The choice of bearing arrangement and type is based on factors such as load carrying capacity, speed of rotation, type of prime mover coupling, and client choice. Operating conditions such as ambient temperature, air cleanliness, vibrations, shock and inclination (marine and offshore platforms) affecting the bearing are also taken into account.

**Flange sleeve bearings**
(standard for frame sizes 710-1120)
Sleeve bearings are flange-mounted on the end-shield. They not only withstand a high level of vibration but also offer excellent quality and performance, as well as first-class reliability when driven by engines:
- the bearing shells are seated in the housing, so the bearing assembly is highly suitable for static as well as radial and axial dynamic loads.
- excellent heat transfer through the contact surface of the shells makes these bearings especially suitable for high speed applications.
- they are of the split type and easy to maintain.

Provided that the operating conditions are carefully followed, their life expectancy is practically infinite.

To prevent bearing damage from circulating currents, all NDE bearing housings are electrically insulated by means of non-conducting PTFE film.
The bearings are typically self-lubricated by oil ring. The lubricating oil is picked up by the oil ring and transferred directly to the shaft.

**Integral pedestal sleeve bearings**
(standard for frame sizes 1250-2500)
These bearings have the same fundamental features as flange sleeve bearings, except that they are mounted on a pedestal that is integrated into the stator frame. Generators with integral pedestal bearings are as easy to mount and align as generators with flange mounted bearings. The generators are delivered ready assembled and require no further assembly on site. The air gap between the stator and rotor is also factory set and does not need any further adjustment during coupling with the prime mover.

The bearings are lubricated by oil ring. In the case of high ambient temperature or inclined operating position (marine applications), external lubrication unit for bearings may be necessary, unless lubrication oil is supplied from the engine lubrication system.

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