

An ISO 9001 : 2008 Certified Co.

# CUBUILT ENGINEERS PVT. LTD.









www.cubuilt.com



















# **PROFILE**



Cu Built Engineers Pvt Ltd is an ISO 9001: 2008 Certified Company incorporated in the year 1995. We are well known by our trade mark Custom Built.

We are pioneer in the field of Design, Manufacture, Supply and Erection & Commissioning of complete range of Welding Automation Systems.

Under the visionary guidance of our respected Managing Director, Mr. P. S. Patil, we have attained distinguished position in the market. His vast domain expertise as well as business acumen have supported us to enlarging our operations globally.

#### Our Standard Products range is as follows:

- Welding Column & Boom
- Welding Rotators
- Hydraulic Shell to Shell Fit-Up Rotators
- Welding Positioners
- Welding Turn Table
- Head Stock & Tail Stock Set Up
- Hydraulic Scissors Lift
- H / I Beam Welding Set Up
- PEB Welding Set Up
- Internal & External Overlay System
- Special Purpose Welding Automation Systems
- Material Handling Trolleys
- EOT / Goliath / Jib Cranes
- All Type of Structural Fabrication

The first year proved to be a testing time with all our valuable customers and the year ended with a modest turnover of Rs. 12 Lakh. Thereafter, there was no looking back. Quality products blended with perfect workmanship, an unmatched after sales service and with an urge for growth resulted in the Company crossing the Rs 50 Crore Annual Turnover. Over the years the domestic and overseas customers have been patronizing our products with repeat orders.

The Manufacturing Unit & Registered Office are located in Bhosari, Pune which is approximately 155 kms from Mumbai, the commercial capital of India.

We have Experienced R&D Department and Modern Manufacturing Facilities to accomplish the exceeding needs of our customers with 280+ Experienced Employees and 5 Full Fledged Manufacturing Facilities in India

# **Quality Policy**

We are committed to deliver product in compliance to International Standards in Terms of Design, Manufacturing, Work Manship, Timely Delivery, Availability of Spares and After Sales Services at a Competitive Prices as per Customer Requirement.

We achieve our quality objectives through training and motivating the employees and continual improvement of our Quality Management System.

# **Quality Objectives**

- On Time Delivery to Customer
- Increase Customer Satisfaction Index
- Training to all Employees
- Maintain a fair and creative work environment
- Implementation of best practices and global processes
- Increase Sales Turn Over
- Increase Supplier Performance
- Increase QMS Performance





# WELDING ROTATORS



Welding Rotators are very essential equipments for heavy and light fabrication shop. They are mainly used to rotate or position the cylindrical jobs for circumferential welding (TIG / MIG / Sub Arc) or for intricate assemblies. The machine consists of 1 No. Drive Unit and 1 No. Idler Unit and Control panel with pendant. For step less speed variation, AC Variable Frequency Drive is used. The rollers are either made of Steel or Moulded with Polyurethane as per customer's requirement.

# **Application**

- Welding of Pipes
- Boilers
- Pressure Vessels / Tanks
- LPG Bullets

- API Pipes
- Heat exchangers
- Mounted vessels
- Barrels, etc.

# **Advantages**

- An indispensable tool for shell fabrication shops.
- Attains exceptional quality circumferential joints on shells.
- Increased production with reduced labour.
- Leads to minimum handling of the Shell / Job.
- Lesser usage of crane thereby reduces idle time.
- Adaptable for automatic or manual welding.

#### There are three Design Variants in Modern Rotators

# 1. The Conventional Type: Model 'CUCR' -Type

Main base frames are fabricated and stress relieved before machining. There are basically two units, the Drive and Idler - one unit each. The precisely machined (on boring machine) Roller Brackets are bolted on the roller beds. Both the Roller Brackets have to be manually moved as per the job diameter keeping the center fixed. This model has double ended drive to avoid use of diameter setting drive shaft. The fixing holes for the brackets on the bed are precisely factory set.

#### Salient Features

- Lowinvestment cost.
- Ideal version to start with new fabrication line.
- Most suitable for small and heavy fabrication shops.
- □ Simple & Sturdy design.
- Proven reliability.
- Accepts wide range of Job diameters.









#### SPECIFICATION FOR CONVENTIONAL TYPE WELDING ROTATOR

		DOTATING		SPEED	7/05 05			OVE	R ALL D	IMENSI	ONS	
MODEL	TOTAL LOAD CAPACITY FOR DRIVE + IDLER (TON)	ROTATING CAPACITY OF DRIVE UNIT. (TONNES)	Job Dia Range; Min / Max (MM)	RANGE – SURFACE SPEED OF ROLLER. (MM/MIN)	Type of Variable Speed Drive. (AC VFD)	ROLLER SIZE. DIA. X WIDTH (ØD X T) MM	'L' mm.	'W' mm.	'H' mm.	'L1' mm.	W1' mm.   400   450   525   575   600   650   700   900   950   975   1400   1450   1500   1500   1600	'H1' mm.
CUCR-2	2	2	300 To 3000	75 To1250	AC VFD	Ø300 x 90	2100	500	507	1900	400	507
CUCR-5	5	5	350 To 3000	75 To 1250	AC VFD	Ø300 x 145	2350	580	577	2150	450	577
CUCR-10	10	10	350 To 3000	75 To 1250	AC VFD	Ø300 x 145	2900	650	604	2650	525	604
CUCR-15	15	15	400 To 4000	75 To 1250	AC VFD	Ø400 x 145	3000	650	604	2800	525	604
CUCR-20	20	20	400 To 4000	75 To 1250	AC VFD	Ø400 x 145	3000	700	654	2850	575	654
CUCR-30	30	30	450 To 4500	75 To 1250	AC VFD	Ø500 x 145	3500	700	760	3300	600	760
CUCR-40	40	40	450 To 4500	75 To 1250	AC VFD	Ø500 x 145	3500	750	770	3300	650	770
CUCR-50	50	50	450 To 5000	75 To 1250	AC VFD	Ø500 x 200	3500	800	910	3300	650	910
CUCR-60	60	60	450 To 5000	75 To 1250	AC VFD	Ø500 x 250	3500	900	916	3300	700	916
CUCR-70	70	70	450 To 5000	75 To 1250	AC VFD	Ø550 x 250	3550	900	924	3300	700	924
CUCR-80	80	80	450 To 5000	75 To 1250	AC VFD	Ø550 x 250	4200	1100	960	3750	900	960
CUCR-90	90	90	450 To 5000	75 To 1250	AC VFD	Ø550 x 300	4200	1200	960	3750	900	960
CUCR-100	100	100	500 To 6000	75 To 1250	AC VFD	Ø550 x 300	4600	1250	960	4200	950	960
CUCR-120	120	120	450 To 6000	75 To 1250	AC VFD	Ø550 x 300	4600	1250	960	4200	950	960
CUCR-150	150	150	500 To 6000	75 To 1250	AC VFD	Ø550 x 400	4700	1280	960	4340	975	960
CUCR-200	200	200	800 To 6000	75 To 1250	AC VFD	Ø550 x 220	5900	1650	1420	5700	1400	1420
CUCR-250	250	250	800 To 6000	75 To 1250	AC VFD	Ø600 x 240	5900	1700	1420	5700	1450	1420
CUCR-300	300	300	800 To 6000	75 To 1250	AC VFD	Ø650 x 250	6250	1700	1445	5960	1450	1445
CUCR-400	400	400	800 To 6000	75 To 1250	AC VFD	Ø650 x 250	6350	1750	1450	5960	1500	1450
CUCR-500	500	500	1000 To 6000	75 To 1250	AC VFD	Ø800 x 300	6400	1950	1540	6100	1500	1540
CUCR-800	800	800	1000 To 6000	75 To 1250	AC VFD	Ø950 x 350	8500	1500	1980	7250	1500	1980
CUCR-1200	1200	1200	1000 To 6000	75 To 1250	AC VFD	Ø1000 x 400	8500	1600	2100	7300	1600	2100

