

# Energy efficient transmission solution for power plant

## Power Plant Summit-

### 2024



**POWER BUILD PVT LTD**

Leaders in Power Transmission Solutions

UNLEASHING  
**POWER**

UNLOCKING  
**VALUE**

**MORE THAN**

**3,000,000**

**Geared motors / Gearboxes  
have been supplied by  
Power Build so far...**





# Radicon Powerbuild

w w w . p b l . c o . i n

**POWER BUILD PVT LTD** are the leading providers of high quality, standard, modified standard and custom engineered geared motors.



Geared motors and gearboxes are the heart of any engineering product. It is not just the torque and speed but the **RELIABILITY** of the Geared Motor that defines the performance of your product or equipment. So, whenever you think of Geared Motors, choose Reliability over the ordinary. Choose **RADICON POWERBUILD**, a name that personifies **RELIABILITY** and **VALUE**.

Experience the power of proven Performance and the advantage of **RADICON POWERBUILD**.

We are proud of our contribution to the society and towards protection of the environment.





# Brief Background

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Power Build Limited, popularly known as PBL, has been in the business of Gearboxes, Geared Motors and other Power Transmission Products since 1972. Having its own manufacturing facility in Vallabh Vidyanagar, Gujarat (India), PBL have been the pioneers in the mechanical Power Transmission industry in medium torque category in India since inception.

In 2010 PBL established its global ambitions by acquiring the Thailand based Geared Motor business of *David Brown UK*, which is now known as *Radicon Transmissions (Thailand) Ltd*. The brand **RADICON | POWERBUILD** thus brings to you the benefits of the latest product design along with the best in manufacturing technology and customer support.



Since 1972

POWER BUILD PVT LTD is part of well known Elecon Group of Companies.





# International Establishments

www.pbl.co.in



*Radicon Thailand Facility*





# International Establishments

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**Radicon Transmission UK**

**Radicon Transmission, USA**

**Radicon Transmission FZE - Middle East**

**Radicon Transmission (Australia) PTY Ltd**

**Radicon Asia (Thailand)**

**Benzlers Finland**

**Benzlers Germany**

**SA and Africa**

**Benzlers Italy**

**Benzlers Denmark**

**Benzlers Sweden - Head Office**

**Benzlers Netherlands**





# Powerbuild in Numbers

www.pbl.co.in

**1**  
COMMON  
CULTURE



**2**  
WORLD CLASS  
MANUFACTURING UNITS




**3**  
OFFERS



GEARED MOTORS  
GEAR BOXES  
GEAR ASSEMBLIES

**5+**  
SWIFT  
CENTERS

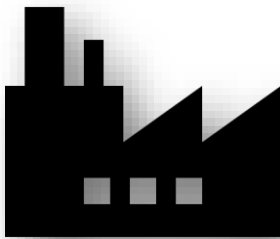


48 HOUR  
DELIVERY

**12**  
INTERNATIONAL  
LOCATIONS



**50+**  
INDUSTRIAL  
SECTORS



**50+**  
YEARS OF  
GEAR



EXPERIENCE

**1000+**  
EMPLOYEES



**15000+**  
CUSTOMERS



**3,000,000+**



GEARED MOTORS AND GEAR  
BOXES IN ACTIVE OPERATION



Power Build Limited offers a wide range of products which includes.

- ✓ Geared Motors
- ✓ Gearboxes
- ✓ Loose Gears
- ✓ Gear Pumps
- ✓ Drive Assemblies
- ✓ Custom Drive Solutions



Consequently, Power Build Limited provides a strong Design & Applications support to its clients and we are in a position to provide a solution to almost every power transmission requirements.





RADICON POWERBUILD Series 'M' Helical Inline Geared Motor and Reducers belong to the latest generation highly efficient Universal drive solutions. The product is very sturdy and elegant design that covers ratios beyond 20,000:1 along with capability of delivering a torque of 20,000 Nm.

