

## Flange Bearing Design Worksheet

Roy 2014 a

General Information	
Company	Date
Contact	
Address	
Phone Email	
Application	340
Technical Specifications	
Nominal ID (in/mm) Plus Minus N	ominal OD (in/mm) Plus Minus
Length (in/mm) Plus Minus Shai	ft Diameter (in/mm) Plus Minus
Shaft RPM Shaft Finish	Shaft Material and Hardness
Housing Size and Tolerance	Load (in lbs/kg)
Temp of Operating Environment Min Max	What is being used now?
Thrust Load (in lbs/kg)  Questions	Mating Material
If the bearing is linear, what is the length of	Reference
stroke and the cycles per minute?	
What is the primary load factor: radial or axial or both?	
Does the bearing experience shock or excessive vibration?	
If the bearing is oscillating, what is the angle of rotation, cycles per minute, and dwell time?	Bearing Load ( P value ) is LBS / (ID x Length)
Are the temperature variations (if any) gradual or rapid?	0.0000 1
Type of Media: air, gas, or liquid? Intermittent or Constant?	ID Length ID x L Load Load / (ID x L.) = P value
Is the environment abrasive in nature?	Relative Velocity (V) is Shaft Dia x 3.14/12 x RPM
Does the environment call for electrical: dissipation or insulation?	3.1415 0.0000 0.0000 0 Shaft Dia. x pl equals div. by 12= x RPM= V Value
Does the environment call for thermal: insulation or transfer?	PV Value
Does the application require: FDA, NSF, USDA, 3A or USP?	1 0 0 Ptimes Vequals PV
Is the shaft running: vertically, horizontally, or diagonally?	L
Is shaft misalignment anticipated?	Notes about the hardware (housing material, etc.)
Are there special shaft treatments: Hardcoat, ENP, chrome, TFE?	Chemicals in contact with the bearing