various speed ranges and speed holding accuracies are available.
- Copper backing bars and copper finger tips are standardized.
- For welding 0.2 mm to 10 mm thick metals.



## PORTABLE FLAME AND AIR PLASMA CUTTING MACHINE

### TECHNICAL SPECIFICATION

DESCRIPTIONS	SPECIFICATIONS
Effective Cutting width	1.2/1.5 M
**Effective Cutting length	3 M
No of Heads	1 No (Default-Flame Head / Optional Air Plasma Head)
**Flame Cutting Thickness	6 to 75 mm
Flame Cutting Speed Range	0 to 800 mm/min
*Plasma Cutting Thickness	Plasma Source
Plasma Cutting Speed Range	0 to 3000 mm/min
**Torch height control	1 No ( For Plasma)
LCD Dimension	7 Inches
Cross Beam Length	1700mm
**Longitudinal Rail Length	3600mm
Gas Pressure	Max 0.1Mpa
Oxygen	Max 1.0Mpa
Plasma Air	Only pressed Air
Plasma Air Pressure	Max. 0.8Mpa
Input Voltage	Input Voltage
Power Supply Frequency	50HZ
Rated Power Supply	180W
Nesting Software	MTC Turbo nest or Equivalent



**\*Note:**

1. Air Plasma Cutting Thickness depends on selection of Plasma source.
2. Either Flame or Plasma head can be mounted or used at a time.

# CNC FLAME & PLASMA CUTTING MACHINE

## TECHNICAL SPECIFICATION

DESCRIPTIONS	SPECIFICATIONS
*Effective Cutting width	2.5 to 5 M
*Effective Cutting length	3M onwards
*No of Heads	1 Plasma, 1 Flame Head
Plasma Cutting	Depends on selection of plasma source based on plate thickness
*Plasma Cutting Speed Range	0 to 6 m/min
*Flame Cutting	6 - 100 mm
Flame Cutting Speed	0 to 0.9 m/min
*Strip Cutting torch	2 - 10 Nos.
*Vertical slide for torch Up/Down	2 - 10 Nos.
*Strip Cutting Thickness	10 - 50 mm
Transverse torch	1 CNC Flame
Driving Mode	Dual Drive
CNC Controller	Start Micro Step, Hypertherm, Victor or Equivalent
Transmission	Rack & Pinion
AVC for Plasma	1 No
Optional: THC for Flame – Capacitance Type	1 No
Transverse & Longitudinal Drive: AC Servo System	Panasonic / Yaskawa or Equivalent
Speed Control	Stepless Speed control
Power Supply	AC 220 V / 50 Hz
Cable and hose management	Cable Drag Chain
Nesting Software	Hypertherm, Fast CAM or Equivalent



**Note:** \* Plasma Cutting Thickness depends on selection of Plasma Source.  
 \* Recommended cutting thickness for Strip cutting is above 10mm.

### \* OPTIONAL

- \* 2.5MX4M - Light Duty / Above 3.1M X6M - Heavy Duty Machines
- \* Single Head CNC Flame (or) Plasma
- \* Double Head Flame & Plasma
- \* Strip Flame cutting Heads
- \* Extended Rail length is feasible as per customer cutting envelope

\* VPSWSPL offers customized machine range to suit customer's requirement.



## PEB BEAM WELDING LINE

**VPSWSPL PEB Beam** welding systems are used to automatically weld the Flange plate to a web plate to form a Pre-fabricated Beam. The beam line equipment comprise of conveyors, Web Splice welders. Tack welding machine, Pull through welder (Auto Welder), Twin wire SAW welding machine (Power source, wire feed head and controller), Pre settable welding heads and flux recovery units.



VPSWSPL offers total solution for Automatic and Manual welding of beams. VPSWSPL beam line for PEB includes CNC Plasma/Flame head cutting machine, Web/Flange Splice welder, Flange to Web Tack welder, Pull through Welder (Auto welder), Twin Wire SAW welding machines, Conveyors, etc. VPSWSPL provide comprehensive material handling system to support beam welding line.



VPSWSPL offers PEB Beam Welding line to customers based on production capacities which helps customer to start producing beams with lesser investment and can be enhanced at later stage based on the volume increase. This will be more helpful for the startup companies. We offer equipments from the range of 250 tons to 1000 tons per month productivity.



