APPLICATION / WITHDRAWAL OF API MONOGRAM

Rev	Reason of Change	Date	Prepared by	Reviewed by	Approved by	Status
1		20-10-2011	YR	JMS	KKD	Released
2	API 17D added in reference documents and API Marking requirement tables added	27-11-2015	AS	JMS	KKD	Released
3	Appendix- A amended & Appendix- B amended according to API 16A 4th edition	10-05-2017	AS	NS	KKD	Released
4	Appendix- B amended according to API 6A 21st edition and details of another API marking removed	07-10-2019	MN	USR	AS	Released
5	Method of marking clause 6.0 rewritten according to API requirements, note 1, weld overlay marking detail added in appendix B	25-11-2019	MN	USR	AS	Released
6	Procedure rewritten as per product applicability.	05-03-2020	SKG	USR	JG	Released
7	Top connector & Threaded connector removed.	28-10-2020	SKG	USR	JG	Released
8	Procedure amended as API 6A Addendum2	09-07-2021	KKM	USR	JG	Released
9	Procedure amended as API 6A Addendum 3	20-09-2022	NK	USR	JG	Released
10.	Gate Valve Added	08-11-2023	NK	USR	JG	Released

APPLICATION / WITHDRAWAL OF API MONOGRAM

1.0 PURPOSE

To describe the requirements for marking of monogrammed products in accordance with API 6A/16A specifications.

2.0 APPLICABILITY

The requirements imposed by this procedure are directive in nature to all Production, Manufacturing Engineering, Production Control, Design Engineering, and Quality Control personnel involved in the manufacture of products manufactured according to API 6A/16A specifications.

3.0 REFERENCE DOCUMENTS

3.1 CPC Quality Assurance Manual
3.2 API Spec 6A, "Specification for Wellhead and Tree Equipment"
3.3 API Spec 16A, "Specification for Drill-through Equipment"
3.4 API Q1, "Specification for Quality Management System Requirements for Manufacturing Organizations for the Petroleum and Natural Gas Industries"

4.0.GENERAL

The API monogram shall be applied only to those products that are designed (When Design applicable) and manufactured in accordance with applicable API specifications when required by the customer and CPC Sales Order.

4.1. Products that do not conform to API specified requirements will not be monogrammed.

4.2. Only API Monogram approved Licensee (approved product only) shall apply the monogram and its designated license number to applicable monogramable newly manufactured products.

4.3. API monogram to be apply to the product only if valid license of API is available.

4.4. License(s) being facility specific, API monogram (during valid license period only) shall be applied at the approved site only.

4.5. Monogram may be applied at any appropriate time during product process but shall be removed, if the product is subsequently found out of conformance including rejection at the supplied location, in accordance with the process covered in Appendix(s) to this procedure.

Note: Alternative API Monogram marking procedures required to be adopted if any shall be in accordance with the details contained in the API Monogram Program alternative Marking of Products License Agreement, available on the API Monogram Program website. However as on approval of this procedure, at CPC, we are not using the any alternate marking procedure.

5.0 RESPONSIBILITY

5.1 Manufacturing Engineering is responsible for detailing marking requirements for monogrammed products on Process Routings in accordance with Design Engineering documentation.

5.2 Production is responsible for marking all monogrammed products in accordance with the Engineering drawing or according to marking given in API (refer API specs tables in appendix B for marking).

5.3 Quality Control is responsible for ensuring the API monogrammed products are properly marked in accordance with the Engineering documentation.

5.4 Director/ Manager QAD will be responsible for release of application of API Monogram.

6.0 METHODS

6.1 Design Engineering drawings shall specify all marking requirements and identify location for monograming final products according to the appropriate API Specifications.

6.2 Manufacturing Engineering shall describe all marking requirements and methods of applications of markings of the final products according to Design Engineering drawings.