Note: We reserve the right to modify the Specifications, Illustrations & Dimensions Whichever Suits Best to the Final Product As Per Our `In House' Developments.

# Standard capacity ranges

Load carrying capacity - 2 Ton to 1200 Ton

Job diameter Ranges - 350 mm to 10000 mm (Higher Diameters on Request)

# **Standard Drive Options**

AC Variable Frequency Drive OR AC Fixed Speed Drive

# Types of Roller Options

Polyurethane Roller / Steel Roller

### 2. Self Centering Type: Model 'CUSR' -Type

The construction of this type is similar to Conventional Type except that this model has a provision to slide the Roller Brackets over the Base Frame equally in both directions through a lead screw having LH & RH Threads.

Unlike in Conventional Type the Roller Brackets in Self Centering Type is not bolted on the base frame. The rotation of lead screw can either be Manual or Motorized (Optional). The Technical Specifications are same as Conventional Type.

### Salient Features

- Lowinvestment cost.
- □ Ideal version to start with new fabrication line.
- Most suitable for small and heavy fabrication shops.
- □ Simple & Sturdy design.
- Proven reliability.
- Accepts wide range of Job diameters.









#### SPECIFICATION FOR SELF CENTERING ROTATOR

		DOTATING		SPEED	7,495,05			OVE	R ALL D	IMENSI	ONS	
MODEL	TOTAL LOAD CAPACITY FOR DRIVE + IDLER (TON)	ROTATING CAPACITY OF DRIVE UNIT. (TONNES)	Job Dia Range; Min / Max (MM)	RANGE – SURFACE SPEED OF ROLLER. (MM/MIN)	Type of Variable Speed Drive. (AC VFD)	ROLLER SIZE. DIA. X WIDTH (ØD X T) MM	'L' mm.	'W' mm.	'H' mm.	'L1' mm.	W1' mm.   400   450   525   575   600   650   700   900   950   975   1400   1450   1500   1500   1600	'H1' mm.
CUSR-2	2	2	300 To 3000	75 To1250	AC VFD	Ø300 x 90	2100	500	507	1900	400	507
CUSR-5	5	5	350 To 3000	75 To 1250	AC VFD	Ø300 x 145	2350	580	577	2150	450	577
CUSR-10	10	10	350 To 3000	75 To 1250	AC VFD	Ø300 x 145	2900	650	604	2650	525	604
CUSR-15	15	15	400 To 4000	75 To 1250	AC VFD	Ø400 x 145	3000	650	604	2800	525	604
CUSR-20	20	20	400 To 4000	75 To 1250	AC VFD	Ø400 x 145	3000	700	654	2850	575	654
CUSR-30	30	30	450 To 4500	75 To 1250	AC VFD	Ø500 x 145	3500	700	760	3300	600	760
CUSR-40	40	40	450 To 4500	75 To 1250	AC VFD	Ø500 x 145	3500	750	770	3300	650	770
CUSR-50	50	50	450 To 5000	75 To 1250	AC VFD	Ø500 x 200	3500	800	910	3300	650	910
CUSR-60	60	60	450 To 5000	75 To 1250	A C VFD	Ø500 x 250	3500	900	916	3300	700	916
CUSR-70	70	70	450 To 5000	75 To 1250	AC VFD	Ø550 x 250	3550	900	924	3300	700	924
CUSR-80	80	80	450 To 5000	75 To 1250	AC VFD	Ø550 x 250	4200	1100	960	3750	900	960
CUSR-90	90	90	450 To 5000	75 To 1250	AC VFD	Ø550 x 300	4200	1200	960	3750	900	960
CUSR-100	100	100	500 To 6000	75 To 1250	AC VFD	Ø550 x 300	4600	1250	960	4200	950	960
CUSR-120	120	120	450 To 6000	75 To 1250	AC VFD	Ø550 x 300	4600	1250	960	4200	950	960
CUSR-150	150	150	500 To 6000	75 To 1250	AC VFD	Ø550 x 400	4700	1280	960	4340	975	960
CUSR-200	200	200	800 To 6000	75 To 1250	AC VFD	Ø550 x 220	5900	1650	1420	5700	1400	1420
CUSR-250	250	250	800 To 6000	75 To 1250	AC VFD	Ø600 x 240	5900	1700	1420	5700	1450	1420
CUSR-300	300	300	800 To 6000	75 To 1250	AC VFD	Ø650 x 250	6250	1700	1445	5960	1450	1445
CUSR-400	400	400	800 To 6000	75 To 1250	AC VFD	Ø650 x 250	6350	1750	1450	5960	1500	1450
CUSR-500	500	500	1000 To 6000	75 To 1250	AC VFD	Ø800 x 300	6400	1950	1540	6100	1500	1540
CUSR-800	800	800	1000 To 6000	75 To 1250	AC VFD	Ø950 x 350	8500	1500	1980	7250	1500	1980
CUSR-1200	1200	1200	1000 To 6000	75 To 1250	AC VFD	Ø1000 x 400	8500	1600	2100	7300	1600	2100

Note: We reserve the right to modify the Specifications, Illustrations & Dimensions Whichever Suits Best to the Final Product As Per Our `In House' Developments.

