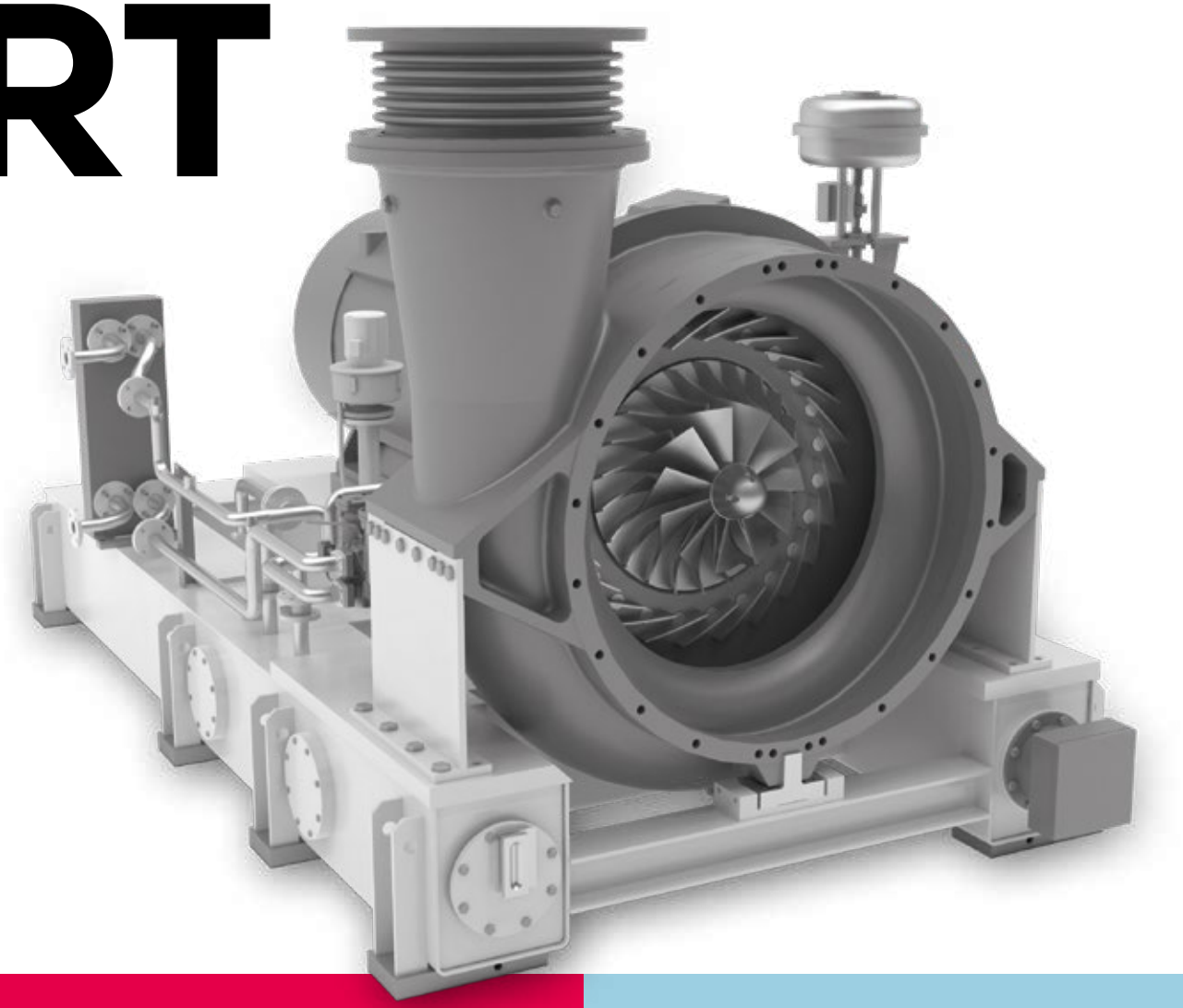
Type RT



Dewatering under vacuum

Specially suited for felt conditioning and tissue applications

Benefits at a glance

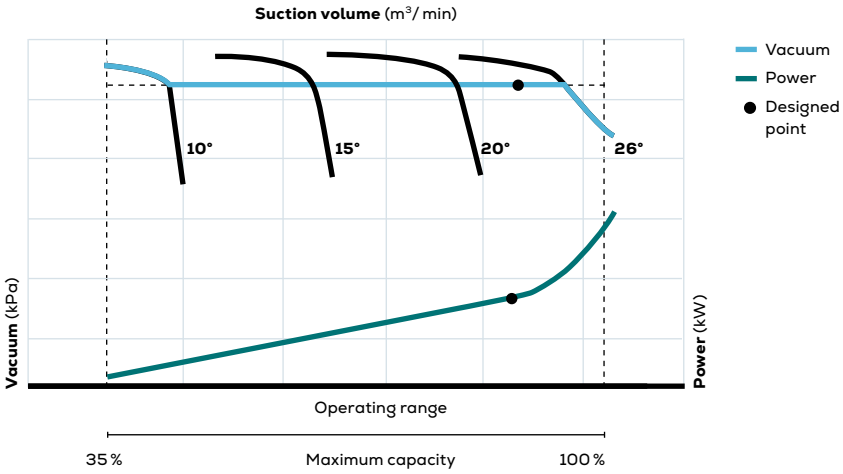
- Operation at optimal duty point
- Environmentally friendly
- Low space requirement
- No seal water consumption

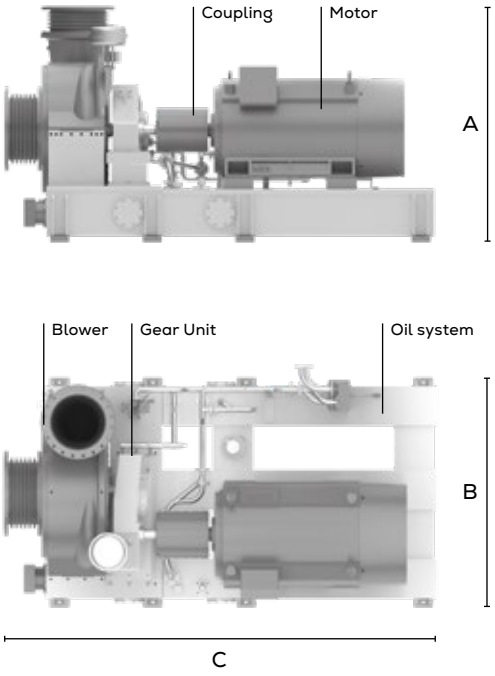
Everllence

Type RT
TURBAIR® Blower

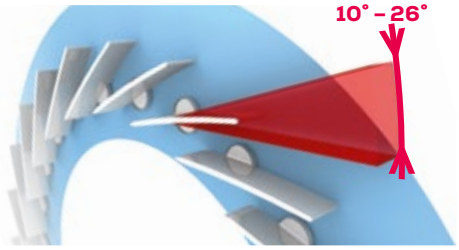
Dimensions

RT type	A (mm) height	B (mm) width	C (mm) length	air flow (m³/ min)	weight (kg)
56	2,200	2,050	4,100	200 – 850	7,100
71	2,550	2,450	4,550	400 – 1,450	11,000





Characteristics
RT single-stage blowers are exceptionally well suited for felt conditioning thanks to their ability to adjust vacuum up to 65 kPa and volume flow to the changing felt permeability while, maintaining optimum efficiency. The constant dewatering level results in optimum conditioning with a corresponding extension of the felt lifetime.



Operation
The RT single-stage blower is driven by an electric motor with constant or variable speed. The air/water mix aspirated from the paper machine is collected in a separator where water, particles and fiber solids are removed. The air is then ducted into the impeller and compressed.
The blower's internal, steplessly adjustable diffuser blades ensure variable volume flows at constant vacuum and optimum efficiency. The air exits the blower with a temperature of around 140 °C.

This thermal energy can be recuperated in a heat exchanger and can be used for preheating the process water, as energy for the drying process, room heating, etc.

Design
The spiral casing with horizontal intake flanges is coupled directly to the spur gear casing or mounted directly onto the base frame. The stepless adjustable diffuser blades, together with the pneumatic servodrive motor, are integrated in the spiral casing.
The welded base frame with foundation pads and fixation bolts has an integrated oil reservoir. All oil system and electric motor auxiliaries are mounted onto the base frame.

Lubricating oil system
All the gear box journal bearings are pressure-lubricated. During start-up and shut-down, an electronically driven auxiliary oil pump provides lubrication to the bearings. Upon reaching nominal speed, a mechanically driven lube oil pump connected to the gearbox casing takes over the oil supply. During normal operation, the electrically driven pump serves as stand-by. Practice has shown that this arrangement offers the best possible blower availability.

Control system
Three fully automatic control loops ensure operational safety and reliability.

Overload protection
Throttle valves in the suction duct close, simulating the flow resistance of the missing paper sheet, thus preventing air inrush and drive motor overload.

Antisurge protection
When operated below minimum flow level, the blower will surge. To avoid this, an automatic valve bleeds air into the suction branch until stable operation is restored.

Power control
The automatic blower control adjusts to varying air flows. A pneumatic servomotor opens the diffuser blades with increasing volume flow and closes them with reduced flow.

Contact
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