<b>Unit Sizes:</b>	01, 02, 03, 04, 05, 06, 07, 08, 09,10, 13, 14, 16
<b>Input Power:</b>	Up to 132kW
<b>Output Torque:</b>	Up to 20,000 N-m
<b>Gear Ratios:</b>	Up to 20,000:1
<b>Motor Sizes:</b>	IEC Frames from 63 to 315



## Series M

### Helical Inline Geared Motor

The M,C,F,K range can be easily assembled due to its unique systems of modular kits, leading to prompt delivery.



RADICON POWERBUILD range of Helical Worm Geared Motor provides the optimum solutions for right angled drives with a high efficiency and multiple mounting options. Ratios up to 250:1 can be easily achieved in just two stages and up to 16,000:1 in multiple stages. Torques up to 10,000 N-m can be transmitted.

<b>Unit Sizes:</b>	03, 04, 05, 06, 07, 08, 09, and 10
<b>Input Power:</b>	Up to 45kW
<b>Output Torque:</b>	Up to 10,000 N-m
<b>Gear Ratios:</b>	Up to 16,000:1
<b>Motor Sizes:</b>	IEC Frames from 63 to 225



## Series C

Right Angled Heli-worm  
Geared Motor

The M,C,F,K range can be easily assembled due to its unique systems of modular kits, leading to prompt delivery.

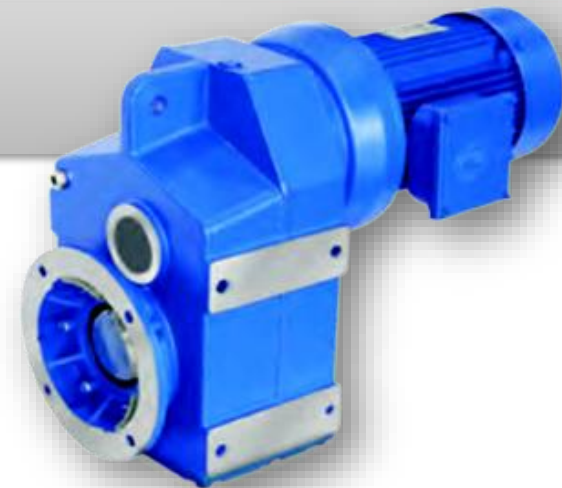


RADICON POWERBUILD Series 'F' Parallel Shaft Mounted Geared Motor comes with multiple mounting options and ratios up to 20,000:1 in multiple stages. This product comes with an integral torque arm for shaft mounted applications. This product is extensively used for Hoists and Cranes; Steel and Tube rolling mills; Steel Pipe manufacturing and a range of conveyor applications.

<b>Unit Sizes:</b>	02, 03, 04, 05, 06, 07, 08, 09, 10, <b>14, 25</b>
<b>Input Power:</b>	Up to 132 kW
<b>Output Torque:</b>	Up to 24,000 N-m
<b>Gear Ratios:</b>	Up to 20,000:1
<b>Motor Sizes:</b>	IEC Frames from 63 to 225

## Series F

Parallel Shaft Mounted  
Geared Motor



The M,C,F,K range can be easily assembled due to its unique systems of modular kits, leading to prompt delivery.



RADICON POWERBUILD Series 'K' is an extremely efficient right-angled gearbox. It can deliver torque up to 50,000 Nm with ratios up to 10,000:1..

Apart from superior aesthetics, the product is very flexible in terms of mounting options. This proven work horse finds wide-spread applications in most core industries like Cement, Power, Mining and other infrastructure projects.

<b>Unit Sizes:</b>	03, 04, 05, 06, 07, 08, 09, 10,12, 15, 16, <b>18</b>
<b>Input Power:</b>	Up to 132kW
<b>Output Torque:</b>	Up to 50,000 N-m
<b>Gear Ratios:</b>	Up to 10,000:1
<b>Motor Sizes:</b>	IEC Frames from 63 to 315

## Series K

Right Angle Helical Bevel  
Geared Motor



The M,C,F,K range can be easily assembled due to its unique systems of modular kits, leading to prompt delivery.



