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Client

Hanko Pulp Mill Oy

General Delivery Limits

Appendix 6

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# Equipment Included in the Delivery

The delivery shall include the equipment and supplies specified below. The delivery limits for electrification and instrumentation are specified in Appendix 7 Scope of Supply.

If some part is not mentioned in the Plant Description (Appendix 3 Purchaser’s Technical Specification) but is within the delivery limits and is necessary for the normal operation of the Plant, it shall be included in the delivery without extra charge to the Purchaser, unless it is expressly mentioned as excluded in the Appendix 7 Scope of Supply or Appendix 3 Purchaser’s Technical Specification or in the list of exclusions below.

The delivery shall include all the material necessary for the erection and operation of the equipment such as:

* foundation bolts and base plates
* concrete inserts (painted) integral with the equipment supplies
* nuts, bolts, gaskets and erection materials required to erect the equipment including loss allowance; everything necessary for connecting flanges at the delivery limits
* steel constructions, stairs and platforms closely connected to the equipment and necessary for easy operation, inspection and maintenance of the equipment
* mechanical drive details; couplings, gear boxes, chains, sprockets, belts and pulleys, including guards
* all pumps
* all instruments and electrical equipment excluding distribution transformers
* insulation material according to the technical instructions for thermal insulation
* painting and surface treatment according to the technical instructions for surface treatment and painting
* lubrication systems including central lubrication system
* hydraulic systems (if needed)
* cranes and hoisting equipment needed for maintenance
* special tools necessary for the erection, maintenance and operation of the equipment delivered
* a supply of spare units required, spare parts and spare consumables for two years’ operation. The standard components e.g. bearings, seals, filters, etc. shall be designed so that spares for these may be obtained from other sources
* process and utility piping including necessary supports
* complete sealing water (chemically treated water) system including filters, booster pumps and flow and pressure controls. The aim is to collect the main part of the sealing waters for reuse as process water. This collecting piping shall be included.
* emergency showers in accordance with the mill standard
* firefighting systems including fire hydrants and sprinkles where needed
* flushing water hoses
* safety painting
* fixed measurements for gases as required, e.g. for H2S.

# Delivery Limits for Civil Works

Equipment and materials not covered in Section 1 above, such as:

* civil works, buildings and concrete foundations are excluded
* ventilation of electrical rooms is excluded
* steel constructions, i.e. building frame structures are excluded
* stairs and platforms closely related to the building are excluded
* overhead cranes are excluded

# Delivery Limits for Piping

The delivery limits are specified below:

* piping within the battery limit shall terminate 1 m outside the battery limit and connections to pipe bridges at max. 9 m level from the ground level unless specified differently in Appendix 7 Scope of Supply or 3 Purchaser’s Technical Specification.
* underground piping embedded into concrete is excluded but piping installed into floor channels after concrete casting is included to the scope of supply unless specified differently in Appendix 7 Scope of Supply or 3 Purchaser’s Technical Specification.

# Delivery Limits for Vendor’s Erection and Erection Supervision

Erection and erection supervision cover the equipment included in the delivery, and additional equipment, if purchased by the Purchaser.

# Delivery Limits for Vendor’s Engineering

The engineering services and drawings to be provided by the Supplier shall satisfy all needs for execution of the project, operation and maintenance of the equipment within the delivery limits unless specified differently in Appendix 7 Scope of Supply or 3 Purchaser’s Technical Specification. Complete basic and detailed engineering shall cover all engineering disciplines except civil design (however, engineering of civil guide drawings is included):

* equipment and piping engineering
* process engineering
* design for underground piping, sewers, floor channels etc.
* mechanical engineering
* electrical and process control engineering
* operation, maintenance and training