

Extruder Vacuum Unit TK-V

for extruder degassing



- Robust
- Increased product quality
- Easy to maintain

Increased product quality and consistency with an extruder degassing unit from Trendelkamp. Many customers rely on the extra value achieved by extracting harmful gasses from their extrusion process, thus improving the overall quality of their product and safety of their system environment.

The removal of oxidizing components, air and water vapor, as well as the extraction of monomeric gases improve isolating characteristics that result in smoother surfaces, higher solidity and less overall air inclusions.

Benefits:

- Increased throughput rate
- Increased extruder efficiency
- Increased operational safety
- Simple and easy to maintain
- Robust and reliable design
- Increased product quality
- Compact design
- Adjustable suction pressure
- Closed water cycle system to save resources (saving on water and energy)
- Compact support cart

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Functional Principle:

Gases that form during the polymer extrusion process are extracted by a vacuum, specifically by a liquid ring vacuum pump system (LRV pump). The gases are initially extracted into a steam chamber. The steam chamber is temperature controlled and when the hot gases enter they start to condense. The condensation is then discharged into a collecting sump. Gases not yet condensed and remaining particles are transported to the vacuum pump. The remnants mix with the operating liquid of the pump and are then directed into the collector. The collector safely prevents an uncontrolled discharge of contaminated water, while also feeding the operating liquid to the vacuum pump. The steam chamber is temperature controlled by an external water connection and is not connected to the collector. Thus, the portion of the system collecting contaminants is separate and allows for a safe, environmentally friendly operation. The whole unit is mounted on a compact support cart, therefore you have good access to the unit and all the containers/tanks.

Features:

- Water cooled/heated steam chamber
- Collecting sump for contaminants
- Stainless steel construction
- Efficient liquid ring vacuum pump
- Closed circuit water reservoir process
- Easy operation and maintenance

Options:

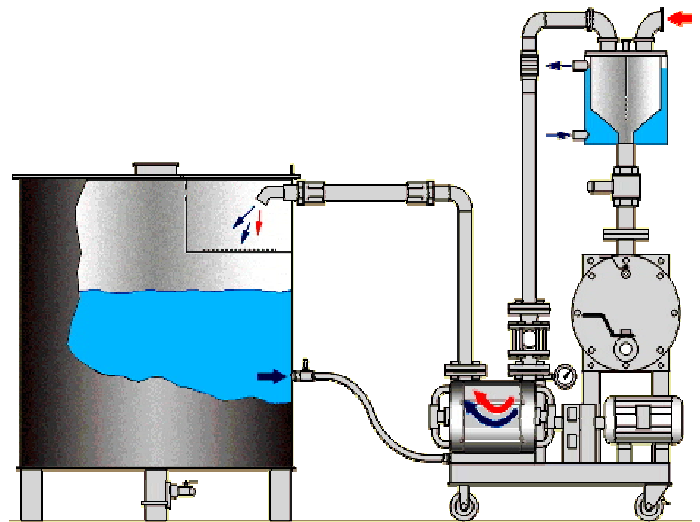
- Regulated system:

The liquid ring vacuum pump is adjustable to the vacuum processing requirements of an extruder.

The desired vacuum suction is easily controlled from the operating panel. The pump speed is adjustable according to the required vacuum suction. The flexibility of this system improves many applications and minimizes both water and energy consumption. Trendelkamp new vacuum system is ideal for processing frequent product changes and is highly flexible.

Applications:

- Polyolefin's
- PA
- PET
- Filled polymers (fiber, glass, calc, talcum)



Extruder Vacuum Unit TK-V

Suction Capacity: 20 - 210 m³/h

Atmospheric pressure: 1.013 mbar

Vacuum: 300 - 900 mbar

Temperature operating liquid: 35°C

Other sizes on request.