

## SUCCESS STORY

Industrial wastewater  
treatment for Flatscher  
in Unken, Austria



 FLATSCHER

SEPARATION

# UNLOCKING A HIDDEN OPPORTUNITY

GROWING A BUSINESS THROUGH IMPROVED  
WASTEWATER TREATMENT AND REUSE

**ANDRITZ**

ENGINEERED SUCCESS

# The challenge

## Reuse wastewater and boost operating margins

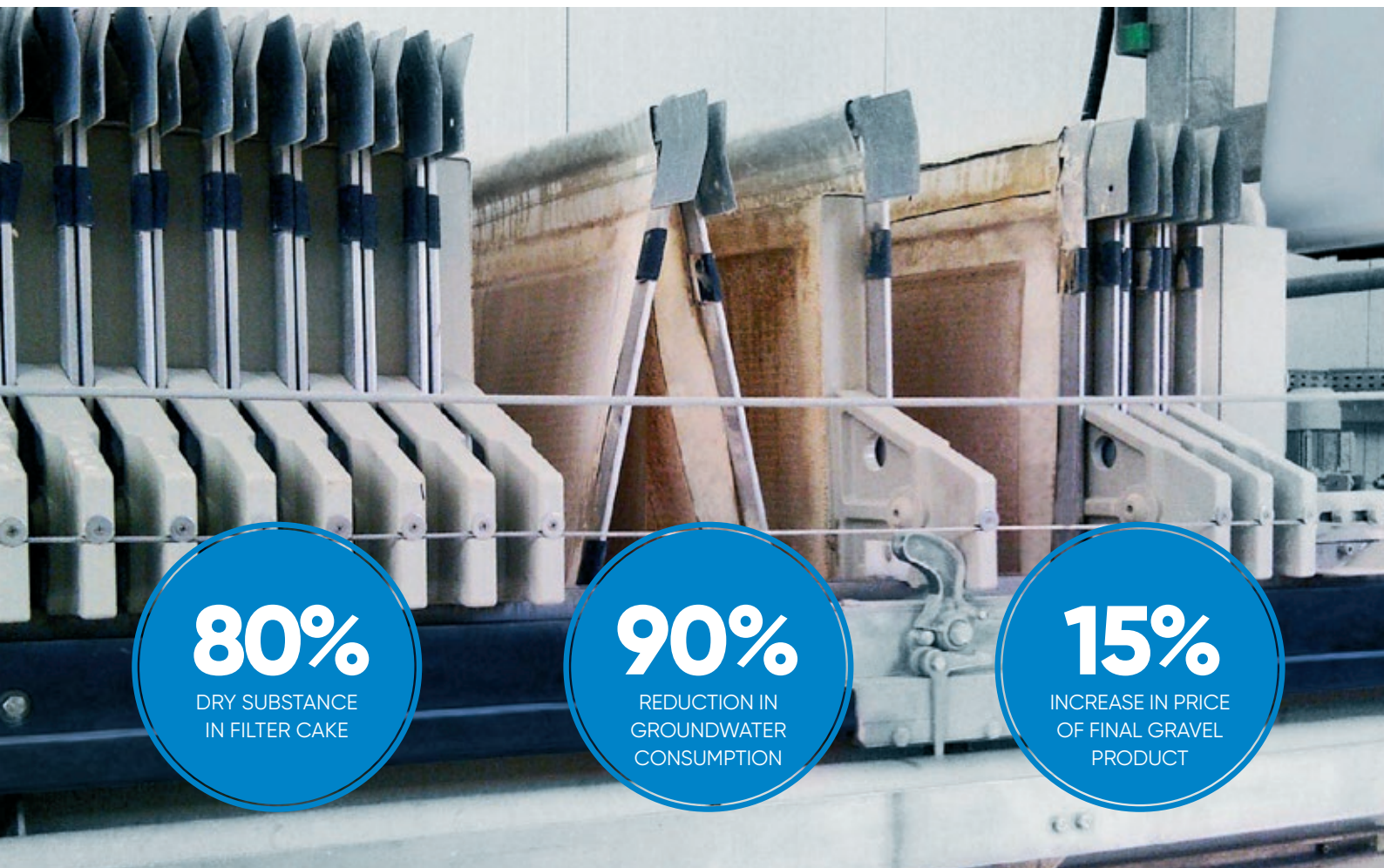
With no wastewater treatment system in place, Flatscher Erdbau & Schotterwerk Ges.m.b.H faced a number of challenges that were threatening the company's business.

A nearly full disposal pond, with slurry too fluid to transport but too thick to pump, had led to an acute shortage of both disposal space and water for the gravel washing process.

To turn existing waste streams into new business opportunities, the gravel plant needed:

- Reliable and efficient treatment technology uniquely suited for moderately sticky filter cake
- A closed-loop filter system to decrease dependency on groundwater
- Optimized filter cloth washing, thickener interface, and related ancillaries for specific slurry conditions

An evaluation of four potential partners led to a clear conclusion: ANDRITZ was the supplier of choice with the most efficient technology for handling the customer's urgent wastewater treatment challenges.



**80%**

DRY SUBSTANCE  
IN FILTER CAKE

**90%**

REDUCTION IN  
GROUNDWATER  
CONSUMPTION

**15%**

INCREASE IN PRICE  
OF FINAL GRAVEL  
PRODUCT

Tiltable frames of the ANDRITZ filter press installed at Flatscher



# Our solution

## Minimal water consumption due to closed-loop filtration

To maximize reliability, an advanced side-bar filter press with long, tiltable frames was installed. A filter cloth washing device, with high-pressure pump, control system, and drip tray were added, optimized with an additional thickener interface, and adjusted to boost throughput. Rather than pumping waste into a disposal pond as before, the new wastewater

treatment plant made it possible to recover water for a more thorough gravel washing process – and thus obtain a cleaner, more valuable product. The slurry itself, which was previously disposed of, now has a much better consistency that makes it easy to treat and mix with other materials.

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# Results

## Improved products and by-products with lower water consumption

Thanks to its new wastewater treatment facility, the gravel plant has replaced most of its water and waste losses with an upfront investment in future efficiency. Relieved of the need for sludge disposal, and with less demand for groundwater resources, overhead costs have been substantially reduced. At the same time, the company's revenue streams have never been stronger.

A cleaner gravel product secures approx. 15% higher prices, while the filter cake with 80% dry substance content can now also be sold to local customers as it is ideal for use in road construction. This complete closed-loop system has allowed the plant to overcome its limited resources, providing a reliable platform for profitable business in the years to come.

**“Without a wastewater treatment facility, our production had reached its limits. ANDRITZ provided the optimal technology to turn this problem into an opportunity for continued growth.”**

**BERNHARD FLATSCHER**

Managing Director, Flatscher Erdbau & Schotterwerk Ges.m.b.H



## WHAT'S YOUR SEPARATION CHALLENGE?

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