轴承装配过盈量的计算
Calculation of interference for bushing fixing

轴承压入座孔前，轴承外径＞座孔内径。这种过盈装配后，在座孔里面产生较强的应力，使轴承内圆保证有较高的圆度，又能更好地固定住轴承，防止轴承在座孔内打滑磨损。过盈量的计算按下列公式：

Before the bushing is pressed into the housing: as the outside diameter of the bushing is bigger than the inside diameter of the housing, strong pressure can be available in the housing. And also this kind of fixing can assure the roundness of the bushing and make the bushing well fixed, avoiding abrasion caused by sliding of the bushing in the housing. The interference can be calculated by the following formula:

○ 过盈量最小值 δmin= 轴承外径最小值 Dmin- 座孔径最大值 DHmax

○ 过盈量最大值 δmax= 轴承外径最大值 Dmax- 座孔内径最小值 DHmin

○ Min interference = Min OD of the bushing- Max ID of the housing

○ Max interference = Max OD of the bushing- Min ID of the housing

轴承装配后内径的计算
Calculation of the after-fixing inside diameter of the bushing

假设您略装配座孔的膨胀量。装配后轴承计算按下列公式：

After bushing mounting, providing that there is no expansion of the housing, the calculation can be carried out by the following formula.

○ 轴承内径最小值 dmin= 座孔内径最小值 Dmin-2× 轴承壁厚最大值 S

○ 轴承内径最大值 dmax= 座孔内径最大值 Dmin-2× 轴承壁厚最小值 S

○ Min ID of the bushing d=Min ID of the housing D-2× Max thickness of the bushing S

○ Max ID of the bushing d=Min ID of the housing D-2× Min thickness of the bushing S

轴承装配后配合间隙的计算
Clearance calculation after bushing fixing

轴承装配后，轴承的内径和轴之间保证合理的间隙是非常有必要的。配合间隙的计算按下列公式：

It's necessary to have an appropriate clearance between the inner surface of the bushing and the axis after bushing mounting. The matching clearance can be calculated by the following formula:

○ 间隙最小值 △ min= 装配后轴承内径最小值 d min- 轴径最大值 dj max

○ 间隙最大值 △ max= 装配后轴承内径最大值 d max- 轴径最小值 dj min

○ Min clearance △ min=Min ID of the bushing after fixing d min-Max diameter of the axis djmax

○ Max clearance △ max=Min ID of the bushing after fixing d max-Min diameter of the axis djmin