### Our Beam Welding Line (PEB) comprising of following equipments,

- CNC Plasma / Flame Cutting Machine
- Web/Flange Splice Welding Machine
- Beam Tack Welder
- PTW-Pull Through Welder(Auto Welder)
- Conveyors
- Twin Wire SAW Welding Machine
- Optional Beam Handling Equipments

Model →	PEBWL-1000	PEBWL-1200	PEBWL-1500	PEBWL-1850	PEBWL-2100
Web Thickness	4 to 10mm	4 to 12mm	4 to 12mm	4 to 16mm	4 to 16mm
Web Min. Width	200mm	200mm	200mm	200mm	200mm
Beam Overall Width	1000mm	1200mm	1500mm	1850mm	2100mm
Web Taper	15° Max.	15° Max.	15° Max.	15° Max.	15° Max.
Flange Thickness	5 to 12mm	5 to 16mm	5 to 20mm	5 to 25mm	5 to 25mm
Flange Width	150 to 400mm	150 to 400mm	150 to 500mm	150 to 500mm	150 to 500mm
Beam Length	2400mm Min.	2400mm Min.	2400mm Min.	2400mm Min.	2400mm Min.
Weld Fillet Size	4 to 8mm	4 to 8mm	4 to 8mm	4 to 8mm	4 to 8mm
Conveyor speed	10 M/Min	10 M/Min	10 M/Min	10 M/Min	10 M/Min

\* VPSWSPL offers customized machine range to suit customer's requirement.

## ROBOTIC WELDING/CUTTING SOLUTIONS

**SS-SHEET ROBOTIC  
LASER 3D CUTTING SPM**



**VP SYNERGIC**  
**ROBOTIC HYDRAULIC CYLINDER  
BARREL TO END CAP, BRACKET,  
PORT & PISTON ROD TO  
ROD EYE WELDING SPM**

**ROBOTIC ALUMINIUM TUBE  
FRAME WELDING SPM**



# ROBOTIC WELDING/CUTTING SOLUTIONS



**TRAILING ARM  
ROBOTIC WELDING SPM**

**AUTOMOTIVE LEVER  
SHIFT ROBOTIC  
WELDING SPM**



**SS- SWITCHGEAR BOX  
ROBOTIC  
WELDING SPM**





# ROBOTIC WELDING/CUTTING SOLUTIONS

**TRAILING ARM  
ROBOTIC WELDING SPM**



**AIR TANK RESERVOIR  
ROBOTIC WELDING SPM  
WITH LASER SENSOR TRACKING**

**SOLAR PANEL LOWER  
MOUNT BRACKET  
ROBOTIC WELDING SPM**

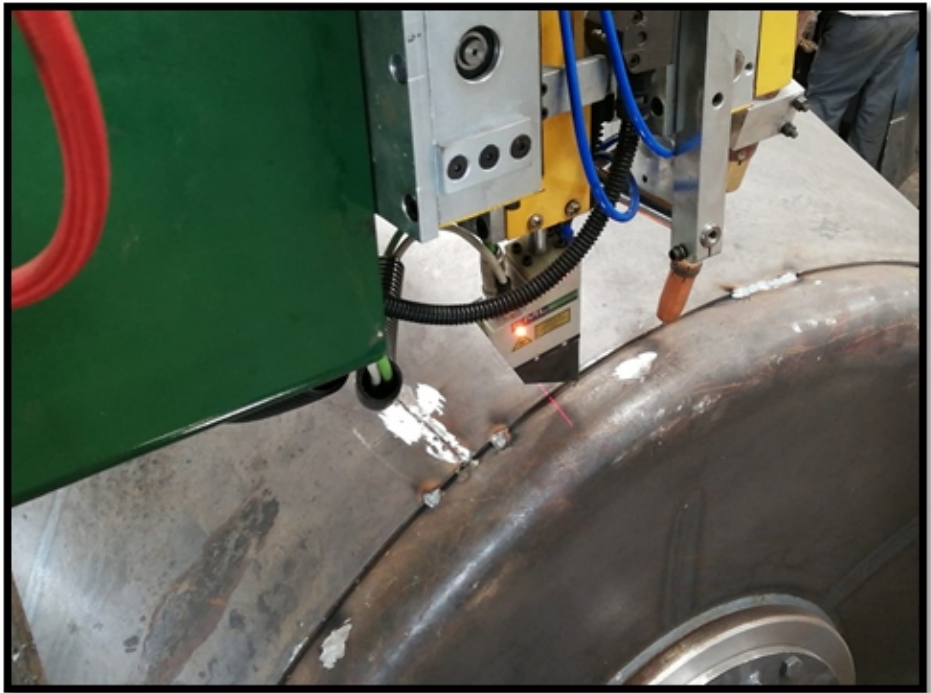


# COBOT WELDING SYSTEMS





## CONCRETE MIXER DRUM WELDING SPM



**CIR SEAM & LONG SEAM WELDING SPM FOR CONCRETE MIXER DRUM  
WELDING BY GMAW PROCESS WITH LASER SEAM TRACKING  
FOR AUTOMATIC WELD JOINT TRACKING FOR FLAWLESS  
AUTOMATION SOLUTIONS**

