# **Good Application Practices**

#### Follow Installation Instructions

A key pre-requisite for the long-lasting, trouble-free operation is to follow installation and lubrication instructions. There are individual sections in this catalog that cover these topics specifically. For installation on an inclination on declination plane, though there are no specific data on what the allowable angles are for each frame size, the following rule of thumb applies. Please refer to drawing on the right. Each oil lubricated DARALI<sup>®</sup> DRIVE is capable of being installed at an angle as long as the oil level reaches at least the bottom of the rolling elements. This ensures all torque transmitting components are lubricated during the operation.

#### □ Motor RPM Not To Exceed 1800

Speed reducers and high-speed motors (i.e. 3600 rpm) are typically not compatible with each other. We recommend input speed to the DARALI<sup>®</sup> DRIVES not to exceed 1800 rpm. Some larger models (i.e. B23~B27, A91~A93) have input speed limit capped at 1200 rpm. If your application absolutely requires higher input speed than the recommended rpms above, please contact factory as we may have to implement special lubricating consideration to compensate for such unusual input speeds.

### Consideration For Brake Load

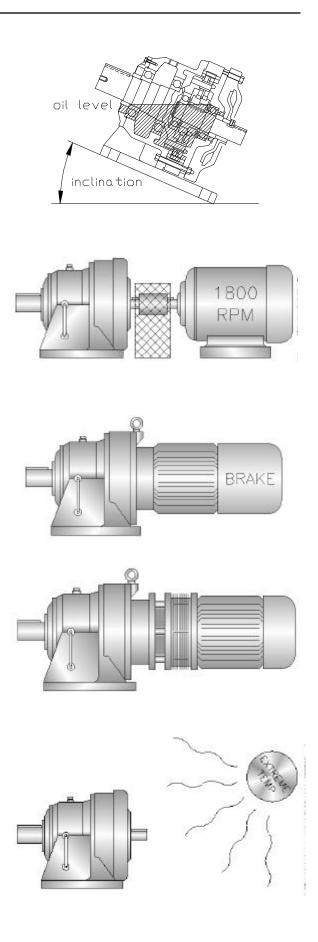
In applications where brake is used on the input of speed reducer, if the torque rating of brake exceeds the motor torque rating, you should always use the torque rating of brake to size up the speed reducers. For applications involving frequent start/stop, an additional service factor (i.e. S.F. = 2.0) will help enhancing the superb performance of DARALI<sup>®</sup> Cycloidal Reducers.

# **Clutch Applications**

Similar to the applications involving the use of brakes, you may want to consider an additional service factor (i.e. S.F. = 2.0) for the frequent start/stop of clutch. This will help alleviating the effect of metal fatigue caused by high frequency start/stop of the application. Periodically check the mounting rigidity and the tightness of fasteners.

# □ Extreme Temperature Applications

Extreme heat and cold could very well be the two worst enemies for any speed reducers. Special lubrication, good ventilation, and controlled ambient temperature would greatly help speed reducers to avoid troubles caused by extreme temperatures. Use high viscosity lubricant for high temperature applications. Use low viscosity lubricant for low temperature applications. In applications where speed reducers are close to the heat source and air are not well circulated, consider using a blower fan. Consider using a heat source or radiator for speed reducer operating under extreme cold temperature. For applications that experience both extremes of temperature, make sure to use appropriate lubricant that can handle both extremes of heat and cold.



# DARALI<sup>®</sup> DRIVES - ISO 9002