

WATER-CURTAIN EXHAUST CABINETS



WATER CLEANS THE AIR

Up to 90% of paint particles captured in water



ASH water-curtain exhaust cabinets from TWEKO provide safe and comfortable working conditions in the paint shop during surface preparation and the application of paints and varnishes to products made of wood, metal, plastic and other materials. Exhaust air is cleaned by a **three-stage filtration system**: two stages of water filtration and a fibreglass PaintStop filter of class EU4 with **at least 95% efficiency**. The water curtain captures **up to 90% of paint particles**, suspensions and aerosols, so the system has a much higher holding capacity than dry filtration and runs **considerably longer without filter replacement**.

Installation requires **no preparatory construction work**: only exhaust air ducts need to be connected, so the cabinet can be set up quickly in almost any room.

PURPOSE OF THE BOOTH

ASH cabinets are designed for paint shops in **furniture workshops and factories, frame-making workshops, light industry and metalworking plants**. The integrated filtration keeps the working environment clean, improves painting quality and productivity, and makes working conditions safer for staff.

The series includes **six models from 1 to 6 m wide** with an airflow rate of **2,200 to 19,500 m³/h**. The compact ASH-1 comes with a **450×450 mm turntable**. The ASH-4, ASH-5 and ASH-6 are assembled from two or three sections, each with its own ventilation unit, water curtain system and circulation pump.

Construction features

- **Galvanised steel body.** The cabinet is made of bent galvanised steel panels.
- **Water curtain with two overflows.** A circulation pump continuously supplies water to the curtain, and the **water is recirculated** within the system.
- **Spark-proof ventilation unit.** Safe to use with paints and solvents.
- **Stable airflow.** The air velocity in the working zone is **0.25–0.40 m/s**.
- **Simple control.** All equipment is operated from a single control panel.

Typical Applications

- **New paint shop.** The cabinet is installed in an existing room **without construction work**. Only exhaust ducts need to be connected.
- **Intensive painting.** Water holds far more paint than dry filters, so the cabinet runs **much longer without filter replacement**.
- **Small products.** The compact ASH-1 comes with a **450×450 mm turntable**.
- **Large products.** ASH-4, ASH-5 and ASH-6 provide a water curtain **up to 6 m wide**.
- **Limited floor space.** Models from ASH-2 to ASH-6 are **only 0.6 m deep**.

Key Advantages

- **Compact size:** Water filtration: up to 90% of paint particles are captured in water, so filters last much longer.
- **Three-stage cleaning:** two water stages and an EU4 PaintStop filter with **at least 95% efficiency**.
- **Water recirculation:** water circulates in a closed loop within the cabinet.
- **Quick installation:** no construction work, only exhaust ducts to connect.
- **Safety:** spark-proof ventilation unit.
- **Durability:** body made of galvanised steel panels.
- **Wide model range:** six models from 1 to 6 m wide, **2,200–19,500 m³/h**.

Operating Principle

The ventilation unit draws air through the working zone at **0.25–0.40 m/s**. Air carrying overspray passes through two stages of water filtration, where **up to 90% of paint particles** settle in the water. It then passes through the PaintStop fibreglass filter of class EU4 and is discharged outside through the exhaust ducts.

A circulation pump continuously supplies water from the cabinet tank to the water curtain with two overflows, and the **water is recirculated** within the system. The ventilation unit can be mounted on the wall or placed on the floor to the left or right of the cabinet, depending on the room layout.

As the filters load with paint, the optional frequency converter lets you adjust fan speed to maintain the required air velocity.

TECHNICAL SPECIFICATIONS. BASIC CONFIGURATION

Parameter	ASH-1	ASH-2	ASH-2.5	ASH-4	ASH-5	ASH-6
Dimensions						
External cabinet dimensions (L×W×H), m	1.1×1×2.5	2×0.6×2.3	2.5×0.6×2.3	4(2×2)×0.6×2.3	5(2.5×2.5)×0.6×2.3	6(3×2)×0.6×2.3
Water curtain opening, m	1×0.9	2×1.8	2.5×1.8	4×1.8	5×1.8	6×1.8
Performance						
Total water volume in the system, l	227	350	450	700	900	1,050
Water flow rate, l/min	250	250	250	500	500	1,500
Airflow rate, m³/h	2,200	6,500	8,000	13,000	16,000	19,500
Air velocity in the working zone, m/s	0.25–0.40					
Electrical						
Power consumption, kW	1.4	3.6	4.6	7.1	9.1	10.7
Power supply	3-phase, 380 V, 50 Hz					
Scope of supply						
Cabinet body made of galvanised steel panels	1 pc	1 pc	1 pc	2 pcs	2 pcs	3 pcs
Spark-proof ventilation unit	1 pc	1 pc	1 pc	2 pcs	2 pcs	3 pcs
Electric motor	1 pc	1 pc	1 pc	2 pcs	2 pcs	3 pcs
Water curtain system with two overflows	1 set	1 set	1 set	2 sets	2 sets	3 sets
Filter cassette with PaintStop fibreglass filter	1 pc	2 pcs	2 pcs	4 pcs	4 pcs	6 pcs
Control panel	1 pc					
Water circulation piping system	1 set	1 set	1 set	2 sets	2 sets	3 sets
Water circulation pump	1 pc	1 pc	1 pc	2 pcs	2 pcs	3 pcs
Set of fasteners	1 set					
Turntable, 450×450 mm	1 pc	—	—	—	—	—
Energy-saving LED T8 luminaires, 600×2×18	1 pc	—	—	—	—	—

