



Package Name	PIPE FITTINGS & FLANGES
Reference Number	M802-PI-01
Package Description	<p>PI01 – PIPE FITTINGS & FLANGES</p> <p>The package includes 1-3 as shown below.</p> <p>The principal reserves the right to award each Part as a separate package to various suppliers, or as one package, pending the assessment of submissions.</p>
Specifications and Standards:	<p>Part 1-Pipes: Supply of CS, LTCS, SS & DSS seamless and welded pipes as per Project requirement. Color coding in addition to markings required by the Project Piping Material Specification. Unless specified otherwise, DN50 and above pipe shall be furnished in double random lengths and single random lengths for pipe size DN40 and smaller. Galvanized pipe shall be furnished in single random lengths (6000mm lengths maximum). Circumferential weld joints (jointers) or intermediate circumferential butt welds are not permitted for DN50 and above pipes.</p> <p>All Pipes shall be furnished with beveled ends in accordance with ASME B16.25. Plain ended pipe is not acceptable in lieu of beveled end.</p> <p>Beveled end pipe shall be furnished with metal end protectors.</p> <p>Plain end and threaded end (T&C) pipe shall be furnished with polyethylene end caps.</p> <p>For Carbon steel (includes Low Temperature Carbon Steel) and impact tested high strength carbon steel) materials, pipes shall be seamless for sizes up to and including DN400 and should be welded for sizes DN450 and larger.</p> <p>For Austenitic SS material, pipes shall be seamless for sizes up to and including DN200 and should be welded for sizes DN250 and larger.</p> <p>For DSS material, pipes shall be seamless for sizes up to and including DN100 and should be welded for sizes DN150 and larger.</p> <p>Seamless pipes are permitted in lieu of welded pipes. Welded pipes shall not be permitted in lieu of seamless pipes.</p> <p>Welded pipes shall be subjected to 100% radiography to attain a longitudinal weld joint quality factor (Ej) of 1.0 in conformance to ASME B31.3, Table 302.3.4, unless specified otherwise.</p> <p>Spiral SAW (Submerged Arc Welded) and ERW (Electric Resistance Welded) pipe shall not be used.</p> <p>Welded pipes in conformance to ASTM A671 shall be class 32 or class 22.</p> <p>Welded pipes in conformance to ASTM A358 shall be class 1.</p> <p>Welding procedures for welded pipes shall be qualified in conformance to the requirements of IOGP S-563 and ASME Section IX.</p> <p>All welds for dual certified SS 304/304L and SS 316/316L pipe shall be carried out using welding procedures qualified by impact testing at minus 196°C including lateral expansion requirements in conformance to the requirements ASME B31.3, Table 323.2.2.</p> <p>UT (Ultrasonic Test) shall not be used in lieu of RT (Radiographic Test) for longitudinal weld joints unless otherwise specified.</p> <p>Seamless and welded pipes shall be hydrostatic tested in conformance to ASTM standards. Eddy current testing is not an acceptable alternative to hydrostatic testing.</p> <p>CS and LTCS pipes shall conform to dimensional requirements of ASME B36.10M.</p> <p>SS including DSS pipes shall conform to dimensional requirements of ASME B36.19M or ASME B36.10M for those not covered by ASME B36.19M.</p> <p>Standardized mill tolerance of 12.5% should be applied for both seamless and welded pipe including API pipes.</p> <p>Part 2- Fittings: Supply of CS, LTCS, SS & DSS type pipe fittings including but not limited to weldolet, tee, reducing tee, swag nipple (concentric/ eccentric), reducers (concentric/ eccentric), elbows, caps, plugs & spacers.</p> <p>Welding tees specified to be manufactured to the requirements of ASME B16.9, shall be furnished with radius and thickness limits in accordance with the requirements of ASME B31.J.</p> <p>Threaded pipe fittings, if specified, shall be forged steel in conformance to ASME B16.11.</p> <p>Threads shall be NPT in conformance to ASME B1.20.1.</p> <p>Straight tees and reducing tees shall be seamless up to DN600. Tees larger than DN600 may be welded pipe with extruded branch.</p> <p>All fittings except Tee shall be seamless for sizes up to and including DN400 and should be welded for sizes DN450 and larger in Carbon steel (includes LTCS and impact tested high strength carbon steel) materials.</p> <p>All fittings except Tee shall be seamless for sizes up to and including DN200 and should be welded for sizes DN250 and larger in Austenitic SS material.</p>

	<p>All fittings except Tee shall be seamless for sizes up to and including DN100 and should be welded for sizes DN150 and larger in DSS material. Seamless fittings are acceptable in lieu of welded fittings. Welded fittings shall not be permitted in lieu of seamless fittings. End connections of fittings shall be furnished in accordance with the following: a) Butt weld – ASME B16.25 b) Socket weld - ASME B16.11 c) Threaded – taper thread per ASME B1.20.1 Welded fittings shall be subjected to 100% radiography to attain a longitudinal weld joint quality factor (Ej) of 1.0 in conformance to ASME B31.3, unless specified otherwise. Welded fittings to ASTM A234 and A420 shall be supplemented by the letter ‘W’ and be subjected to 100% radiography. Welded fittings to A403 shall be of class “WX”. UT shall not be used in lieu of RT for longitudinal weld joints. Caps shall be seamless in all sizes. Buttweld elbows shall be the long radius type (1.5 x D) Butt welding fittings shall be qualified by proof testing in conformance to ASME B16.9. Fittings shall not be manufactured from bar stock or rolled bars. Welding procedures for welded fittings shall be qualified in conformance to the requirements of IOGP S-563 and ASME Section IX. Bevel protectors shall be provided for all bevel end fittings. All fittings shall be color coded in addition to markings required by the project Piping Material Specification.</p> <p>Part 3- Flanges: Supply of CS, LTCS SS & DSS type flanges including but not limited to Blind, Socket Weld, Weld Necks, Orifice & Nipoflange. Flanges shall conform to ASME B16.5 for sizes DN15 to DN600 in ratings up to Class 1500 and size DN300 for Class 2500. Sizes DN650 to DN1500 in ratings up to Class 600 and sizes up to DN1200 in class 900 shall conform to ASME B16.47 Series ‘A’. Flanges shall be RF (Raised Face) for all classes up to and including Class 2500. Flange jointing faces shall have the following surface roughness: - RF flanges with Spiral wound gaskets for Class 150 to 2500 - Ra 3.2 to 6.3 µm. Orifice flanges shall be furnished in accordance with the requirements of the following: a) ASME B16.36 b) in pairs (one set). Pressure taps shall be furnished with DN 15 butt welded nipoflanges 150MM long, SCH XXS thickness and rating as per piping class.</p>
Delivery Place	Karratha, Western Australia
Supplier EOI Instructions	<p>Please note, this is an Expression of Interest (EOI) only, the content of this work is subject to change pending project demand and timelines.</p> <p>Suppliers are invited to express interest by registering on ICN Gateway where competency and previous positive experiences for similar onshore oil and gas projects should be demonstrated for the provision of similar goods and/or services.</p> <p>ICNWA will follow up on full scope registrations by email, once the full scope closing date has passed. The supplier’s response to ICNWA’s email and their demonstration of capability for the service, will form their Expression of Interest (EOI) for this package.</p> <p>This is a request for specific expressions of interest, contractors will be considered for prequalification and / or tender if suitably qualified.</p>
Contact:	<p>All initial enquiries should be made through the Industry Capability Network Western Australia Ray Loh Ray.Loh@icnwa.org.au +61 (0) 8 9365 7499</p>
Closing Date:	15/09/2023