



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx BAS 13.0085U Issue No: 0 Certificate history:
Issue No. 0 (2014-11-13)

Status: **Current** Page 1 of 3

Date of Issue: **2014-11-13**

Applicant: **Minco Products Inc**
7300 Commerce Lane
Minneapolis
55432-3177
United States of America

Electrical Apparatus: **Type FG212474 Union Fitting**
Optional accessory:

Type of Protection: **Flameproof and Increased Safety**

Marking: **Ex db IIC Ex eb IIC (-40°C to +90°C)**

*Approved for issue on behalf of the IECEx
Certification Body:*

R S Sinclair

Position:

General Manager

*Signature:
(for printed version)*

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





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Manufacturer: **Minco Products Inc**
7300 Commerce Lane
Minneapolis
55432-3177
United States of America

Additional Manufacturing
location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-7 : 2006-07 Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[GB/BAS/ExTR13.0185/00](#)

Quality Assessment Report:

[NL/DEK/QAR12.0028/02](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Type FG212474 threaded union has male 'process thread' sizes of 7/8" UNF, M20, 1/2" NPT and 3/4" NPT and female 'connection thread' sizes of 1/2" NPT, 3/4" NPT and M20. The union assembly is intended for inline connection into a flameproof enclosure or fitting having male or female threads.

The union assembly is manufactured from stainless steel in grades 303 or 316 and comprise of three individual component parts together with two locking set screws. The three parts are all coaxially threaded and are identified as the 'male adaptor', which has the male 'process thread' on one end and a male collar thread and serrated flame path on the other, the 'female flange' which has the female 'connection thread' and a corresponding serrated flamepath and finally the threaded collar. The male adaptor and female flange are held together by the threaded collar. Once assembled in the desired position the threaded collar is locked in position, against removal or vibration, by the locking set screws which are threaded radially into the collar at 180° PCD. The serrated flamepath consist of a series of concentric, triangle section, grooves machined normal to the axis of the main component parts.

Schedule of Limitations

1. The Type FG212474 Union when used in flameproof applications must not be closed with a flameproof stopping plug.
2. The 'male adaptor' has the option of two parallel 'process thread' options (metric and UNF) which have a 3.5 mm (maximum) undercut at the base of the entry thread and therefore must only be fitted into a flameproof enclosure with entries having a minimum of 14mm full thread form measured from the external surface.
3. As an alternative to condition 2, the flameproof gland must be fitted with a non-detachable, non-compressible washer having a minimum thickness of 2mm between the head of the gland and enclosure.
4. With 'process' or 'connection' threads are of parallel thread form additional measure must be taken to seal the threads in order to maintain the union's IP65 rating.

CONDITIONS OF CERTIFICATION: NO