RADICON POWERBUILD range of smart Planetary Geared motor and Reducers provide an ideal solution for inline and right-angled applications which require high ratios up to 2,500:1 in a limited space.

The current product range covers 65,000 N-m. The product has a range of options on the output side to suit the customer needs.

**Unit Sizes:** PL- 01, 02, 03, 05, 08, 12, 16, 25, 40, 65  
PR- 01, 02, 03, 05, 08, 12, 16, 25, 40, 65

**Input Power:** Up to 90 kW

**Output Torque:** Up to 65,000 N-m

**Gear Ratios:** 3.6:1 to 3200:1- Single/Double Reduction

**Output options:** Output shaft to suit connection with shrink disc  
Output shaft with keyway Hollow  
Output shaft with external spline  
Output shaft with internal spline

**Motor Sizes:** IEC Frames from 90 to 200



## Series PL

Planetary Geared Motor



RADICON POWERBUILD Series 'J' is available in the most popular ratios. A very simple product that is easy to mount and dismount using our patented KIBO technology. By varying input speed using mechanical drives, the output RPM can be controlled to suit any application. Series 'J' delivers an excellent performance especially for construction, ceramic, glass, mining, paper and chemical industries.

<b>Unit Sizes:</b>	J1, J2, J3, J5 and J7- Single and Double Stages
<b>Input Power:</b>	Up to 55kW
<b>Output Torque:</b>	Up to 5,000Nm
<b>Gear Ratios:</b>	Up to 5:1- Single Reduction Up to 25:1- Double Reduction



## Series J

Shaft Mounted Speed Reducer



RADICON POWERBUILD Series 'A' is a genre of Compact Geared Motors with a proven performance. This product range is available locally through stockiest and retailers across the country. Series 'A' has a stylish design, ease of installation, compact, light weight, efficient and comes with a minimal foot print. The product is grease filled for life which makes it simple and maintenance free.

- Unit Sizes:** 9 Sizes
- Input Power:** Up to 11kW
- Output Torque:** Up to 2,764 N-m
- Gear Ratios:** Up to 200:1
- Output Options:** Solid
- Motor Sizes:** IEC Frames from 71 to 160



## Series A

Compact Geared Motor



RADICON POWERBUILD offers mechatronics solution for motor ratings from 0.37kw to 7.5kw for wide range of motion control applications. These variable frequency drives are integrated with the geared motor (Decentralized Drives) and hence can be controlled remotely. The **MOTODRIVE** solutions are available with all category of geared motors suitable for applications like food processing, material handling and baggage handling.

**Unit Sizes:** 2 frame Sizes  
**Input Power:** 0.37 Kw to 7.5 Kw  
**Input Supply:** Three phase 230/415, 50/60Hz

## MOTODRIVE

Decentralized geared motor





The small to medium planetary units series PN has 23 sizes with ratio coverage from 3.6:1 to 2250:1 providing an efficient and compact drive solution to get 800 Nm to 2,75,000 Nm torque capacity.

**Unit Sizes:** Inline Planetary - P(1/2/3/4)C- 11 TO 33  
Bevel Planetary - P(1/2/3/4)B- 11 TO 33

**Output Torque:** Up to **2,75,000 N-m**

**Gear Ratios:** **3.6:1 to 2250:1**

**Output options:**

- Output shaft with keyway
- Hollow output shaft to suit connection with shrink disc
- Hollow output shaft with keyway
- Output shaft with external spline
- Output shaft with internal spline



## PN Series

Planetary geared motor



The new H series units are PBL's new range of products dedicated for catering Hoist application requirements in material handling cranes. This required special features and robust design, which are wisely incorporated in these series. In our H series 3 sizes with up to 12.5 Tons Lifting capacity.

