Contents

1 Subject of specification 2
2 Scope of validity 2
3 Terms and conditions of using this specification 2
4 Documentation 3
5 Relevant documents 6
6 Enclosures 6
7 Record of changes 7

This document is the property of Grupa LOTOS SA. Coping and giving it to other are forbidden without express written authority by Grupa LOTOS SA

1 Subject of specification

This specification used in conjunction with other technical specifications of LOTOS Group S.A. establishes the minimum requirements for the design and preparation of the passports of pipelines which are subject to UDT/ZDT inspection and which are operated in LOTOS Group's plants.

2 Scope of validity

- This specification applies to the preparation of tender documents, inquiries and contracts concerning new investments projects planned by LOTOS Group S.A. In case of modernisation of existing pipeline scope of passport documentation must be separately agreed with ZDT, based on rules described in Attachement no 9 of this specification "Wykaz dokumentacji dostarczanej przez modernizującego rurociąg" (List of documentation for modernized pipelines). Signed memo contained such agreement override requirements of this specifications.

This specifications and agreement mentioned above shall be a basis for preparing both detailed specifications and inquiries for individual or package supplies.

If subject of tender is engineering or performing tie-in or any existing pipeline modernisation, then offered price must cover all cost of performing a passport documentation within scope as agreed with ZDT.

2.1 Deviations

Any deviation from this specification and the relevant specifications, standards and related documents including proposals, which the bidder claims to be economically and / or technically superior solutions must be submitted in writing for review and approval by Grupa LOTOS SA. Non-approved exceptions are not acceptable by Grupa Lotos S.A.

The supplier must report in writing any ambiguity in this or any other specifications of Grupa LOTOS SA or non-compliance with the referred documents / standards and obtain a written explanation from Grupa Lotos SA

3 Terms and conditions of using this specification

Besides the basic technical documentation, pipeline passport documentation (according to the appendix to this specification) is required for the following pipelines subject to technical inspection in LOTOS Group:

- those qualified for hazard categories I, II, III according to PED 97/23/WE and requiring registration with UDT or ZDT *[Office of Technical Inspection or Factory Technical Inspection]*
- those qualified for hazard categories I, II, III according to WUDT –UC-RT and requiring registration with UDT or ZDT *[Office of Technical Inspection or Factory Technical Inspection]*
- those subject to ZDT *[Factory Technical Inspection]* inspection, not classified for the above mentioned groups.

3.1 Hierarchy of documents:

Should conflicts existing between this specification and other documents, the following order of precedence shall govern:

- The current Polish legislation
- Terms of purchase order / contract and other requirements agreed in writing with GL S.A.
- Data Sheets approved by GL S.A.
- This specification
- Other Specifications
- Drawings and other documents
- Standards,

4 Documentation

4.1 Documentation must have a design examination certificate (if required) issued by an authorised institution according to point 4 of Specification No. 8800.

4.2 The pipeline passport is the technical documentation of the pipeline, is to be done in Polish language (with the exception of support drawings) comprising the below listed chapters:

4.2.1 Chapter I – design technical documentation (prepared by a design office)

1 Technical description of the pipeline (do not show PSV technological symbol in case when PSV is provided not only for subject piping protection).

2 Functional description of the pipeline (among other things - to give the kind of medium, the description of the beginning and the end of the pipeline, the PSV technological symbol placed on the pipeline together with the symbols of other protected equipment).

3 Data concerning the source of supply (the source for pipeline is the nearest apparatus or equipment, with detailed list of piping between - if any; should be given Ps – max allowable pressure of source, Ts – max allowable temperature of source, Qnom – rated flow).

4 Technical data concerning corrosion protection and thermal insulation

5 Compensation of stresses in the pipeline

6 Hazard analysis (for pipeline which the passport concerns)

7 Operating manual (e.g. to show the number of the plant operating manual).

8 Calculation of the minimum pipeline wall thickness for all used diameters (calculations have to be done according to proper codes refering to the used material).

9 Accessories list.

10 Data sheet for safety valve with calculation sheet (only for PSV which protect exclusively this pipeline).

11 Specification of pipeline supports.

12 Drawings of pipeline supports.

13* Single admission of materials according to ASTM standards, different from harmonised standards according to EC.

14 Design bill of materials.

15 Bill of materials as built – updated material card, done after piping construction and final acceptance (printed with included designer changes during manufacturing) done as a one card for the whole pipeline, according to the Technical Specification No 6600.

16 Isometric drawing of the pipeline as approved for construction – sheet size A3.

17 Isometric drawing “as built edition” of the pipeline, with the changes (during fabrication and after the final acceptance) incorporated by designer in to the previous isometric edition, printed in sheet size A3.

18 Data plate – attachment no 8 to Technical Specification no 8820.

19 Medium data sheet.

4.2.2 Chapter II – as-built technical documentation (a set of documents made by the manufacturer during the manufacturing of the pipeline)

1 Manufacturer's CE declaration of conformity.

2* Conformity certificate issued by a Notified Body – if required by a respective conformity assessment module.

3 CE final assessment report.

4* CE design examination certificate or CE type testing issued by Notified Body – if applicable.

5 CE design examination report.

6 Specification of materials used for construction, stating certificate and heat numbers (containing among the others material name, dimensions, materials type, heat number, certificate number, the Grupa Lotos register number, only when Grupa Lotos is a material supplier, or volume/page number of the certificates set when the supplier is other than the Grupa Lotos). Material certificates of used materials should be numbered and collected in separate file in order.

