

CASE STUDY

WHERE TRADITION MEETS PURE COMPRESSED AIR

How Schumacher Altbier-Manufaktur combines brewing tradition, product quality and process reliability with oil-free CompAir compressed air

When Altbier is brewed in Düsseldorf, it is about more than just a drink:

It is about tradition, craftsmanship and the unmistakable taste of a true classic. At Schumacher Altbier-Manufaktur, Düsseldorf's oldest Altbier brewery, historic brewing craftsmanship meets modern technology. To turn carefully selected raw materials into a pure beer with distinctive character, every stage of the process must operate reliably – from the brewhouse to filling. Compressed air plays a central role: it controls valves, supports cleaning processes and ensures smooth barrel, can and bottle filling. Because even the smallest contaminants could affect beer quality, Schumacher relies on water-injected, oil-free screw compressors from CompAir.



The project at a glance

▶ Customer	Schumacher Altbier-Manufaktur, Düsseldorf
▶ Industry	Brewery / Food & Beverage
▶ Applications	Valve control, cleaning, and barrel, keg, can and bottle filling
▶ Solution	Two water-injected, oil-free CompAir screw compressors



Tradition and quality from Düsseldorf

Schumacher Altbier-Manufaktur represents traditional Düsseldorf brewing craftsmanship.

Even today, you can experience many stages of the brewing process firsthand: malt, hops, and brewing water are processed into wort in the brewhouse before it is cooled and then fermented in the fermentation cellar using the brewery's own yeast culture.

The combination of traditional production methods and careful process control helps achieve a consistently distinctive taste.

After fermentation, the beer is matured for several weeks before further processing.

Schumacher deliberately sees itself as a craft brewery. The beer remains as natural and authentic a product as possible. Components that contribute to flavour, body and head formation are deliberately left in the beer.



Without compressed air, production stops

Schumacher uses compressed air throughout virtually the entire production process.

In the brewhouse alone, numerous valves are pneumatically actuated. Solenoid valves direct compressed air to the relevant valve seats, enabling the wort to be transferred between the individual process stages.

Compressed air also performs important tasks in other areas of the brewery – particularly in cleaning processes and in barrel, keg, can and bottle filling.

A reliable supply is therefore not a matter of convenience, but an essential requirement for uninterrupted brewery operations.

“Without a reliable compressed air supply, all production equipment would come to a standstill.”

Sascha Brunow,
Brewmaster, Schumacher Altbier-Manufaktur



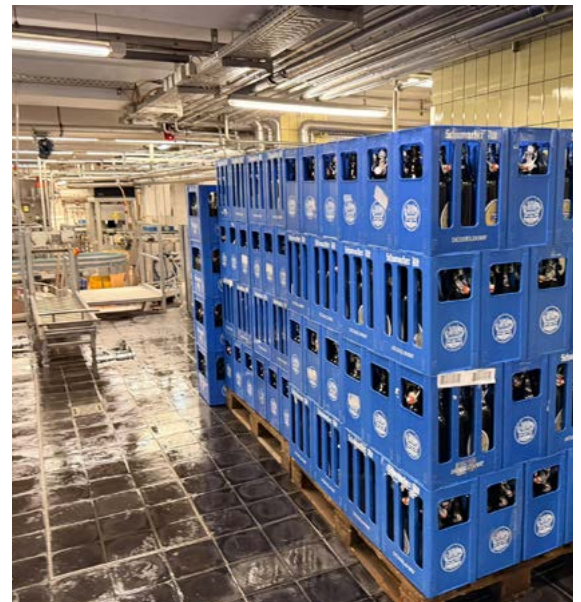
Oil-free air is not optional – it is essential

For Schumacher, it was clear when selecting its compressed air technology that only oil-free compressed air would be considered.

Even the smallest traces of oil contamination could negatively affect the beer, particularly head formation.

“Oil-lubricated – an absolute no-go.”

Together with Hermann Mönnichs Drucklufttechnik GmbH, a CompAir Premium Distributor for oil-free compressed air and a long-standing brewery partner, Schumacher chose water-injected, oil-free screw compressors from CompAir.



**“Pure air for our
pure product.”**

Sascha Brunow,
Brewmaster, Schumacher Altbier-Manufaktur



The CompAir solution

Compressed air requirements are particularly demanding in a smaller brewery because air demand is not constant.

Different production stages result in highly fluctuating, intermittent compressed air demand.

In addition to the required oil-free air, good controllability, energy efficiency and high operational reliability were therefore decisive criteria. The CompAir solution helps Schumacher supply compressed air in line with demand, safeguard production processes reliably and reduce maintenance requirements compared with the reciprocating compressor technology used previously.

Mönnichs sold and installed the first CompAir compressor in 2013.

With more than 46,000 operating hours, it remains part of the equipment fleet today and is a clear example of the solution's reliability. Sascha Brunow, Brewmaster at Schumacher, describes the compressed air station as largely trouble-free and exceptionally reliable.

Modern screw compressor technology replaced older reciprocating compressors, which required more maintenance, were more expensive to operate and did not offer comparable variable-speed control.



Positive experience leads to a second CompAir system

Years of positive experience with the first machine convinced Schumacher to choose CompAir again for its next investment.

Around two years ago, a second, newer generation water-injected screw compressor was installed – once again supported by Hermann Mönnichs Drucklufttechnik GmbH.

The control system has been further developed compared with the first generation, while Schumacher continues to rely on the proven principle of water-injected, oil-free compression.

The key factor was the experience gained in day-to-day operation: the first system had demonstrated its reliability over many years. In addition, available funding improved the economics and payback of the investment.



Future outlook: nitrogen as an area of interest

Nitrogen is also an area of interest for breweries, particularly for reliably supporting sensitive processes and safeguarding product quality over the long term. CompAir offers suitable nitrogen generation equipment and supports customers with solutions tailored to on-demand supply.



A partnership spanning generations

The relationship extends far beyond simply supplying compressors.

In the video interview, Mark Mönnichs, Managing Director of Hermann Mönnichs Drucklufttechnik GmbH, a CompAir distributor responsible for the sale and installation of the compressors, speaks with Sascha Brunow, Brewmaster at Schumacher. Both describe a partnership spanning generations, characterised by personal support, mutual trust and a deep understanding of the brewery's requirements.

For a supply on which virtually the entire production process depends, this reliability is crucial. Sascha Brunow emphasises the high operational reliability of the systems, while Mark Mönnichs explains the technical reasons behind the choice of CompAir's water-injected, oil-free and highly controllable technology. The positive experience with the first system was therefore a major reason for choosing CompAir again for the second machine.

