







ARRKAY POWER TRANSMISSION

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ARRKAY POWER TRANSMISSION

Arrkay Power Transmission's journey began in 1999 and providing quality products at the competitive prices while concurrently offering exceptional customer service. As a result, Arrkay Power Transmission has become successful & reliable manufacturer of all types of windmill spares.

We continue to build upon its core principles with the objective of creating value for its customer serving numerous industries. We listen to customers and adapt to a constantly changing business environment. We pride our self as both an OEM & Distributor for Products varying from BHU, Brakes, Power Packs, and Cables with an entrepreneurial attitude coupled with a custom engineering focus.

We are more than a company that buys and sells parts. We believe in proactively discovering ways to help customers achieve their goals and troubleshoot their problems efficient through collaboration with suppliers, engineers and end-users.



DESIGNED TO MAKE A DIFFERENCE

ARRKAY's braking system ensures that the wind turbines yaw system and main shaft remains reliable and in safe control.

Our innovative and diverse selection of Blade Hydraulic Unit with Soft Braking System has helped windmill preserve throughout harsh and demanding environments whether it be intense wind, seismic activity or braking your windmill when incoming heavy winds, ARRKAY BHU – Soft Braking system will enable you to overcome these obstacles and achieve your industry specific goal.



2.5 SQMM 4 CORE FLEXIBLE CABLE

ADVANTAGES OF ELECTRICAL BHU AND SOFT BRAKE ARRANGEMENT

- Life of the windmills drive train equipments such as Rotor assembly, Main bearing assembly, Gearbox unit, Generator unit with Flexible coupling can be optimised by way of reduction with Momentary impact loads exerted out at the time of braking of WEGs
- Ultimate safety of the WEG, in high wind seasons can be improved significantly when Electrical BHU is in place with the Soft Braking application. Since the Mechanical type BHU's will be in action only when rotor over speeds and subsequent rupture disc failures.
- Maintenance cost of the WEGS will get reduced due to enhanced life of drive train.
- Major expenditure in the wind mill would be due to Gearbox failure. If the wind mill is equipped with Electrical BHU and Soft brake arrangements then the designed life of the Gear box could be easily achieved.
- The life of Gear box Bearings, Gearbox suspensions, AVM's Flexible couplings fastner can be optimised by way of electrical BHU application where the soft braking is ensured.
- When electrical BHU is in place the braking application will be smooth with soft braking which will help in the smooth transition of excessive kinetic energy to Mechanical energy gets distributed smoothly.
- When Electrical BHU is in place, the distortion level in the WEG are kept under control which would help for the failure free system.



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ECONOMICAL RISK IN MECHANICAL BHU

If the gear box failure occurred within period of 2 to 3 years. Minimum repairing cost of the gear box would be about Rs. 10 to 12 Lakhs including internals, casing crack and bearing etc.,

Repair cost of nacelle mounting components slew ring bearing, yaw gear unit and yaw brakes etc., will account to Rs. 4 to 7 lakhs.

Rotor and main shaft failure occurred with in the period of 1 to 2 years, blade tip carbon shaft, steel rope, yoke bolt, rotor bolt cuts also leads to damage. Minimum repair cost will be Rs.3 to 5 lakhs.

Minimum repair cost for Generator winding and bearing failure is about Rs. 2.50 to 3 lakhs. Brake pad consumption per year is 2 to 3 sets. It also costs Rs 12000/-

Brake disc and flexible coupling, gearbox suspension mounting leg replacing cost will be Rs 75000/-

Considering the above maintenance cost of 5 to 10 lakhs approximately for 2 to 3 years expenses per WEGS. We suggest our electrical blade hydraulic unit with soft braking system for the effective production in WEGS.

