



Lloyd's
Register

Type Approval Certificate Extension

This is to certify that Certificate No. 86/00060(E7) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

| | |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PRODUCER | Promat BD Ltd |
| PLACE OF PRODUCTION | Unit 20 Walsall Enterprise Park Regal Drive Pleck Walsall, WS2 9HQ United Kingdom (UK) |
| DESCRIPTION | Contoured flanged branch connections and branch outlet fittings. |
| TYPE | <p>Standard connections:-</p> <p>Weldoflange: 1/2"-150lb to 12"-2500lb</p> <p>Nipoflange: 1/2"-150lb to 2"-2500lb</p> <p>Reinforced Nipoflange: 1/2"-150lb to 1 1/2"-1500lb and 2"-150lb to 2"-600lb</p> <p>Weldolet 16"-300lb</p> <p>Lightweight connections for stainless steel applications:</p> <p>Weldoflange: 1/2"-150lb to 2"-600lb</p> <p>Nipoflange: 1/2"-150lb to 2"-600lb</p> <p>Reinforced Nipoflange: 1/2"-150lb to 2"-600lb</p> <p>Sweeplet 3/4" Sch 5 to 24" Sch XXS</p> |
| Certificate No. | 86/00060(E8) |
| Issue Date | 10 May 2017 |
| Expiry Date | 2 June 2022 |
| Sheet | 1 of 3 |



M.H.M.Rila
Southampton Technical Support Office
Marine & Offshore Lloyd's Register

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

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TYPE (continued)

Branch outlet fittings in carbon steel and alloy, stainless, duplex and super duplex steels:
 Branch welding outlet: 1/2" to 24" Schedule 10S through 80
 1/2" to 24" Schedule 160 and XXS
 Socket welding outlet: 1/2" to 4"-3000lb
 1/2" to 2"-6000lb
 Threaded outlet: 1/2" to 4"-3000lb
 1/2" to 2"-6000lb
 Nipple welding outlet: 1/2" to 2"-3000lb
 1/2" to 2"-6000lb
 Elbow and lateral butt welding outlet:
 1/2" to 24"-3000lb Sch STD and XS
 1/2" to 24"-6000lb Sch 160 and XXS
 Elbow and lateral socket welding outlet:
 1/2" to 2"-3000lb
 1/2" to 1 1/2"-6000lb
 Elbow and lateral threaded outlet:
 1/2" to 2"-3000lb
 1/2" to 1 1/2"-6000lb
 Elboflanges: 150lb to 2500lb
 Schedule 10S to XXS
 Latroflanges: 150lb to 2500lb
 Schedule 10S to XXS
 Prohub: 1/2" to 8" (pressure ratings as detailed in
 ABB Vetco Gray Catalogue reference
 GLOC-105/1-96/10M dated 1996).

DESIGN CODES

Area replacement compensation for reinforcement of welded branch connections is to comply with the following design codes, as appropriate, subject to the conditions under which they are used:

ASME B16.5: 2009; ASME B31.1: 2009;
 ASME B31.3: 2010; ASME B31.4: 2009;
 ASME B31.8: 2010; BS EN 1759-1:2004;
 ASME VIII Div 1: 2010; PD 5500: 2011;
 MSS SP-97-2006

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Sheet 2 of 3



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DESIGN CODES (Cont.) Hydrostatic pressure tests and burst pressure tests are to comply with the following design codes subject to their proposed use:
ASME B16.9 : 2007 and BS1640 : 1968

APPLICATION Marine, offshore and onshore oil and gas piping applications, Petrochemical Plant, Power Generation and General Process Plant, Pressure Vessels and associated equipment.

OTHER CONDITIONS The design pressure of the branch outlet fittings must not exceed the rating of the standard socket weld or screw thread.

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. 86/00060(E8) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 86/00060(E7) to which this extension should be attached.

Certificate No. 86/00060(E8)
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Sheet 3 of 3


Mohamed Rila
Southampton Office
Lloyd's Register EMEA
LR031.1.2016.06



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