



LIBERTY
LIBERTY Galati

Projects Department

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TECHNICAL SPECIFICATION

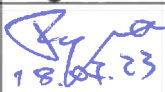



Air leakages SM5 step 3

LIBERTY GALATI

Contracted work: **Manufacture windlegs**

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FOREWORD

LIBERTY Galati plant is called hereinafter, the COMPANY.

In this Technical Specification, the Installations represents Sinter Plant – Sinte Machine no 5 as well as the complete connected installations *Air suction circuit*, and the Equipment represents the complete or a part of the Installation.

The compliance with this Technical Specification from the part of the PROVIDER represents a commitment for results.

The PROVIDER, within his commitment for results, will ensure that the equipment object of his work, and all the materials to be delivered by him, comply perfectly with enforced laws, decrees and standards, especially regarding health and safety and environment protection, as well as with internal regulations of the COMPANY.

Within the contracted work, the PROVIDER will strictly comply with IT DP 045 “General rules to be applied by LIBERTY GALATI contractors” as well as with all the policies and objectives of the latter.

1. OBJECT OF CONTRACTED WORK

Within the project for Compensate SM5 Air leakages, this Technical Specification refers to required materials and mechanical components.

The object of contracted work is to ***Manufacture windlegs.***

The work executed by the PROVIDER will include in particular:

- Supply required materials, other than composite plates
- Manufacturing in the workshop required mechanical components
- Factory Acceptance Test(FAT)
- Packing, loading, transport, dispatching, unloading, delivery on site
- Complete documentation, in Romanian and/or English
- Declaration of conformity CE

All supplies of parts, materials and components, all transports, all loading and unloading operations, all equipping (mobile cranes, nacelles), all servicing equipment, all protection equipment, all works, drawings and compliances related to the object of this technical specification and to the achievement of results expected by the COMPANY are exclusively in the scope of the PROVIDER.

The PROVIDER is the sole responsible for the solutions implemented in order to guarantee the proper operation of his installation and to obtain the results and functionalities expected by the COMPANY.

The PROVIDER will execute in his workshop the maximum of required pre-fabrications

The PROVIDER, in the scope of his work will have to strictly comply with the following principles:

- Define, conceive, supply and commission the materials and mechanical components described in this specification.
- Conceive the installation and its organization, to guarantee the health and safety and environment protection and to minimize the execution difficulties of his work.
- Obtain the results expected and defined by the COMPANY
- Improve the reliability, availability, maintainability of equipment which were modified, adapted, replaced, and / or related with the execution of contracted work
- Integrate the contracted work in the planning of the COMPANY
- Inform the COMPANY, on regular basis, about achieved results.

2. CHARACTERISTICS OF THE INSTALLATION INTERFACING WITH THE CONTRACTED WORK AND LOCATIONS FOR THE EXECUTION OF CONTRACTED WORK

2.1 SITE CONSTRAINTS

The installation is located on the site of the COMPANY, in GALATI ROMANIA

The PROVIDER, while executing the work, will consider the constraints applying to the site of the COMPANY', defined in IT DP 045 "General rules to be applied by LIBERTY GALATI contractors"

3. DESCRIPTION OF CONTRACTED WORK

3.1 DESCRIPTION OF GENERAL FUNCTIONS IN THE SCOPE OF CONTRACTED WORK

The aim for contracted work is to **Manufacture windlegs**.

Technical documentation (drawings and COMPANY's requirements for new parts) will be required by supplier and sent by project manager via email or onedrive.

No	Mechanical components	Required quantity	Technical data	Comments
C1	Windleg type 1	8 ans	0.12.389.390-3M	VAUTID 100T composite plates or similar will be delivered by Liberty Galati. 57 sheets with 2900 x 1400 hardfaced area, thickness 20 mm (10 mm base material plus 10 mm hardfaced)
C4	Immersion nozzle	8 pcs	0.12.389.413-1M/2M	

3.2 STUDIES

Before starting the manufacture process for mechanical components, the supplier will check all dimensions, materials and other technical requirements in drawings and documentation delivered by LIBERTY GALATI and will notify any discrepancies before submitting the fabrication schedule.

