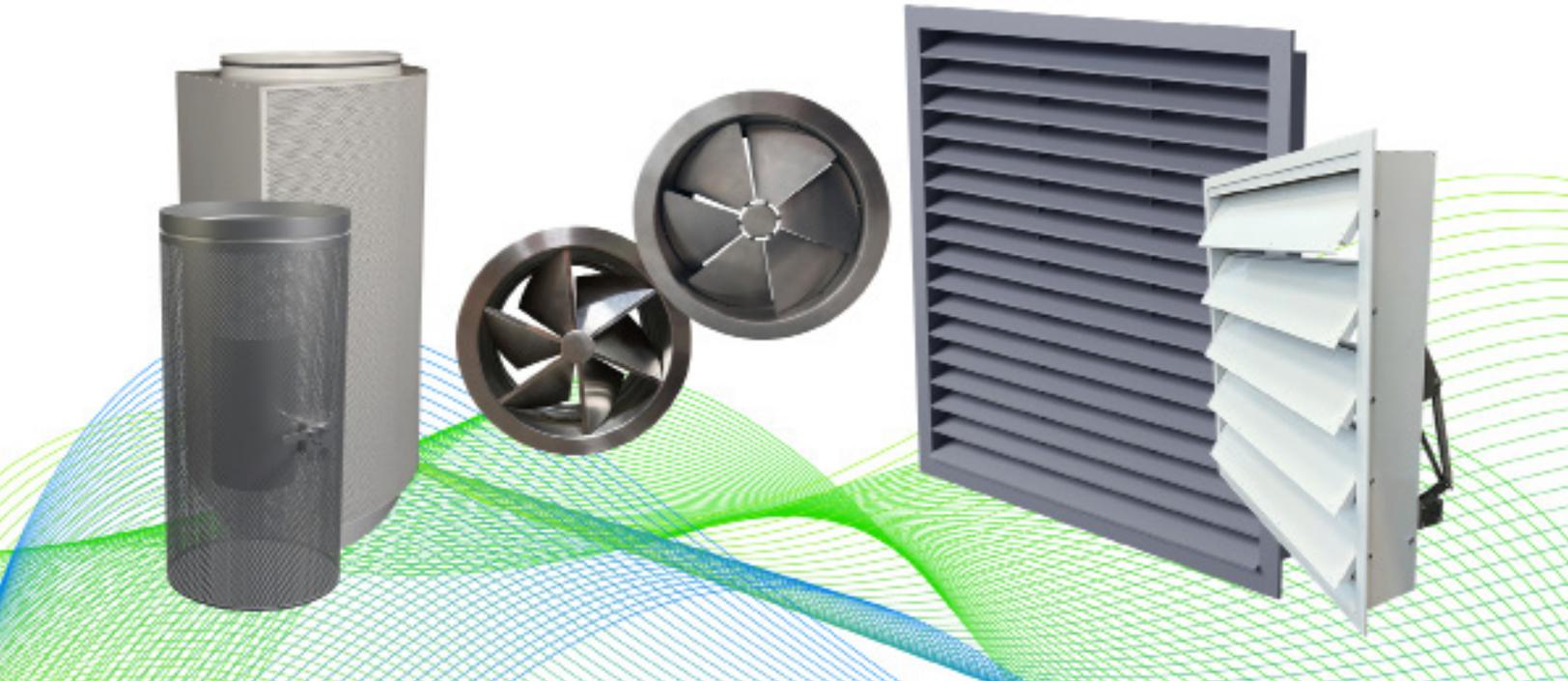




VENTILATION FOR INDUSTRIAL FACILITIES



Ventilation in industrial facilities is crucial for ensuring proper working conditions, safety, and efficiency of technological processes. In production halls, warehouses, and other large industrial spaces, proper air circulation enhances employee comfort and productivity, improves product quality, and protects infrastructure from damage caused by moisture or contamination.

Saw-Pol specializes in manufacturing end components for ventilation and air conditioning systems, with a focus on industrial solutions such as air diffusers, air intake louvers, grilles, and displacement diffusers. Our ventilation products are made from high-quality materials, including galvanized steel, aluminum, and stainless steel (1.4301/304 and 1.4404/316L). We have a modern machine park capable of producing large industrial components, enabling us to customize products to fit a variety of installation sites. All our components are made to order, allowing us to meet the expectations and visions of even the most demanding designers and architects.



