

HG20615-2009尺寸公差

HG20615-2009 DIMENSIONAL TOLERANCE

法兰的尺寸公差
Dimensional tolerance of flange

项目 Item	法兰形式 Flange type	尺寸范围 Size range	尺寸公差 Dimensional tolerance
内径B Inner Diameter B	对焊法兰 承插焊法兰 Butt Weld Flange Socket Weld Flange	≤DN250	±1.0
		DN300~DN450	±1.5
	带颈平焊法兰 松套法兰 承插焊法兰承插孔 Flat Weld Neck Flange lap joint flange(LJF) Socket Weld Flange Socket	≤DN250	+3.0 -1.5
		≥DN300	+1.0 0 +1.5 0
法兰厚度C Flange thickness C	双面加工的所有形式法兰 (包括镗孔) All forms of flanges machined on both sides (including countersunk)	≤DN450	+3.0 0
		≥DN500	+5.0 0
法兰高度H Flange height H	带颈法兰 Flange with neck	≤DN250	±1.6
		≥DN300	±3.2
对焊法兰焊端外径A Butt Welding Flange Welding End Outer Diameter A	带颈对焊法兰 Butt Welding Flange	≤DN125	+2.0 -1.0
		≥DN150	+4.0 -1.0
法兰突台外径d (环连接面除外) Flange RF outer diameter d (except ring connection surface)	所有形式 All forms	密封面突台高度为2.0 Sealing surface RF height is 2.0	±1.0
		密封面突台高度为7.0 Sealing surface RF height is 7.0	±0.5
螺栓孔中心圆直径K Bolt hole center circle diameter K	所有形式 All forms	-	±1.5
相邻螺栓孔间距 Adjacent bolt hole spacing	所有形式 All forms	-	±0.8
螺栓孔直径L Bolt hole diameter L	所有形式 All forms	-	±0.5
螺栓孔中心圆与加工密封面的同轴度偏差 Concentricity deviation between bolt hole center circle and sealing surface	所有形式 All forms	≤DN65	< 0.8
		≥DN80	< 1.5
密封面与螺栓支撑面的平行度 Parallelism of sealing surface and bolt bearing surface	所有形式 All forms	-	< 1°
法兰突台高度f1(环连接面除外) Flange RF height f1 (except ring connection surface)	所有形式 All forms	2	0 -1.0
		-	±1.0
环连接面法兰突台高度E Ring connection face flange RF height E	所有形式 All forms	-	±1.0
凹面/凸面和榫面/槽面高度f2、f3 FM/M face, T/G face heights f2, f3	所有形式 All forms	-	+0.5 0
		-	0 -0.5
凹面/凸面和榫面/槽面直径 FM/M face, T/G face Diameters	X、Z	-	0 -0.5
	W、Y	-	+0.5 0

松套法兰用对焊环尺寸公差

DIMENSIONAL TOLERANCE OF BUTT WELDING RING FOR LOOSE FLANGE

项目 Item	尺寸范围 Size range	尺寸公差 Dimensional tolerance
对焊环端部外径A Butt welding ring end outer diameter A	DN15~DN65	+1.6 -0.8
	DN80~DN100	±1.6
	DN80~DN200	+2.4 -1.6
	≥DN250	+4.0 -3.2
对焊环内径B Butt welding ring inner diameter B	DN15~DN65	±0.8
	DN80~DN200	±1.6
	≥DN250	±3.2
对焊环长度h Butt welding ring length h	—	2
对焊环密封面外径d Butt welding ring sealing surface outer diameter d	DN15~DN200	0 -1
	≥DN250	0 -2
圆角半径R2 Corner radius r2	DN15~DN80	0 -1
	≥DN100	0 -2
对焊环翻边厚度T Butt welding ring flange thickness T		+1.6 -12.5%钢管名义厚度 Nominal thickness of steel pipe

环连接面的密封面尺寸公差按表10.0.2的规定，法兰环槽密封面的硬度应高于所配合的金属环型垫的硬度。

法兰（包括对焊环）端部的坡口尺寸公差按本标准第9章的规定。

The dimensional tolerance of the sealing surface of the ring connection surface is as specified in Table 10.0.2. The hardness of the sealing surface of the flange ring groove should be higher than that of the matched metal ring gasket.

The dimensional tolerance of the groove at the end of the flange (including the butt welding ring) shall be as specified in Chapter 9 of this standard.

环连接面的尺寸公差

DIMENSIONAL TOLERANCE OF RING CONNECTING SURFACE

项目 Item	尺寸公差 Size tolerance	
环槽深度E Ring groove depth E	±0.4 0	
环槽顶宽度F Ring groove top width F	±0.2	
环槽中心圆直径P Ring groove center circle diameter P	±0.13	
环槽角度23° Ring groove angle 23°	±0.5°	
环槽圆角Rmax Ring groove fillet Rmax	Rmax ≤ 2	+0.8 0
	Rmax > 2	±0.8
密封面外径d Outer diameter of sealing surface D	±0.5	