

CIRCOR Fastener Quality Plan					Rev
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Quality Plan No. / Revision	QP13 / REV 0	
Purchase Order No.	Standard Plan- See Purchase Order	
Material Specification No. / Revision	3040001 15876	A193 Gr. B8 BOLTING and A194/A320 Gr.8 NUTS 18-8 SS, CLASS 1 (6A)
	3160006 15876	A193 Gr. B8A BOLTING and A194/A320 Gr.8A NUTS 18-8 SS, CLASS 1A (6A)
	3160008 15876	A193 Gr. B8M BOLTING and A194 / A320 Gr.8M NUTS (6A)
	4140001 4309	A193 Gr. B7, BOLTING (6A)
	4140002 4449	A193 Gr. B7M, BOLTING (6A)
	4140003 15354	A320 Gr. L7M, BOLTING (6A)
	4140004 2814	A194 (A320) Gr. L7 NUTS (6A) LOW TEMP - IMPACT TESTED
	4140005 15354	A194 (A320) Gr. L7M NUTS (6A and NACE) LOW TEMP - IMPACT TESTED
	4140008 2814	A194 Gr. 2H NUTS
	4140009 4449	A194 Gr.2HM NUTS (6A)
	4140010 4151	A320 Gr. L7 BOLTING (6A)
	4140015 15876	HIGH GRADE ALLOY STEEL FOR HEX SOCKET HEAD CAP SCREWS

1.0 TITLE

Fasteners procurement, inspection, testing, storage and control in compliance with API Spec. 6A, API Spec. 6D and API Spec. Q1

2.0 SCOPE

2.1 All parts which are used for fastening such as studs, hexagonal head bolts, hexagonal head screw, cap screw and hexagonal nuts manufactured to API Spec. 6A, API Spec. 6D and API Spec. Q1

3.0 REFERENCE STANDARDS

API Spec. 6A
API Spec. 6D
MIL-STD-105D
ASTM Standards D2240 or 01415
API Spec. Q1
ISO 2859-1

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Identify Applicability
check off the appropriate box(es)

<input type="checkbox"/>	Required procedures are submitted for review by the applicable CIRCOR API Manufacturing Location Engineering and/or Quality Departments or by a Subject Matter Expert (SME)
<input type="checkbox"/>	Required procedures are reviewed Onsite by competent CIRCOR Supply Chain location personnel
<input type="checkbox"/>	Technical audit
<input checked="" type="checkbox"/>	API Specification 6A is applicable
<input checked="" type="checkbox"/>	API Specification 6D is applicable

4.0 ORDERING REQUIREMENTS

Purchasing agreements shall include the following provisions identified by this Quality Plan. Only vendors that are in good standing in the Approved Vendors List shall be used. Refer to **MSPM 1.8, Purchasing Control**, for other purchasing order requirements that may be required.

4.1 The vendor is required to submit to **CIRCOR** for review:

- a. A copy of the procurement and incoming inspection procedure, including the vendor's criteria for the qualification and approval of the process(es). This also includes provisions for process re-validation.
- b. Visual inspection requirements and acceptance criteria.
- c. Copies of the manufacturer qualification record.
- d. Copies of the calibration records for inspection, test and measurement equipment.
- e. The vendor shall submit any proposed changes in procurement and incoming inspection procedure for **CIRCOR** review prior to using it on CIRCOR orders when changes are proposed.

4.2 The vendor shall provide a Certificate of Conformance to their procurement and incoming inspection procedure number and revision level.

4.3 OEM material test reports are required.

4.4 The vendor shall not change supplier/manufacturer without **CIRCOR** approval.

4.5 All fasteners studs, hexagonal head bolts, hexagonal head screw, cap screw and hexagonal nuts shall be ordered by KF part numbers, drawings and material specifications. They shall be attached to the purchase order.

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Quality Plan Required Documentation - FASTENERS			
Quality Plan Reference Requirement	What is required?	Circor Review Required	
		Yes	No
4.1a	Procurement and Incoming Inspection Procedure		X
4.1b	Visual Inspection Requirements and Acceptance Criteria	X	
4.1c	Manufacturer Qualification Record		X
4.1d	Calibration records, including record content, for inspection equipment		X
4.2	Certificate of Conformance	X	
Attachment I	Including records specified by MSF 2.3.1-1, Supplier Documentation Requirements for this Quality Plan		X

CIRCOR Supply Chain Location Approval Mike Evans 2/28/18
 Signature Date

CIRCOR API Manufacturing Site Approval Carlos Castillo 2/28/2018
 Signature Date

CIRCOR API Manufacturing Site Approval Tim McHenry 2/28/18
 Signature Date