

GAEYAH PRODUCT TECHNICAL DOSSIER

Gaeyah Worm Units:

Housing:

For the sizes from 025 to 090 the housings are manufactured of high-quality aluminium ally. The process used is Pressure die casting. For sizes 110 and above the casing is made of 250 grade nodular cast iron. Casing of a worm gear unit does an important function of dissipating the heat generated during running to the atmosphere. The casing is substantially designed with fins to expand the surface area for better heat dissipation. Hence Gaeyah units will have longer life, run smooth and have reduced noise during running. Hence, Gaeyah Worm units have high rigidity and can withstand very high compression load.

After fettling the housing is shot blasted and quoted with primer and then powder coated for high quality surface finish. The surface coating remains for longer period of time thereby improving the life of the housing.

Worm Shaft:

Manufactured out of 20CrMNTi high tensile alloy steel forging. The worm shaft is heat treated using case carburizing technic, to improve the wear resisting quality while running on full load. The profile of the worm is ground for better efficiency and to improve the life of worm wheel.

The case depth vary as per the module size of the worm and the hardness is maintained at 58-62 HRC.

Worm Wheel:

Manufactured using Al Bronze alloy material, It has a very high wear resistance combined with good strength.

Bearings and Oil seals:

Best in class quality seals and bearings are used in the manufacturing of Gaeyah geared motors. We offer unconditional warrantee of 12 months from the date supply for all the parts.

Gaeyah Helical & Hypoid Units:

Housing:

For the sizes from 050 to 090 the housings are manufactured of high-quality aluminium ally. The process used is Pressure die casting. Casing of a hypoid gear unit does an important function of dissipating the heat generated during running to the atmosphere. The casing is adequately designed with fins to expand the surface area for better heat dissipation. Hence, Gaeyah Hypoid units have high rigidity and can withstand very high compression load.

After fettling the housing is shot blasted and quoted with primer and then powder coated for high quality surface finish. The surface coating remains for longer period of time thereby improving the life of the housing.

Pinion & Gears:

Manufactured out of 20CrMNTi high tensile alloy steel forging. The pinion and gears are heat treated using case carburizing technic, to improve the wear resisting quality while running on full load. The profile of the gears is ground for better efficiency and to improve the life of the gear air.

The case depth vary as per the module size of the gears and the hardness is maintained at 58-62 HRC.



Bearings and Oil seals: Best in class quality seals and bearings are used in the manufacturing of Gaeyah geared motors. We offer unconditional warrantee of 12 months from the date supply for all the parts.

Gaeyah Gem Series Electric Motor:

Housing:

Motor up to 112 m Frame in Aluminium Pressure Die-Cast and Higher Frames in Cast Iron Components.

Stamping:

Imported cold rolled non grain oriented (CRNGO) high silicon steel.

Copper Wire:

Super enameled dual coat copper wire.

Insulating Material:

Imported Nomex equivalent to Class H.

Varnish:

Dr. Beck varnish with high dielectric strength almost eliminating chances of insulation failure. Class H Insulation is available upon request.

Bearing:

Double sealed (metallic sealing) ball bearing lubricated for life with high quality imported grease.

Rotor: Pressure die cast with 99.7% EC grade pure aluminium.

Dynamic Balancing: Dynamic balancing with high precision balancing machines resulting in low vibration in motors.

MFGD. WITH BIS STANDARD SPECIFICATION AS BELOW:

IS: 325	Specifications for three phase induction motors.
IS: 1231	Dimensions of three phase foot mounted inductions motors.
IS: 2223	Dimensions of flange mounted AC induction motors.
IS: 8789	Values of performance characteristics for three phase inductions motors.
IS: 2691	Degree of protection
IS: 1271	Class of Insulation

The Special Care In Construction Allows The Motor:

- High voltage variation ±10%, Frequency Variation ±6%, Ambient temperatures higher than 45°C.
- Class of insulation 'F' or 'H'
- Motors with cooling arrangement as per IS: 4691, Degrees of Protection IP 55
- Motors suitable for VFD applications. Very much suitable for application in industries like Textiles, Process, Mills, Conveyors, Power Generation, Crushers, Packaging M/Cs, Machine Tools, Paper, Steel, Sugar Mills, food processing etc.
- Customized Motors available as per specified requirement.



(Rajan Narayanaswamy) For Gaeyah transmission