

# Vitra Customer Success Story

**Customer:** Eczacibasi – Vitra brand

**Region:** Turkey

**Sector:** Bathtub Thermoforming

**Benefit:** Energy savings of 89%

Eczacibasi is a prominent Turkish industrial group, whose core sectors are building products, healthcare and consumer products. Their Vitra brand is among the world's top providers of bathroom and tiling solutions. Vitra's Istanbul factory has the capacity to produce 350,000 bathtubs every year.

## Challenge:

Vitra's modern bathtubs are manufactured by a thermoforming process, using acrylic materials. In the thermoforming process a plastic sheet is heated and then formed to a specific shape in a mold, under vacuum. The acrylic sheets are literally sucked into shape.

Energy use is a significant part of Vitra's costs, and in addition to striving to reduce their level of energy consumption, Vitra are very conscious about sustainability. They had launched the Be Green initiative in an effort to contribute to sustainable living. Be Green encourages every employee to adopt environment-friendly habits, both at home and at work.

Vitra's vacuum needs had previously been catered to by six oil injected vane pumps that were supplied by a competitor. They were very noisy and cluttered around the work floor - not the clean set-up you would expect in a factory making bathtubs.



## Solution:

Atlas Copco proposed a centralized system with a GHS 1600 VSD+, an oil injected screw vacuum pump with a variable speed drive and 30kW installed motor power. This meant Vitra were able to replace their 6 noisy oil sealed rotary vane pumps with a dedicated configuration with just one GHS VSD+.

## Outcome:

The GHS 1600 VSD+ vacuum pump saved a lot of energy – more than they expected. Vitra measured the energy consumption before and after installation of the pump, and the energy savings amounted to 89%.

Atlas Copco have pioneered variable speed drive technology for their compressors, tuning the speed of the machine to match the demand coming from the process. They are now using that variable speed drive knowledge to innovate the world of vacuum, bringing big energy savings.

Besides the energy savings, there were other benefits to using the GHS VSD+ vacuum pump. All of its technology is enclosed in a tidy box: this results in a cleaner set-up than old fashioned vacuum pump installations, and it also has only a small footprint. The pump can also hold its own in the harshest of conditions.