

# Vora Machinery Works

(IMPOTERS AND EXPORTERS)

## 1. V Belt Pulleys



Aided by a team of qualified and skilled professionals, we are offering a huge gamut of **Single Belt Pulley** is available in diverse specifications. This single pulley is used to support the movement of direction of belt along its

circumference. Offered single pulley is tested by our adroit professionals on well-defined parameters. This single pulley can be availed at market leading prices.

#### **Features:**

- Rugged design
- High load bearing capacity
- Corrosion resistance

# **Technical Specifications:**

- Size (Diameter): 2" to 12"14" to 18"20" to 24"32" to 36"
- Section: ABCD
- Specification: Single Groove Pulley

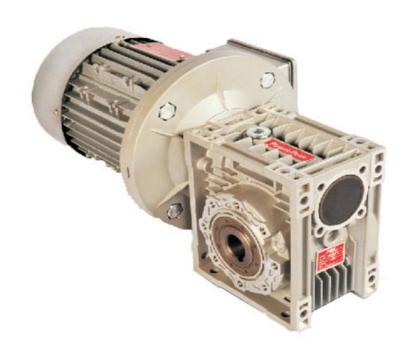
#### 2. Taper Lock Pulleys



• First-ever range of standard metric pulleys to be Made in India.

- Dual-duty grooves to perfectly match Classical 'V' & Space saver Wedge Belts
- With Taper Lock Bushes, changes in diameter and position of pulleys can be easily done
- Drives up to 250kW at 1440 RPM
- Speed ratio up to 1:7
- Over 470 standard sizes to meet a wide range of requirements

#### 3. FW Series Geared Motor



- Power Rating: 12 kW 15 kW
- FW 30 / 40/ 50 / 63 /75 / 90 (Alu –Die Cast Body)
- FW 110 / 130 / 150 (Cast Iron Body)
- **Types:** Worm/Heli Worm/Double Reduction
- High Reduction Ratio
- Flexible Mounting

- Gearbox with IEC/ISS
- Lubricated for lifetime
- Maintenance-free operation

#### **FH-FENNER**

## 4. Tough Nut -In-line Helical Geared Motor - FH Series



- DESIGN CONCEPTS: the combination of standardization and modularization allows interchangeability with international leading brands, while keeping structure rigidity and compactness.
- ENERGY EFFICIENCY: leveraging the advantage of high accuracy of helical gears, the reducers perform at 90% efficiency with higher stability and lower noise level.

- RATIOS COVERAGE: 1~3 stages of reduction provides a wide range of ratio accommodation from 1/1.3~1/27788.
- LOADING CAPACITY: available with power ranges from 1/4hp up to 150hp depending on different requirements and applications.
- TENSILE STRENGTH: pinion and gears are made with 20CrMo alloy steel plus carburizing heat treatment to enhance performance; the input pinion is equipped with double bearing support to provide stability at high speed.
- COMPLETE SERIES: vertical and horizontal mounting along various input mechanism ensure the products meet a wide range of applications.
- INSTALLATION FLEXIBILITY: all models are designed for a choice of mounting position (M1~M6) specified by customers.
- APPEARANCE AESTHETICS: the products are designed with modern exterior while maintaining high rigidity.

#### **FENNER BEVEL GEARBOX**

#### 5. Tough Nut – Bevel Helical Gear Reducer – FK series



- DESIGN CONCEPTS: the combination of standardization and modularization allows interchangeability with international leading brands, while keeping structure rigidity and compactness.
- ENERGY EFFICIENCY: leveraging the advantage of high accuracy of helical gears, the reducers perform at 90% efficiency with higher stability and lower noise level.
- RATIOS COVERAGE: 3 stages of reduction provide a wide range of ratio accommodation from 1/8~1/215 more than worm gear reducers.
- LOADING CAPACITY: available with power ranges from 1/4hp up to 60hp depending on different requirements and applications.
- TENSILE STRENGTH: bevel gears and helical gears are made with 20CrMo alloy steel plus carburizing heat treatment to enhance performance.
- SPACE EFFICIENCY: 90° transmission and compact configuration for minimizing mounting space.

- INSTALLATION FLEXIBILITY: all models are designed for a choice of mounting position (M1~M6) specified by customers.
- APPEARANCE AESTHETICS: the products are designed with modern exterior while maintaining high rigidity

#### 6. Shaft Mounted Speed Reducer



- Mounted directly on the shaft and does not require a foundation.
- Eliminates the need for coupling and potential alignment variations.
- Options: Foot Mount/Flange Mount/Motor Mounting/Vertical Shaft Mounting/Back Stop.
- Comes in 8 sizes B, C, D, E, F, G, H & J.
- Maximum Torque (O/P) 6995 Nm @10rpm.
- 3 Ratios 5:1, 13:1, and 20:1
- A wide range of output speeds can be obtained by using appropriate input V-Belt drives.
- Choice of alternative hub bores.

• Delivers 98% efficiency per stage of reduction.

#### 7. Parallel Helical Geared Motor - PHGM



- Available in 8 Model B, C, D, E, F, G, H & J.
- 12 ratios are available ranging from 5:1 to 63:1
- Nominal Input Motor RPM is 1440.
- Backstop available in Adaptor Flange.
- Hollow output Hub with Standard & alternate bore sizes.
- Flange design supports vertical Mounting applications.
- Torque arm and Anti Vibration Bracket assembly are available as accessories.