6.3 Product marking shall be clear, legible, and visible without the use of magnification. Only capital letters shall be used unless otherwise stated on the drawing or product specification

6.4 Equipment shall be marked as per the product-specific requirements given in Appendix- B. The nominal size for equipment shall be marked with US Customary (USC) units.

6.5 Temperature classes (see 4.3.2) or maximum and minimum temperature ratings shall be at location specified.

6.6 Permanent marking methods shall be “Low Stress” (dot, vibration, or rounded V). Conventional sharp V-stamping shall be permitted only in low-stress areas, such as the outside diameter of flanges.

6.7 Unless nameplates are specified, marking shall be applied on the nameplate and/or the body or the connector.

6.8 Marking required on a connector outside diameter that would be covered by clamps or other parts of the connector assembly shall be stamped in a visible location near the connector.

6.9 The marking shall include API Licenses number, manufacturer's name and the date of manufacturing in conjunction with API Monogram.

6.9.1 Date of manufacturing shall be of 2 digits representing month & year e.g. 03-11 for March 2011 unless otherwise stipulated in the applicable API Spec including additional requirements of specifications/standards, if any, as applicable.

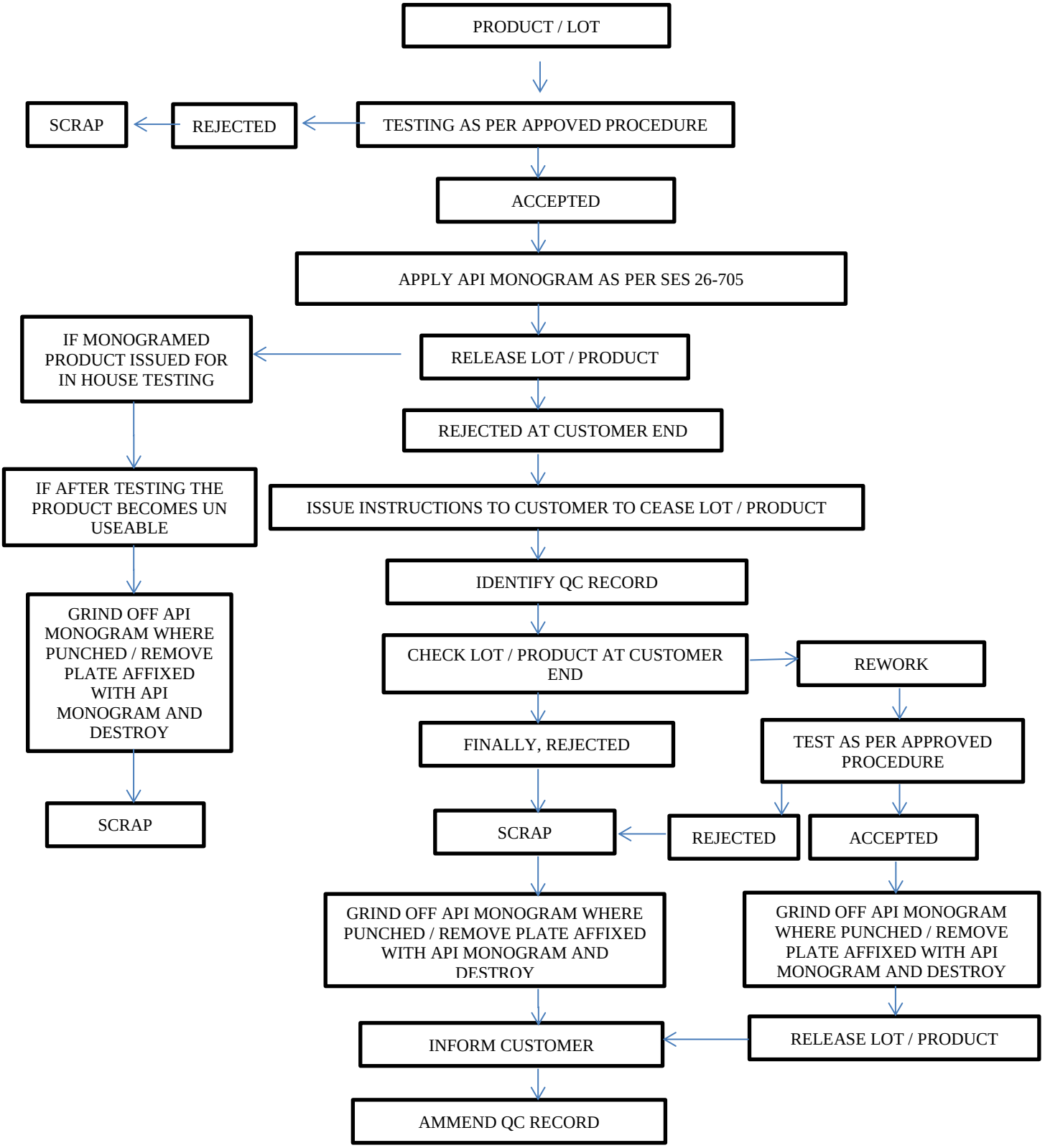
6.9.2 Design Engineering shall specifically add note to clarify for the application of the additional API product specification(s) and/or standard(s) marking requirements, to be marked on the product, if applicable.

