



Rotor-stator-inline system rethought: GORAMILL[®] from hoelschertechnik-gorator[®]

Good in-line homogenizers are incredibly versatile: Homogenization, emulsification, deagglomeration, wet grinding, disintegration or as an inline reactor – everything is possible. This technology is becoming more and more important to increase efficiency and reproducibility. But the differences are sometimes enormous.

Regardless of whether we are emulsifying below $1\ \mu$ or grinding fibers below μm , this is now possible with just one rotor system APS. The idea: We use the advantages of two principles of a colloid and radial mill (tooth and chamber). Sounds easy, but it isn't: A high-performance system with shear rates of $> 400,000\ \text{s}^{-1}$ works at the limit of cavitation if the design is wrong. Rotor stability and gap geometry also playing an important role. But it wouldn't be HIMMEL[®] product if we didn't make more of it:

How? Question everything and improve many things with new ideas. And we showed right away how to do it with the difficult fiber grinding: With GORAMILL[®] it was only

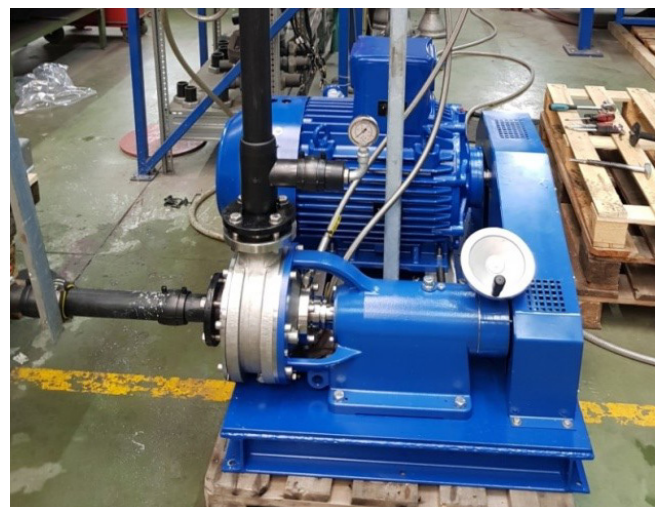
switch on, where competitors are already despairing of the throughput.



concept and results convince:
GORAMILL[®] 33 in a competition



GORAMILL[®] 33, 160 kW on the test rig:
development and analysis – a must



pilot machine GORAMILL[®] APS22
with hand wheel for gap adjustment





...and in the end it is the convincing result that counts:

- > finer and quicker fiber grinding with higher efficiency
- > new real gap geometry (25-1900 μ) for maximum reproducibility
- > new 1:1 gap setting, enormously extending the degree of grinding < 1/200, even with smaller machines
- > the first easy-to-resharpen tool with higher reproducibility
- > extremely smooth running and rotor stability due to more solid construction and purely axial gap



from fibrous press material
(15x15x3 mm)



via a 25% w slurry
(highly thixotroped = highly efficient,
simplified process handling)



up to fine pudding-like slurry (d90
~ 100 μ)

**Do you have any questions about our wet processing applications?
Feel free to get in touch and talk to our experts:**

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