# 8. ESSEX Jaw Coupling



- Flexible Rubber inserts caters to incidental Angular, Parallel, and Axial misalignments
- Comes in Standard (8 sizes), External Spider (6 sizes), and Cushion type (5 sizes)
- All versions are available in spacer type, with spacer size depending on the distance between the shaft ends (DBSE)

• **Torque:** 20 – 2139 Nm

• **Bore Range:** 15 – 90mm (via Bore)

## 9. HRC Coupling



- A product developed by Fenner (Hainsworth Research Centre, UK)
- Higher power transmission & misalignment capacity
- Available in Taper Lock / Through Bore versions
- Optimized design to balance power capacities
- Appropriate shaft diameters that utilize Taper Lock Bush fixing.
- Nitrile Rubber elastomeric inserts to withstand temperatures from 40°C to +100°C
- Comes in 8 varying sizes (HRC-70 to HRC-280)
- **Torque:**5 3150 Nm
- **Bore:** 9 90mm (Taper Lock) & 10 115mm (Through Bore)

# 10. Pin Bush Coupling



- Simple and Compact
- High Torque and High Speed
- Flanges in pilot or finished bore
- Lubrication is not required
- Comes in 26 sizes (FBC-1 TO FBC-17)
- Power rating ranges from 0.81 kW to 2069kW at 100 rpm.
- **Torque Range:** 77 1,97,600 Nm
- **Torque:**5 3150 Nm
- **Bore range:**7 350mm

# 11. Fenaflex Tyre Coupling



- Highly Elastic and Back Lash Free
- Absorbs shocks and dampens vibrations
- High Misalignment Capacity
- Available with Taper Lock Bushes
- Available with Spacers 100mm,140mm,180mm DBSE
- Choice of tyres Standard, Neoprene, or Fire Resistant Anti-Static (FRAS)
- Inherent Overload Protection
- Lubrication is not required
- Comes in 17 sizes (F40 F250)
- Power rating ranges from 0.22 kW to 132kW at 100 rpm
- Bore: 9 127mm (Taper Lock) & 11 –190mm (Through Bore)

## 12. Gear Coupling



- High Mechanical Flexibility Crowned Tooth profile
- High Mechanical Flexibility Curved Tooth profile
- High compensation of Angular, Parallel, and Axial misalignment
- High power carrying capacity
- Suits variety of applications
- Conforming to IS & IPSS Standards
- Seal carrier for easy maintenance
- Carbon Steel forged / cast hubs with hardened teeth
- Comes in 19 sizes (FGC-1 FGC-19)
- Comes with Torsion shaft.
- **Torque:** 1100 14,70,000 Nm
- **Bore range:** 14 710 mm

# 13. Resilient Coupling



- High-power rating and greater flexibility
- Ranges from 0.45kW to 1308kW at 100 RPM
- Vertical & Horizontal Split cover for easy installation

#### 14. Motors

# **International Efficiency IE2 / IE3-Apex series**



The increasing costs of energy calls for saving the same in all steps of manufacture. Electric Motor Driven systems used in the industrial processes consume around 70% of the energy used in the industry. Hence innovative technology has to be developed and applied to achieve highest possible efficiency levels. CG has developed Apex Series, energy efficient motors complying with latest IS12615 & IEC60034-30.

The Indian standard mentions following additional performance other than IEC60034-30

- Performance requirements in addition to efficiency.
- Breakaway torque
- Breakaway current
- Full load speed

- Full load current
- Frame size designation
- Range
- 0.18 kW to 710 kW
- Frame
- IEC 80 to 500 in cast iron
- IEC 63 to 160 in Aluminum
- NEMA 143 to 504 in cast iron
- NEMA 56 to 256 in Aluminum
- Mounting
- Foot/Flange/Face
- Pole
- 2 to 10 Others on request
- Frequency
- 50 or 60 Hz
- Ambient Temp.
- -20 to + 50 ° C Others on request
- Protection
- IP 55; Others on request
- Feature
- Inverter Compatible

#### Flame Proof Motors Ex 'db' (LV)



CG offers wide range of low voltage Flameproof squirrel cage & Slip ring electric motors for operation in hazardous and hostile environments, ranging from 0.37 kW to 500 kW. These Flameproof Motors are licensed by a European notified body (BASEEFA) and Indian notified body (BIS/DGMS/PESO). All relevant products fully comply with the requirements of the ATEX & CE Directives.

We also offer a complete range of Squirrel Cage Motors for **Gas Group IIC.** These motors are manufactured under most stringent quality control norms for **IIC** atmosphere and are duly tested at ERTL, Kolkata and Karandikar Laboratories, Mumbai.

- Standard Motors are designed for foot mounting; other mountings are also available on request.
- Standard Levels of enclosure protection for motor and terminal box is IP55.
   With IP56,IP65 and IP66 available on request

- All Hazardous area motors (except for Gas Group IIC-available in TOP only)
  have terminal box on the RHS as standard. Top terminal box can be offered
  on request.
- Standard Paint shade is anti corrosive epoxy RAL7034(Yellow Grey), others are also available on request
- The flame proof motors manufactured by CG are suitable for Temperature Class T4 as per IS/IEC 60079-1.

Following accessories can be offered on request.

- Thermistor
- Space Heater
- Insulated Bearing (Frame IEC 200 and above)
- Roller Bearing (Frame IEC 225 and above)
- Encoder Mounting arrangement
- MS Canopy
- Double Compression Cable Glands