

Test Report Sheet



Test No **NA5073/01**
 Approval - WICS: MTBA200X32 Trials (5712)

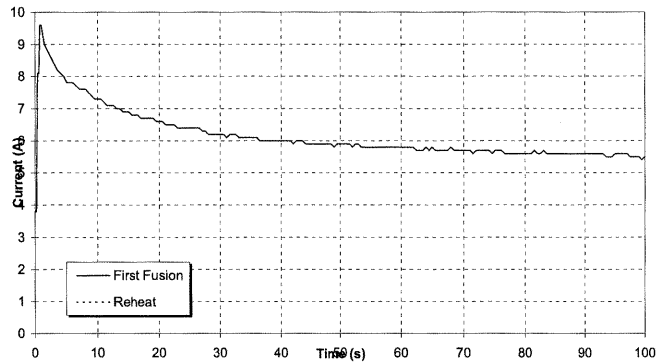
Test **Long Term Hydrostatic Strength at 20 C**
 WIS 4-32-14. March 1995.: Clause 7.3, March 1995.
 Test temperature: 20.0 C Test pressure: 19.0 Bar

Fitting **Multi-Seal Tapping Tee u/s 200x 32 mm black PE100**
 Production Run:

Pipe **Resin: PE80 SDR: 11**

Jointing Cond. **C2 (Pipe: -5.0 C, Fitting: 23.0 C, Applied power: Minimum)**

Jointing Declared voltage (Vd): 39.0 V
 Measured fitting temp.: 23.0 C
 Measured resistance (Rm): 3.970 Ohm
 Max. decl. resistance (Rd): 4.055 Ohm
 App. volt. (Vd*SQR(Rm/Rd)): 38.6 V
 Fusion time: 100 s
 Input energy: 23.7 kJ



Date On Test	Date Off Test	Accrued Hours	Failure Mode	Gas Tested	Test Result
04-Dec-00	31-Jan-02	10096.82			Pass
Comments					

S. Dudley

Joint date: 22-Sep-00

Signed By:

Date Completed:

Test Report Sheet



Test No

NA5814/01

Quality Control: CBKHA63D 3rd run in production (7295)

Test

Joint Cohesion (Crush)

EN 1555 (Gas): Part 3 Table 4 (ISO/DIS 13954:13955:13956)

Test temperature: 20.0 C Test pressure: n/a

Fitting

Coupler 63 mm black PE100

Production Run: 0602286 Fitting no: 1397

Pipe

Resin: PE80 SDR: 11

Jointing Cond.

MIN-10 (Pipe: -10.0 C, Fitting: -10.0 C, Applied power: Minimum)

Jointing

Declared voltage (Vd): 39.0 V

Measured fitting temp.: 22.0 C

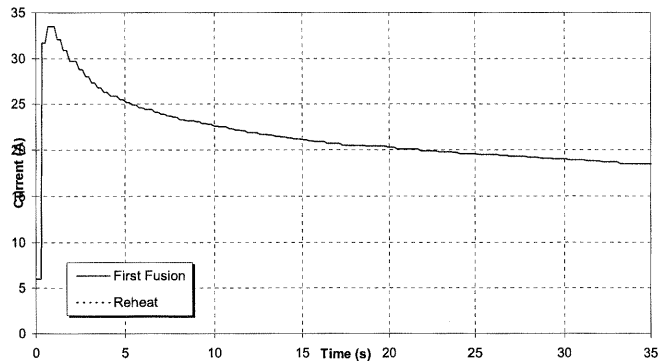
Measured resistance (Rm): 0.894 Ohm

Max. decl. resistance (Rd): 0.985 Ohm

App. volt. (Vd*SQR(Rm/Rd)): 37.2 V

Fusion time: 35 s

Input energy: 28.1 kJ



Remarks

No signs of brittleness through joint. NB tested on PE80 pipe.

Test Result

Pass

I. McKeown

Joint date: 04-Jul-02

Signed By:

Date Completed:

TL6

Issue 3

Test Report Sheet



Test No **NA5830/07**
 Approval - Gas Natural: RBKHM 110x90 Thin wall (7349)

Test **Hydrostatic strength at 20 C (100 hrs)**
 EN 1555 (Gas): Part 3 Table 4 (EN 921)
 Test temperature: 20.0 C Test pressure: 20 Bar

