The Rotary Drum Vacuum Filter Station is composed by the following parts:

- Nr. 1 Rotating Pilot Drum Vacuum Filter complete with agitator and sliding knife discharge. Filtrating Surface 0.1 m².
- Material of construction: AISI 316.
- Nr. 2 Filterate Tanks (~ 30 liters each) complete with level gauges.
- Nr. 1 Liquid Ring Vacuum Pump.
- Impeller Material: Bronze
- Body Material: Cast Iron
- Flow Rate: ~ 24 m³/h at ~ 300 mBarA
- Service Water: 0.2 m³/h
- Nr. 1 Set of valves and pipes for the complete connection and function of the Plant.
- Nr. 2 Vacuum Gauges (one each tank).
- Nr. 1 Electrical Panel to control the liquid ring vacuum pump, the vacuum rotary filter and the agitator.

### Handling Operations and Storage

The Rotary Drum Vacuum Filter Station handling operations indicated in this paragraph must be carried out by skilled personnel only. The people charged with Rotary Drum Vacuum Filter Station handling by use of cranes must know all the Health and Safety rules to carry out the loading, unloading and transporting of parts under the highest safety conditions. The Weight of the Rotary Drum Vacuum Filter Station is about 150 Kg and use lifting means of suitable weight capacity and in conformity with safety regulations of the nation where the Rotary Drum Vacuum Filter Station is being installed. The capacity of the lifting means must consider the max. protrusion allowed in addition to the weight of the parts. Tecniplant declines any responsibility for damage to property and/or persons in cases of incorrect lifting. Prevent any other person from standing nearby in order to avoid contact with any accidental falling parts or objects.

All of the area involved in Rotary Drum Vacuum Filter Station handling, including the vehicle’s apron and the place that will accommodate the Rotary Drum Vacuum Filter Station must be previously identified and inspected. Check that the floor does not present exceptionally deep holes. For correct unloading and handling operations the presence of two operators is recommended equipped with helmet, gloves, overalls and safety shoes. These operators must pay the utmost attention to all the transport phases and remain at the proper distance from the Rotary Drum Vacuum Filter Station when their presence is not strictly necessary.

In operations of lifting the Rotary Drum Vacuum Filter Station, it must not be allowed to fall or tilt violently. Care must be taken to stop objects of any kind from hitting the interior or exterior of the Rotary Drum Vacuum Filter Station or from falling onto it. Never use cables or chains in direct contact with the Rotary Drum Vacuum Filter Station to carry out lifting operations.

Always avoid chains, hooks or the rocker arm oscillating or interfering with the Rotary Drum Vacuum Filter Station. In case of rocker arm use a cable guide by hand to keep the load under control. Do not cross or stand neither beneath the Rotary Drum Vacuum Filter Station nor on top.

Store the Rotary Drum Vacuum Filter Station indoors inside its wooden case.

### Information for Technical Assistance

Email: info@tecniplant.it
Site: www.tecniplant.it
Ph: +39 02 26262144
SAFETY INSTRUCTION

OBLIGATION TO RESTORE PROTECTIONS
FORBIDDEN TO MAKE MAINTENANCE
WITH BODIES IN MOTION

DANGER OF CRUSHING TO BELT
TRANSMISSION

KNIFE DISCHARGE
DON’T PUT HANDS OR FINGERS

CAUTION: CAREFULLY READ FOLLOWING INSTRUCTION

Strictly adhere to the instruction listed below to prevent personal injuries and/or equipment damage.

- Electrical connections must ALWAYS be carried out by authorized personnel and in accordance to the local codes. Any work on the Filter should be carried out by at least 2 people.
- When approaching the filter ALWAYS be properly dressed (avoid use of cloth with wide sleeves, neckties, necklaces, etc.) and/or wear safety equipment (hard hat, safety glasses, safety shoes, etc.) adequate for the work to be done.
- Be ALWAYS informed on location of first aid sites inside the Company and carefully read safety and medical first aid prescription force.
- ALWAYS stop the Pilot Filter and its ancillaries prior to touching it for whatever the reason.
- ALWAYS disconnect the power to Electrical Panel prior to start to work or remove protections from the Pilot Filter.
- NEVER work on the filter when it is hot.
- DO NOT attempt to remove the safety guards when the Pilot Filter is operating.
- After completion of the work ALWAYS re-install the safety guards previously removed.
- NEVER touch Pilot Filter or relevant piping with temperature higher than 80°C.
- ALWAYS have a fire extinguisher in the vicinity of the Pilot Filter installation.
- DO NOT operate the Pilot Filter in the wrong direction of rotation.
- NEVER put hands or finger in the hand-holes with Pilot Drum Filter in operation.

The Filtration and Flotation Solution

ROTARY PILOT DRUM VACUUM FILTER STATION

FILTRATE TANK

AIR CONNECTION

ELECTRICAL PANEL

VACUUM GAUGES

AGITATOR

DRUM SPEED REGULATOR

VACUUM PUMP

SLIDING KNIFE DISCHARGE

VALVE LIST

A – Slurry Inlet
B – Overflow
C – Drain
D – Filtrate Inlet
E – Filtrate Inlet
F – Vent
G – Vent
H – Filtrate Drain
I – Filtrate Drain
L – Vacuum Line
M – Vacuum Line
N – Vacuum Pump Water Inlet