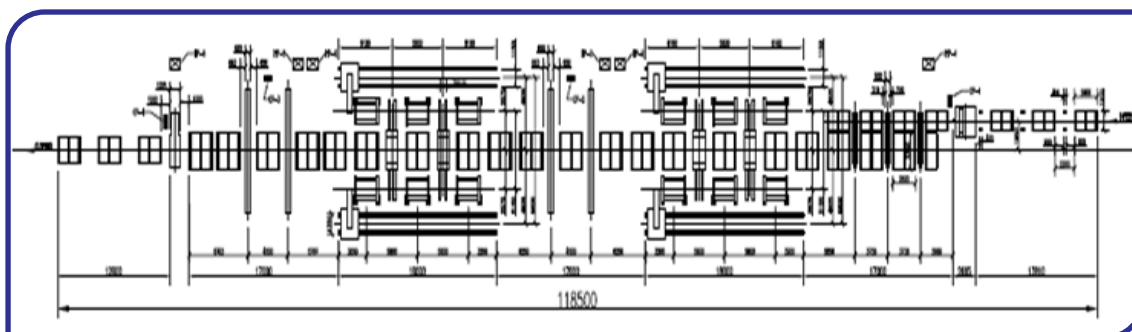


## HEAVY DUTY ( H BEAM) BEAM WELDING LINE

VPSWSPL offers H Beam (Heavy Duty) welding line to fabricate Beam of thickness from 10/12mm to 100mm. These beams are Boiler Support Beams, Railway Bridge Girder beams, Heavy structural beams, etc. VPSWSPL offers fully automatic line with complete beam handling equipment and also individual equipment's based on customer requirements.

**VPSWSPL offers Heavy Duty H Beam line with the following modules,**

- CNC Plasma /Flame Cutting Machine with Multi Torch Strip Cutting Heads.
- H Beam Assembly Welding Machine with Infeed & out feed Conveyors
- H Beam Auto/Cantilever SAW (Single/Twin/Tandem/Multi) Welding machine.
- H Beam Flange warpage (Straightening) Machine with Infeed & Outfeed Conveyors.
- H Beam End Facing Machine with Jigs & Fixtures.
- H Beam Shot Blasting Machine with infeed & Outfeed Conveyors
- Star/Plus Beam Welding Machine
- H Beam Handling Equipment's comprising of Conveyors, 90° Beam Tilters, 60° Beam Tilters, 180° Beam Flippers, Beam Transfer device, Roll over manipulator, etc

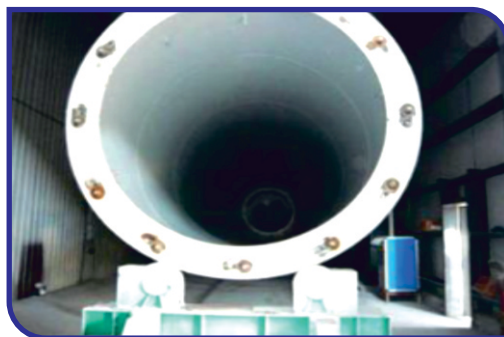


## WINDMILL TOWER FABRICATION LINE

VPSWSPL offers Turnkey solutions for Windmill Tower Manufacturing. We design based on output requirement of tower production, especially growing line concept which is Hydraulic based equipment to ease the tower fitup and welding. VPSWSPL offers full line with complete line of production equipments and also individual equipment's based on customer requirements.

**VPSWSPL offers turnkey solutions for windmill tower manufacturing with the following modules,**

- CNC Plasma & Flame Cutting Machine.
- CNC Plate Rolling Machine with Conveying Equipment
- Plate Bevellers ( Weld Joint Bevelling)
- Long Seam Welding Station
- Fit up Fixture for Flange to Stub Shell
- Bottom Flange to Shell Welding Equipment
- Growing Line for Shell to Shell fit-up & welding
- Blasting & Painting –Rotating Equipment.





# WE ARE ASSOCIATED WITH

**LORCH**  
smart welding



**ABB**



**Hypertherm**



**KAIYUAN**







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