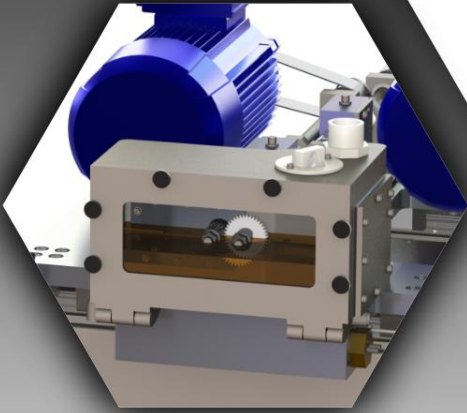




RDMOTION

MTP-5 testing system



RD Motion's MTP-5 multifunctional test system enables the transfer of operating conditions from a real engineering application to a precisely controlled laboratory environment.

Available testing modes

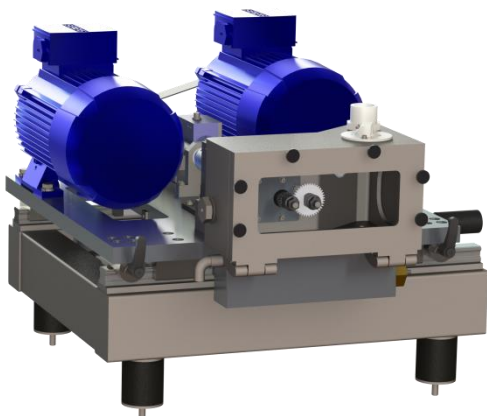
- Spur gear tests (VDI 2736 compatible)
- Twin-disc tribotests

Acquisition of all relevant material properties in one place

- Plastic gear S-N curve identification
- Temperature-dependent wear characterization
- Temperature-dependent root/contact fatigue strength of plastic gears
- Coefficient of friction measurements
- Tests in dry running, grease or oil lubricated conditions

Modular built and adjustable to customer needs

- Simple and straightforward handling
- IoT based remote control and live on-line monitoring.



Parameter

Range

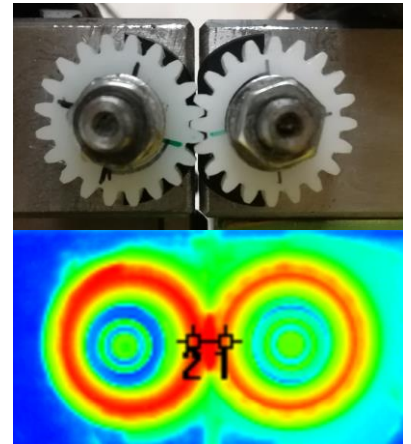
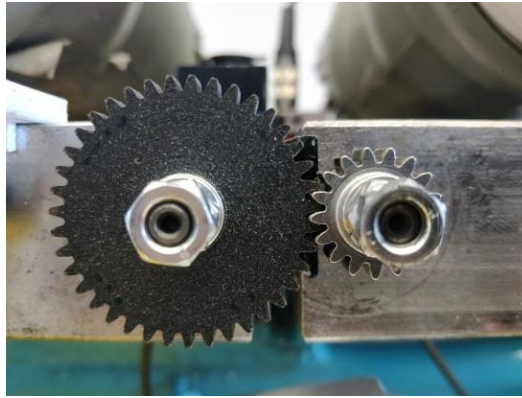
Continuously adjustable torque	0-5 Nm
Sample temperature control	20-120 °C
Rotational speed	0-2800 rpm
Center distance variation	28-70 mm



For every problem, we have a solution

- Active control of the transmitted torque
- Precise and adjustable sample temperature control
- Active control of the rotational speed
- NVH behavior analysis
- Gear-pair or sliding-bearing efficiency testing

Test parameters - graphic



The device enables to determine all the mechanical properties of polymer materials which are necessary for the precise design of drive components, such as gears and sliding bearings. These are usually the most heavily loaded machine elements and are the predominant cause of failure of a polymer gear drive.

dr. Borut Černe, Mechanical Engineer & Polymer Gears Expert, University of Ljubljana

- VDI 2736-4 gear size 1 and size 2 compatible
- Patented solution for testing in different lubrication regimes
- Patented solution for measuring the coefficient of friction

Companies we already helped



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RD Motion offers innovative solutions in the field of mechanical testing. We are specialized in polymer power transmissions, polymer testing and analysis. Our team consists of highly skilled experts from the fields of mechanical engineering, mechatronics and software engineering, with more than 15 years of experience. For more information visit us at www.rdmotion.com.

RD Motion's testing system is an innovative testing device developed for top-notch experts in the fields of power transmissions, polymers and tribology. The device enables acquisition of all relevant material properties in one place while being modular built and customizable to customer needs. The testing device is accompanied with IoT based software for test control and data acquisition which enables live on-line monitoring of the test performance.

