



TUBE-CLEANING SYSTEM (CTCS/ZBL™)

DATA SHEET WITH THE MINIMUM DATA REQUIRED FOR QUOTATION

Please fill in one (1) data sheet per size of tube-cleaning system.

1. General

| | | | |
|-------|--|--------------------------|--|
| Date: | | Data Sheet Revision No.: | |
|-------|--|--------------------------|--|

2. Project Information

| | | | |
|------------------|--|---------------|--|
| Company Name: | | | |
| Project Name: | | | |
| Type of Project: | | Water Source: | |

(*): "New" means construction of a new plant.

(**): "Retrofit" means upgrading or revamping of an existing plant.

Note: TBA = To Be Advised by Beaudrey

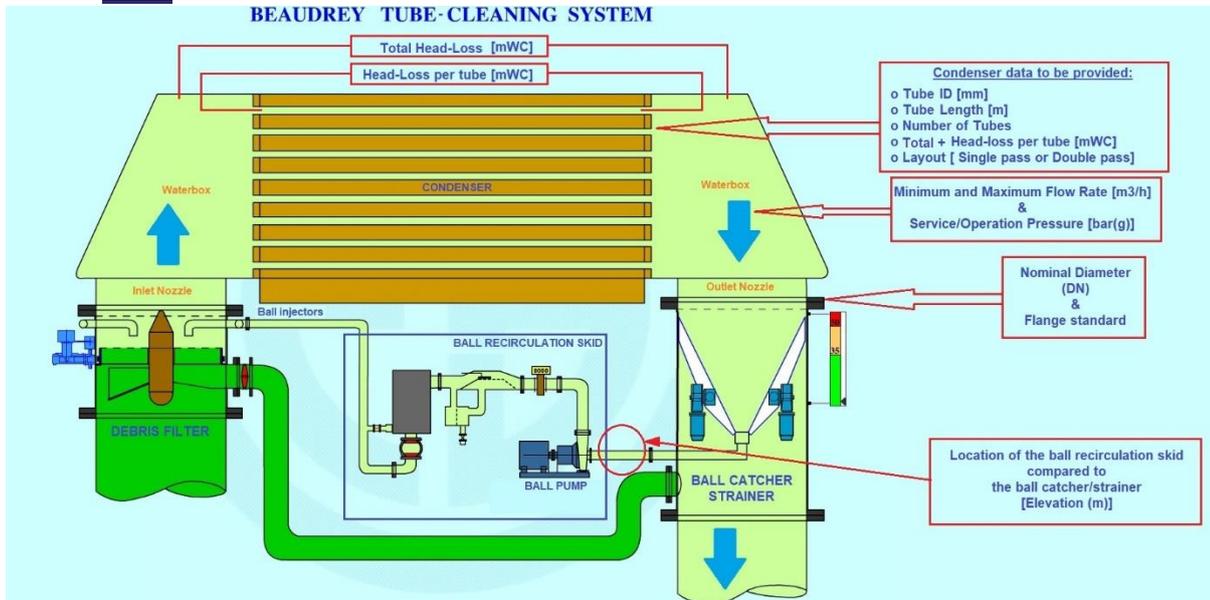
2.1 For a NEW project, the following documents/drawings must be provided together with this data sheet:

| | |
|---|--|
| General arrangement drawing of the Condenser / Heat Exchanger | |
| Isometric drawing of the piping from the outlet nozzle/waterbox of the condenser / heat exchanger | |
| General arrangement drawing showing the location of the ball recirculation skid (Skid) | |
| Condenser data sheet | |
| Piping & Instrumentation Diagram (PID) of the condenser and inlet/outlet piping | |

2.2 For a RETROFIT project, the following documents/drawings must be provided together with this data sheet:

| | |
|--|--|
| General arrangement drawing of the Condenser / Heat Exchanger | |
| Isometric drawing of the piping from the outlet nozzle/waterbox of the condenser / heat exchanger | |
| Condenser data sheet | |
| Piping & Instrumentation Diagram (PID) of the condenser and inlet/outlet piping | |
| Pictures of the location/waterbox concerned by the modification/upgrading | |
| <u>For the retrofit of an existing Tube-cleaning system please provide the following:</u> | |
| General arrangement drawing of the existing tube-cleaning system | |
| General arrangement drawing of the existing ball recirculation skid (Skid) | |
| Piping & Instrumentation Diagram (PID) of the condenser, the tube-cleaning system and the skid | |
| The Operation and Maintenance Manual (OMM) | |
| The Cross Sections drawings (if available) | |
| The type of sponge balls currently used (OD and density) | |
| Pictures of the existing tube-cleaning system & skid or the location concerned by the modification | |

3. Data



| | | |
|--|----|---------------------------|
| Quantity of tube-cleaning system(s) required: | | |
| Quantity of ball catchers/strainers required: | | |
| Type of tube-cleaning system (see Note): | | |
| Location of the skid compared to the ball catcher (Elevation): | | m |
| Minimum flow rate per Ball Catcher: | | m ³ /h |
| Maximum flow rate per Ball Catcher: | | m ³ /h |
| Condenser layout: | | |
| Nominal Diameter of the outlet nozzle/waterbox (*): | DN | (e.g., DN 1200 or DN 48") |
| Flange standard of the outlet nozzle/waterbox: | | |
| Total Head-Loss/Pressure drop of the Condenser (**): | | mWC |
| Minimum head-Loss/pressure drop per tube (**): | | mWC |
| Service/Operation Pressure (***): | | bar(g) |
| Design Pressure: | | bar(g) |
| Tube ID: | | mm |
| Tube length per pass: | | m |
| Number of tubes per pass: | | |

(*): If the value is in *inches* instead of millimeters, please show the symbol (") after the numerical value.

(**): Please indicate the head-loss values at minimum flow rate.

(**): Pressure at the *outlet* of the condenser.

Note:

- **Single** means one (1) ball recirculation skid for each ball catcher.
- **Twin** means one (1) ball recirculation skid for two (2) ball catchers.
- **TBA** = To Be Advised by Beaudrey

4. Materials

| | |
|---|--|
| Shell with internal lining/coating (if not SS): | |
| Internal parts: | |

Note: TBA = To Be Advised by Beaudrey

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|-----------|
| Comments: |
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| | |
|---------------------------|--|
| Name of Person in Charge: | |
| Signature here: | |