**Unit Sizes:** H3100, H3200, H3300

**Lifting capacity :** Up to 12.5 Tons

**Special Features For Gearbox:**

- Double Oil Seal

- With Driving Flange

- ND Side Brake

- Brake Fitting Provision

**Output options:** Output Shaft is a Spline Shaft as per DIN 5480



## H Series

Hoist geared motor



PBL is proud to introduce the "PBWR Series (Aluminum Worm Gearbox)." The PBWR series is a new generation of worm gear units developed on the basis of innovation, quality, and advanced engineering. The PBWR Series comes in sizes ranging from 25 to 150, with reduction ratios ranging from 7.5 to 100.

**Unit Sizes:** 30, 40, 50, 63, 75, 90, 110, 130, 150

**Output Torque:** 2.6 N-m to 1484 N-m

**Gear Ratios:** From 7.5 to 100

**Special Features For Gearbox:** • Solid o/p shaft

- With Torque arm
- O/p Flanges
- Other accessories like Viton oil seal, Reinforced o/p, Low/High Temp. and Food grade oil



## PBWR Series

Aluminum geared motor



POWER BUILD has one of the best manufacturing facility in the world to produce Loose Gears and Pinions of high accuracy ranging up to DIN Class 6. The Range includes gears up to 1000mm diameter. Highly specialized gears have been delivered for application in Railways, Textile, Compressors, Pumps, Defense, Steel, Power and Construction.

