

PRODUCTION SPECIFICATION

SCOPE: This specification covers the requirements for API INT. Stock ANSI/ASME B16.5 Flanges.
Part Numbers: RFS, SRFS, RFB, SRFB, FFS, SFFS, FFB, SFFB.

Vendor's
Initials
Certifying
Compliance

CHARACTERISTIC		REQUIREMENT
1	Physical/ Material	<p>FOR ALL SLIP-ON FLANGES: Forged: Steel - ASTM A105 Stainless Steels - ASTM A182 (304/304L or 316/316L)</p> <p>FOR BLIND FLANGES ONLY: Plate: Carbon Steel - ASTM A515 or A516 GR. 70, or ASTM A105. Stainless Steels - ASTM A240 (304/304L or 316/316L) or ASTM A182 (304/304L or 316/316L)</p> <p>MILL CERTIFICATION is required with MTRs. All materials shall conform to the latest revisions of ASTM Standards.</p>
2	Finish - Very Important	<p>Raised Face Flanges (RF) shall have the raised face serrated with spiral or concentric serrations, 125 µin – 250 µin, 45-55 grooves per inch.</p> <p>Flat Face Flanges (FF) shall have one face serrated with spiral or concentric serrations, 125 µin – 250 µin, 45-55 grooves per inch.</p> <p>Serrations shall not have protrusions above the serrations or variation that affects the gasket Seal, as described in the latest revision of B16.5. Gasket sealing surfaces shall be protected to prevent damage.</p> <p>All other surfaces, to be 250 µin or better.</p>
3	Dimensional Tolerances Flange Nominal Dimensions	<p>Dimensional Tolerances - See attachment 1.B: "QS1-FDT-B16.5.pdf"</p> <p>Flange Nominal Dimensions - See attachment 2.B: "ENG2-B16.5 Flange Nominal Dimensions.pdf"</p>
4	Structural Integrity of Material	<p>Material shall be of highest quality and shall not exhibit any internal voids, cracks, pitting, or porosity on or below the surface.</p> <p>Repairing defect material by welding (or any other means) is not permitted and will result in rejection of full batch/heat.</p>
5	Flange Identification Markings	<p>Each flange shall be impression stamped as follows: Nominal Pipe Size, B16.5, Class, Material Specification, Material Grade, & Country of Origin along O.D. edge with 1/8" high letters.</p>
6	Inspection	<p>100% Inspection of all dimensions. All dimensions must meet the requirements of attachment 1.B and 2.B.</p>
7	Appearance	<p>All edges should be free of burrs and should not be sharp. Flanges should not be scratched, dented or nicked. Bolt Hole chamfers should be smooth. Flanges should be clean.</p>
8	Coating	<p>Carbon Steel Flanges are to be painted black, with a rust preventative paint in line with industry standards. Paint shall be smooth and free of drips or runs. Gasket Sealing Surfaces or Threaded Features shall not be inhibited by excess paint in grooves/threads.</p>

Note 1) – These Production Specifications shall be as stated above, unless otherwise specified in the Purchase Order, a Product Engineering Drawing/Engineering Specification or Quality Documentation.

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9	Packaging /Crating	<p>Packaging in Crates - Specific instructions per purchase order as specified. <i>All products</i> should be packed carefully to minimize damage. Place desiccant bags into crates (inside/outside flanges to absorb moisture).</p> <p>Palletized Stock Flanges - All API International Stock Flanges shall be packaged per the purchase order pallet quantities. Place desiccant bags into stacks (inside/outside flanges to absorb moisture).</p> <p>All stainless-steel flanges must be separated by cardboard to avoid scratching. Attach labels on outside of crates/pallets (per attachment 7).</p>
10	Documentation	<ol style="list-style-type: none"> 1. Mill Certification (from Mill) & Material Test Results (MTR) - Must show matching Tensile Strength, Yield Strength, elongation percent at break, along with Chemical composition. MTR per excel format, Mill Cert per attachment 4 example. 2. Packing Slip - Must show correct part numbers, quantities, and corresponding crates.

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DATE	REV	DESC.	INITIALS	APPROVAL
4/21/2026	A	Initial Release, Adapted and revised scope from PS-102722	EA	4/21/2026 - GTD