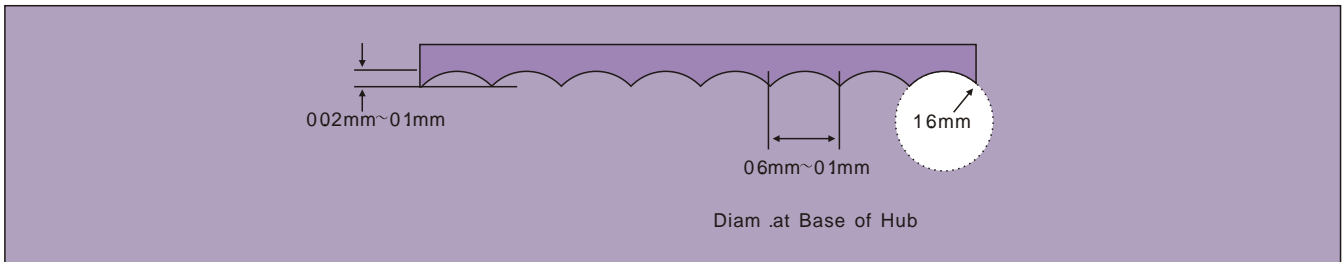


FINISH & TOLERANCE

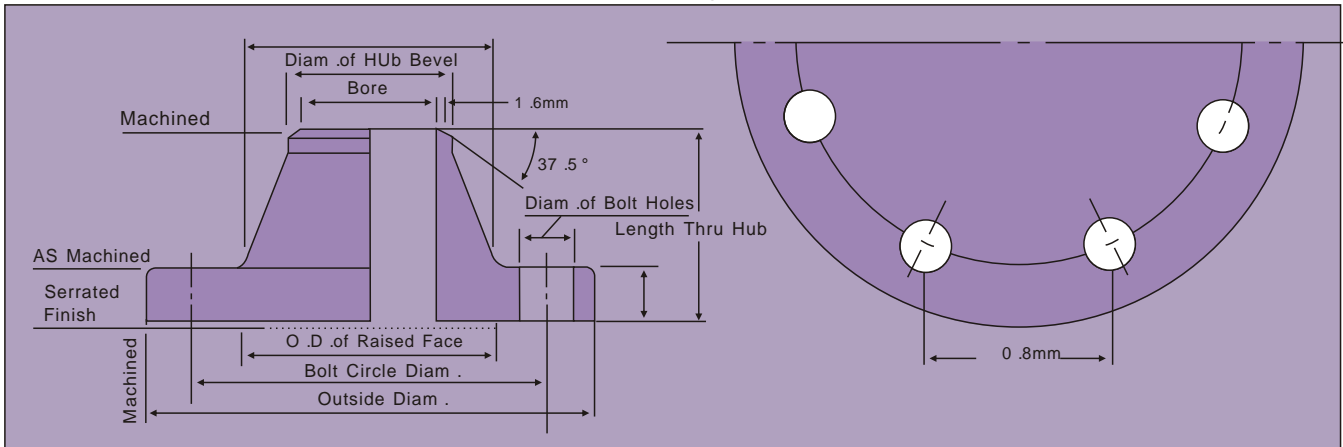
ANSI B16.47 SERIES B FORGED FLANGES

1. Standard Finishes for Contact Face of Flanges

The flange face shall have a serrated finish consisting of 20 to 40 grooves per inch, 0.002 in. to 0.005 in. deep, cut spirally or concentrically with a round-nose tool.



2. Dimensional Tolerances for ASME B16.47 SER. B Flanges



Dimension	Tolerance
Outside diameter of raised face	±0.8mm
Flange thickness	±4.8mm, 0mm
Length thru hub	±3.0mm
Diam. of hub at bevel	±4.1mm, -0.8mm
Bolt circle diameter	±1.6mm
Center-to-center of adjacent bolt holes	±0.8mm
Bore	±3.0mm, -1.6mm
Outside diameter	±3.0mm
Diameter at base of hub	±3.0mm

Notes

- (1) Flanges shall have bearing surface for bolting that are parallel to the flange face within 1 degree. Any back facing or spot facing required to accomplish parallelism between the flange face and nut bearing surface on the back of the flange shall not reduce the flange thickness.
- (2) Tolerance for the welding end of a welding neck flange shall be in conformance with ANSI B16.25.
- (3) Other tolerances than specified the table shall be in accordance with ANSI B16.5.
- (4) The flange shall be either back-faced or spot-faced at the bolt holes on the flange back if the nut bearing surface at the back of the flange is not parallel with the flange face within the tolerances listed in Note (1). If the fillet at the hub interferes with the nut bearing surface or if the flange thickness exceed the minimum required thickness by more than 0.19 inch (4.8 millimeters). The nut bearing surface is the spot-facing diameter at the bolt holes as given in MSS SP-9. Spot-facing shall be in accordance with MSS SP-9.
- (5) Tolerances marked *are not covered in API 605.