



CILINDRICAL ROLLER BEARINGS

Applications

Common Applications

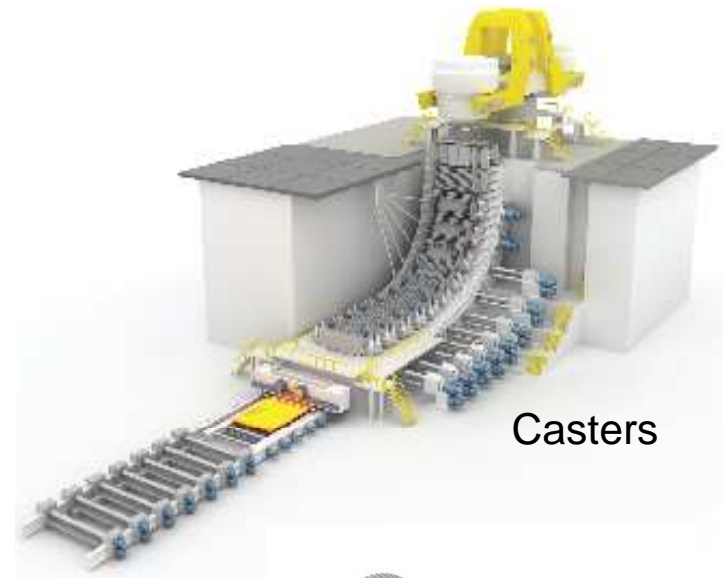
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CRB Applications

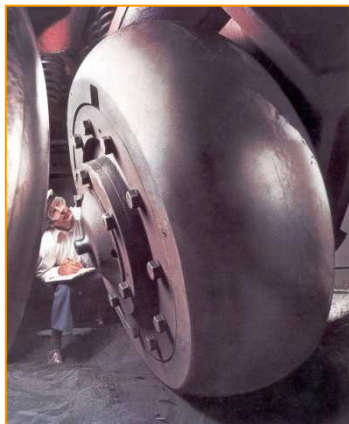
- Common in many industrial applications where radial loads are prevalent



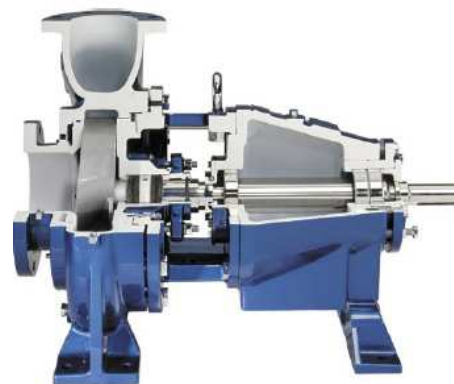
Flat and Long Product Rolling Mills



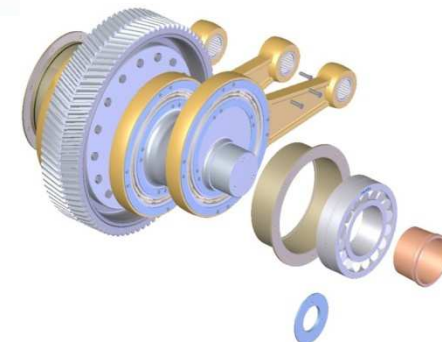
Casters



Coal Pulverizer Wheels



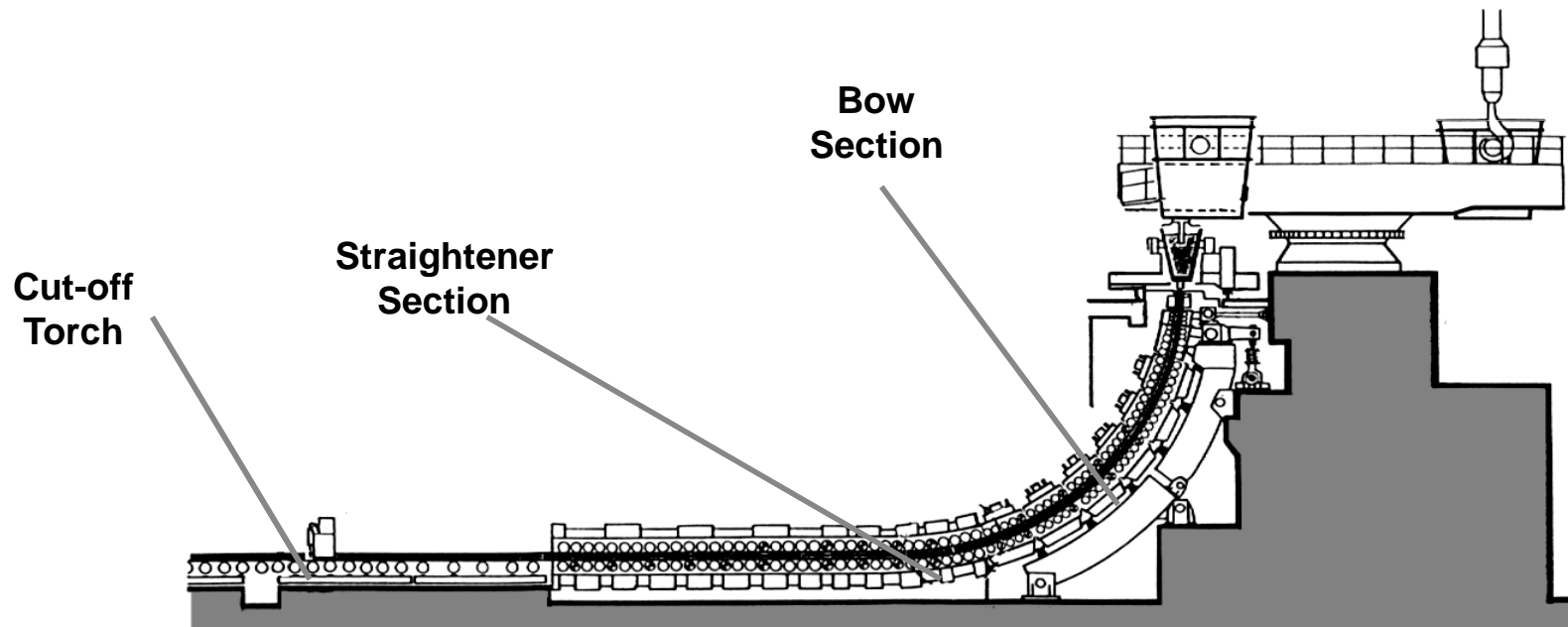
Slurry Pumps



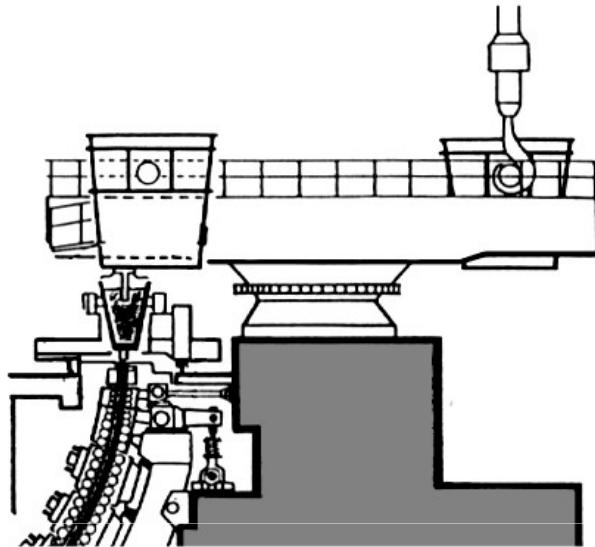
Mud Pumps

Metals - Continuous Caster

- Slab leaves mold and travels down [sometimes through a bender] to the Bow and Straightener sections
- At the bottom of the caster, continuous bar cut into separate bars by a gas torch



Metals - Continuous Caster



Ladle Turret

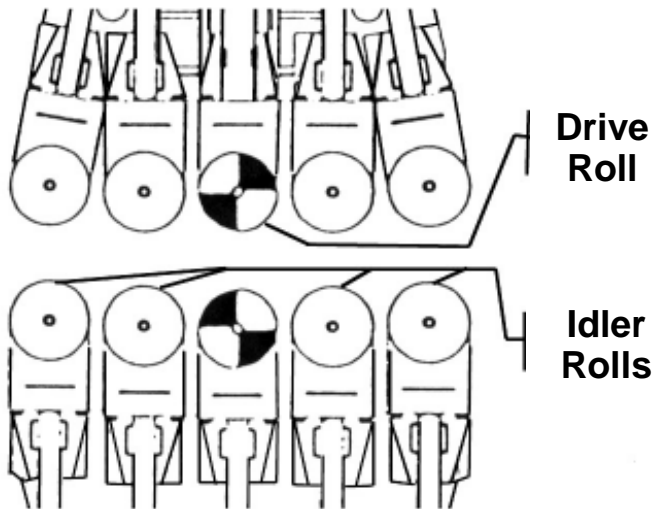
- Cylindrical, spherical, taper and ball thrust bearings up to 1200 mm (47.25 in) bore
- Radial cylindrical and spherical bearings

