

COBOT
DYNAMICS

COBOT Dynamics

DEVELOPMENT OF PURELY MAGNETIC BASED DRIVING UNITS WITH OUTSTANDING SAFETY, ROBUSTNESS AND SENSITIVITY PERFORMANCE

Purely magnetic geared driving units offer completely new designs when used as part of industrial or consumer products. The unique combination of features of this gear box promises to outperform traditional driving units in human safety, high sensitivity or rugged applications.

The newest technology of a magnetic gear stage will be developed and realized in a prototype. During the incubation period, the magnetic design will be validated. An industrial-like gear box prototype will be built and tested extensively. For high-speed applications, sources of vibration are examined and rendered harmless by means of dynamic balancing. The magnetic wobbling gear stage itself will be used as a very sensitive torque sensor element. To further demonstrate the new innovation and industrial potential, a magnetic geared driving unit will be built as part of a simple model.

USP
Gear box designed for safe human interactions, highly sensitive, extremely robust, lubrication & backlash free

Target market
Robotic market, collaborative robots, safety applications, sensitive driving units, automotive, space

Space Connection
ESA - ITI B16986 - Magnetically Geared Driving Units for Pointing Applications in Space





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