

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

## Annual inspection for EHP-approval

Manufacturer: Logstor Polska Sp. zo.o., Zory  
Product: District heating pipes, OPTI production  
Standard: EN 253:2009+A2:2015 and EN 15698-1:2009  
Certification rules: Euroheat & Power EHP/001, January 2016  
Certificate: 01/10  
Agreement: 210-04-0347  
Date of inspection: 2016-04-14  
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 in EN 253:2009+A2:2015 and EN 15698-1:2009 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<br>4.2.3 | Dimensions                           | GITP 300-01                   | No remarks                                       |
| 4.2.4          | Finish, surface, etc                 | GITP 300-01                   | No remarks                                       |

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Gamybos skyriaus  
viršininkas  
Raimundas Gudutis

NUORAŠAS TIKRAS

**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                   | No remarks                                       |
| 4.3.1.1            | Carbon black dispersion       | Certificates                  | No remarks                                       |
| 4.3.1.3            | Thermal stability             | GITP 314-01<br>11             | No remarks                                       |
| 4.3.1.4            | Use of rework material        | GITP 314-01<br>11             | No remarks                                       |
| 4.3.2.1<br>4.3.2.2 | Diameter<br>Wall thickness    | GITP 314-01<br>14             | No remarks                                       |
| 4.3.2.3            | Appearance and surface finish | GITP 314-01<br>14             | No remarks                                       |
| 4.3.2.4            | Elongation at break           | GITP 314-01<br>15             | No remarks                                       |
| 4.3.2.6            | Stress crack resistance       | GITP 314-01<br>15             | No remarks                                       |



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

| Clause | Characteristic                                           | Manufacturer's reference doc. | Judgment of documentation, resources and results |
|--------|----------------------------------------------------------|-------------------------------|--------------------------------------------------|
| 4.4.1  | Composition<br>Make, marking and delivery specifications | GITP 314-01<br>4              | No remarks                                       |
| 4.4.2  | Cell structure - Cell size                               | GITP 314-01<br>15             | No remarks                                       |
| 4.4.2  | Cell structure – Closed cell content                     | -                             | Not in inspection plan, not yet performed.       |
| 4.4.2  | Cell structure – Voids and bubbles                       | GITP 314-01<br>15             | No remarks                                       |
| 4.4.3  | Compressive strength                                     | GITP 314-01<br>15             | No remarks                                       |
| 4.4.4  | Density                                                  | GITP 314-01<br>10             | No remarks                                       |
| 4.4.5  | Water absorption                                         | GITP 314-01<br>15             | 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 314-01 14                | No remarks                                       |
| 4.5.4           | Centre line deviation                       | GITP 314-01 15                | No remarks                                       |
| 4.5.11          | Measuring wires EN 14419:2009               | GITP 314-01 10                | No remarks                                       |

**Twin pipe, EN 15698-1:2009**

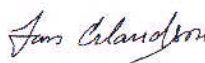
| Clause | Characteristic                                    | Manufacturer's reference doc. | Judgment of documentation, resources and results |
|--------|---------------------------------------------------|-------------------------------|--------------------------------------------------|
| 4.5.1  | End alignment of forward and return service pipes | GITP 314-01 10                | No remarks                                       |
| 4.5.2  | Distance between forward and return service pipes | GITP 314-01 10                | No remarks                                       |
| 4.5.3  | Twisting of service pipes                         | GITP 314-01 10                | No remarks                                       |

**Conclusion**

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 10:45:17 +02:00

Lars Erlandson