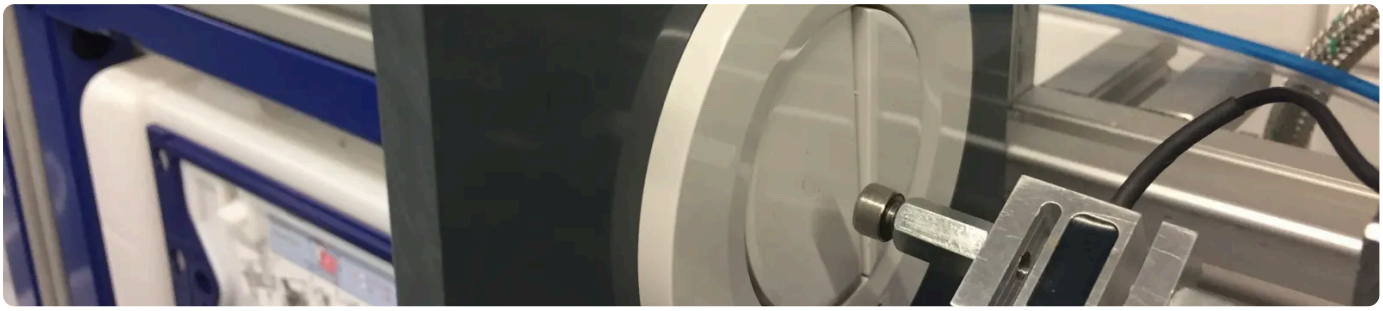
TEQABLE
Engineering Success

CASE STUDY

Flushing made easy: less force for the pneumatic flush actuator



#MECHANICS #PLASTICS DESIGN

The Geberit remote flush actuator triggers the flush pneumatically and can be placed freely next to the toilet. TEQABLE analysed its actuation force systematically and showed ways to lower it markedly in continuous use.

GEBERIT

Situation

Pneumatic force transmission lets the flush actuator be placed freely: next to the toilet instead of behind the user, without a power connection. Light actuation is key to comfort, and friction in the actuator stood in the way.

Goal

Understand the actuation force of the pneumatic actuator systematically and find ways to lower it in continuous use.

Solution

TEQABLE specified test setups for long-term measurements, put them into operation and evaluated the measured forces and the wear behaviour systematically. This led to proposals for the system architecture and the choice of materials, and to test samples in several variants whose measurements confirmed the potential.

> *"TEQABLE showed us new ways out of the tribological trap. We implemented the recommendations successfully and learned a lot about the analytical approach to measurement for the future."*
>
> **Erwin Schibig, Head Product Development BAS & IFS, Geberit International AG**

Key facts

SERVICES

Analysis, test setups, long-term measurements, optimisation, sample building

Outcome

- Potential of 40 percent less actuation force in continuous use confirmed
- Test setups for long-term measurements specified and put into operation
- Proposals for system architecture and materials, with test samples in several variants
- Recommendations implemented successfully by Geberit

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