

Designed by BallastCo for IP water ingress testing, this device meets the IP water ingress test standards. It runs the full IPX1/X2/X3/X4/X5/X6 ingress test range. Test fittings are swapped by hand to match the test being run, and the device moves and locks into place with little effort. The machine has two main parts: the test chamber and the standoff tube. The chamber combines a sealed water reservoir with a turntable that holds the test specimen. The turntable is 350 mm in diameter and turns at up to 24 rpm, driven by a 400 V gear motor and a belt-and-pulley system. The chamber has interior lighting and a plexiglass cover for viewing the test in progress. Water is recirculated through the machine during testing by a 220 V pump that delivers 0–120 L/min. The standoff tube is 400 mm in diameter and 2,5 m long. A 500 × 500 mm drip box sits on top of the chamber for IPX1 and IPX2 tests. An oscillating tube with ±120° travel handles IPX3 and IPX4 tests. Two nozzles are provided for IPX5 and IPX6; fit the one that matches the required test level. All connections are made by hand and take only a moment. A flow meter and a manual valve set the water flow and can be monitored in real time. All materials are stainless.

Chamber dimensions, turntable diameter, and plexiglass cover dimensions can be customized on request.

Benefits & Features

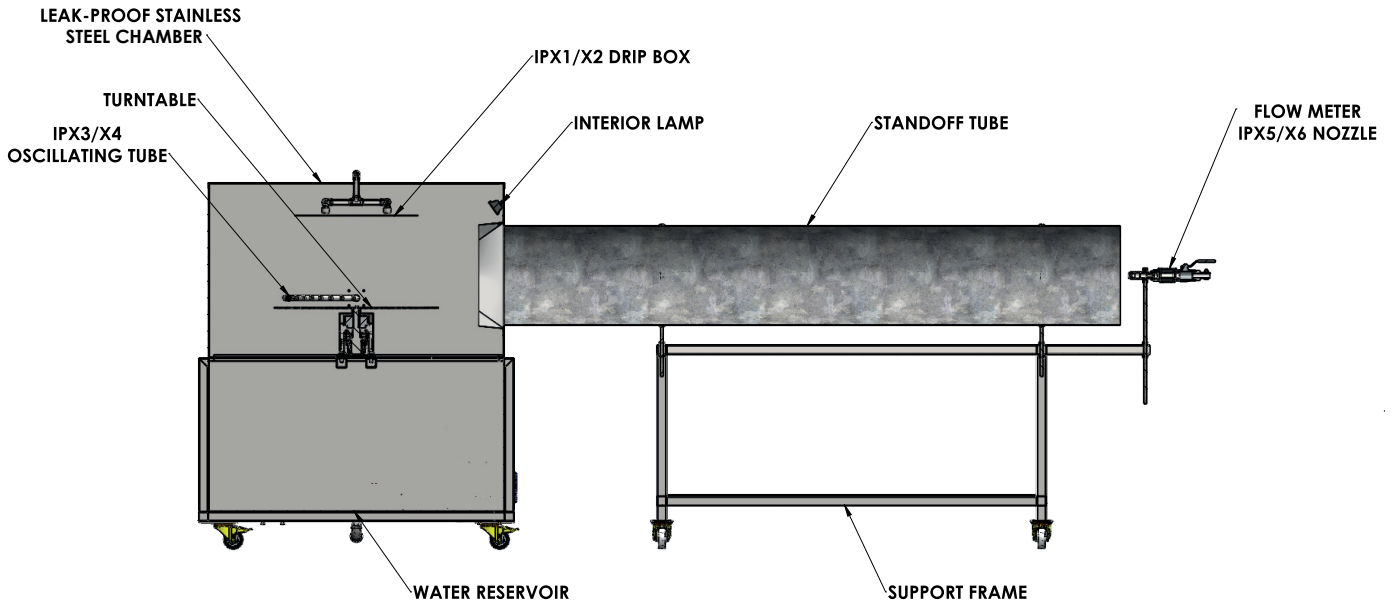
- Easy to move and lock in place
- Stainless steel chamber
- Manual flow adjustment
- Real-time flow monitoring
- Watertight construction
- Water recirculation
- Interior chamber lighting
- High operator safety
- Low power consumption
- Ease of use
- Manual height adjustment
- BallastCo customer support

Technical Specifications

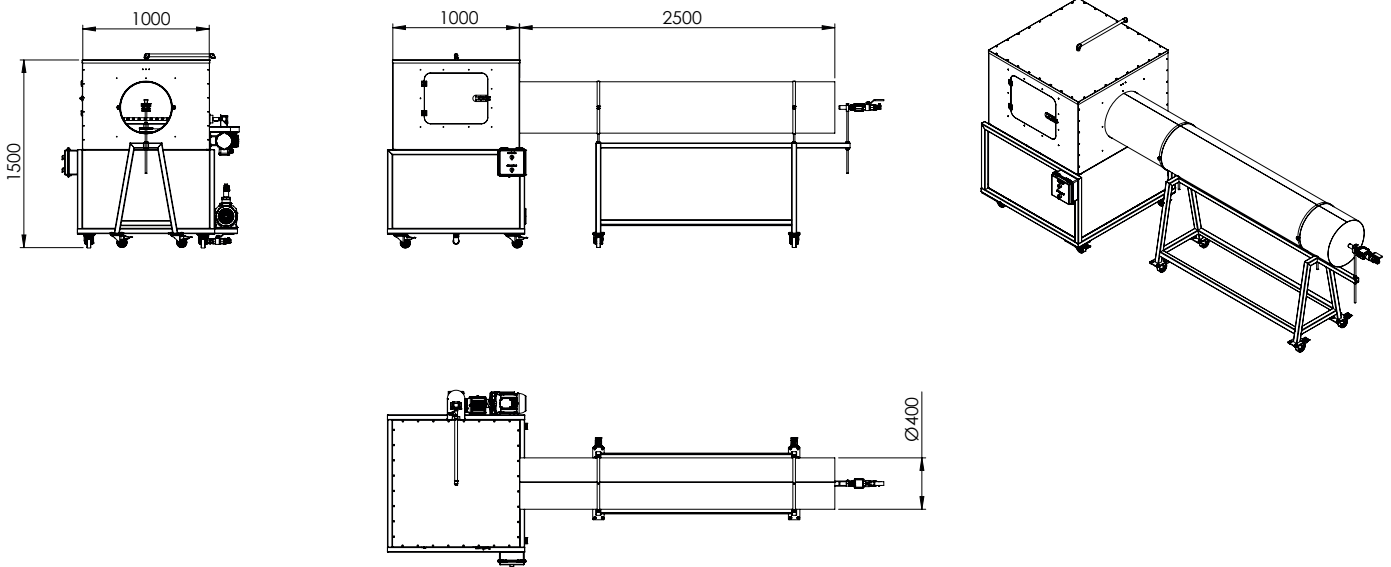
Chamber Dimensions	1000 × 1000 × 1500 mm (W × L × H)
Standoff Tube Dimensions	Ø400 × 2500 mm (D × L)
Power Supply	380 V / 1,3 kW (220 V optional)
Water Flow Rate	0,25 L/min – 120 L/min (adjustable)
Customization	Chamber dimensions can be customized to meet customer requirements.

Technical Drawings

Components



Dimensions



Note: All dimensions are given in mm.

IP Test Conditions

Test	Rotation Speed	Water Flow Rate	Distance	Duration	Characteristic
IPX1	1 rpm	1 L/(m ² ·min)	Distance between drip box and test specimen must be at least 200 mm.	10 min	Vertical dripping
IPX2	Fixed at 15° tilt No rotation	3 L/(m ² ·min)	Distance between drip box and test specimen must be at least 200 mm.	10 min (4x2,5 min)	Dripping at 15° tilt
IPX3	Optional (to scan all surfaces) 10 rpm	10 L/min ±5%	Distance between oscillating tube and test specimen must be approximately 300 mm.	5 min	Spraying up to 60° (rain-like)
IPX4	Optional (general rotation) 20 rpm	10 L/min ±5%	Distance between oscillating tube and test specimen must be approximately 300 mm.	10 min	Splashing from all directions (baffle/shield removed in IPX4)
IPX5	20 rpm	12,5 L/min ±5%	Distance between nozzle and specimen must be between 2,5 m and 3 m.	3 min	Water jet (nozzle Ø6,3 mm)
IPX6	20 rpm	100 L/min ±5%	Distance between nozzle and specimen must be between 2,5 m and 3 m.	3 min	Powerful water jet (nozzle Ø12,5 mm)

During all tests:

The water used must be fresh water or purified water.

Tests must be conducted at atmospheric pressure and room temperature.