LONG-RANGE AIR DIFFUSERS: NWO-9, NWO-11, NWO-12

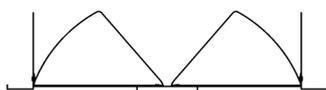
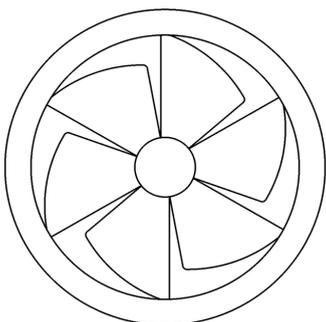


Long-range air diffusers are ideal for food industry facilities, where maintaining proper air quality, temperature, and humidity is critical. Our diffusers ensure even air distribution over long distances, which is essential in large industrial halls, warehouses, and cold storage rooms. The extended range of air distribution prevents areas with poor air circulation, thereby mitigating issues with humidity and condensation.

These diffusers maintain stable climate conditions throughout the facility, which is vital for food storage and processing. The NWO-11 diffuser can be equipped with a thermal (wax) actuator, electric actuator, or manual adjustment for changing the air discharge angle, making it suitable for both heating and cooling. The NWO-12 model also features adjustable louvers that can be manually set individually.

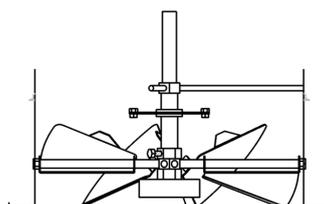
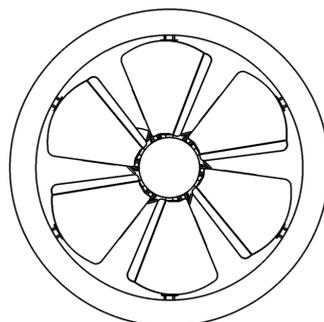
NWO-9

Air diffuser with fixed blades



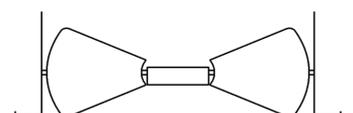
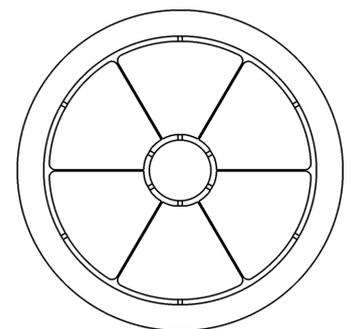
NWO-11

Air diffuser with adjustable blades. All blades move simultaneously. Can be manually controlled, or operated with an electric or thermal (wax-based) actuator.



NWO-12

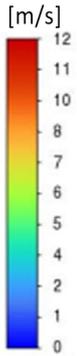
Air diffuser with adjustable blades. Manually adjustable. The angle of each blade is individually set.



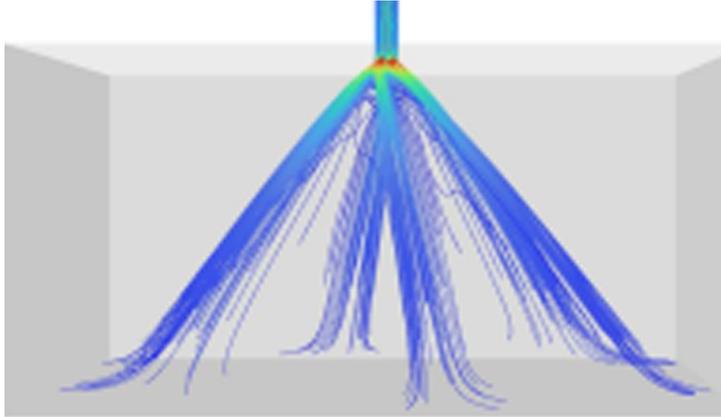


Airflow streamlines for diffuser NWO-11 $\phi 710$, capacity 6500 m³/h Domain in the shape of a rectangular prism 20x20m, H=10m