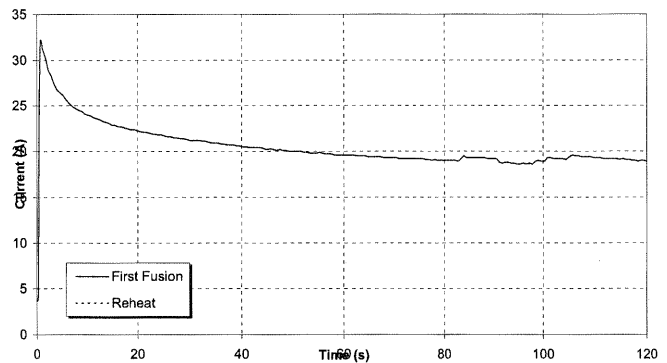
Fitting **Reducer e/f 110x 90 mm black PE100**
 Production Run:

Pipe **Resin: PE80 SDR: 11**

Jointing Cond. **MIN-10 (Pipe: -10.0 C, Fitting: -10.0 C, Applied power: Minimum)**

Jointing

Declared voltage (Vd): 39.0 V
 Measured fitting temp.: 23.0 C
 Measured resistance (Rm): 1.110 Ohm
 Max. decl. resistance (Rd): 1.214 Ohm
 App. volt. (Vd*SQR(Rm/Rd)): 37.3 V
 Fusion time: 120 s
 Input energy: 91.6 kJ



Date On Test	Date Off Test	Accrued Hours	Failure Mode	Gas Tested	Test Result
12-Sep-02	19-Sep-02	148			Pass
Comments					

N. Allman

Joint date: 12-Sep-02

Signed By:

Date Completed:

Test Report Sheet



Test No

NA6133/08

Quality Control: RBKHA63x40 G Test 1st run wk 21 (8687)

Test

Joint Cohesion (crush)

EN 12201 (Water): Part 3 Table 4 (ISO/DIS 13954:13955:13956)

Test temperature: 23.0 C Test pressure: n/a

Fitting

Reducer e/f 63x 40 mm black PE100

Production Run: 0504215 Fitting no: 270

Pipe

Resin: PE80 SDR: 11

Jointing Cond.

MIN-10 (Pipe: -10.0 C, Fitting: -10.0 C, Applied power: Minimum)

Jointing

Declared voltage (Vd): 39.0 V

Measured fitting temp.: 25.0 C

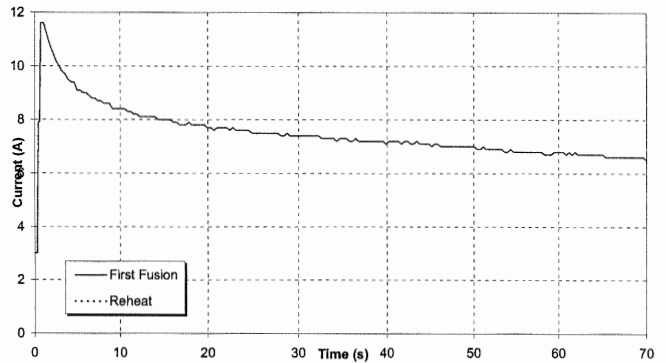
Measured resistance (Rm): 2.890 Ohm

Max. decl. resistance (Rd): 3.116 Ohm

App. volt. (Vd*SQR(Rm/Rd)): 37.6 V

Fusion time: 70 s

Input energy: 19.6 kJ



No sign of brittleness on fitting interface

Remarks

Test Result
Pass

C. Brecker

Joint date: 25-May-04

Signed By:

Date Completed:

TL6

Issue 3

Test Report Sheet



Test No **PC023010**
Process Control - Normal (Week: 30/02) (7355)

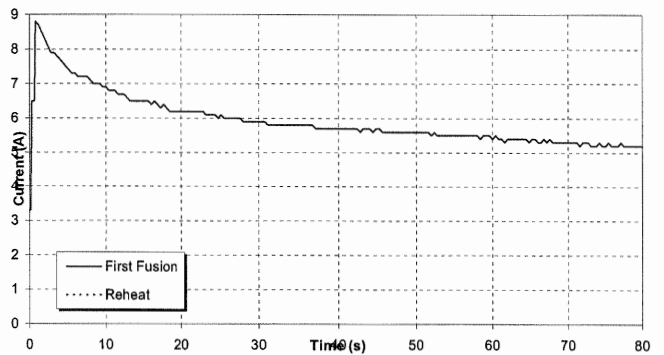
Test **Joint Cohesion (crush)**
EN 12201 (Water): Part 3 Table 4 (ISO/DIS 13954:13955:13956)
Test temperature: 23.0 C Test pressure: n/a

Fitting **Equal tee 63x 63x 63 mm black PE100**
Production Run: 0702985 Fitting no: 24

Pipe **Resin: PE80 SDR: 11**

Jointing Cond. **MIN-10 (Pipe: -10.0 C, Fitting: -10.0 C, Applied power: Minimum)**

