

# Universal test bench for industrial applications

**BREMSKERL's all NEW Industrial test bench is changing the way in which we achieve cutting edge material developments. The flexibility of this new test system, allows for faster alignment between customer application and our most appropriate brake and clutch materials. This optimisation alone, is already allowing our customers to significantly benefit from reduced R&D costs and improved speed to market.**

**T**raditionally our customers have been required to carry out more time-consuming „in-house“ testing, to eventually prove the singular and best material for their own applications. Whilst this method has always proven to be succesful, our engineers and technicians at Bremskerl are continually looking for a better way. This approach, and mindset has resulted in the development of our industrial test bench, which is now available for our customers` benefit.

In essence the new test bench will allow for two primary types of friction material testing;

- **Complete lining testing** – Our focus in this instance is to recreate the conditions that will be typically seen by our customers application whilst „in-service“.
- **Partial lining testing** – The aim of this test method is much more simplified, and this approach allows us to quickly calculate the key performance features. Using varied pressures and speeds, we can quickly determin achievable friction levels with a given material.

In addition to a variety of combinable testing parameters, further specific benefits include our ability to manipulate mating parts for more specific test purposes. For example, heating of mating surfaces i.e discs, is one option where temperatures of up 350°C can be achieved.

We are also aware that in the brake lining development cycle, various environmental influences must be recreatable. With this in mind, we can test in a wide variety of climatic conditions using our specifically developed climatic chamber. The spectrum of combinable testing parameters encompasses static and dynamic testing, with friction speeds of 0.001 to 80 m/s and surface pressures of 0.1 to 10 N/mm<sup>2</sup>.

Whilst this latest development is an addition to our portfolio and a significant leap forward for global Industrial friction and brake application design, it doesn't end here. Bremskerl are passionate and committed in our quest to maintain our position at the forefront of industrial friction development. This is only one of many key investments we are making, which further demonstrates our focus for the future.

**BREMSKERL**  
*simply safe*

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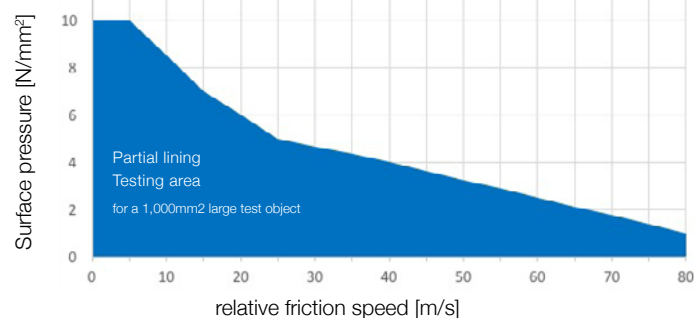
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## Entire lining testing

Load torque	100 to 1,000 Nm
Test speed	0 to 6,000 rpm
Power supply Customer unit	0 to 300 V DC
Flywheel masses (incl. electr. simulation)	0.208 to 32 kgm <sup>3</sup>
Flange temperature during testing	max. 200 °C

## Partial lining testing

Operating principle	Disc brake
Contact pressure	100 to 10,000 N
adjustable temperature of the brake disc	≤ 350°C
rel. friction speed	0 to 80 m/s



## Climate simulation

Testing room temperature	-70°C to +180°C
Rel. humidity at 10°C to 95°C	10% to 98%

**BREMSKERL**

Der Spezialist für Brems- und Kupplungsbeläge  
The specialist for brake and clutch linings