Velocity Magnitude

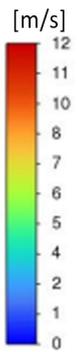


pathlines-1

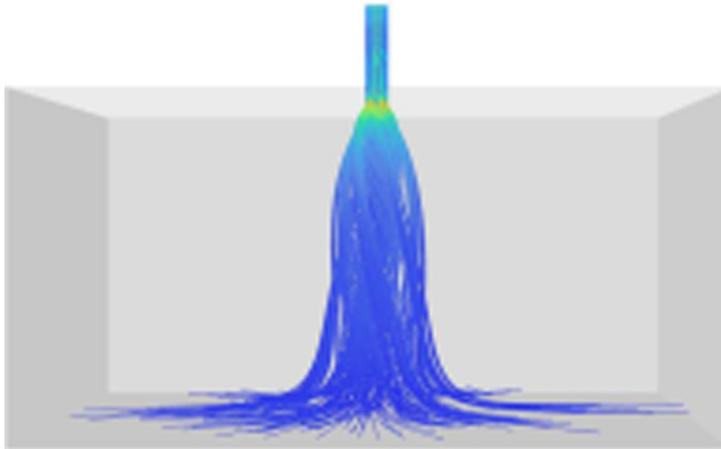


Blade angle of inclination 30°
Heating $\Delta T=10^\circ$

Velocity Magnitude

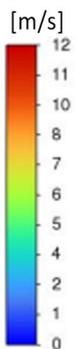


pathlines-1

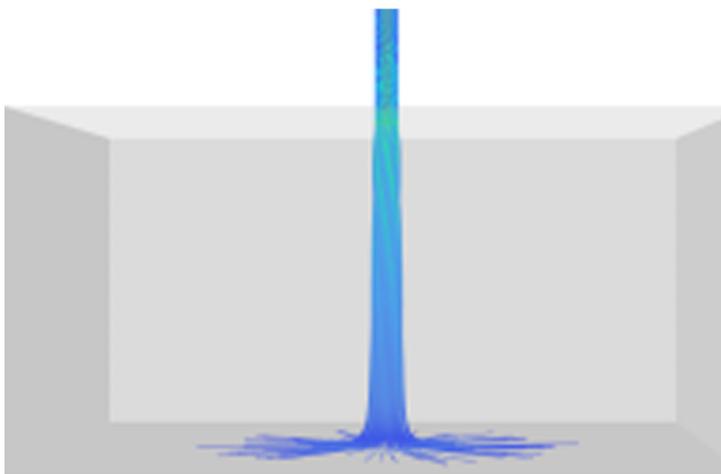


Blade angle of inclination 45°
Heating $\Delta T=10^\circ$

Velocity Magnitude



pathlines-1



Blade angle of inclination 83°
Heating $\Delta T=10^\circ$





DISPLACEMENT AIR DIFFUSERS TYPES: NW, NW-P, NW-N, NW-4P, NWJ



Displacement air diffusers supply large volumes of air at low speeds and with a laminar airflow, ensuring effective removal of polluted air towards exhaust outlets without creating drafts or mixing fresh air with contaminated air (e.g., in production processes).

These diffusers provide efficient removal of dust, gases, and vapors without recirculating them into the work environment. Our product range includes:

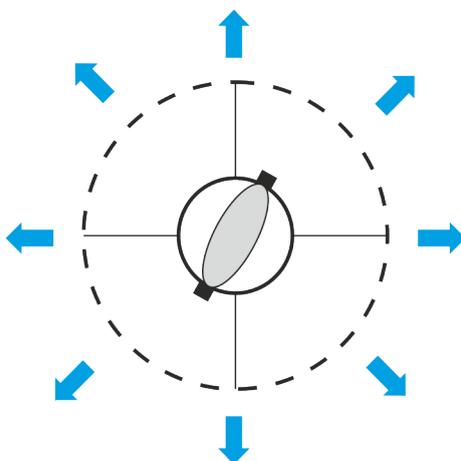
Our range includes:

- Round displacement diffusers (NW)
- Semi-round displacement diffusers (NW-P)
- Corner displacement diffusers (NW-N)
- Rectangular displacement diffusers (NW-4p)

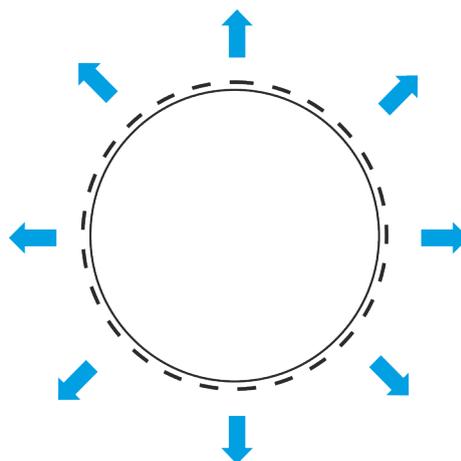
We also manufacture single-shell round industrial displacement diffusers NWJ-1 and NWJ-2, which are particularly recommended for use in the food industry.