Jointing
Declared voltage (Vd): 39.0 V
Measured fitting temp.: 23.0 C
Measured resistance (Rm): 4.030 Ohm
Max. decl. resistance (Rd): 4.055 Ohm
App. volt. (Vd*SQR(Rm/Rd)): 38.9 V
Fusion time: 80 s
Input energy: 18.3 kJ



no signs of brittleness

Remarks

Test Result
Pass

J. Wilson

Joint date: 08-Aug-02

Signed By:

Date Completed:

TL6

Issue 3

Test Report Sheet



Test No **PC023905**
 Process Control - Normal (Week: 39/02) (7497)

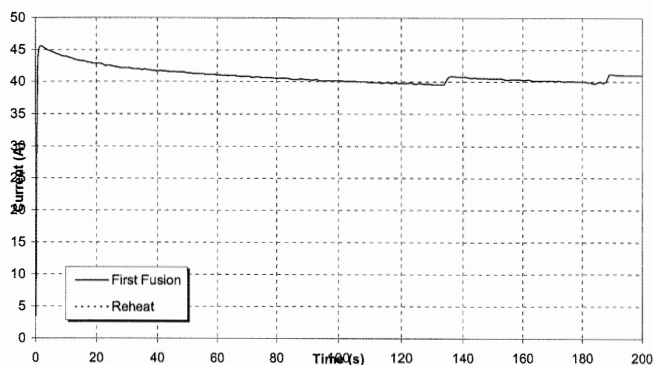
Test **Hydrostatic strength at 80 C (165 hrs)**
 EN 12201 (Water): Part 3 Table 4 (EN921, ISO 1167)
 Test temperature: 80.0 C Test pressure: 9.0 Bar

Fitting **Elbow 160 mm x 90 deg black PE100**
 Production Run: 0902420 Fitting no: 179

Pipe **Resin: PE80 SDR: 11**

Jointing Cond. **MIN-10 (Pipe: -10.0 C, Fitting: -10.0 C, Applied power: Minimum)**

Jointing Declared voltage (Vd): 39.0 V
 Measured fitting temp.: 23.0 C
 Measured resistance (Rm): 0.869 Ohm
 Max. decl. resistance (Rd): 0.886 Ohm
 App. volt. (Vd*SQR(Rm/Rd)): 38.6 V
 Fusion time: 200 s
 Input energy: 309.1 kJ



Date On Test	Date Off Test	Accrued Hours	Failure Mode	Gas Tested	Test Result
04-Oct-02	15-Oct-02	191			Pass
Comments					

J. Wilson

Joint date: 03-Oct-02

Signed By:

Date Completed:

TL6

Issue 3

Test Report Sheet



Test No **PC065101**
 Process Control - Normal (Week: 51/06) (10893)

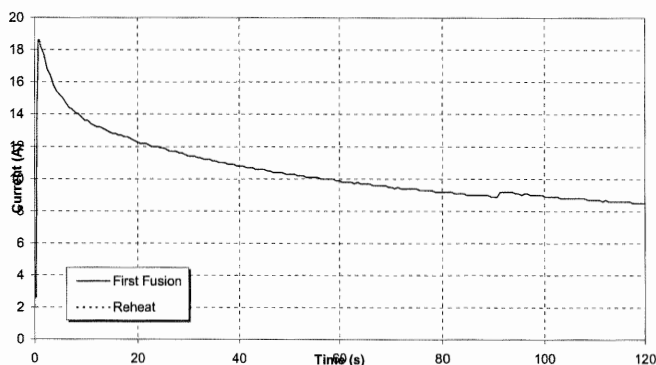
Test **Hydrostatic strength at 80 C (165 hrs)**
 EN 12201 (Water): Part 3 Table 4 (EN921, ISO 1167)
 Test temperature: 80.0 C Test pressure: 9.0 Bar

Fitting **Branch saddle u/s 250x 90 mm black PE100**
 Production Run: 1206217 Fitting no: 61

Pipe **Resin: PE80 SDR: 11**

Jointing Cond. **MIN-10 (Pipe: -10.0 C, Fitting: -10.0 C, Applied power: Minimum)**

Jointing Declared voltage (Vd): 39.0 V
 Measured fitting temp.: 23.0 C
 Measured resistance (Rm): 1.990 Ohm
 Max. decl. resistance (Rd): 2.099 Ohm
 App. volt. (Vd*SQR(Rm/Rd)): 38.0 V
 Fusion time: 120 s
 Input energy: 47.4 kJ



Date On Test	Date Off Test	Accrued Hours	Failure Mode	Gas Tested	Test Result
05-Jan-07	22-Jan-07	318			Pass
Comments					

C. Brecker

Joint date: 05-Jan-07

Signed By:

Date Completed: