

ITE HZ 100 & ITE HZ 300

Product features

The HZ 100 and HZ 300 hydrocyclones are mechanical components with a cylindrical to conical shape that are used for separating fine particles from suspensions by means of centrifugal force.

The size of particles filtered out during the separation process is subject to the size of the cyclone, particle size, suspension viscosity as well as the pressure inside the cyclones.

The primary advantages of hydrocyclones are their simplicity and efficiency in construction and design.



Illus.: HZ 300 hydrocyclone



Illus.: HZ 100 hydrocyclone

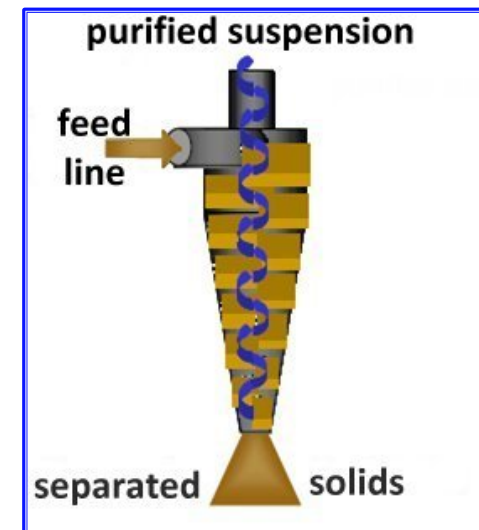
Properties and functions:

- Lightweight and durable materials offering a high level of heat, wear and chemical resistance
 - Polyurethane for ensuring a higher level of protection against abrasion
- Manometer for measuring the pressure inside the hydrocyclone (measurement range 0 – 6 bar)
- Easy and safe handling
- Easy to replace and cost-efficient

Functioning

Inside the hydrocyclone, the suspension entering the device is stirred and set into a circular motion. In turn, this gives rise to centrifugal forces which get stronger towards the bottom of the hydrocyclone due to its conical design.

This way, the small solid particles in the suspension are tossed against the inner wall of the hydrocyclone, separated at a characteristic cut-point and removed at the cyclone underflow. The purified liquid containing particles smaller than the cut-point will leave the hydrocyclone via the cyclone overflow.



Illus.: Separation process taking place inside a hydrocyclone

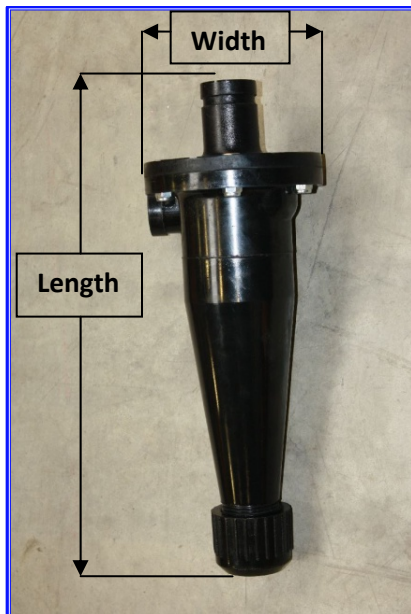
Transport dimensions

- **ITE HZ 100**

- Internal diameter: 4 inches (102 mm)
- Length: 550 mm
- Width: 230 mm
- Weight: 6.3 kg

- **ITE HZ 300**

- Internal diameter: 12 inches (305 mm)
- Length: 900 mm
- Width: 540 mm
- Weight: 56.7 kg



Technical specifications

- **ITE HZ 100 (Desilter cyclone)**

- Cut-point (d_{50}): 20 μm
- Operating pressure requirement: 2.4 – 2.8 bar
- Flow rate: 227 l/m and/or 13.8 m^3/h^*

- **ITE HZ 300 (Desander cyclone)**

- Cut-point (d_{50}): 60-80 μm
- Operating pressure requirement: 2.4 – 2.8 bar
- Flow rate: 1893 l/m and/or 113.5 m^3/h^*



** Subject to the properties of the material to be treated. The flow rate indicated above represents the minimum flow rate (at 2.5 bar). The above specifications refer to one hydrocyclone.*