



Lloyd's  
Register

## Type Approval Certificate Extension

*This is to certify* that Certificate No. 08/60011(E3) for the under noted products is extended and renumbered as shown.

This certificate is issued to:

<b>PRODUCER</b>	Tube-Mac Piping Technologies Ltd. 853 Arvin Avenue Stoney Creek, Ontario L8E 5N8 Canada
<b>PLACES OF PRODUCTION</b>	Tube-Mac Piping Technologies Ltd. 853 Arvin Avenue Stoney Creek, Ontario L8E 5N8 Canada
<b>DESCRIPTION</b>	4 Bolt loose slip-on flared flanges
<b>TYPES</b>	FFC34 FFC64 FFC74
<b>APPLICATION</b>	Marine and offshore piping systems in accordance with the limitations and conditions listed on Lloyd's Register Design Appraisal Document no.08/60011 (E4).
<b>SPECIFIED STANDARDS</b>	ISO/DIS 6162-1 ISO/DIS 6162-2 ISO/DIS 6164
<b>Certificate No.</b>	08/60011 (E4)
<b>Issue Date</b>	08 November 2017
<b>Expiry Date</b>	08 November 2022
<b>Sheet</b>	1 of 2



A. Nash  
Americas Technical Support Office

*Lloyd's Register Canada Limited  
5420 North Service Road, Suite 506, Burlington, Ontario, L7L 6C7, Canada*

Lloyd's Register Canada Limited  
Is a subsidiary of Lloyd's Register Group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

RATINGS	Diameter (DN)	Max Working Pressure rating (bar)
FFC34-050	13	350
FFC34-075	19	350
FFC34-100	25	350
FFC34-125	32	275
FFC34-150	38	210
FFC34-200	51	210
FFC34-250	64	175
FFC34-300	76	140
FFC34-400	101	35
FFC64-050	13	420
FFC64-075	19	420
FFC64-100	25	420
FFC64-125	32	420
FFC64-150	38	420
FFC64-200	51	420
FFC74-250	64	310
FFC74-300	76	270
Temperature range (°C):		-20 to +120

*"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 of any modification or changes to the equipment in order to obtain a valid certificate."*

*The Design Appraisal Document No. 08/60011 (E4) and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

All other details remain as the previous Certificate No. 08/60011 (E3) to which this extension should be attached.

<b>Certificate No.</b>	08/60011 (E4)
<b>Issue Date</b>	08 November 2017
<b>Expiry Date</b>	08 November 2022
<b>Sheet</b>	2 of 2



A. Nash  
Americas Technical Support Office

*Lloyd's Register Canada Limited  
5420 North Service Road, Suite 506, Burlington, Ontario, L7L 6C7, Canada*

Lloyd's Register Canada Limited  
Is a subsidiary of Lloyd's Register Group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.