# Standard capacity ranges

Load carrying capacity - 2 Ton to 1200 Ton

Job diameter Ranges - 350 mm to 10000 mm (Higher Diameters on Request)

# **Standard Drive Options**

AC Variable Frequency Drive OR AC Fixed Speed Drive

# Types of Roller Options

Polyurethane Roller / Steel Roller

### 3. The Self Aligning Types: - Model 'CUSAR' -Type

Self Aligning Rotators automatically adjust the Roller Housings to accept any job diameters within the specified diameter range. These types of machines are generally used to cope with the increased production demands. The roller housings of this type of machine are hinged to the beds and open up automatically when a larger diameter job is introduced. In this type of rotator, each Roller bracket assembly has two separate roller assemblies, and this supports the job on a wider area. The final drive is given to all the 4-sets of rollers of the Drive Unit in special models, providing better traction to the job. However, in that case a de-clutching arrangement is provided to the top rollers, in order to protect the gear boxes, as when the job hits the top rollers first while loading, forcing it to rotate via. the self locking gear box.

#### Salient Features

- Both the rollers automatically get adjusted for all job diameters.
- Accepts complete range of job diameters in one setting.
- Center axis of job remain stable for all job diameters.
- Wide range of Job diameters and Load capacities.
- Most suitable for 'thin walled' shells of large diameters.
- □ 'Four roller' contacts gives superior 'slip free' traction for thin walled vessels.
- Proven reliability and higher productivity.
- Most accepted design for very busy fabrication shops.
- □ Ideal design for using in conjunction with Column & Boom.
- Better acceptability to ovality of vessels compared to other models.

# Standard capacity ranges

Load carrying capacity - 5 Ton to 1000 Ton

Job diameter Ranges - 1200mm to 10000 mm (Higher diameters on request)





#### SPECIFICATION FOR SELF ALIGNING ROTATOR

		DOTATING		SPEED	TYPE OF			OVE	R ALL D	IMENSI	ONS	
MODEL	TOTAL LOAD CAPACITY FOR DRIVE + IDLER (TON)	ROTATING CAPACITY OF DRIVE UNIT. (TONNES)	JOB DIA RANGE; MIN / MAX (MM)	RANGE – SURFACE SPEED OF ROLLER. (MM/MIN)	VARIABLE SPEED DRIVE. (AC VFD)	ROLLER SIZE. DIA. X WIDTH (ØD X T) MM	'L' mm.	'W' mm.	'H' mm.	'L1' mm.	'W1' mm.	'H1' mm.
CUSAR-10	10	10	400 to 4000	75 To 1250	AC VFD	Ø300 x 90	2800	650	980	2300	500	980
CUSAR-15	15	15	400 to 4500	75 To 1250	AC VFD	Ø300 x 145	2800	650	980	2300	500	980
CUSAR-20	20	20	400 to 4500	75 To 1250	AC VFD	Ø3000 x 145	2800	800	1050	2300	600	1050
CUSAR-30	30	30	500 to 5000	75 To 1250	AC VFD	Ø400 x 145	2900	900	1055	2400	600	1055
CUSAR-40	40	40	500 to 5000	75 To 1250	AC VFD	Ø400 x 145	3100	900	1150	2400	650	1150
CUSAR-50	50	50	500 to 5000	75 To 1250	AC VFD	Ø500 x 145	3100	900	1200	2400	650	1200
CUSAR-60	60	60	500 to 5000	75 To 1250	AC VFD	Ø500 x 145	3100	1000	1200	2400	700	1200
CUSAR-70	70	70	500 to 5000	75 To 1250	AC VFD	Ø500 x 145	3150	1200	1210	2400	850	1210
CUSAR-80	80	80	500 to 5000	75 To 1250	AC VFD	Ø500 x 145	3150	1200	1210	2400	850	1210
CUSAR-100	100	100	800 to 6000	75 To 1250	AC VFD	Ø500 x 200	3400	1250	1260	2750	900	1260
CUSAR-120	120	120	800 to 6000	75 To 1250	AC VFD	Ø550 x 200	3450	1400	1370	2800	950	1370
CUSAR-150	150	150	1500 to 6000	75 To 1250	AC VFD	Ø550 x 200	4500	1500	1530	3600	1000	1530
CUSAR-200	200	200	1500 to 6000	75 To 1250	AC VFD	Ø550 x 220	4900	1600	1580	3650	1000	1580
CUSAR-250	250	250	1500 to 6000	75 To 1250	AC VFD	Ø550 x 220	4900	1400	1630	3650	1000	1630
CUSAR-300	300	300	1500 to 6000	75 To 1250	AC VFD	Ø600 x 250	4900	1400	1630	3650	1000	1630
CUSAR-400	400	400	1500 to 8000	75 To 1250	AC VFD	Ø600 x 250	4950	1450	1630	3650	1200	1630
CUSAR-500	500	500	1500 to 8000	75 To 1250	AC VFD	Ø600 x 250	5250	1900	1825	4450	1250	1825
CUSAR-800	800	800	2000 to 10000	75 To 1250	AC VFD	Ø650 x 300	6200	1950	1930	5250	1500	1930

Note: We reserve the right to modify the Specifications, Illustrations & Dimensions Whichever Suits Best to the Final Product As Per Our `In House' Developments.