Single-layer displacement air diffusers – Industrial

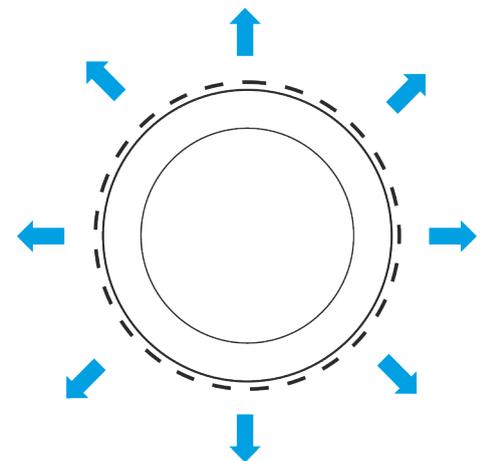
NWJ-P
Air diffuser with
damper



NWJ-1
Air diffuser with air
deflection disk



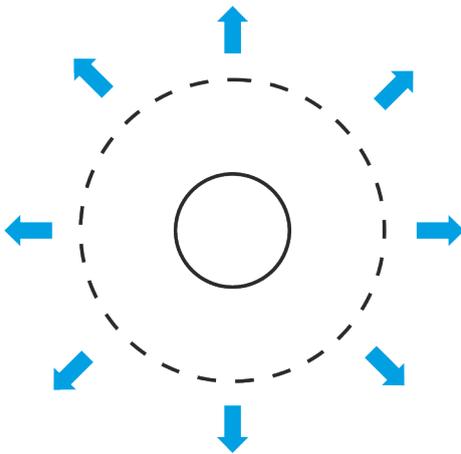
NWJ-2
Air diffuser with air
deflection rings