4. RESULTS AND PERFORMANCES TO BE ACHIEVED AND MEASUREMENT OF RESULTS AND PERFORMANCES

4.1 RESULTS AND PERFORMANCES TO BE ACHIEVED

The PROVIDER studies, defines and executes the contracted work in order to achieve the results and performances defined in IT DP 045 "General rules to be applied by LIBERTY GALATI contractors"

4.2 METHODS TO VERIFY THE RESULTS AND PERFORMANCES TO BE ACHIEVED

Mechanical components will be inspected on manufacturer workshop before delivery, according to *Liberty Galati requirements for execution new parts*, issued for each component.

5. SAFETY – ENVIRONMENT

THE COMPANY UNDERSTANDS THAT THE SAFETY OF EQUIPMENTS AND WORKS EXECUTED ON-SITE IS OPTIMUM AND WORKS ARE EXECUTED IN PERFECT SAFETY CONDITIONS.

The PROVIDER will comply strictly with IT DP 045 “General rules to be applied by LIBERTY GALATI contractors”.

The PROVIDER will inform the COMPANY about all the specificities of the equipment in terms of environment and safety.

The PROVIDER must attach to the Technical Offer, the filled-in template F.DP.087 Questionnaire for Contractor H&S V1, (annex to this Technical Specification).

6. TECHNICAL RULES FOR CONCEPTION, CONSTRUCTION, CALCULATIONS

The PROVIDER will comply strictly with IT DP 045 “General rules to be applied by LIBERTY GALATI contractors”

According to the evolution of standards and norms, if there are any contradictions between the recommendations and prescriptions of the COMPANY and enforced regulations: the PROVIDER has the obligation to inform the COMPANY. The final solution will be chosen by mutual agreement of the two parties.

6.1 SPECIFIC RULES

Additional to enforced Norms and Regulations, as well as to construction standards, instructions and rules of the COMPANY, the PROVIDER will comply with the below mentioned specific rules:

6.1.1 Welding Procedure

According Liberty Galati requirements for new windlegs, welding procedure qualification certificates (WPQR); welding procedure specifications (WPS); welder qualification certificates; non-destructive and dimensional control

6.1.2 Tests

7. RANGE AND INTERFACES OF CONTRACTED WORK

7.1 INTERFACES

The contracted work of the PROVIDER will be executed within the following physical limits:

***The manufacturing process will take place in PROVIDER workshop
The delivery will be done in Central Warehouses Liberty Galati / on site – only on specific request notified in advance.***

7.2 ELEMENTS DELIVERED BY ANOTHER PROVIDER OF THE COMPANY

The PROVIDER has a mission to coordinate and erect the elements delivered by another provider of the COMPANY, which are interfacing with the execution of his work.

He will address to the COMPANY and to the other provider a note in which:

- He will define his expectations regarding these elements, referring to their main and necessary characteristics.
- He will make all useful recommendations for these elements to allow him to comply with his commitment for results and to ensure the complete success of project.

The delivery of these elements, for which the construction and installation will be done according to pre-specified information, will result in the elaboration of a reception protocol signed by the PROVIDER and by the other provider of the COMPANY who has executed the respective elements.

During this contradictory reception, the PROVIDER will verify the works executed by the other provider of the COMPANY.

Unless any written reservations issued by the PROVIDER during the contradictory reception, the respective elements will be considered as accepted without reservations by the PROVIDER and therefore perfectly adequate with his commitment for results.

Any ulterior modifications will then be exclusively in the charge of the PROVIDER.

The PROVIDER will inform the COMPANY about all difficulties encountered during this reception phase.

7.3 WORKSITE

NA

8. RECEPTION

The PROVIDER will issue interphase inspection plan. On COMPANY's request, the windlegs can be delivered partially. Final reception can be done on PROVIDER's or COMPANY's site, based on erection requirements.

8.1 CONFORMITY OF THE EQUIPMENT, OBJECT OF CONTRACTED WORK

The PROVIDER will comply strictly with IT DP 045 "General rules to be applied by LIBERTY GALATI contractors".