Mold Oscillator

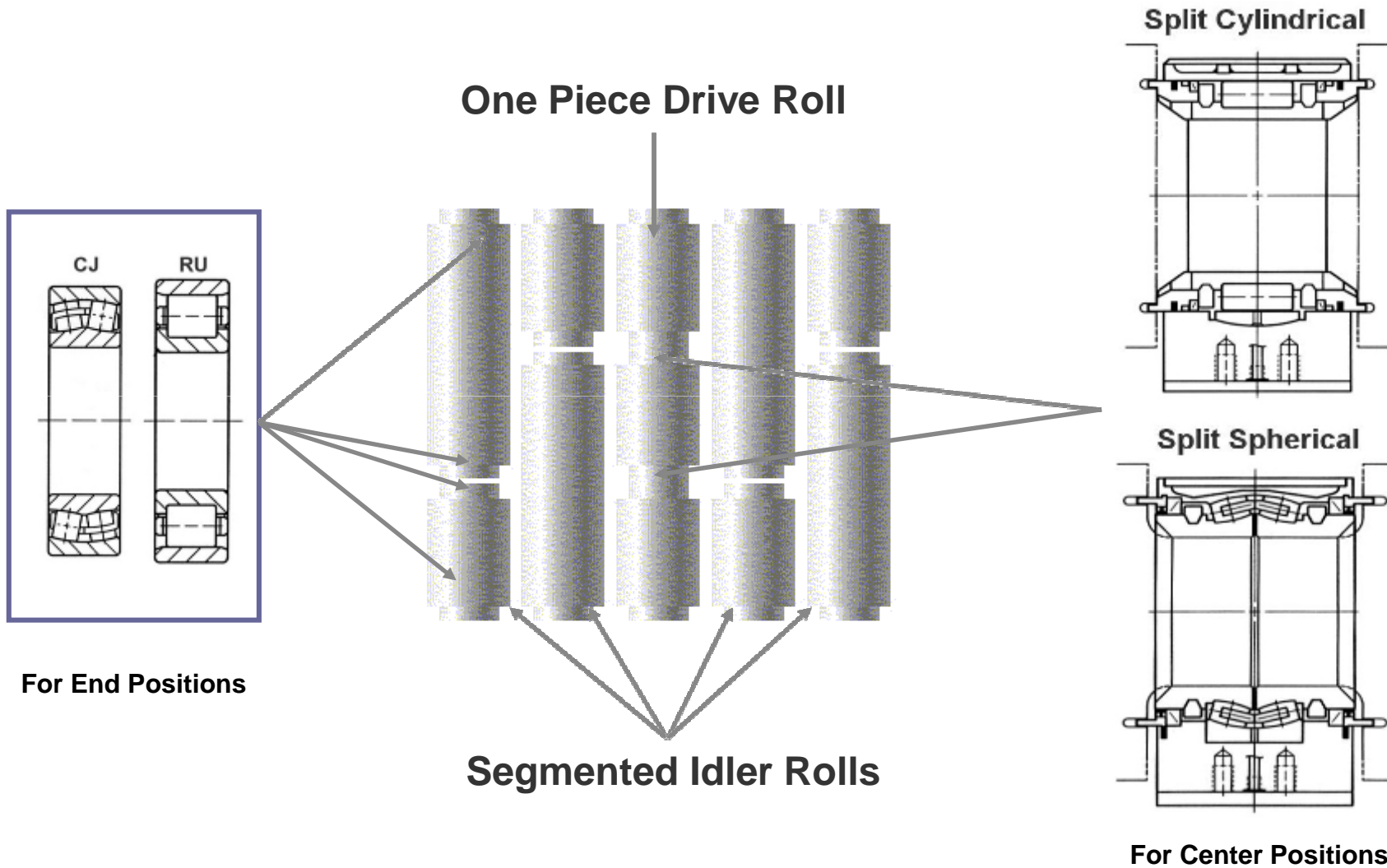
- Spherical, taper and cylindrical bearings with heavy duty cages and tight tolerances

Strand Segments

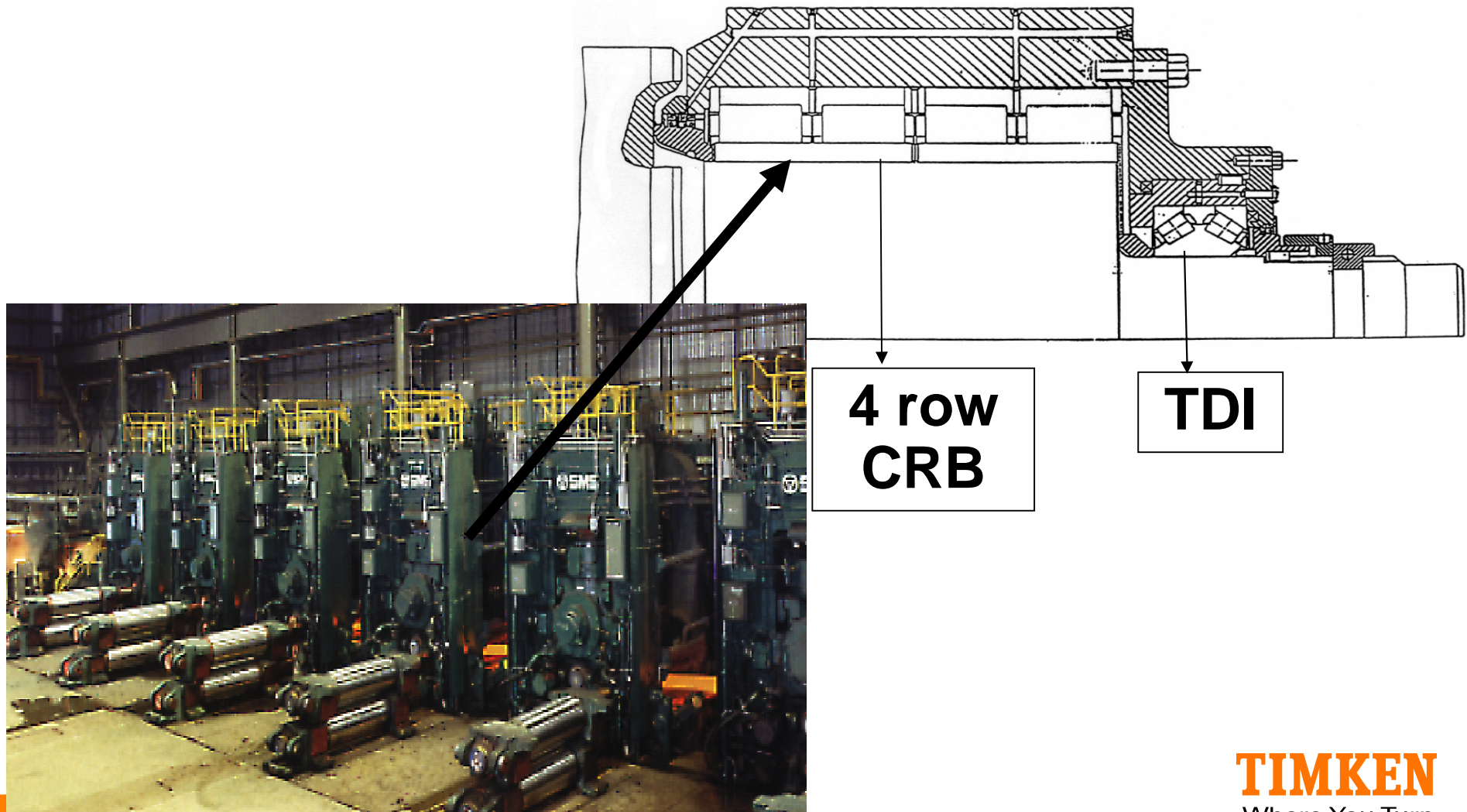
- Drive rolls:
Spherical and cylindrical roller, split spherical, or split cylindrical roller bearings
Water cooled split housings
- Idler rolls:
Needle, spherical and cylindrical roller bearings