**Components:** Spur Gears  
Helical Pinions and Gears  
Double Helical Gears  
Worm & Worm Gears  
Split Gearing

**Accuracy Class:** Up to DIN 6

**Diameter ranges:** Up to 1000 mm

**Services:** Custom Gear manufacture as per Client requirement  
Refurbishment of existing Gear Boxes



Loose Gears and Pinions



# GEARBOXES/GEARMOTORS SUPPLIED IN VARIOUS APPLICATION - POWER PLANT



## Customer:- KARTHIKEYA CRANE (Chennai)

### Model :-

- H3300- 05 Nos
- H3200- 05 Nos
- H3100- 05 Nos

**Speciality:- Ext.  
Splined Shaft, D-  
Flange, INTORQ Brake  
at NDE**



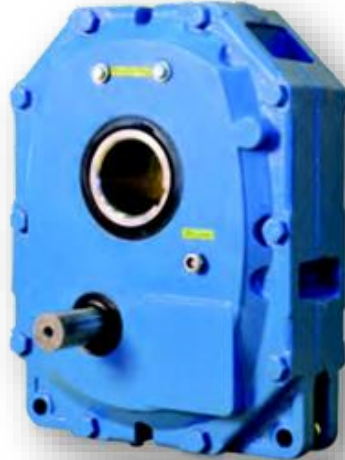
**Customer:- Electromech Pune**

**Model :-** M, F, K & PR series & M series with Sp. Spline shaft



**Customer:- Conveyor Belting Enterprise  
(Coimbatore)**

**Model :-** J22B, J32B, J52B, J72B With Double oil seal on i/p shaft & Double Leap oil seal in J72B





**Customer:- KYB Conmat**

**Model :- M,C,J Series**



**Customer:- KYB Conmat**

**Model :- M,C,J Series**



**Customer:- L&T**

**Model :- K & M series**

**Speciality:-**

- 1) Special Torque arm
- 2) Special Gear case
- 3) Special Bearing



**Customer:- Elecon MHE.  
( Chetinad Project)**

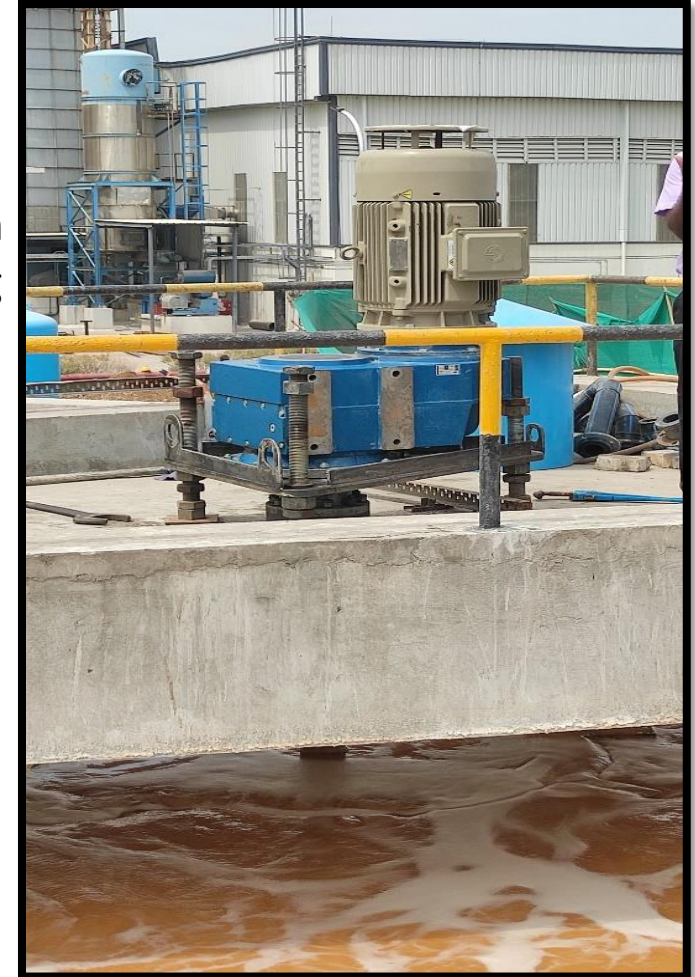
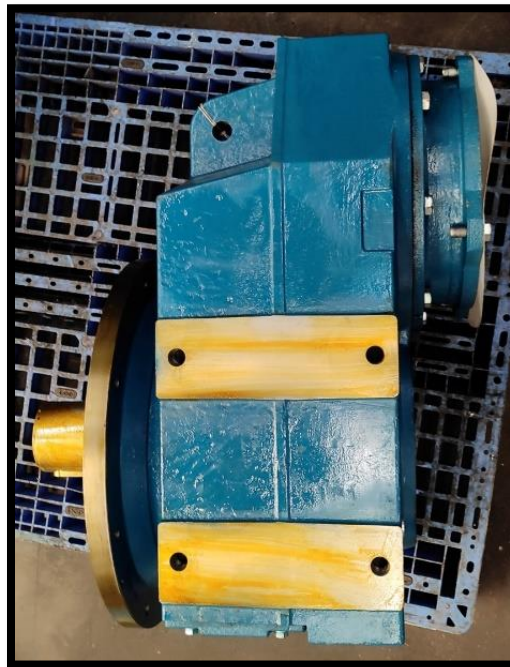
**Model:- PR2540 With Servo Motor**

**Requirement:-** o/p speed 0.011 to 11 rpm  
With I/p speed upto 3500 Rpm.  
Total Solution with PLC panel.



**Customer:- JRS Pharma & Gujarat Microwax Pvt.ltd**

**Model :-** F1424 Model With Single Solid O/p Shaft, With Double oil seal on O/p Shaft And with SKF / FAG bearing



**Customer:- TATA KPO (Water treatment plant)**

**Model :-** M0822 MMR Suitable for 5.5 kW



## Customer:- Harshal Industries (Pune)

**Model :-** PBWR 50, Ratio:-30, With Std. O/p Flange, With Hollow O/P Shaft Dia. 25mm, Mtg. Position-B3, GB suitable for 0.37 kW, 4 Pole, 71 Frame, B5 Motor



# THANK YOU

For your attention

## “Lets Team up”