8.2 COMMISSIONING

8.2.1 Industrial Commissioning

The PROVIDER will comply strictly with IT DP 045 "General rules to be applied by LIBERTY GALATI contractors".

8.3 RECEPTION

The PROVIDER will comply strictly with IT DP 045 "General rules to be applied by LIBERTY GALATI contractors".

9. GUARANTEE PERIOD

24 months after reception.

10. DOCUMENTS TO BE SUPPLIED

All the documents to be supplied will be in Romanian and/or English language.

The documents issued in a foreign language must be supplied in the "original language" version and the translation in Romanian language.

They will be updated and sent during the execution of the work, as per established planning.

The final versions of all documents, updated and accurate, will be submitted to the COMPANY prior to the Industrial Commissioning.

The documents will be delivered in 3 printed copies and electronic support (printable and editable format).

10.1 LIST OF DOCUMENTS TO BE SUPPLIED (NON-EXHAUSTIVE LIST)

- Quality Plan of the project as per ISO 9001 / 9002 / 14001
- All quality documents according to EN 10204 3.1.B.
- The quality plan (including manufacturing operations, check list and detailed manufacturing schedule).
- Quality checking reports according to technical requirements.
- Chemical analysis and Mechanical properties for base materials.
- Fasteners and bearings (SKF/TIMKEN) certificates.
- Heat treatment report.
- Non-destructive Visual Test bulletin.
- Non-destructive MT bulletin.
- Non-destructive Ultrasonic Test bulletin.
- Non-destructive Penetrate Test bulletin.
- Depth layer hardened.
- Hardness certificate.
- Thickness coat painted.
- Dimension measurements file.
- Warranty certificate.

10.2 DIFFUSION METHODS OF DRAWINGS

The PROVIDER will comply strictly with IT DP 045 "General rules to be applied by LIBERTY GALATI contractors".

11. DELAYS – PLANNINGS

The key dates for the development of the business are:

Task Name	Duration	Start	Finish
RFQ & Technical agreement	28 days	19 Jul '23	14 Sep '23
Technical spech definition	10 days	19 Jul '23	01 Aug '23
RFQ release	3 days	02 Aug '23	04 Aug '23
Bidder confirmation	5 days	07 Aug '23	11 Aug '23
Supply of composite plates for windlegs	5 days	07 Aug '23	11 Aug '23
Windlegs manufacturing	5 days	07 Aug '23	11 Aug '23
Offers submission	1 wk	07 Aug '23	11 Aug '23
Technical clarifications	1 wk	01 Sep '23	07 Sep '23
Technical agreement	1 wk	08 Sep '23	14 Sep '23
File release to commercial	2 days	15 Sep '23	18 Sep '23
Commercial	117 days	03 Apr '23	02 Oct '23
Approval file	21 days	19 Sep '23	17 Oct '23
Contract signing	2 wks	18 Oct '23	31 Oct '23

12. PROCEDURE FOR QUALITY CONTROL

The PROVIDER will comply strictly with IT DP 045 “General rules to be applied by LIBERTY GALATI contractors”

13. PRESENTATION OF THE OFFER

The technical offer will contain:

1. Detailed schedule with following milestones:
 - a. Vautid 100T delivery batches (will be provided by Liberty Galati)
 - b. each windleg delivery date
 - c. Weekly progress report and inspection plan
2. Details on textile compensator
3. Proposed accessories on windlegs components for transport and installation
4. Possibility to check and confirm proper installation in Liberty Galati
5. F.DP.087 Questionnaire for Contractor H&S V1 filled in
6. Confirmation for sufficient material (cutting plan for 8 windlegs and immersion nozzles set in max 57 sheets)

14. ANNEXES

- IT DP 045 General rules to be applied by Liberty contractors
- F.DP.087 Questionnaire for Contractor H&S V1
- Drawings for windlegs - will be required by supplier and sent by project manager via email or onedrive
- Liberty Galati requirements for new windlegs - will be required by supplier and sent by project manager via email or onedrive