# Standard Drive Options

A.C. Variable Speed OR A.C. fixed speed

# Types of Roller Options

Polyurethane / Steel

# Special Note (Optional):

All types of Rotators can be Designed/Supplied with either Manual or Motorized Bogie as per customer request.

### 4. Hydraulic Shell to Shell Fit-Up Rotators Model 'CUFIT' Type

Cu-Built Hydraulic Shell to Shell Fit-Up Rotators are specially designed to Align, Rotate and Support two sections of same diameter Shells for 'Tack Welding' or 'Full Circumferential Seam Welding'. Different diameters of cylindrical jobs can be accommodated on them as per the design for which it is indented. Fit Up Rotators are Used for assembly or Fit-Up of Long Pipe / Tanks / Wind Tower / Vessel, etc.

Fit Up Rotators have Four Units, Two Units (1No. Drive Unit + 1No. Idler Unit) are with Trolley Wheels and the other Two are Hydraulic Fit Up Units Fixed Base Type. Trolley of Drive Unit has inbuilt drive system, so that the shell section supported on them can be moved forward or backward, in order to butt the shell edge, against the edge of the other shell on the fixed units.

If different length of shells are involved, it is better to have these of the units on Trolley wheels, and only one unit fixed. This will help to easily adjust the distance between the shell supporting units to the length of the shell sections.





# WELDING COLUMN & BOOM



Welding Column & Boom is also called as Welding Head Manipulator. The welding head is mounted at one end of the Boom. The wire spool can be mounted at the front or at the rear end of the Boom. In Extra Light Duty and Light Duty Models (i.e. up to 3 meter X 3 meter), the vertical movement is through Lead Screw. And for Medium & Heavy Duty Boom, the vertical movement is through Rack & Pinion with counter weight arrangement. The Counter weight and Boom assembly is firmly held with metallic wire rope. Provision of anti-fall security is a standard feature in all models including Lead Screw driven ones. The Horizontal Boom drive movement is through rack and pinion for all models of Column & Boom

# **Application**

- Welding of Pipes
- Boilers
- Pressure Vessels / Tanks
   Mounted vessels
- LPG Bullets

- API Pipes
- Heat exchangers
- Barrels, etc.

# Advantages

- Increased Production.
- Allows maximum flexibility to welding head manipulation.
- Better weld quality with reduced labor.
- Dependable even for most critical weld quality.
- Assured high quality welding non-dependent on operator's skill.
- Essential toll for automatic / semi-automatic welding.
- Ensures 360° radial accessibility to welding head, covering vast area in the shop.
- Trolley car mounted version gives accessibility to the full shop length.
- Easy high quality automatic circumferential or longitudinal seam welding in conjunction with Rotator or Positioner.
- □ Indispensable for pipe / vessel fabrication shops.



#### Salient Features

- Rugged Construction.
- Wide Base & Lockable 'Swivel Base' to enhance Stability.
- Minimum Deflection even when 'Boom' extended fully.
- Precise 'Jerk free' vertical & horizontal movements.
- Over rated, pre-loaded and dust protected bearing arrangements.
- Operator's seat at conveniently placed location. (Optional)
- □ Option for self propelled Chair for operator on heavy duty models.
- □ Option for walkway along the boom.
- □ Option for Drag Chain for cable/pipe movement along the Vertical & Horizontal plane.

# 1. Small Duty Models (Light Duty Type) - 'CCBL' Models.

Available Range: Up to 3.5 meter Vertical Stroke X 3.5 meter Horizontal Stroke.

#### **Features**

- Most Economical Design.
- Proven Reliability.
- Very Low Investment cost.
- Most suitable for low budget fabrication & small vessel shops.
- Can perform wide range of applications.
- Safety ensured design (in case of L.S. Nut wear out, operator's safety is assured by auto-engagement of 'Anti-fall Nut'.)
- Lead Screw-Nut drive for UP / DOWN movement of Boom

# Standard Ranges

Minimum Vertical Stroke – 1000 mm & Minimum Horizontal Stroke - 1000 mm Maximum Vertical Stroke – 3500 mm & Maximum Horizontal Stroke - 3500 mm Options: CCBL(P) Models (P - Pedestal Mounted Base) & CCBL(T) Models (T-Trolley Car Mounted Base).





### 2. Medium Duty Models - 'CCBM' Models.

Available Range: Above 3.5 meter Vertical Stroke X 3.5 meter Horizontal Stroke. Up to Maximum 6 meter Vertical Stroke X 6.5 meter Horizontal Stroke

#### Features

- Robust Design.
- Proven Reliability
- Reasonable Investment cost
- Most suitable for Medium Fabrication & Vessel Shops.
- □ Can perform wide range of applications.
- Smooth Rack & Pinion Drive for both Up/Down & Horizontal Movement of Boom.
- Anti-toppling device for Trolley car mounted versions.

### Standard Ranges

Minimum Vertical Stroke – 3500 mm & Minimum Horizontal Stroke - 3500 mm Maximum Vertical Stroke – 6000 mm & Maximum Horizontal Stroke - 6500 mm

#### **Options**

CCBM(P) Models (P - Pedestal Mounted Base) & CCBM(T) Models (T - Trolley Car Mounted Base).





### 3. Heavy Duty Models - 'CCBH' Models

Available Range: Above 6 meter Vertical Stroke X 7 meter Horizontal Stroke. Up to Maximum 7.5 meter Vertical Stroke X 8 meter Horizontal Stroke

#### **Features**

- Most Favoured Design
- Proven Reliability and High Stability.
- □ Ideal for large Fabrication Shops.
- Most suitable for large Vessel Shops.
- Can perform wide range of applications.
- Smooth Rack & Pinion drive for both UP / DOWN and Horizontal movements.
- Over rated wire rope to hold counter balancing weight of the Up/Down drive.
- Anti-toppling device for Trolley car mounted versions.

### Standard Ranges

Minimum Vertical Stroke – 6000 mm & Minimum Horizontal Stroke - 7000 mm Maximum Vertical Stroke – 7500 mm & Maximum Horizontal Stroke - 8000 mm

#### **Options**

CCBH(P) Models (P - Pedestal Mounted Base) & CCBH(T) Models (T - Trolley Car Mounted Base).

