

NEXT - PLASTICS s.r.o.
Karpatské námestie 10A
831 06 Bratislava, Slovakia

Resistance to internal pressure test

Objects

LPG pipes made from PE-100, DN25 PN25 mm in black colour.

Date of delivery

2016-10-03

Size, marking and material

The Client delivered three LPG pipes made from PE-100, DN25 PN25 with a length of 1000 mm.

The pipes were marked as follows:

Pipe designation	Marking written on the pipe
DN25 PN25	NP-LPG25 ANTI-STATIC Designed in accordance with EN 16125 next-plastics LPG-system DN25 PN25 =N34= =0703= 06.06.2016 05:22

Testing

On the pipes resistance to internal pressure have been performed according to EN 12201-2:2011 clause 7.2 Table 3.

TEST RESULTS

Measurement uncertainty

Reported uncertainty corresponds to an approximate 95 % confidence interval around the measured value. The interval has been calculated in accordance with EA-4/16 (EA guidelines on the expression of uncertainty in quantitative testing), which is normally accomplished by quadratic addition of the actual standard uncertainties and multiplication of the resulting combined standard uncertainty by the coverage factor $k=2$. The results apply only to the tested objects.

SP Technical Research Institute of Sweden

Postal address
SP
Box 24036
SE-400 22
GÖTEBORG
Sweden

Office location
Gibraltargatan 35
SE-412 79
GÖTEBORG

Phone / Fax / E-mail
+46 10 516 50 00
+46 33 13 55 02
info@sp.se

Laboratories are accredited by the Swedish Board for Accreditation and Conformity Assessment (SWEDAC) under the terms of Swedish legislation. This report may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Measurements of dimensions

Sample no	Mean outside-diameter mm	Wall thickness
		min mm
DN25 PN25		
1	51.8	13.0
2	51.8	13.0
3	51.8	13.0

Test method: *EN ISO 3126:2005*
 The measurements were performed at 23±2°C with equipment with the following accuracy.
 Wall thickness: ±0.01 mm
 Diameter: ±0.1 mm
 Date of test: 2016-10-27

Appearance

The pipe was inside and outside smooth and without any visible surface defects. The material in the pipe ends were homogenous.

Resistance to internal pressure

Hoop stress MPa	Test-temperature °C	Sample no	Test pressure MPa	Time to failure h
DN 25 PN25				
5.0	80	1	3.34	>1000
5.0	80	2	3.34	>1000
5.0	80	3	3.34	>1000

Test method: *EN ISO 1167-1:2006, endcaps of type A*
 For the test conditions the following tolerances apply:
 Test temperature: ±0.3 °C
 Test pressure: ±0.7 %
 Date of test: 2016-10-27 – 12-08

Conclusion

The result fulfils for the tested characteristic the requirement in EN 12201-2:2011 clause. 7.2, table 3.

**SP Technical Research Institute of Sweden
Energy and bioeconomy - Pipe Centre**

Performed by

Examined by

Lars Erlandson

Olle Persson