Continuous Caster - Segment Rolls



Typical Plate Mill Configuration – Back-up Roll

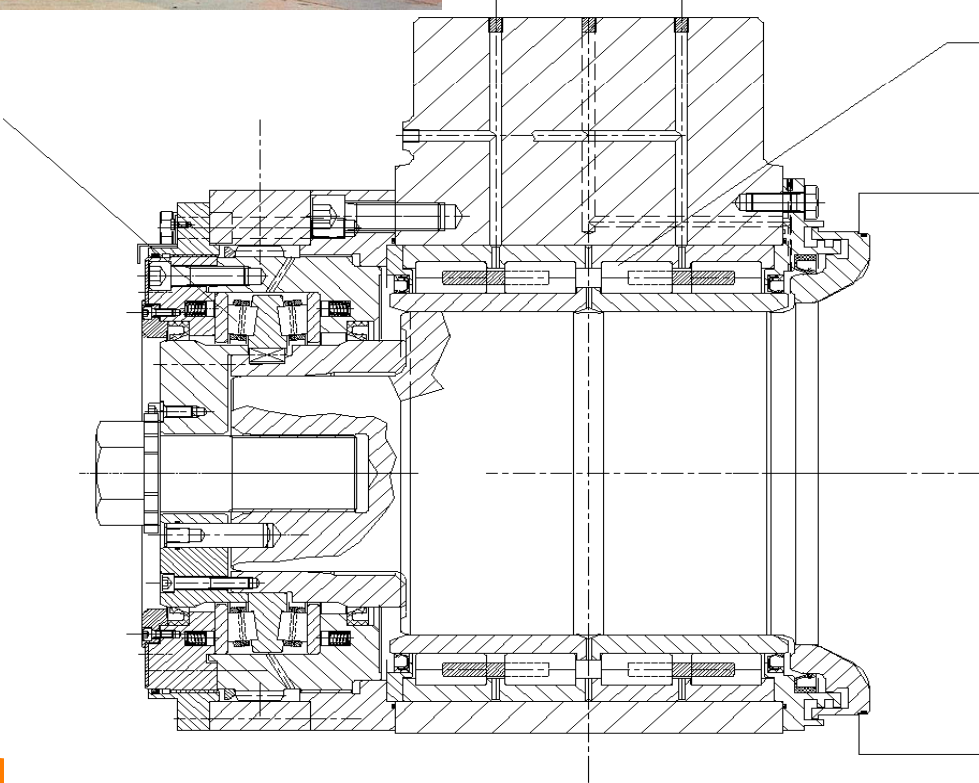


Typical Bar Mill Configuration – Work Roll



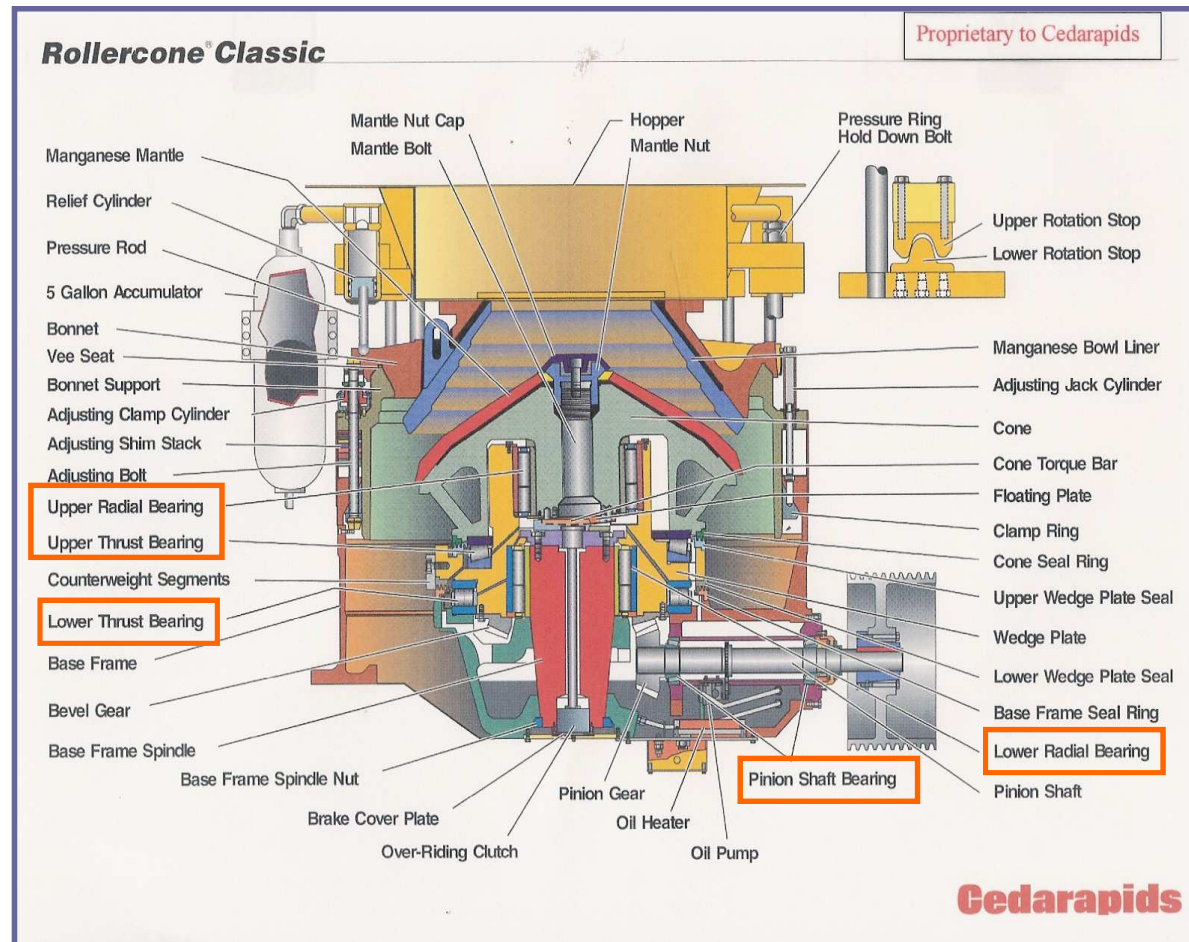
Radial bearing
4-row CRB
Open or Sealed
(bore 140-400mm)

Axial bearing
TTDWK



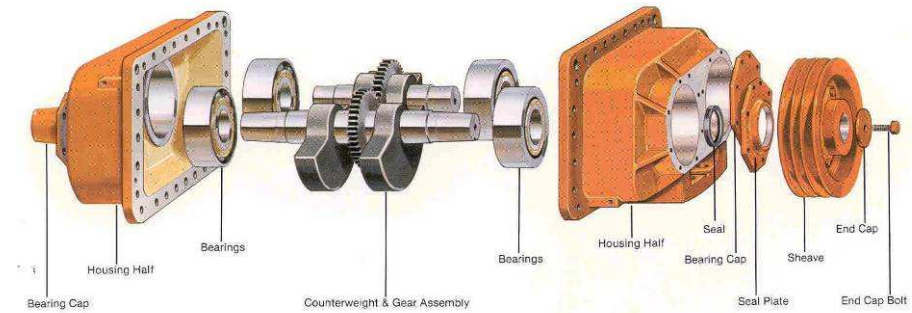
Aridos – Machacadora de Cono

- Upper radial bearing: CRB
- Lower radial bearing: CRB
- Upper thrust bearing: Thrust TRB (TTVF type)
- Lower thrust bearing: Thrust CRB (TP type)
- Pinion shaft: TRB (TS type)



Aridos- Criba Horizontal

- Reciprocating action
- Uses multiple shafts with two bearings per shaft

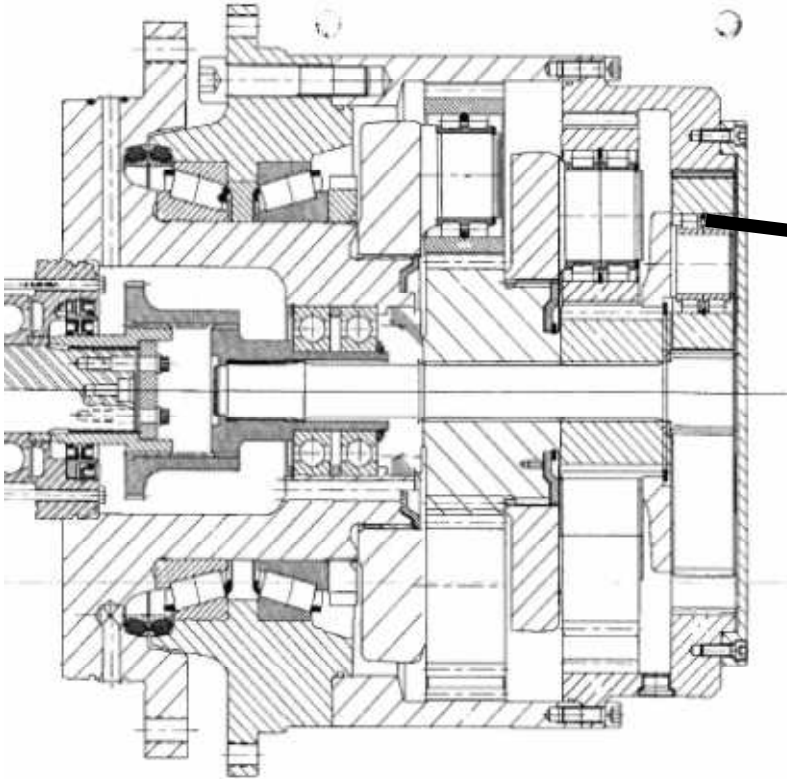


Low Head Screen Bearing Assembly (CRBs)