# 4. Extra Heavy Duty Models -'CCBEH' Models

Available Range: Above 7.5 meter Vertical Stroke X 8 meter Horizontal Stroke. Up to Maximum 10 meter Vertical Stroke X 10 meter Horizontal Stroke

#### **Features**

- Rugged Design
- Proven Reliability and High Stability.
- Ideal for very large Fabrication Shops.
- Most suitable for extra large Vessel Shops.
- Can perform wide range of applications.
- Smooth Rack & Pinion drive for both Up / Down and Horizontal movements.
- Over Rated wire rope to hold counter balancing weight of the Up/Down drive.
- Anti-toppling device for Trolley car mounted versions.

# Standard Ranges

Minimum Vertical Stroke – 7500 mm & Minimum Horizontal Stroke - 8000 mm Maximum Vertical Stroke – 10000 mm & Maximum Horizontal Stroke - 10000 mm

# Options

CCBEH(P) Models (P - Pedestal Mounted Base)
& CCBEH(T) Models (T - Trolley Car Mounted Base).

#### SPECIFICATIONS FOR WELDING COLUMN & BOOM

MODELS	MIN. HEIGHT UNDER BOOM`H'- (MIN) mm.	Max. Height Under Boom`h'- (Max.) mm.	BOOM REACH (MAX. STROKE) `S'-mm.	BOOM TRAVEL SPEED mm./Min.	MAX. LOAD AT BOOM END Kg.	COLUMN SWIVEL Degrees	TROLLY SPEED mm./Min.	INNER DIST. BETWEEN RAILS `T' mm.	OVERALL LENGTH `L'-mm	OVERALL HEIGHT `H1' mm
CCBL-2525	1000	3500	2500	75 To1150	100	360°	2500	1435	4400	4500
CCBL-2530	1000	3500	3000	75 To1150	100	360°	2500	1435	7700	4500
CCBL-3030	1000	4000	3000	75 To1150	125	360°	2500	1435	4500	5000
CCBL-3035	1300	4000	3500	75 To1150	125	360°	2500	1435	5000	5000
CCBL-3040	1300	4000	4000	75 To1150	125	360°	2500	1435	5500	5000
CCBM-3535	1300	4500	3500	75 To1150	140	360°	2500	1435	5000	5500
CCBM-3540	1300	4500	4000	75 To1150	140	360°	2500	1435	5500	5500
CCBM-4040	1300	5300	4000	75 To1150	140	360°	1200	1750	5500	6500
CCBM-4045	1300	5300	4500	75 To1150	150	360°	1200	1750	6000	6500
CCBM-4060	1300	5300	6000	75 To1150	150	360°	1200	1750	7700	6500
CCBM-5040	1300	6300	4000	75 To1150	150	360°	1200	1750	5700	7500
CCBM-5050	1300	6300	5000	75 To1150	150	360°	1200	1750	6700	7500
CCBM-5060	1300	6300	6000	75 To1150	150	360°	1200	2000	7700	7500
CCBM-5065	1300	6300	6500	75 To1150	150	360°	1200	2000	8200	7500
CCBM-6040	1300	7300	4000	75 To1150	150	360°	1200	2000	5700	8500
CCBM-6050	1300	7300	5000	75 To1150	200	360°	1200	2000	6700	8500
CCBM-6060	1300	7300	6000	75 To1150	200	360°	1200	2000	8000	8500
CCBM-6065	1300	7300	6500	75 To1150	200	360°	1200	2000	8500	8500
CCBH-6070	1300	7300	7000	75 To1150	250	360°	1200	2000	9000	8500
CCBH-6080	1300	7300	8000	75 To1150	250	360°	1200	2000	10000	8500
CCBH-7060	1300	8300	6000	75 To1150	250	360°	1200	2100	8000	9500
CCBH-7070	1300	8300	7000	75 To1150	250	360°	1200	2100	9000	9500
CCBH-7080	1300	8300	8000	75 To1150	250	360°	1200	2100	10000	9500
CCBEH-8080	1700	9700	8000	100 To1500	400	360°	1200	3400	12000	11300
CCBEM-9080	1700	10700	8000	100 To1500	400	360°	1200	3400	12000	12500
CCBEM-1090	1700	11700	9000	100 To1500	400	360°	1200	3400	13000	13800
CCBEM-1010	1700	11700	10000	100 To1500	400	360°	1200	3400	14000	13800

Note: We reserve the right to modify the Specifications, Illustrations & Dimensions Whichever Suits Best to the Final Product As Per Our `In House' Developments.

# WELDING POSITIONERS

Positioners are mainly used to manipulate and position the Jobs for 1G position for easy down hand welding, independent of operator's skill. Once the job is loaded it can be manipulated conveniently to complete all the welding operations in down hand position. This reduces handling time and frequent use of crane. The job can be tilted from 0° to 135° depending on the requirement of specific location of welding. Positioners can be conveniently used for complete circumferential welding, strip cladding, for down hand position welding, to set the job conveniently for easy accessibility to intricate assemblies etc. Along with Column & Boom, a positioner can carry out any welding tasks which are impossible otherwise.



# Special Features of our Design

- Extremely Stable and 'Free Standing' with the maximum rated load.
- □ 'Free standing' design allows frequent change of site.
- Rugged and robust Design / Construction.
- Generous 'Rotational' and 'Tilt' torque.
- Enhanced 'CG' rating due to specific design, lowering the distance to the 'Pivot point' from table top.
- Over rated, Pre-loaded and dust protected bearing arrangements.
- Forced diversion of 'Earth return current' off the spindle bearings, averts bearing damage.
- Activation of mechanical 'Stoppers' in case of limit switch failure.

### Standard capacity ranges

Load capacity - 25 Kg to 200 Ton

Table Rotation - A.C. Variable Speed OR A.C Fixed Speed (As per Customer

Requirement)

Table Tilt range - 0 to 135° OR -45° to +90° (AC Fixed Speed)

# **Optional Features**

■ Degree of tilting angle can also be - 45 to +90 degrees to the horizontal.