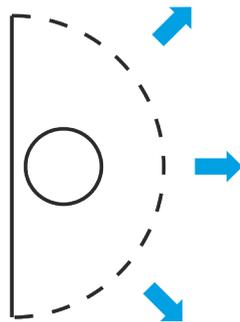


Double-layer displacement air diffusers

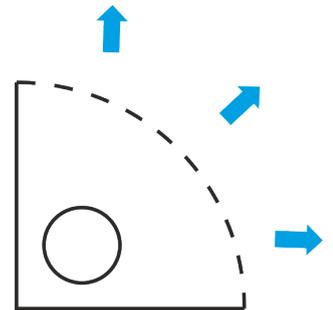
NW
Round air
diffuser



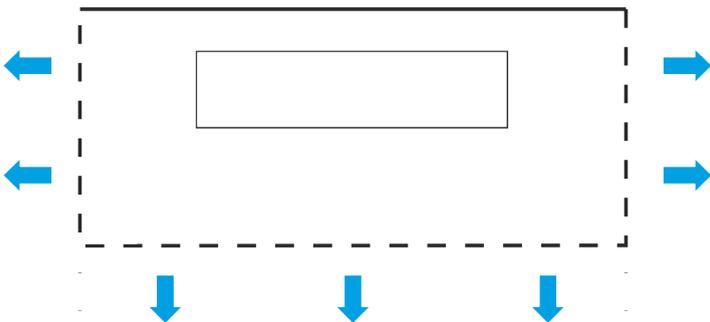
NW-P
Half-round air
diffuser



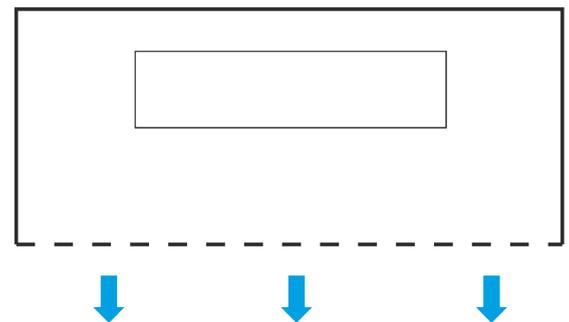
NW-N
Corner air diffuser



NW-4P
Rectangular
air diffuser



NW-4P
Rectangular
air diffuser





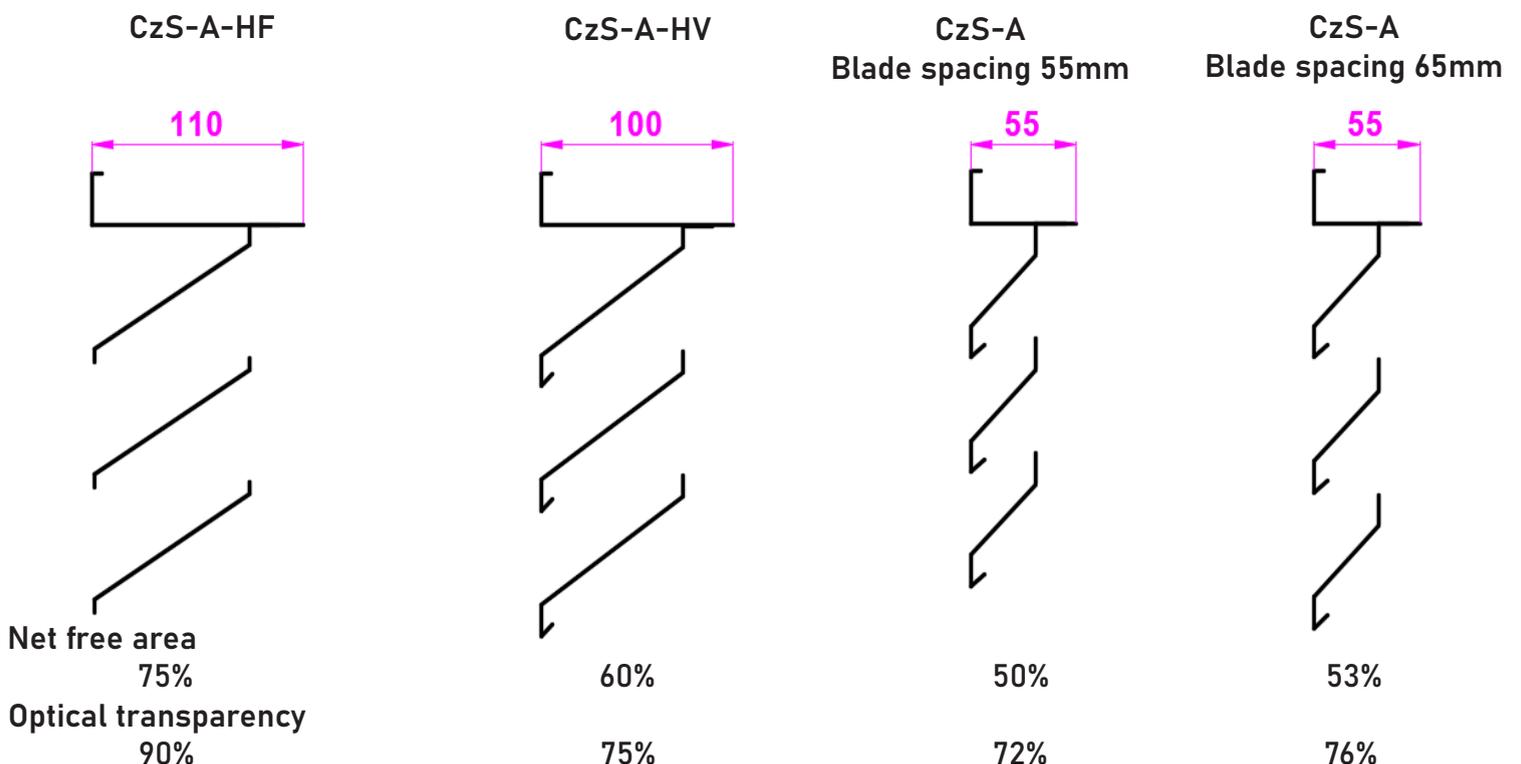
EXTERNAL GRILLES, AIR INTAKES, AND EXHAUST LOUVERS TYPES CzS-A, CzS-A-HF, CzS-A-HV, CzS-B, ZSR-N



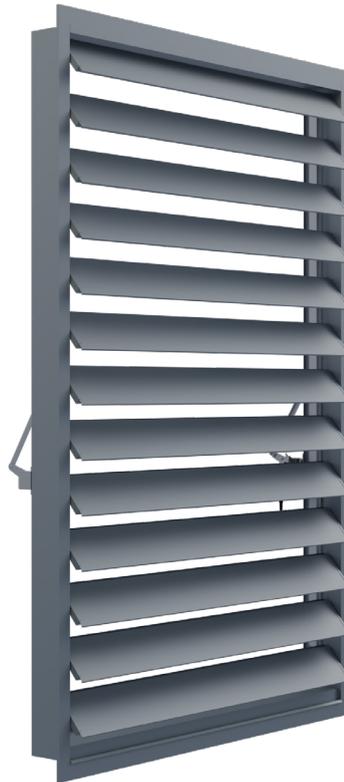
Air intakes and external grilles play a vital role in industrial ventilation systems by ensuring the proper supply of fresh air and protecting the installation from contamination and damage. Our products are made from durable materials such as stainless steel, galvanized steel, and aluminum, making them resistant to atmospheric factors like rain, snow, wind, and UV radiation.