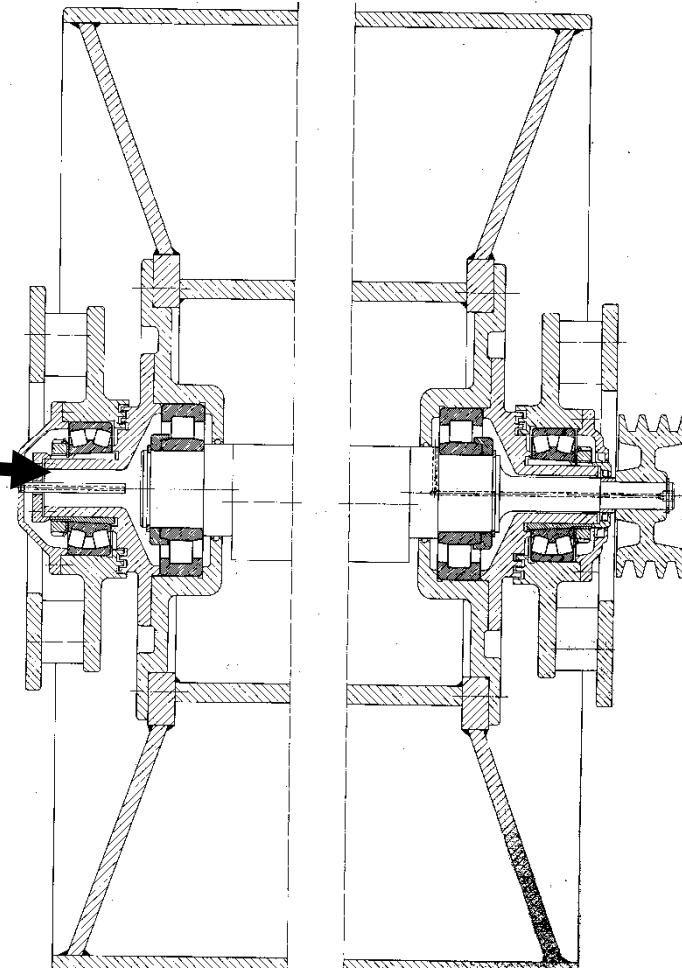


Construction – Front End Loader

- N style CRB's Outboard planetary



Construction – Vibratory Compactors

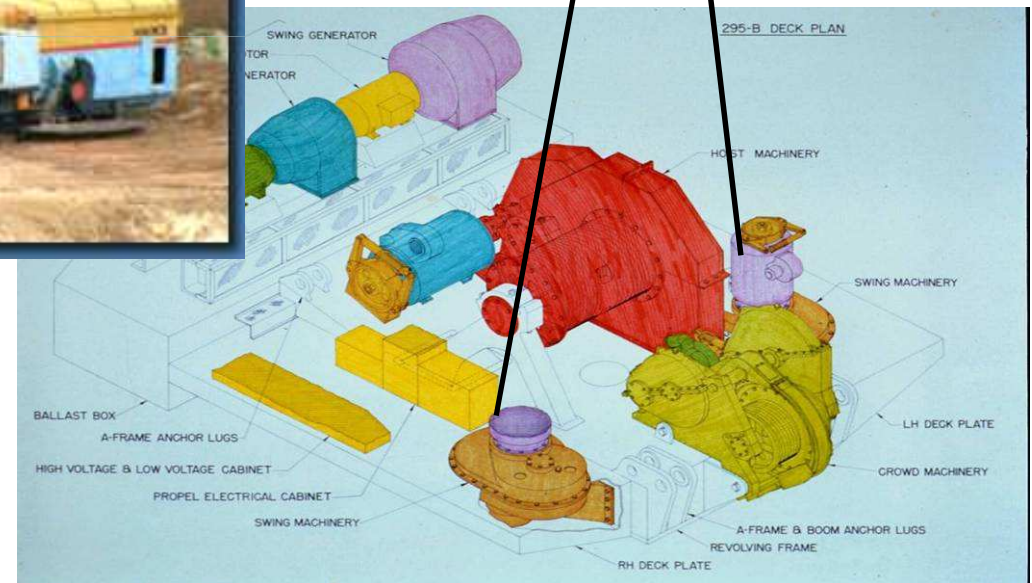


- NU style CRB's with HJ rings for incidental axial contact

Mining Applications

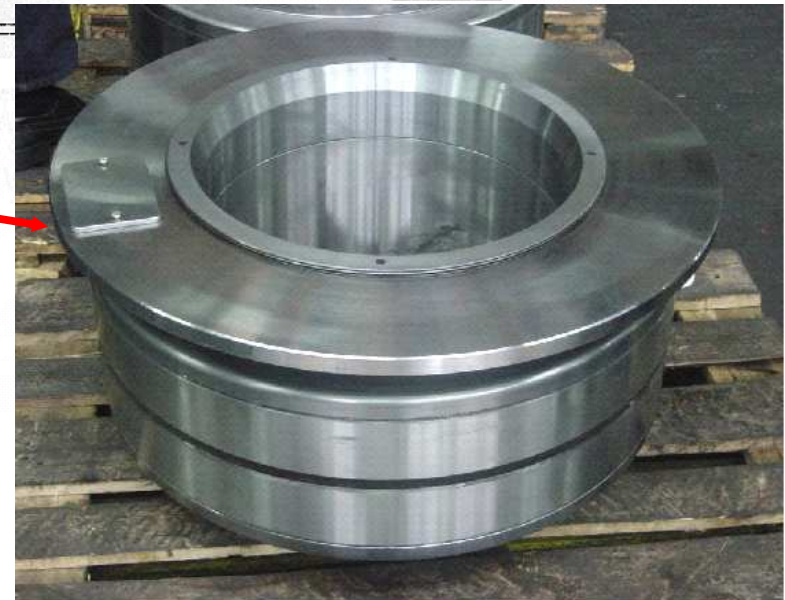
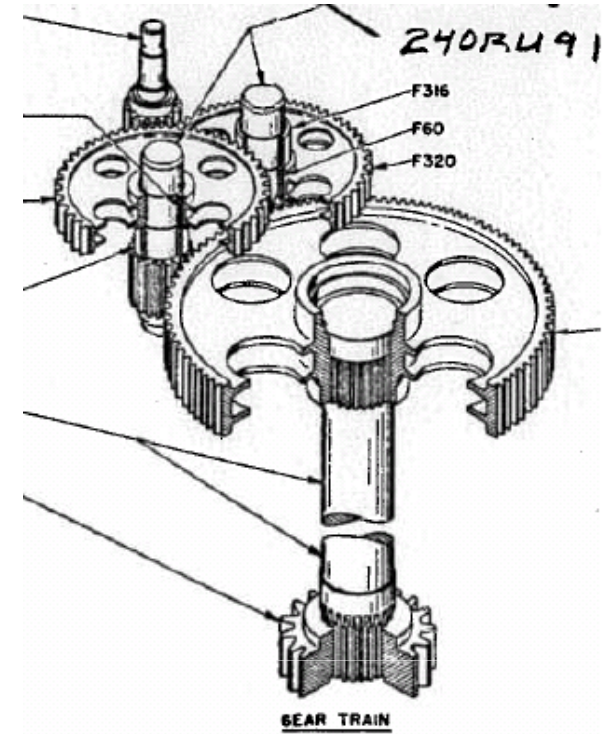
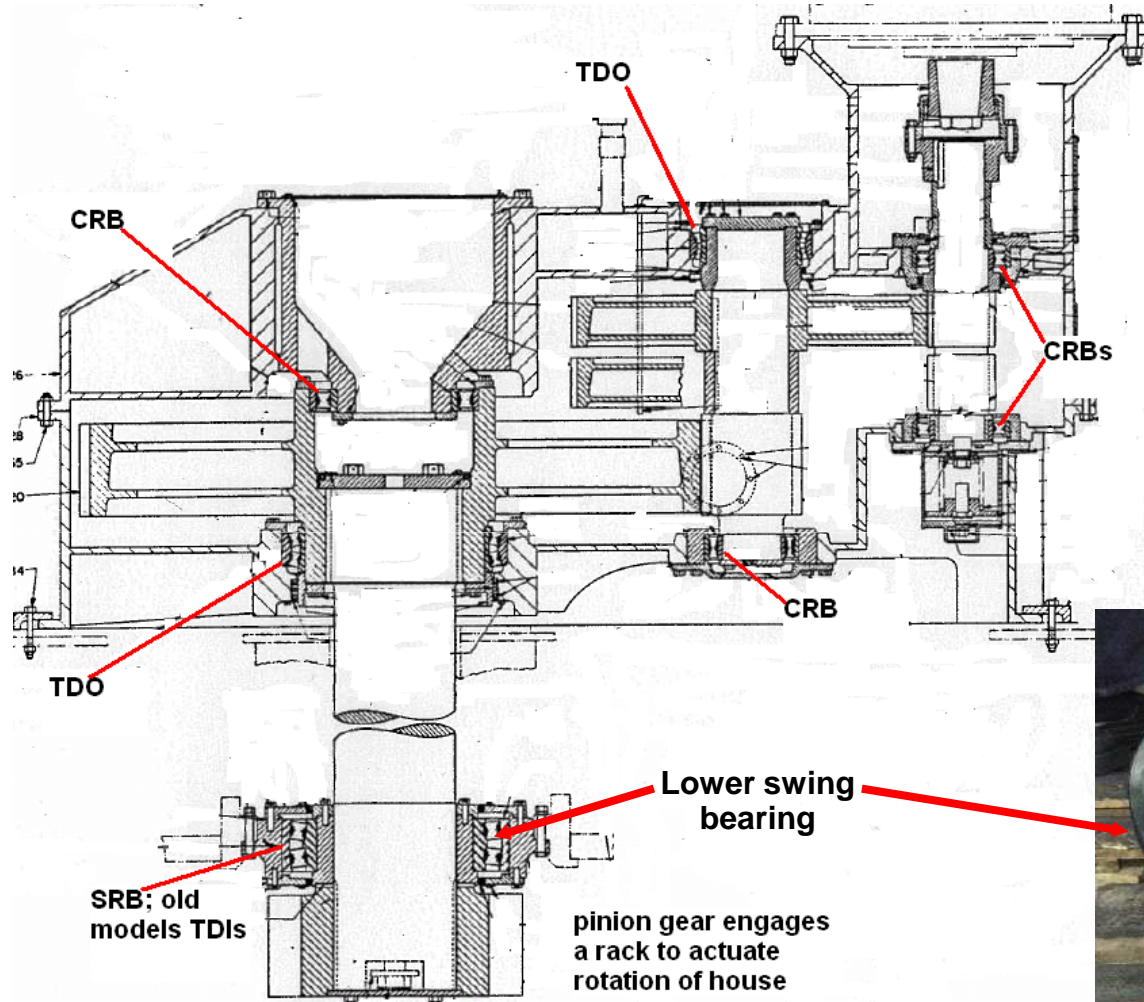


Swing Arms



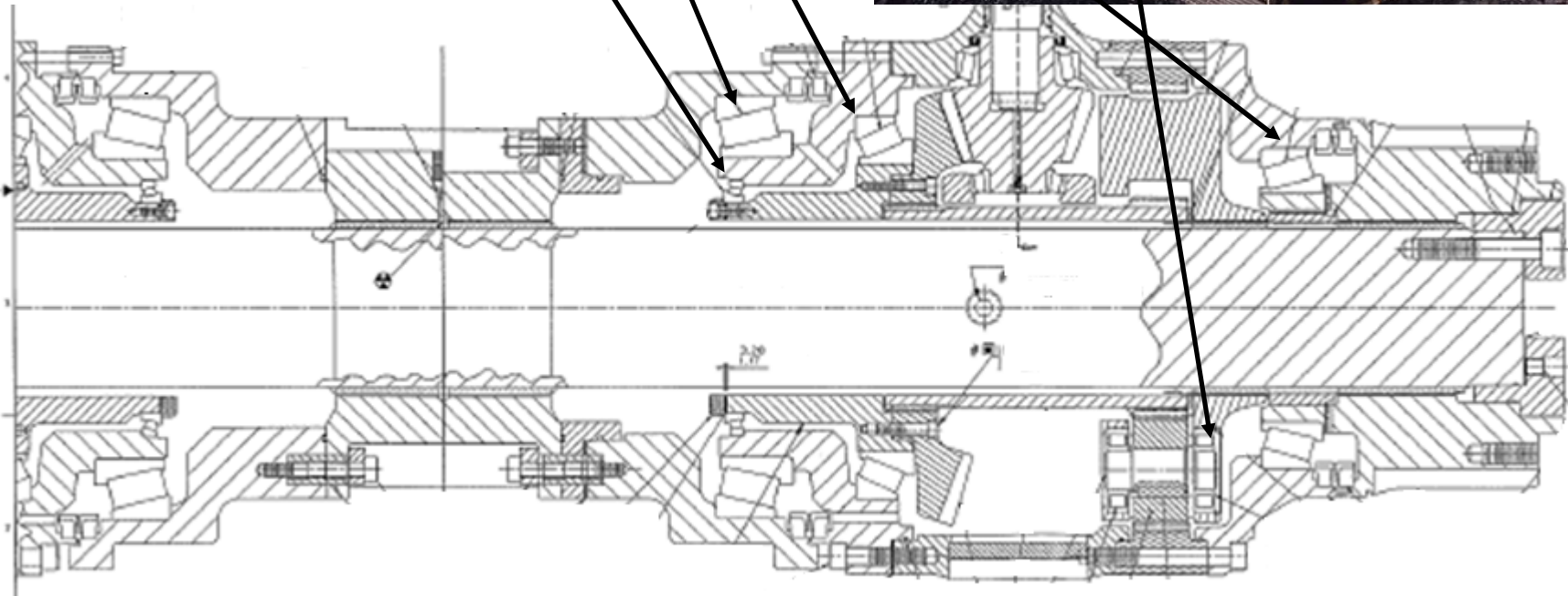
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Swing Gear Train



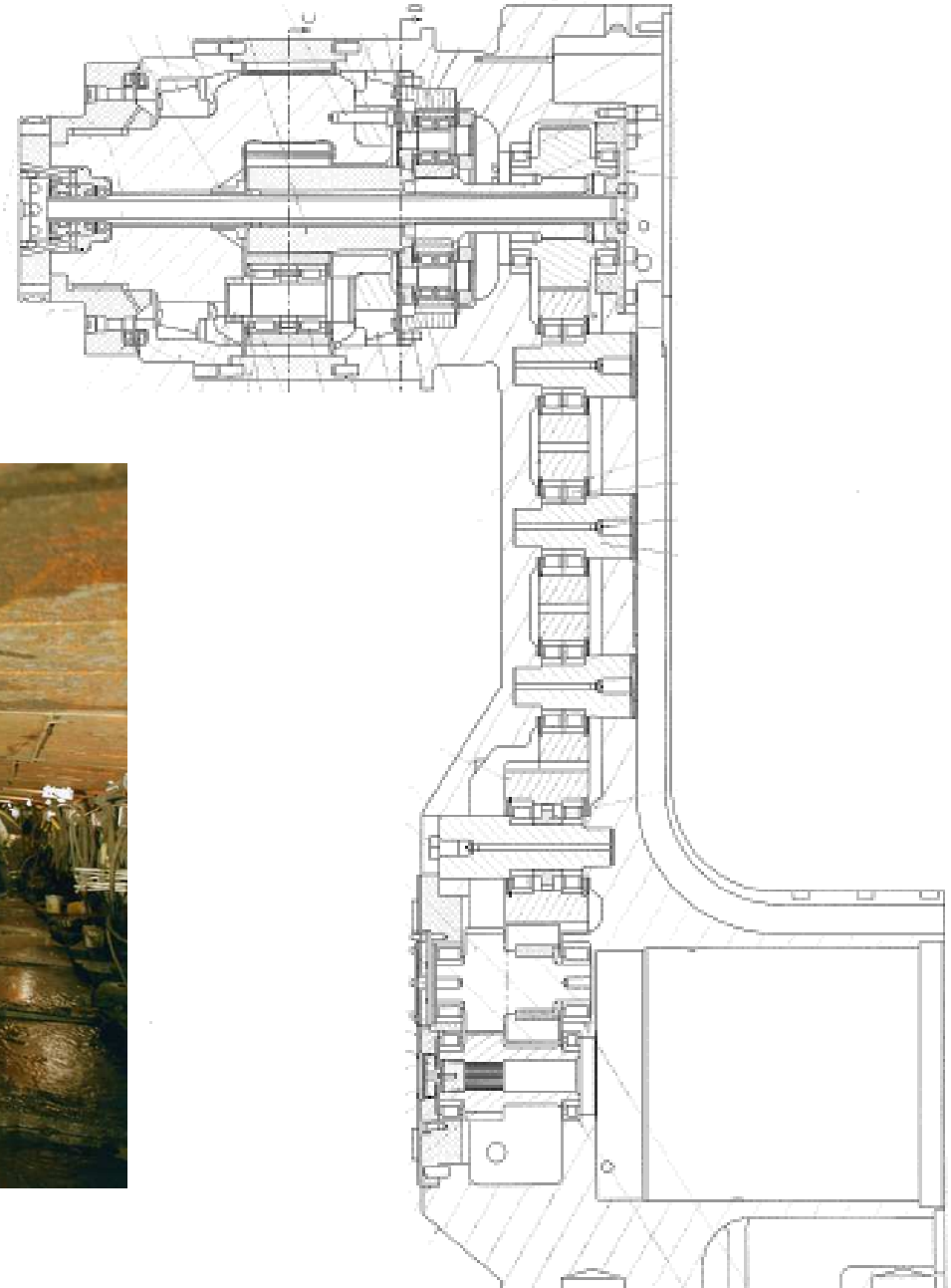
Continuous Miner

- CRB's planetary
- CRB's at drum positions as opposed to TRB's
- TRB's at spiral bevel gear