7 Welding logbook (to enable identification of materials and welds)

8 Welders list (approved by Notified Body/UDT)

9 As-built isometric drawing, done by manufacturer with indicated marked welds and with changes done during manufacturing (significant changes have to be accepted by UDT).

10 Heat treatment diagrams – if applicable.

11 Non-destructive Tests (NDT) reports.

12 List of NDT personnel.

13 Data concerning pressure accessories used for pressure testing (e.g. pressure gauges etc.) – if applicable.

14 Reports of pressure tests carried out during fabrication or other type tests – if applicable.

15 P&ID showing the subject piping.

* - Technical documentation shall not be required for pipelines that are not subject to assessment by NoBo.

4.3 Electronic recording of the technical passport documentation for all plant piping on portable HDD or DVD containing:

1 The list of pipelines according to the enclosure no 8 of the specification 6600.

2 The technical documentation of project (file recorded as for example 090-P1234 – REV0 – Passport Design Part:
- in the form of one file according to above point 4.2.1 recorded in the *.DOC or *.DOCX format. The exception is point 12, 13,16,17 about which is below,
- documentation according to point 12, 13 recorded in format *.PDF (300 dpi/8bit quality - the grey scale),
- documentation according to point 16, 17 recorded in format *.DXF (files recorded as for example **090-P1234 –REV0 – isom1**, etc.).

3 The as built technical documentation (file recorded as “090-P1234 – as built passport part”) in the form of one PDF file, described in point 4.2.2 (300dpi/16 bit – color quality).

4 one PDF file named **“090-P1234 – REV0 – Complete pipeline passport”** done as a recording of a source documentation in format PDF.

4.4 List of connected documents:

1 List of pipelines

2 Piping classes specification catalogue

3 Supports catalogue

4 Prefabrication, construction, examination and inspection of pipelines

5 Strength analysis of piping

6 Hazard analysis (for the all system or the installation)

7 Certificates of the personnel (welders, operators) - valid in time of the pipeline construction

8 Accepted WPS, the heat-treatment and the forming procedures - if any

9 Certificates of the personnel performing NDT - valid in the time of testing.

10 Certificates of used materials (for materials supplied by the Grupa Lotos SA. to enclose only the list of certificates)

11 Plant operating manual

12 Plot plan

List of connected documents should be placed in the pipeline passport (the list of the content). Under mentioned connected documents with the passport should be delivered:

- in paper form in the separate files - one set for the whole installation. The description of the file has to contain an univocal information about the content and the connection with the number of the installation (the investment job),
- in electronic PDF format in file named "Connected documents".

4.5 The pipeline passport maker shall submit the first three copies to Grupa Lotos as an example for verification.

Examples (samples) shall apply to pipelines built from such elements as: a safety valve, a standard and special supports, etc., isometric should consist of at least two sheets and at least two construction area (if any).

4.5.1 All passports have to be supplied in a form of stiff files with the lever mechanism:

a) in the first part - the project-documentation ,
b) the second (after the insert between parts) part - the as-built documentation ,

On the edge the file to place the large type the full symbol of the pipeline and the kind of the inspection during operation eg. ***„24"-090***-P1234 / ZDT**".** The width of the file assorted so that his content will fill approx. 50-70% the thickness.

4.6 Contractor shall make the other passports after a written assessment and approval of the delivered three (3) first passport samples.

4.7 Contractor shall deliver (according to procedure described in Technical Standard 6610) required passports in the paper form with:
- 3 sets for piping under UDT inspection (original and 2 copies),
- 2 set for piping under ZDT inspection (original and copy).

And also in electronic form according to point 4.3.

4.8 After the completion of the pipeline construction and after its acceptance by a competent body the pipeline passport will be the basis for UDT or ZDT for registering the pipeline and for taking it under its operating inspection.

4.9 **The complete passport must be transferred to the Lotos Inspection Department (ZDT),** via Technical Documentation Archive Department (TB) which keeps one archive copy, **at once after the construction and after the obtainment of all required protocols of the inspections (with the positive result), however not later than 2 weeks before the time to transfer pipeline to the stage of tests.**

5 Relevant documents

"Technical Specification" issued by GRUPA LOTOS S.A. listed in Contract Files.

6 Enclosures

- Attachment No. 1 – An example of a pipeline passport (including all of the listed below attachments - No 2 to No 8)
- Attachment No. 2 – Data sheet for safety valve
- Attachment No. 3 – Drawings of pipeline supports
- Attachment No. 4 – Drawings of pipeline supports
- Attachment No. 5 – Bill of materials – material card
- Attachment No. 6 & 7 – Isometric drawing of pipeline: Sheet 1 & 2
- Attachment No. 8 – Data Plate
- Attachment No. 9 – "Wykaz dokumentacji dostarczanej przez modernizującego rurociąg" – List of documentation for modernized pipelines.

7 Record of changes

No.	Date	Description	Introduced by
1.	17.10.2006	Changed point 4.3	M.Rapior
2	29-04-2011	Changed points: 4.2, 4.2.1, 4.2.2, 4.5, 4.6, 4.7, 4.8, 5 Added points: 4.3, 4.4, 4.5.1, 4.9 Changed all attachments No 1 to No 8. Attachment No 1 added as a separate file.	TD
3	16-02-2012	Updated revision number	K. Went TD
4	18-03-2013	paragraph 2: exception for modernized pipelines added, Attachment 9 added: „List of documentation for modernized pipelines." paragraph 4.7 & 4.9: passport delivery according to procedure described in Technical Standard 6610	MP Tadeusz Wróbel
5	30-11-2013	Review, update, standardize and changes to the Standard in scope of order No. OK/990/2012	Editorial board coordinated by T.Wróbel