

EUROHEAT & POWER

CERTIFICATE NUMBER 01/07

PRODUCT "Logstor" preinsulated district heating pipes, single and twin pipe system, with service pipes DN 20 – 900 and casing pipes 90 – 1100 mm and fittings, single and twin pipe system, with service pipes DN 20 – 1200 and casing pipes 90 – 1400 mm (traditional and plates)

LICENSEE Logstor Polska Sp. Z o.o.
www.logstor.com

PRODUCTION PLANT Logstor Polska Sp. z o.o. ul.
Handlowa 1
PL-41807 Zabrze
Poland



**EUROHEAT
& POWER**

GUIDELINES: EHP/001
CERTIFICATE: 01/07

VALID UNTIL 5.9.2022

This certificate is granted in accordance with the Euroheat & Power Certification Guidelines for Quality Assessment of District Heating Pipes [001]

Name, Signature

Date, Place

Lennart Månsson

5.9.2016, Borås



SP Technical Research Institute
of Sweden
Box 857
SE-501 15 Borås
Sweden
www.sp.se

The production complies with EN 253, EN 448 and EHP Certification Guidelines [001].

The licensee may use the Euroheat & Power Certification Board quality mark.

The certificate is valid only for the production plant mentioned in the certificate.

The materials used are contained in the confidential Annex to this certificate.

The certificate is valid for 6 years subject to periodic surveillance. Re-issue is automatic.

Refer to the Euroheat & Power Certification Guidelines [001] for full requirements and conditions



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Logstor Polska Sp. zo.o.
ul Handlowa 1
Mikulczyce
PL-41-807 Zabrze
Poland

Annual inspection for EHP-approval

Manufacturer: Logstor Polska Sp. zo.o., Zabrze
Product: Pipes and fittings to district heating pipes
Standard: EN 253:2009+A2:2015, EN 448:2015, EN 15698-1:2009 and EN 15698-2:2015
Certification rules: Euroheat & Power EHP/001, January 2016
Certificate: 01/07
Agreement: 210-04-0347
Date of inspection: 2016-04-13
Manufacturer's representative: Iwona Szolc, Beata Bondaruk
Manufacturer Quality Certificate: ISO 9001:2008

At the inspection visit the manufacturer's quality plan and quality surveillance resources were examined in respect of the requirements laid down EN 253:2009+A2:2015, EN 448:2015, EN 15698-1:2009, EN 15698-2:2015 and in the Euroheat & Power Certification Guidelines EHP/001, January 2016. The examination also included the extent and results of the manufacturer's internal quality surveillance activities directed towards the products in question.

The tables below summarise the results of the assessments performed. The corresponding clause in EN 253:2009+A2:2015 and EN 448:2009 are given as reference.

Service pipe, EN 253:2009+A2:2015

Clause	Characteristic	Manufacturer's reference doc.	Judgment of documentation, resources and results
4.2.1	Make, marking delivery specification	GITP-300-01	No remarks
4.2.2	Dimensions	GITP-300-01	No remarks
4.2.3			
4.2.4	Finish, surface, etc	GITP-300-01	No remarks

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Casing pipe, EN 253:2009+A2:2015

Clause	Characteristic	Manufacturer's reference doc.	Judgment of documentation, resources and results
4.3.1	Material	GITP-300-01 0800-001	No remarks
4.3.1.1	Carbon black dispersion	Certificates	No remarks
4.3.1.3	Thermal stability	GITP-330-01, 12	No remarks
4.3.1.4	Use of rework material	GITP-330-01, 12	No remarks
4.3.2.1 4.3.2.2	Diameter Wall thickness	GITP-330-01, 11	No remarks
4.3.2.3	Appearance and surface finish	GITP-330-01, 11	No remarks
4.3.2.4	Elongation at break	GITP-330-01, 12	No remarks
4.3.2.6	Stress crack resistance	GITP-330-01, 12	Not performed on plates.