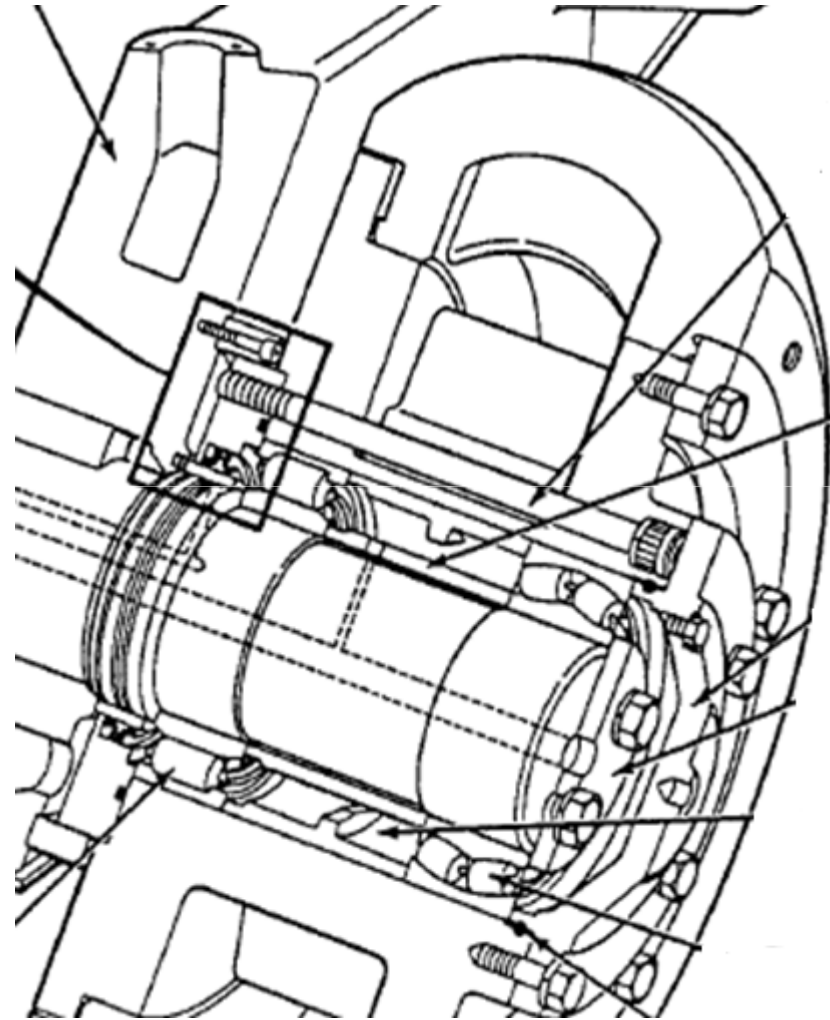


Longwall Shears

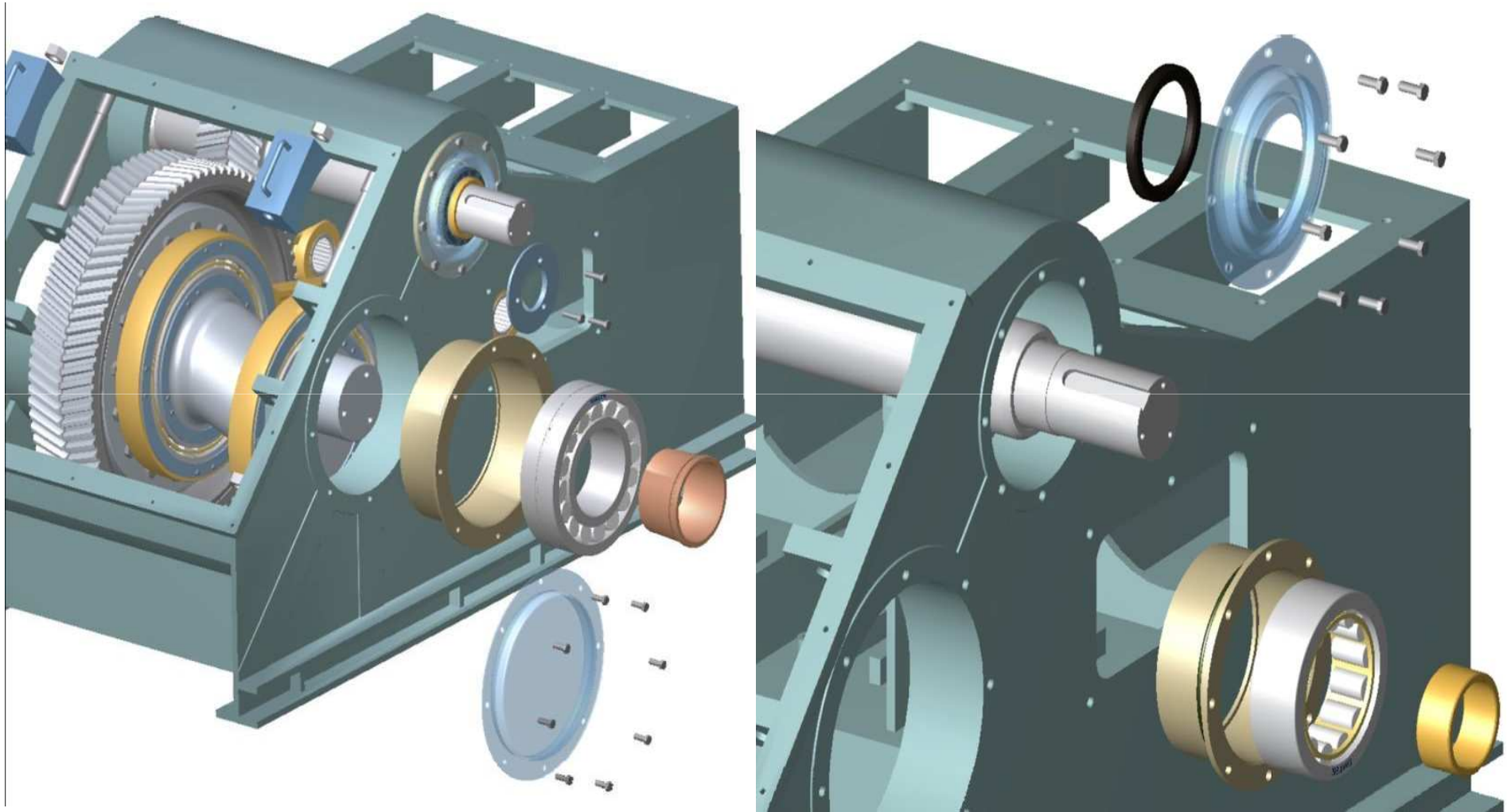
- Motor Input
- TRB's Cutter head
- NJ CRB's Idlers
- CRB planets