- □ In case face plate diameters are required more than the standard versions, please specify for such requirements. Also mention, whether extension arms are required to accommodate increased diameter.
- Machined "T" slots at extra cost. Please specify for such requirements in your enquiry.
- AC VFD for tilt drive.

# Other Options

- Head Stock Tail Stock Set Up
- Elevating Type Positioners (Adjustable Table Height)
- Turn Tables (Horizontal (i.e. 0° Fixed) or Vertical (i.e. 90° Fixed) Tables)



#### SPECIFICATION FOR POSITIONERS

MODELS	RATED LOAD (ROT.& TILT) Kg.	ECCENT -RICITY `E' mm	CENTER OF GRAVITY 'CG' mm	ROTATIONAL SPEED RANGE RPM	Z ROTATIONAL 3 DRIVE TORQUE	Degrees	TILT SPEED (TIME REQD. for 135° TILT) Secs.	TILT DRIVE TORQUE Nm.	TABLE DIA. (STD) `D' mm.	3 TABLE DIA (WITH 3 EXT. ARMS)`D1'	OVER ALL LENGTH (INCLUSIVE OF HOR. TABLE) 'L'	GVER ALL WIDTH GRASE FRAME) 'W'	OVER ALL HEIGHT  (Std. table hort.)" H'	OVER ALL HEIGHT  S(10. table vert.)" H1'	TOTAL POWER RECD.
CUM-50	50	25	30	0.5 to 5	12.5	0° to 135	Manual	N.A.	300	N.A.	650	450	550	625	0.25
CUM-100	100	40	50	0.25 to 2.5	40	°0° to 135	Manual	N.A.	400	N.A.	850	450	580	700	0.25
CUM-250	250	40	50	0.25 to 2.5	100	°0° to 135	50	440	500	N.A.	1000	620	600	740	0.75
CUM-500	500	80	100	0.2 to 2	400	°0° to 135	50	1200	750	N.A.	1250	820	775	1020	1.5
CUM-750	750	100	125	0.2 to 2	750	°0° to 135	60	2050	1000	N.A.	1330	880	780	1140	1.5
CUM-1000	1000	100	125	0.1 to 1	1000	°0° to 135	80	2900	1200	N.A.	1670	1200	1040	1460	2
CUM-1500	1500	150	150	0.05 to 1	2250	°0° to 135	80	4700	1500	N.A.	2005	1400	1150	1720	2.5
CUM-2000	2000	150	200	0.05 to 1	3000	°0° to 135	100	7600	1500	N.A.	2005	1400	1150	1720	4
CUM-3000	3000	150	200	0.05 to 1	4500	°0° to 135	100	11400	1600	N.A.	2060	1400	1250	1870	5
CUM-5000	5000	200	250	0.05 to 1	10000	°0° to 135	100	22500	1600	N.A.	2140	1650	1500	2100	10
CUM-7500	7500	200	250	0.04 to 0.8	14000	°0° to 135	100	32900	2000	3000	2600	1800	1730	2500	10
CUM-10000	10000	200	250	0.025 to 0.5	20000	°0° to 135	120	50000	2500	3500	3050	2340	2000	2950	12.5
CUM-15000	15000	250	300	0.025 to 0.5	37500	°0° to 135	120	105000	2500	3500	4200	2860	2530	3400	20
CUM-20000	20000	250	300	0.025 to 0.5	50000	°0° to 135	120	140000	3000	4000	4400	2860	2880	4000	30
CUM-25000	25000	250	300	0.025 to 0.5	62500	°0° to 135	125	175000	3000	4000	4600	3070	2880	4000	30
CUM-30000	30000	300	300	0.025 to 0.5	90000	°0° to 135	150	225000	3500	4500	4850	3070	3270	4600	40
CUM-40000	40000	300	500	0.01 to 0.2	120000	°0° to 135	180	380000	3500	5000	5250	3320	3420	4740	45
CUM-50000	50000	300	500	0.01 to 0.2	150000	°0° to 135	200	480000	3500	5000	5800	3320	3430	4750	60
CUM-75000	75000	300	500	0.01 to 0.2	225000	°0° to 135	250	810000	3500	5000	5800	3650	3450	4760	60
CUM-100000	100000	300	500	0.005 to 0.1	300000	°0° to 135	300	1100000	4000	5000	6300	3760	3800	5250	65
CUM-150000	150000	300	500	0.005 to 0.1	450000	°0° to 135	300	1650000	4000	5000	7500	4480	4050	5440	80
CUM-200000	200000	300	500	0.005 to 0.1	600000	°0° to 135°	300	2250000	4000	5000	8000	5700	4570	5960	110

Note: We reserve the right to modify the Specifications, Illustrations & Dimensions Whichever Suits Best to the Final Product As Per Our `In House' Developments.





# WELDING SPECIAL PURPOSE MACHINE





We design and manufacture any Special Purpose machine for Automatic/ Semi-automatic/Manual Welding. These SPMs may use any welding process as required for the specific job. The welding process may be MIG / MAG, TIG, or SAW. Some of the SPMs we have manufactured for various customers are as follows:

#### Sailent Features

- Manufacture as per Client requirement .
- Fully automatic / semi automatic reduces lead time of production.
- Can assure better quality of production.





### A convincing service in all respects

- Advice in planning stage.
- Complete design with modernized technology.
- Over rated, Pre-loaded and dust protected bearing arrangements.
- Personal Training.
- Upgrading and modernization.

#### We can supply SPM's for applications such as:

- Automobile components.
- Accessories for TWO/FOUR wheeler vehicles.
- Road Rollers or any other similar cylindrical components.
- Hydraulic cylinders.
- Pipe to Flange welding.
- Turntable with TIG/MIG Torch mtq. arrangement with auto welding sequences.
- Complete LPG cylinder project including system handling.
- Domestic Pipes / API pipes welding equipment with automatic handling system.
- Automobile components of special nature.
- Special Accessories for TWO/FOUR wheeler components.
- Automatic loading and unloading systems for conveyor Idler Roller welding.
- Rebuilding setup for Road Rollers or any other similar cylindrical component.