Saw-Pol offers external elements in various aesthetic and color options, enabling their integration with the building's façade. Our air intakes and external grilles can be equipped with suitable filters or protective meshes to safeguard the ventilation system from contaminants, which extends the system's lifespan and reduces maintenance frequency.

The CzS-A wall air intake is our standard product, offered in several variants to achieve desired performance. These range from intakes with standard blade spacing to high-flow variants like CzS-A-HV, with an optical clearance of 75% and a net free area of 60%, and the highly popular CzS-A-HF, which offers an optical clearance of 90% and a net free area of 75%.



Saw-Pol also offers adjustable grilles, allowing the angle of the blades to be set as needed. Their primary advantages include precise airflow control, protection against weather conditions, and improved energy efficiency by allowing partial closure in unfavorable atmospheric conditions. These adjustable louvers can be operated manually (ZSR-N-R), by a pull-cord mechanism (ZSR-N-C), or electrically with an actuator (ZSR-N-S).



Manual control



Control with actuator





SAW-POL

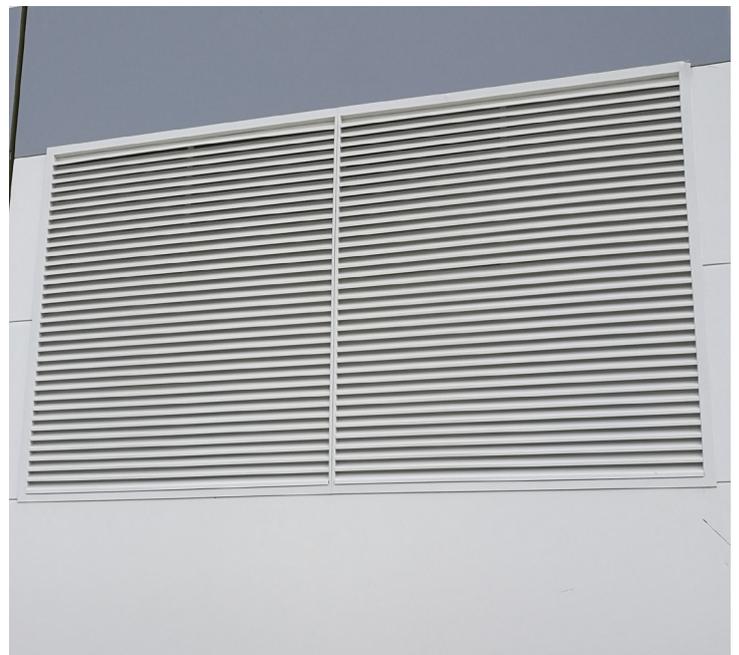
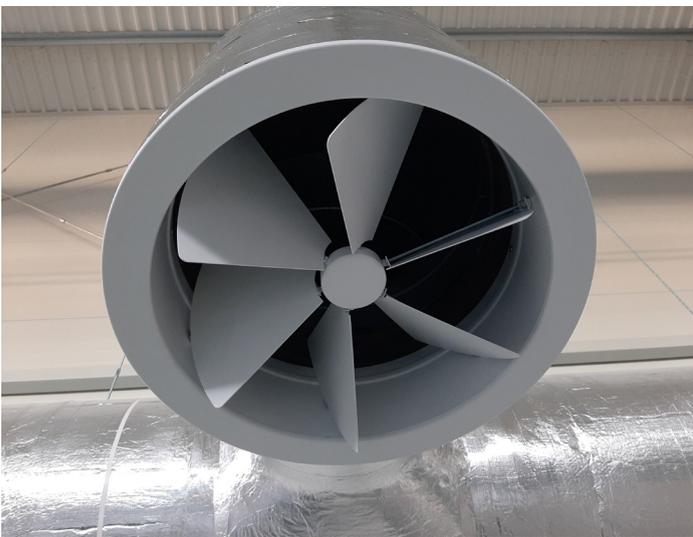
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