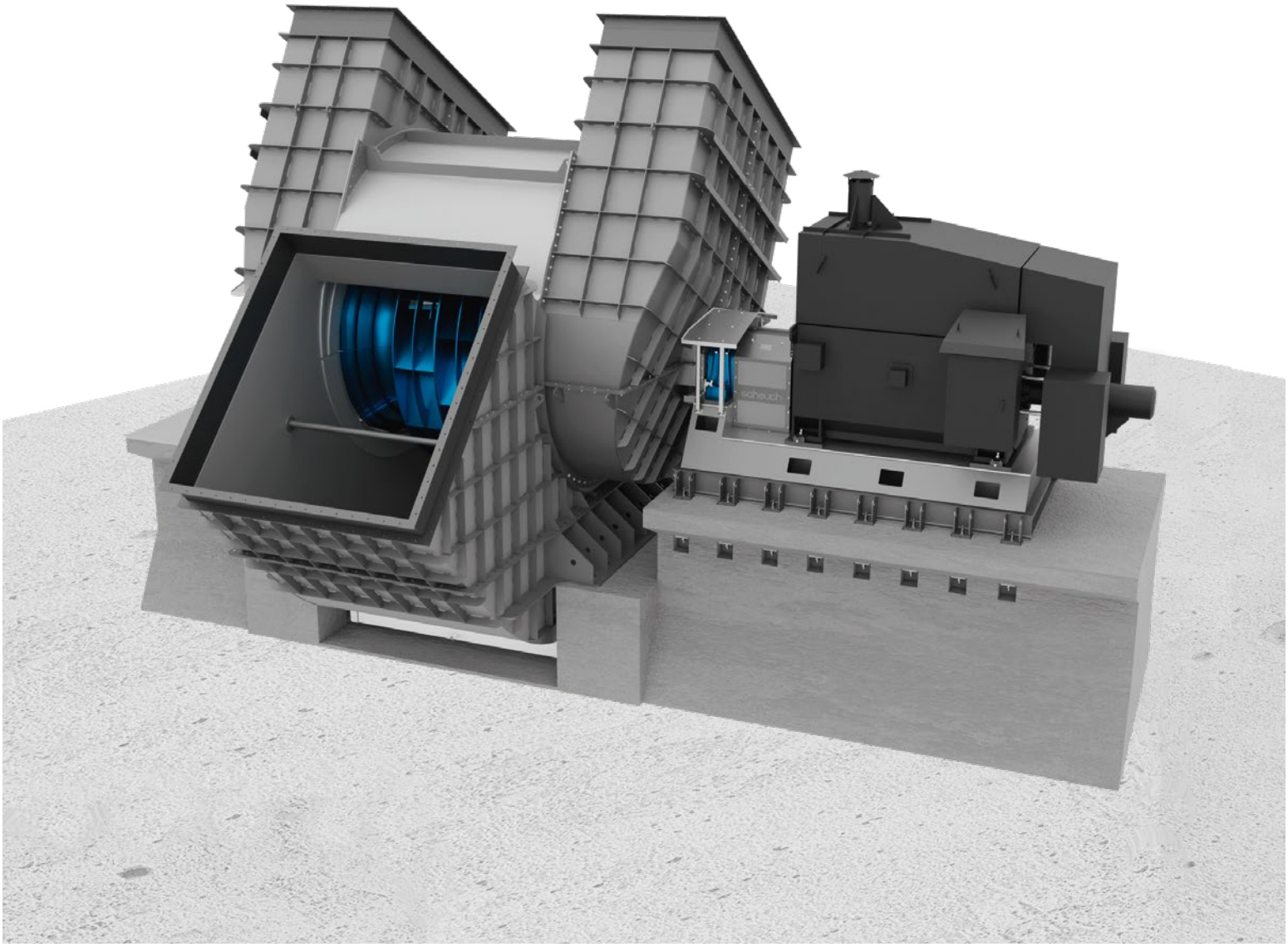


COMPONENTS

RADIAL FANS

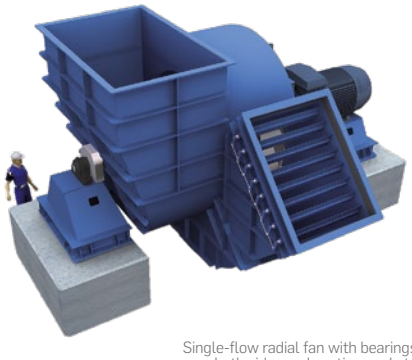
BEARINGS ON BOTH SIDES

RADIAL FANS FOR LARGE VOLUMETRIC FLOWS

The robust design of Scheuch COMPONENTS radial fans makes it possible to achieve large volumetric flows with the fan mounted in an overhung position. Bearings can be provided on both sides if requested by the customer, and this configuration is implemented as standard above a critical impeller mass. The fan can be installed on a steel bracket or a concrete foundation depending on the size and installation situation.

SINGLE-FLOW RADIAL FAN

Single-flow radial fans with bearings at both sides are primarily used in the cement industry due to the harsh operational conditions present there.



Single-flow radial fan with bearings on both sides and suction pockets

DOUBLE-FLOW RADIAL FANS

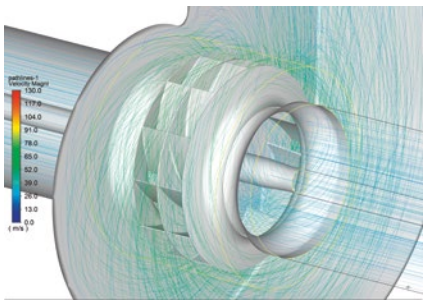
Thanks to the two suction openings and the bearings on both sides, the volumetric flow can be nearly doubled while keeping the same impeller diameter and the same flow velocity at the inlet. This is reflected in a compact design with high power density.
Our flow-optimized suction pockets and the smaller dimensions that can be achieved as a result allow us to use the shortest possible shaft, thus saving costs.

Volumetric flows:	100,000 – 1,500,000 Am³/h
Pressure increase:	2,000 – 9,000 Pa
Motor power:	800 – 5,000 kW

Double-flow radial fan with bearings on both sides, without suction pockets

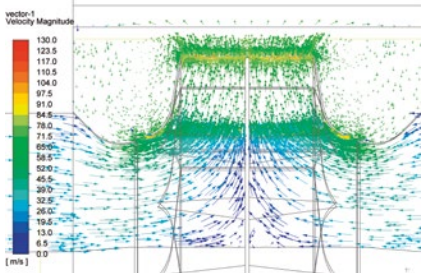
FLOW-OPTIMIZED SUCTION POCKETS

If bearings are mounted on both sides, the suction-side pipe connection is usually established via flow-optimized suction pockets to ensure that the flow is redirected with minimal loss when space is limited. This creates a clean flow pattern with low turbulence at the inlet, which has a significant impact on the filling ratio and efficiency of the impeller. Casing angles and suction pocket angles can be combined flexibly in order to facilitate placement in the plant.



SIMULATIONS

We use CFD simulations to optimize the inflow of our fans and ensure a high degree of efficiency. Our theoretical calculations are verified with models on our test stands and undergo continuous development. Strength calculations in the context of FE simulations allow us to keep improving the design of our radial fans and expanding the volumetric flow range for single-flow impellers.



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