Pulverizer Wheels

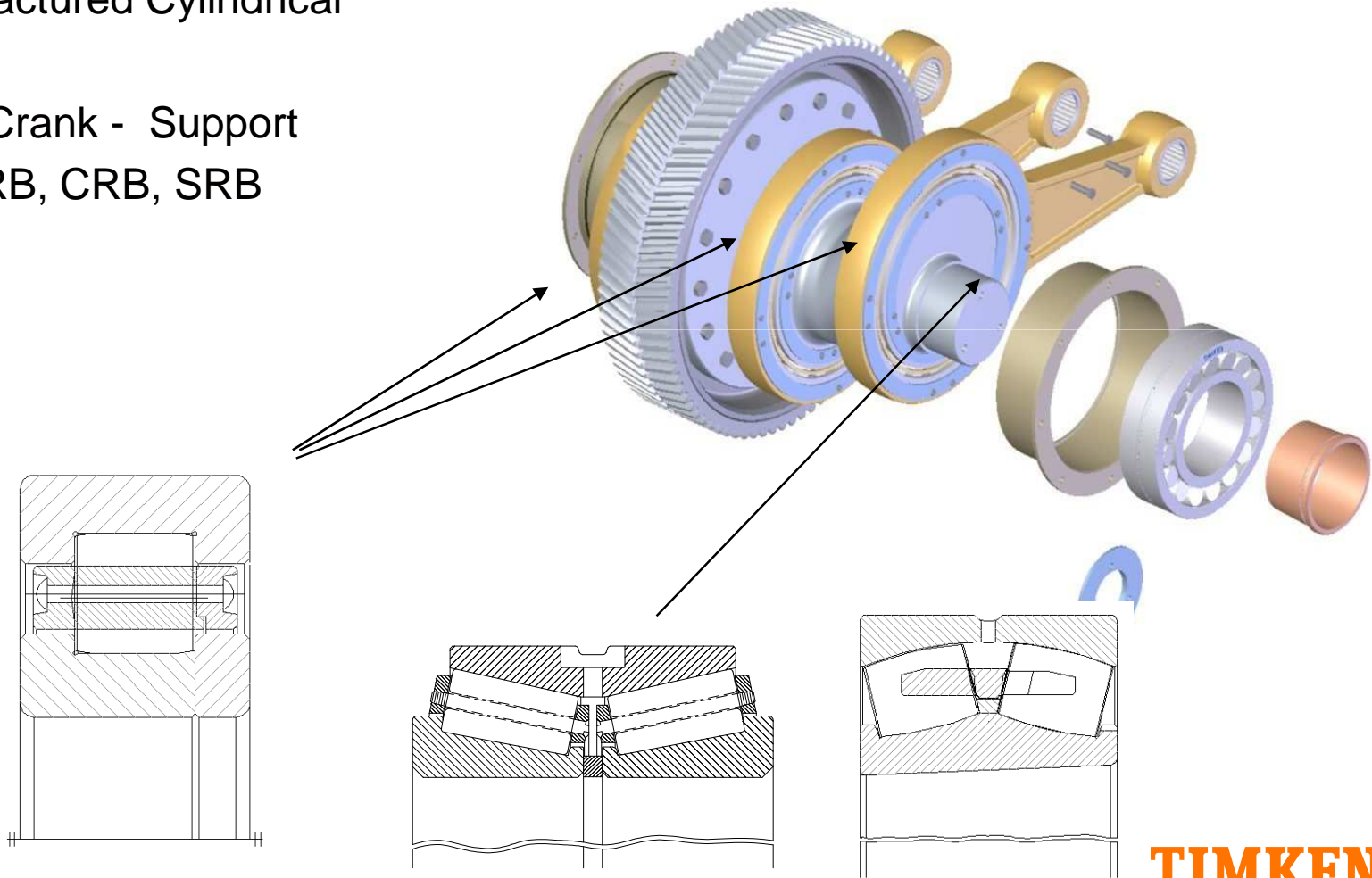


Mud Pump

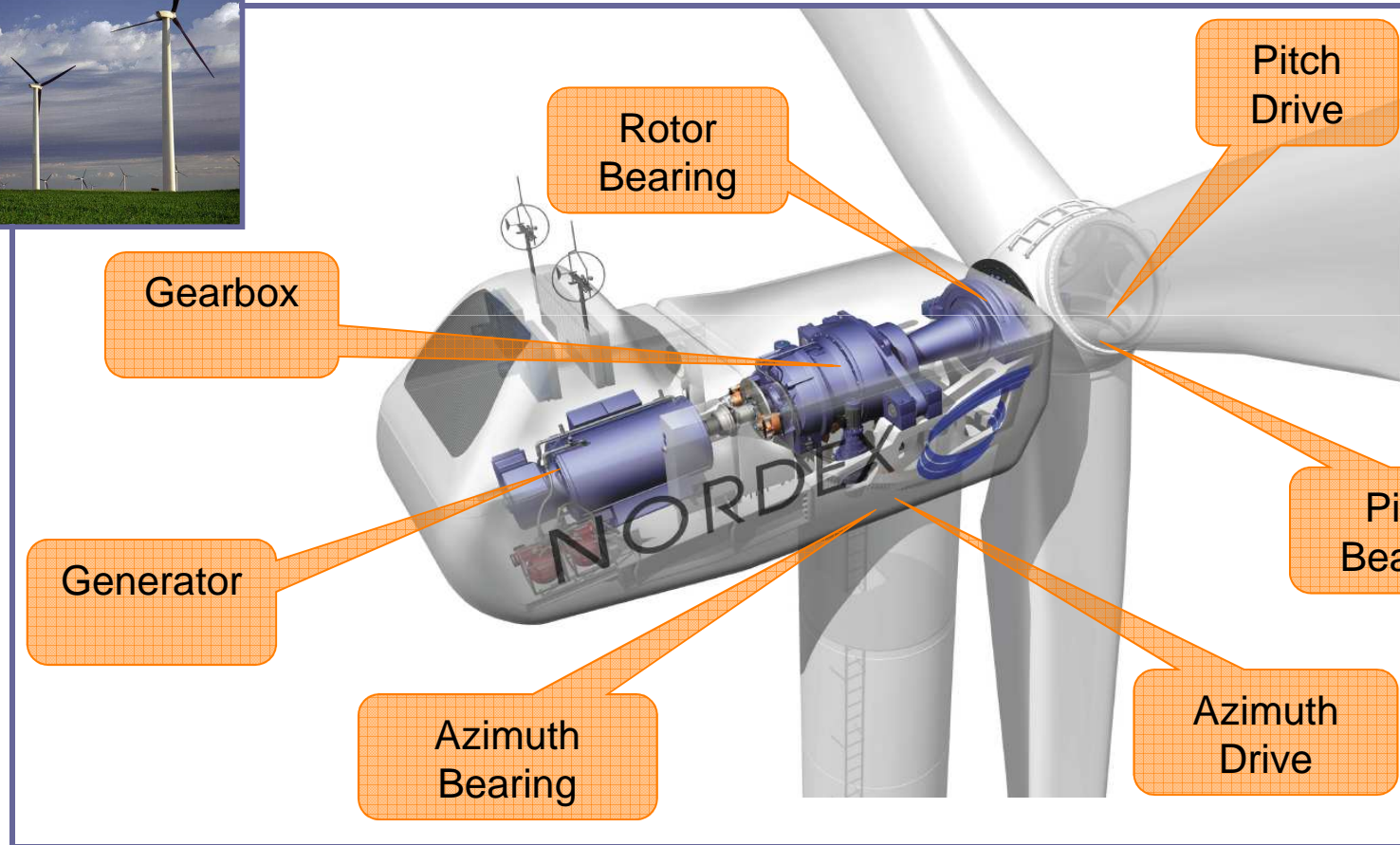


Mud Pump

- Crank - Eccentric
 - Fractured Cylindrical
- Pinion/Crank - Support
 - TRB, CRB, SRB