# HYDRAULIC SCISSOR LIFT

Hydraulic Scissors Lifting Table is mostly used for Lifting Point of View. Our Designed Hydraulic Scissors Lifts can be Pit Installed or Floor Mounted for Indoor or Outdoor Use. We are in the field of Design, Manufacturing, Supply and Erection and Commissioning of Hydraulic Scissors Lifting Table based on the Customers requirement and their Application.

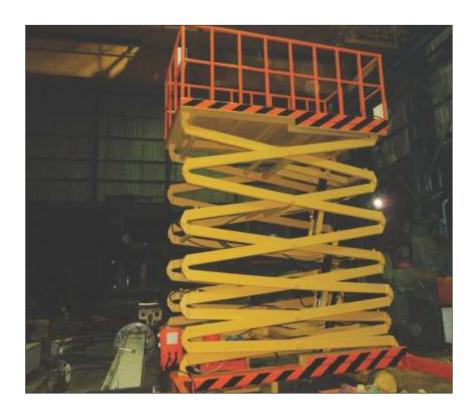
# **Application**

- Maintenance In Industrial Sector / Power Stations
- Maintenance In Railways / Air Port

- Loading / Un Loading of Material
- Packing of Material

#### Salient Features

- Rugged Construction
- Flexible
- Compact Design
- Electric Full Perimeter Toe Guard around the Platform
- High Performance
- Compact Hydraulic Power Pack





# Standard capacity ranges

- Load Carrying Capacity
- Height of Lift
- Movement

- 50 Kg to 5000 Kg
- 500 mm to 15000 mm
- Manual / Motorized

# Standard Options

Foot Operated Control
Pallet Truck Approach Ramp
Pendant / Remote
Electrically / Battery Operated





# **BEAM WELDING LINE**

We offer a complete and efficient way of welding tailor-made beams and profiles. The lines are designed with economy and accuracy in mind, and can be delivered with additional equipment to suit special requirements for capacity and quality:



- Welding of I/H-beams, T-beams or L-beams, wide flange beams, columns & Tapered beams
- □ Integrated handling equipment for mounting and handling of webs and flanges, as well as handling of ready welded profiles

### **Application**

PEB, Petrochemical, heavy machinery, ship, structural steel construction and pressure container industry

#### Salient Features

- Flexibility
- High production capacity
- Perfect Weld Quality
- Less space required
- Flange straightening not required after welding
- Few workers required







# **INDUSTRIAL CRANES**

We are engaged in the Design, Manufacturing, Supply and Erection & Commissioning of Industrial Cranes. Each products is made under the compliance of IS 3177 and IS 807. For special purpose cranes, like Steel duty cranes, IS 4137 Standard is followed. There standards verify and confirm the quality and safety of the products. & the raw material is used as per IS 2062. Our Product Range in Cranes and Material Handling Equipments is as follows

- Single Girder EOT Cranes
- Double Girder EOT Cranes
- Goliath Cranes
- Semi Goliath Cranes
- Jib Cranes
- Single Girder Hoists
- Double Girder Trolley (Crab)
- Industrial Transfer Trolleys
- Special Purpose Material Handling Systems
- □ Our cranes are manufactured maintaining high quality & latest safety norms with best workmanship.
- We are having most modern design facility with simulation features.
- □ Our experts team in crane design always give performance to user friendly design with priority in easy maintenance.
- We have adopted a modular production system to give faster delivery.
- □ Our cranes features are open and can be compared with any other crane manufacturer technically and commercially.
- We score higher on manufacturer selection parameter, due to our-in-house facilities.
- We always ensure availability of inventory for emergency maintenance and assure interchangeability.

#### PRODUCT SILENT FEATURES

- Modular Design
- Light in Weight
- Noise Free
- Hardened and Ground Gear Box
- Fully Machined and Self Lubricated End Trucks
- Power Saving
- VFD providing smooth and Jerk less Transition with required speeds
- Optimized and Compact Design to provide More Working Space
- Low and Easy Maintenance
- Over Load (Weight) Tripping Facility (Optional)

#### **EOT Cranes**

We specialize in providing EOT Cranes that are compact in design and light in weight. EOT stands for electric overhead traveling cranes are fabricated using premium quality raw material.

#### Single Girder EOT Cranes

We specialize in providing Single Girder EOT Cranes that are compact in design and light in weight. Manufactured using quality components, these are appreciated for their easy operation, long service life and low maintenance. Our range of Single Girder EOT Cranes issued for various construction purposes and is in great demand due to its following attributes:

#### Single Girder EOT crane

- Capacity 1 Ton to 20 Ton
- Available in: German Gear Drive with variable speed
- Span & Height of lift: Customized (As per requirement)



#### Double Girder FOT Cranes

These are considered ideal for lifting and conveying loads of more than 10T and for span of over 25m. These are fabricated using quality-tested components and are provided with two torsion free box girders. Double Girder EOT Cranes offered by us are known for their high performance, excellent heavy load lifting capability and wide spans.

#### Double Girder EOT crane

- Capacity 5 Ton to 200 Ton
- Available in: German /Conventional Gear Drive with variable speed
- Span & Height of lift: Customised (As per requirement)



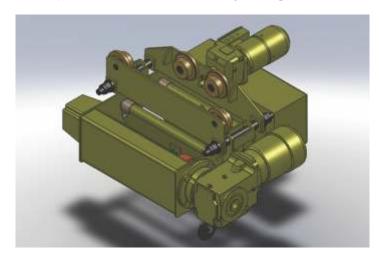
### Electric Wire Rope Hoists (Modular)

We hold expertise in providing Rope Hoists that are used for up, down, right and left movement of loads. We are leading manufacturers and suppliers of a wide range of Wire Rope Hoists, manufactured using quality approved basic material and cutting edge technology.

We are engaged in offering a comprehensive range of Electric Wire Rope Hoists (Modular). It is manufactured using quality material and is provided with fix suspension, geared trolley and power trolley. Our range of Electric Wire Rope Hoist is appreciated for its optimum quality, durability, trouble free performance and sturdy design.

