

White Paper



Bearing Irregularities, Possible Causes & Measures in a Nutshell !!

Irregularities		Possible Causes	Measures
Noise	Loud Metallic sound	<ul style="list-style-type: none"> Abnormal load Incorrect mounting Insufficient or improper lubricant Contact of rotating parts 	<ul style="list-style-type: none"> Improve the fit, internal clearances, preload, position of housing shoulder etc Improve the machining accuracy and alignment of shaft and housing accuracy of mounting method Replenish the lubricant or select another lubricant Modify the seal etc
	Louder Regular sound	<ul style="list-style-type: none"> Flaws , corrosions, or scratches on raceways Brinelling Flaking on raceway 	<ul style="list-style-type: none"> Replace or clean the bearing, improve seals and use clean lubricant Replace the bearing and use care handling bearings Replace the bearing
	Irregular sound	<ul style="list-style-type: none"> Excessive clearances Penetration of foreign particles Flaws or flaking on balls 	<ul style="list-style-type: none"> Improve the fit, clearance and preload Replace or clean the bearing, improve the seal and use clean lubricant Replace bearing
Abnormal Temperature Rise		<ul style="list-style-type: none"> Excessive amount of lubricant Insufficient or improper lubricant Abnormal load Incorrect mounting Creep on fitted surface, excessive seal friction 	<ul style="list-style-type: none"> Reduce amount of lubrication select stiffer grease Replenish lubricant or select a better one Improve the fit, internal clearance, preload, position of housing shoulder. Improve the machining accuracy and alignment of shaft and housing accuracy of mounting method Correct the seal, replace the bearing, correct the fitting or mounting.
Vibration (Axial run out)		<ul style="list-style-type: none"> Brinelling Flaking Incorrect mounting Penetration of foreign particles 	<ul style="list-style-type: none"> Replace the bearing and use when handling bearing Replace the bearing Correct the squareness between the shaft and housing shoulder or side of spacer Replace or clean the bearing, improve the seals
Leakage or discoloration of lubricant		<ul style="list-style-type: none"> Too much lubricant, penetration by foreign matter or abrasion chip 	<ul style="list-style-type: none"> Reduce the amount of lubricant, select stiffer grease. Replace the bearing lubricant or lubricant. Clean the housing and adjacent parts.