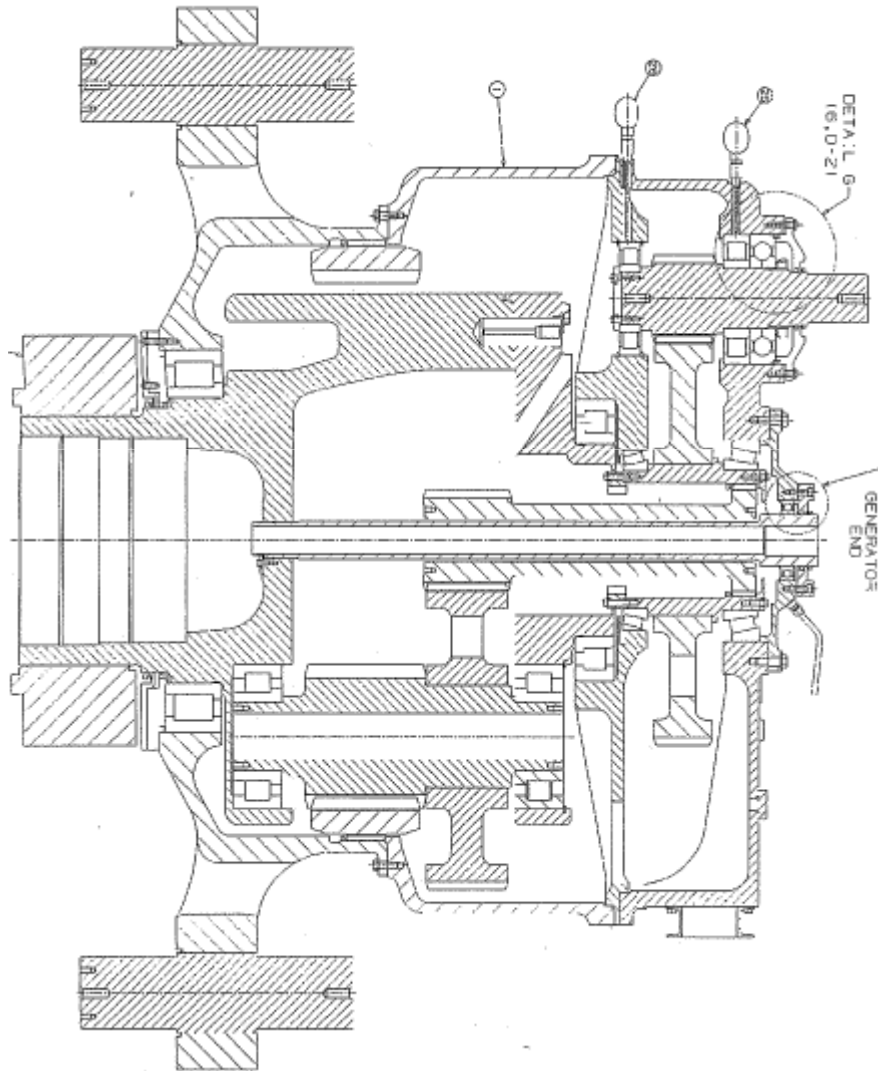


Wind Turbines



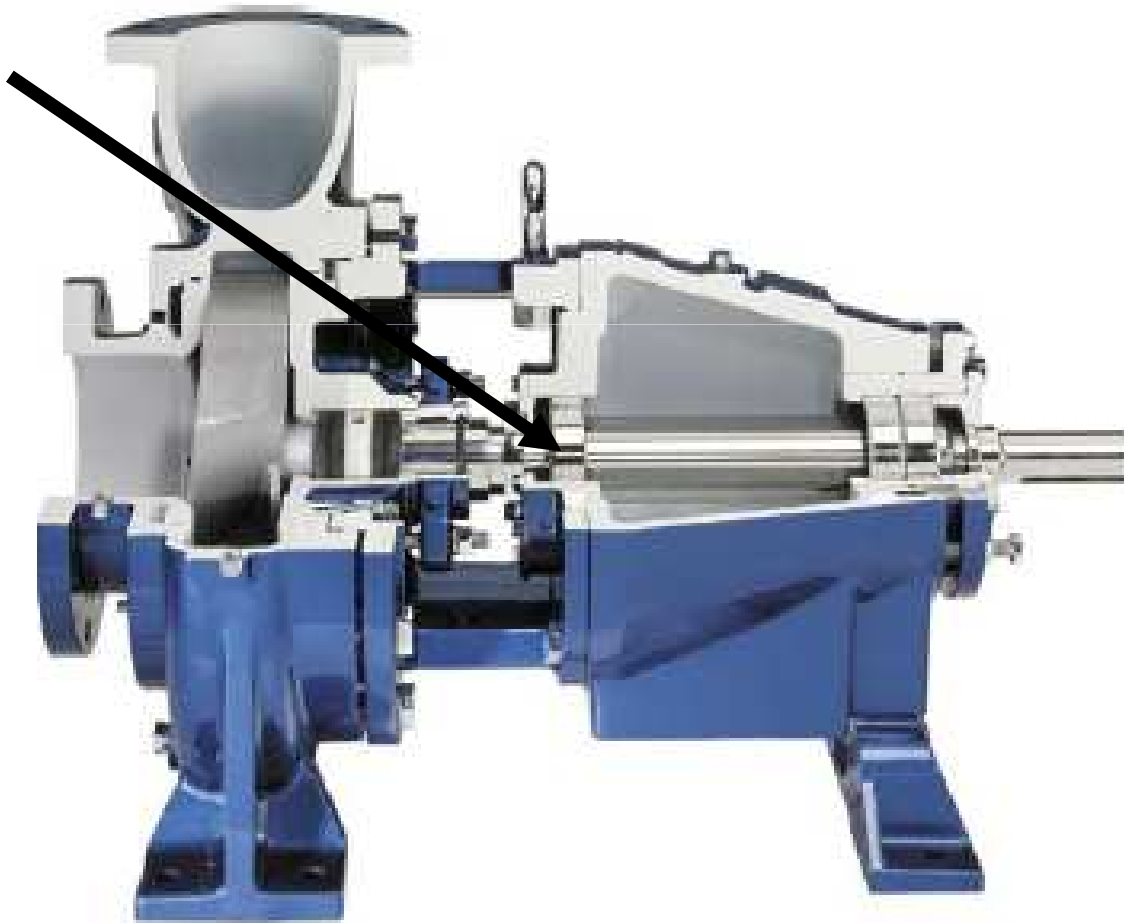
Wind Turbines – Gear Drive

- NJ CRB's Carriers
- NJ CRB's Planets
- NU high speed output



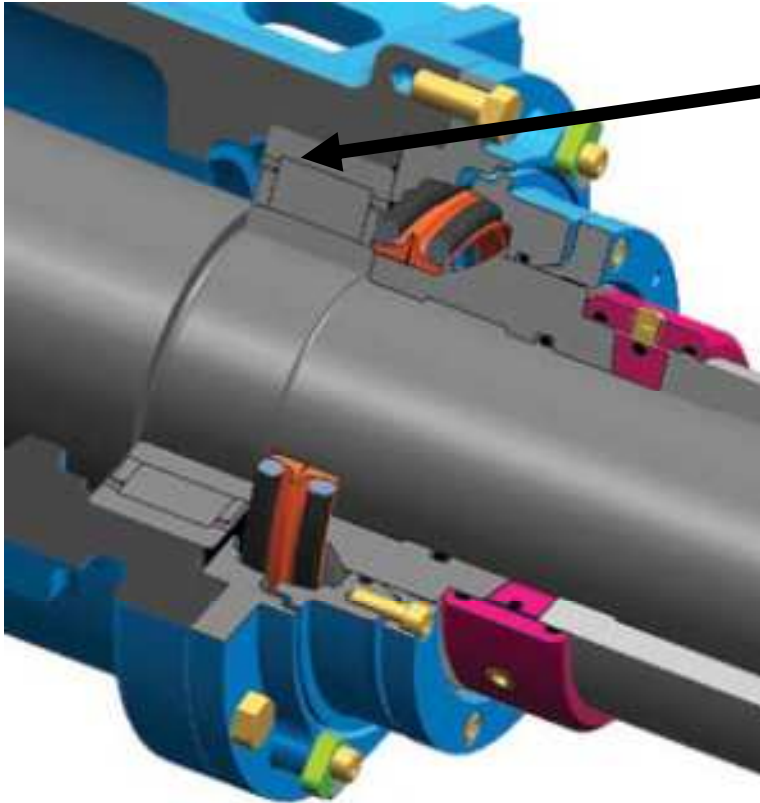
Slurry Pump

- Tandem Ball Bearing Fix Position
- CRB Float Position



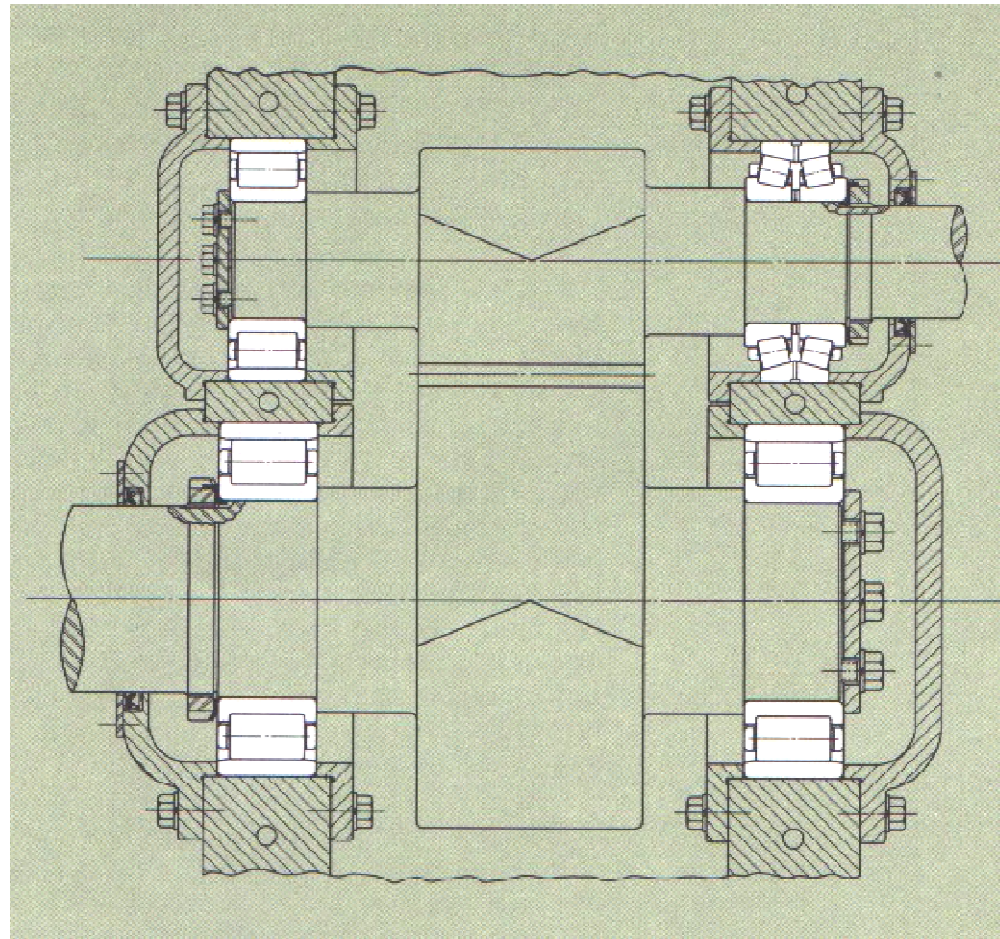
Slurry Pump

- NU Style Float Position



Gear Drives

- Float N Style CRB opposite input TRB Fixed
- N Style CRB on Output with Herringbone Drive



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