#### Electric wire rope hoist

- □ Capacity 1 Ton to 20 Ton
- Available in: German GearDrive with variable speed
- Height of lift: Customised (As perrequirement)



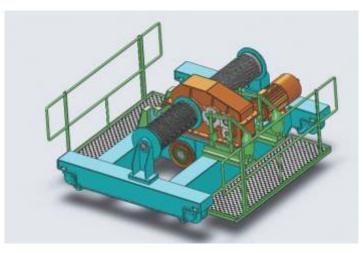
# Double Girder Trolley (Crab)

We hold expertise in providing Double Girder Trolley that are used for up, down, right and left movement of loads more than 10 Ton. Double Girder Trolley (Crab) is specially used for lifting & tilting heavy & big jobs.

It is manufactured using quality material and is provided with fix suspension, geared trolley and power trolley. Our range of Electric Double Girder Trolley (Crab) is appreciated for its optimum quality, durability, trouble free performance and sturdy design.

#### Electric wire rope hoist

- □ Capacity 5 Ton to 200 Ton
- Available in: German / Conventional Gear Drive with variable speed
- Height of lift: Customized (As per requirement)



#### **Goliath Cranes**

We are engaged in offering goliath cranes and gantry crane is extensively used in construction industry, shipping yards, roadsides, mines, quarries and many others. We hold in-depth expertise in offering Goliath (Gantry) Cranes that are appreciated for their low maintenance and high cost efficiency. Based on the latest technology, these are integrated with proper safety features and are appropriate for heavy load applications. Our range of Goliath (Gantry) / Semi Goliath Cranes is extensively used in construction industry, shipping yards, road sides, mines, quarries and many other.

#### Types of Goliath Cranes

- □ Single Girder Goliath Cranes □ Double Girder Goliath Cranes

#### Goliath crane

- Capacity 1 Ton to 200 Ton
- Available in: German / Conventional Gear Drive with variable speed
- Span & Height of lift: Customized (As per requirement)



#### Semi Goliath Cranes

In workshops where part utilization of shop bay is required (as in a tool room attached to a press shop), a Semi-Goliath/Gantry Crane is used. In such a configuration, one end-carriage of the crane will travel on the regular gantry rail while the opposite end-carriage will travel on a rail mounted typically on the ground or at a lower elevation.

Goliath / Gantry Cranes are self-propelled cranes running on rails installed at ground level. Such crane sare typically used at-

- Construction sites
- Workshops where existing columns cannot bear the wheel loads of a bridge crane
- Locations where bay lengths are excessive
- Locations where bay lengths do not remain constant
- Locations where loads are to be shifted from points outside the crane span as in the case of an over hang on either side of the rails
- Precise control of the up/down motion and / or travel motion can be achieved by fitting Variable Frequency Drives in the panels. Control can be either through a Pendant Push Button station or a Radio Remote Control (optional).

Types of Semi-Goliath Cranes

- Single Girder Semi Goliath Cranes
- Double Girder Semi Goliath Cranes



#### JIB Cranes

Jib cranes consist of a rotating arm with a hoist that runs along its length. The arm usually revolves on an axis which can be a fixed, ground-mounted post, or can be a wall or ceiling-mounted pin. Wall bracket mounted jib cranes are usually the least expensive jib cranes, but they require the most headroom and exert more force on their mounting wall. Cantilever jib cranes place the arm at the top, allowing for maximum lift when used in situations with limited headroom. They also exert less force on the wall on which they're mounted. Jib lifts are sold that slip onto the forks of a forklift, turning it into a mobile crane. More inexpensive jib cranes feature manually operated chain hoists, while more sophisticated cranes use an electric chain hoist. Optional jib crane features are available depending on the model and manufacturer, including portability, telescoping arms, articulating arms, motorized rotation, motorized trolley movement etc.

Jib crane

■ Capacity 1 Ton to 10 Ton

☐ Arm Length: Upto 10 mtrs

□ Swivel: Upto 360 Degree



# Material Transfer Systems

Available with four and multiple wheels, our range of Motorized Transfer Trolley have capacity ranging from 1 ton up to 320 ton. Under the supervision of our professionals, the range is precisely manufactured using high grade raw material and advanced machines. Further, the range is stringently checked and tested before delivery so that our clients receive defect free products.

#### **Specifications**

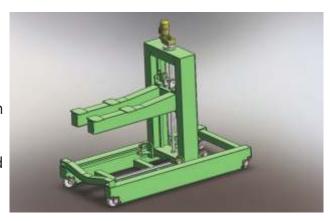
- Drive with motor, gear box
- □ Control with pendant or remote control
- A.C. frequency drives
- Power supply to trolley through cable reeling drum / shrouded DSL

#### Types of Material Transfer Systems

- □ Industrial Transfer Trolley
- ☐ Special Purpose Material Transfer System

#### Material Transfer Systems

- □ Capacity 1 Ton to 320 Ton
- Available in: German Gear Drive with variable speed
- Length & width of trolley: Customized (As per requirement)





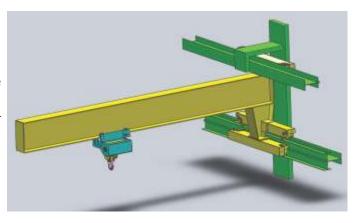


# Wall Traveling Cranes

Wall traveling cranes are in such a configuration, one side end carriages of the crane will travel and other end will be hanging like jib cranes and will move along the bay length through rails.

#### **Specifications**

- □ Capacity 1Ton to 10 Ton.
- Arm length up to 10Mtr.
- Available in German Geared Drive with variable speeds.
- Height of lift. Customized (as per requirement).



# **OUR VALUED CUSTOMERS**

### Domestic Base Customer





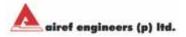






























































# **Exports Base Customer**

































# CONTACT US



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Fax: +91 20 46765128

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#### Manufacturing Unit 1

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#### Manufacturing Unit 2

Cu Built Engineers Pvt. Ltd. J – 513 / 1 /2 MIDC, Bhosari, Pune – 411026 Maharashtra, India

#### Manufacturing Unit 3

Cu Built Engineers Pvt. Ltd. Gat No. 62 & 63, Village Ahire, Tal. Pargaon Khandala, Satara – 412802 Maharashtra, India



















An ISO 9001: 2008 Certified Co.

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