Polyurethane foam insulation, EN 253:2009+A2:2015

Clause	Characteristic	Manufacturer's reference doc.	Judgment of documentation, resources and results
4.4.1	Composition Make, marking and delivery specifications	GITP-300-01 GITP-310-01,3	No remarks
4.4.2	Cell structure - Cell size	GITP-330-01,12 GITP-325-01, 21	No remarks
4.4.2	Cell structure – Closed cell content	GITP-330-01,12 GITP-325-01, 21	Not performed yet.
4.4.2	Cell structure – Voids and bubbles	GITP-330-01,12 GITP-325-01, 21	No remarks
4.4.3	Compressive strength	GITP-330-01,12 GITP-325-01, 21	No remarks
4.4.4	Density	GITP-330-01,11 GITP-325-01, 20	No remarks
4.4.5	Water absorption	GITP-330-01,12 GITP-325-01, 21	No remarks



Pipe assembly
Single pipe EN 253:2009+A2:2015

Clause	Characteristic	Manufacturer's reference doc.	Judgment of documentation, resources and results
4.5.2 and 4.5.3	Dimension of pipe ends and outside diameter	GITP-330-01, 11	No remarks
4.5.4	Centre line deviation	GITP-330-01, 12	No remarks
4.5.11	Measuring wires EN 14419:2009	GITP-330-01, 11 GI-380-60 GI-380-66	No remarks

Twin pipe, EN 15698-1:2009

Clause	Characteristic	Manufacturer's reference doc.	Judgment of documentation, resources and results
4.5.1	End alignment of forward and return service pipes	GITP-330-01, 11	No remarks
4.5.2	Distance between forward and return service pipes	GITP-330-01, 11	No remarks
4.5.3	Twisting of service pipes	GITP-330-01, 11	No remarks

Fittings, EN 448:2015

Clause	Characteristic	Manufacturer's reference doc.	Judgment of documentation, resources and results
4.1	Service pipe		
4.1.1-4.1.9	Dimension of steel parts	GITP-300-01	No remarks
4.1.10.1	Material, make, delivery, specification of steel welding	WPS Certificates	No remarks
4.1.10.4	Inspection of steel welds A	GITP-320-01, 13	No remarks
	B	GITP-320-01, 13	No remarks
	C	GITP-320-01, 13	No remarks
4.1.11	Surface conditions	GITP-325-01, 10	No remarks
4.4	Fitting assembly		
4.4.1-4.4.5	Dimensions of fittings ends and outside diameter	GITP-325-01, 20	No remarks
4.4.3	General requirements on PE welding	PLI-325-61 and PLI-325-65	No remarks
4.4.3.3	Visual appearance	GITP-325-01, 20	No remarks
4.4.3.4	Bending test	GITP-325-01, 5, 6, 8 and 9	No remarks
4.4.4	Leak-tightness of welded PE-casing	GITP-325-01, 20	No remarks
4.4.6	Minimum insulating thickness	GITP-325-01, 21	No remarks
4.4.7	Tolerances on main fitting dimension	GITP-325-01, 14	No remarks
4.5	Surveillance system EN 14419:2009 Annex F	GITP-325-01, 20	No remarks

Additional items relevant for twin pipe systems only, EN 15698-2:2015

Clause	Characteristic	Manufacturer's reference doc.	Judgment of documentation, resources and results
4.5.1	End alignment of forward and return service pipes	GITP-325-01, 20	No remarks
4.5.2	Distance between forward and return service pipes	GITP-325-01, 20	No remarks
4.5.3	Twisting of service pipes	GITP-325-01, 20	No remarks

Conclusion

The corrective action regarding stress crack resistance test for plates shall be sent to SP at the latest 2016-06-30.

The manufacturer's Quality Plan and quality surveillance resources, activities and results fulfil the requirements specified in Euroheat & Power EHP/001, January 2016.

**SP Technical Research Institute of Sweden
SP Structural and Solid Mechanics - Pipe Centre**

Performed by

 Signed by: Lars Erlandson
Date & Time: 2016-04-19 10:44:44 +02:00

Lars Erlandson