6.10 Production shall apply all appropriate markings according to the information contained on the Process Routing in conformity with the details as mentioned on the relevant drawing.

6.11 Quality Control shall apply the API Monogram in accordance with the Design Engineering drawings.

6.12 Manager Quality Control shall be responsible for overseeing the removal of the API monogram if the product is subsequently found to be in nonconformance with API specified requirements as per procedure in appendix A attached.

APPENDIX A


PRODUCT / LOT
TESTING AS PER APPOVED PROCEDURE
REJECTED
SCRAP
ACCEPTED
APPLY API MONOGRAM AS PER SES 26-705
RELEASE LOT / PRODUCT
IF MONOGRAMED PRODUCT ISSUED FOR IN HOUSE TESTING
REJECTED AT CUSTOMER END
IF AFTER TESTING THE PRODUCT BECOMES UN USEABLE
ISSUE INSTRUCTIONS TO CUSTOMER TO CEASE LOT / PRODUCT
IDENTIFY QC RECORD
GRIND OFF API MONOGRAM WHERE PUNCHED / REMOVE PLATE AFFIXED WITH API MONOGRAM AND DESTROY
CHECK LOT / PRODUCT AT CUSTOMER END
REWORK
FINALLY, REJECTED
TEST AS PER APPROVED PROCEDURE
SCRAP
SCRAP
REJECTED
ACCEPTED
GRIND OFF API MONOGRAM WHERE PUNCHED / REMOVE PLATE AFFIXED WITH API MONOGRAM AND DESTROY
GRIND OFF API MONOGRAM WHERE PUNCHED / REMOVE PLATE AFFIXED WITH API MONOGRAM AND DESTROY
INFORM CUSTOMER
RELEASE LOT / PRODUCT
AMMEND QC RECORD

APPENDIX B

(API Based Marking details of Products)

Marking details of API 6A products

(Ref Table 35 of API 6A 21st Edition) — Marking requirements and locations

Table 35—Guide to Marking Requirements

Equipment Type	Nameplate Required?	Marking Requirements
Loose Fittings and Connectors		
• Blind, and test flanges	Optional	14.1.5
• Ring gaskets	Not applicable	14.2.5
• Threaded connectors	Optional	14.3.5
• Tees and crosses	Optional	14.4.5
• Bullplugs	Not applicable	14.5.5
• Valve-removal plugs	Not applicable	14.6.5
• Top connectors	Optional	14.7.5
• Crossover connectors	Optional	14.8.5
• Other end connectors	Not applicable	14.9.5
• Spools (adapter and spacer)	Optional	14.10.5
Valves		
• Complete assemblies	Optional	14.11.5
• Prepared for actuator	Optional	14.11.5
Back-pressure Valves	Not applicable	14.12.5
Slip-type and Mandrel-type Hangers	Not applicable	14.13.5
Casing and Tubing Heads	Optional	14.14.5
Chokes		
• Choke assemblies, adjustable	Optional	14.15.5
• Choke assemblies, positive (fixed)	Optional	14.15.5
• Choke beans, positive chokes	Not applicable	14.15.5
Actuators (for Valves and Chokes)	Optional	14.16.5
Safety Valves		
• Safety valves (SSV, USV, BSDV)	Required	14.17.5
• Safety valves prepared for actuator	Required	14.17.5
• Safety valve actuators (SSV, USV, BSDV)	Required	14.17.5
Tree Assemblies	Optional	14.18.5
Other		
• Fittings/pressure boundary penetrations	Not applicable	Section 9

FOOTNOTES
a Valves that satisfy the requirements of API 6FA can be marked per the requirements therein in addition to the requirements of this section.
b Marking for features that do not exist on a product is not applicable.
c PSL 3 products may be marked “PSL 3G” when the additional requirements of gas testing have been satisfied.

Note 1: If equipment has metal-overlaid, corrosion-resistant ring grooves, the ring groove type and number shall be followed by **“CRA”** to designate a corrosion-resistant alloy.

Ref Table 37 of API 6A — Marking for blind and test flange and weld neck flange

Required Markings	Required Location(s)
API 6A or 6A Temperature class(es) or ratings Material class Product specification level (PSL) Date of manufacture Manufacturer's name or mark Serial number (if applicable) Nominal bore size (if applicable) End and outlet connector size Rated working pressure Ring groove type and number	Outside diameter of connector
Hardness test values (if applicable)	Adjacent to test location

Ref Table 38 of API 6A — Marking for integral studded and flanged outlet connectors

Required Markings	Required Location(s)
Nominal bore size (if applicable) End and outlet connector size Rated working pressure Ring groove type and number	Outside diameter of flange or face of studded outlet

Ref Table 39 of API 6A — Marking for Ring gaskets

Marking Requirement	Marking	Location
Date of manufacture	(Month/Year)	Outside diameter of gasket
Traceability to heat and job lot	Traceability Code(s)	Outside diameter of gasket
Manufacturer's name or mark	PMR	Outside diameter of gasket
Ring gasket type and number	Example: "BX 155"	Outside diameter of gasket
Ring gasket manufacturing method [wrought (F), cast (C), or welded (W)]	F	Outside diameter of gasket, following gasket material code, with or without a dash
	C	
	W	
Ring gasket material code:		Outside diameter of gasket, following gasket type and number, with or without a dash Examples: "R 24-D-W" "RX 39 316 F" "BX 169-825-C"
Soft iron	D	
Carbon or low-alloy steel	S	
304 Stainless steel	304	
316 Stainless steel	316	
Nickel alloy UNS N08825	825	
Other CRA materials	(UNS number)	

Ref Table 39 of API 6A — Marking for Tees and Crosses

Required Markings	Required Location(s)
API 6A or 6A Temperature class(es) or ratings Material class Product specification level (PSL) Date of manufacture Manufacturer's name or mark Serial number (if applicable)	Nameplate and/or body
Bore size (if applicable) End and outlet connector size Rated working pressure	Nameplate and/or body and outside diameter of each connector
Ring groove type and number	Near each connector or thread
Hardness test values (if applicable)	Adjacent to test location
FOOTNOTE Performance requirement marking is not required for tees and crosses.	

Marking for Bullplugs-

Bullplugs shall be marked with "API 6A" or "6A" followed by the nominal size, material class, and manufacturer's name or mark, as a minimum.

Marking for Valve-removal plugs-

Valve-removal plugs shall be marked with "API 6A" or "6A" followed by the nominal size and "VR" for 69.0 MPa (10,000 psi) working pressure or "HPVR" for 138.0 MPa (20,000 psi) working pressure, material class, and manufacturer's name or mark, as a minimum.

Ref Table 46 of API 6A — Marking for Adapter and spacer spools

Required Markings	Required Location(s)
API 6A or 6A Temperature class(es) or ratings Material class Product specification level (PSL) Date of manufacture Manufacturer's name or mark Serial number (if applicable)	Nameplate and/or body
Nominal bore size (if applicable) End and outlet connector size Rated working pressure	Nameplate and/or body and outside diameter of connector
Thread size (threaded products only)	Nameplate, body, or near thread
Ring groove type and number	Near each connector or thread
Hardness test values (if applicable)	Adjacent to test location
FOOTNOTE Performance requirement marking is not required for spools.	

Marking for Valve-

Valves shall be marked as specified in Section 12 and Table 48 in API 6A.

Table 48—Marking for Valves

Required Markings	Required Location(s)
API 6A or 6A Temperature class(es) or ratings Material class Product specification level (PSL) Performance requirements (PR) [c] Date of manufacture Manufacturer's name or mark Serial number (if applicable)	Nameplate and/or body
Rated working pressure Nominal bore size (s) [d] End and outlet connector size	Nameplate and/or body and outside diameter of connector
Thread size (threaded products only)	Nameplate, body, or near thread
Ring groove type and number	Near each connector or thread
Flow direction (check and unidirectional valves only)	On body
Direction of movement to open	On handwheel
Hardness test values (if applicable)	Adjacent to test location

FOOTNOTES

a for valves prepared for actuators, mark the letter "V" after "API 6A" or "6A."

b Valves that satisfy the requirements of API 6FA can be marked per the requirements therein in addition to the requirements of this section.

c Allowable markings are PR1, PR2, or PR2F, as applicable.

d for multiple-bore valves having unequal bore sizes, valves shall be designated by the nominal bore in decreasing sizes (e.g. 31/16 x 21/16, 29/16 x 21/16). For valves having equal bore sizes, valves shall be designated by the nominal bore size followed by the number of bores (e.g. 21/16 quad) or by identifying all bore sizes (e.g. 29/16 x 29/16).

Actuated valves shall be marked as specified in Table 35 and Table 49

Table 49—Marking for Actuated Valves (Assemblies of Actuators with Valves Prepared for Actuators)

Required Markings	Required Location(s)
Date of final acceptance Name of manufacturer Location of manufacturer	Tag or nameplate

(API Based Marking details of Products)

Marking details of API 16A products –

(Ref Table 41 of API 16A 4th Edition) — Marking requirements and locations

Marking	Ram blowout preventer	Annular blowout preventer	Hydraulic connector	Drilling spools, Spacer spools, mandrels and adapters	Loose connector	OECs (integral & loose) [d]	Clamps	Ram blocks	Annular & ram packers & top seals
API 16A	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body	Connection OD [a, b, c]	Mfr's specification	Nameplate and/or body	Mfr's specification	Mfr's specification
Mfr's name or mark	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body	Connection OD [a, b, c]	Mfr's specification	Nameplate and/or body	Mfr's specification	Mfr's specification
Model or type designation (if applicable) (8.4.2.1)	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body				Nameplate and/or body		
Serial number (if applicable)	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body			Nameplate and/or body	Mfr's specification	
Size designation (Table 46)	Nameplate and/or body & connection OD [a]	Nameplate and/or body & connection OD [a]	Nameplate and/or body & connection OD [a]	Nameplate and/or body & connection OD [a]	Connection OD [a, b, c]	Mfr's specification			
Rated working pressure (Table 47)	Nameplate and/or body & connection OD [a]	Nameplate and/or body & connection OD [a]	Nameplate and/or body & connection OD [a]	Nameplate and/or body & connection OD [a]	Connection OD [a, b, c]	Mfr's specification			
Temperature rating (Table 48)	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body	Connection OD [a, b, c]	Mfr's specification	Nameplate and/or body		
Mfr's part number	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body	Connection OD [a, b, c]	Mfr's specification	Nameplate and/or body	Mfr's specification	Mfr's specification
Date of manufacture	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body	Connection OD [a, b, c]	Mfr's specification	Nameplate and/or body	Mfr's specification	Mfr's specification
Product description code (8.4)	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body	Connection OD [a, b, c]	Mfr's specification	Nameplate and/or body[e]		
Hydr OS rated working pressure	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body						
Hydr OS recommended operating pressure	Nameplate and/or body	Nameplate and/or body	Nameplate and/or body						
Hydraulic open & close ports	Mfr's specification	Mfr's specification	Mfr's specification						

Equipment orientation	Upper portion								
Ring groove designation	Connection OD a, b, c	Connection OD a, b, c	Connection OD a, b, c	Connection OD a, b, c	Connection OD a, b, c	Mfr's specification[c]			
Non-Metallic codification system (8.3.3)									Mfr's specification

a. All type 16B and 16BX hub connections shall be marked on the neck of the connection, 12 mm (1/2 in) max. from the required length of the neck.

b. All flanges shall be marked in accordance with API 6A.

c. If the ring groove is overlaid with corrosion-resistant material, it is marked in accordance with section 8.2.1.3.

d. All API 6A OECs shall be marked in an easily accessible and readable area selected by the manufacturer.

e. the size designation in the PDC may be replaced by the two-digit clamp number in accordance with Table 16. If the clamp number is used, the rated working pressure code shall be replaced by the letter's "CC".

f. Serialization shall be required for annular packers. The location of the serial number shall be per manufacturer's specification.

Table 44 – Product description code

Code	Description
AA	Equipment type (see 8.4.2.1)
BB	Size designation (see 8.4.2.2)
CC	Rated working pressure (see 8.4.2.3)
DD	Temperature rating (see 8.4.2.4)
EEEE	Date of manufacture (see 8.4.2.5)
FFF	Performance requirement (see 8.4.2.6)

Table 45 — Equipment type

Generic description of equipment	Code AA
Single ram BOP	01
Double ram BOP	02
Single annular BOP	03
Double annular BOP	04
Drilling spool	05
Adapter	06
Triple ram BOP	07
Hydraulic connector	08
Clamp	09
Quad ram BOP	10
Spacer spool	11
Mandrel	12
Other	99

Table 46 — API equipment size designation

API size designation		Code BB
mm	(in)	
179	7 1/16	07
228	9	09
279	11	11
346	13 5/8	13
425	16 3/4	16
476	18 3/4	18
527	20 3/4	20
540	21 1/4	21
680	26 3/4	26
762	30	30

Table 47 — Rated working pressure

Rated working pressure		Code CC
MPa	(psi)	
6.89	1000	01
13.8	2 000	02
20.7	3 000	03
34.5	5 000	05
69.0	10 000	10
103.5	15 000	15
138.0	20 000	20
172.4	25 000	25
206.8	30 000	30

Table 48 — Temperature ratings (metallic materials)

Operating temperature range		Code DD
°C	(°F)	
− 59 to 121	− 75 to 250	72
− 59 to 177	− 75 to 350	73
− 29 to 121	− 20 to 250	22
− 29 to 177	− 20 to 350	23
− 18 to 121	0 to 250	02
− 18 to 177	0 to 350	03

Date of manufacture (EEEE)-

The date of manufacture shall consist of the month (in numerical form) and the last two digits of the year (e.g. May 2003 is coded as 0503 for code EEEE).

Performance Requirement (FFF)-

The performance requirement code shall be either PR1 or PR2.

Weld Metal Overlays-

When equipment has weld metal–overlaid ring grooves, the ring gasket type and number shall be followed by “CRA” to designate a corrosion-resistant alloy or “SST” to designate an austenitic stainless steel.