

Name	Laboratorio Trasmissioni ruote dentate (Transmission Gear Laboratory)
Acronym	TGL
Responsible	E. Rocca
Group	E. Rocca; R. Brancati; S. Savino; S. Pagano
Location	p.no terra - Edificio 4, via Claudio
Links	
s/w	LabVIEW (N.I.)
h/w	Optical encoders for measuring the angular motion of gear wheels; Instrumentation for various gear lubrication techniques.
Aims	
<p>The aim of the laboratory is to conduct experimental analyses on vibration phenomena for various types of gears. Currently there is a test rig by which it is possible to test gears in conditions of unloaded gear, which allow to investigate the phenomenon of gear rattle by reproducing different operating conditions. It is also possible to carry out experimental measurements of the gear transmission error, in static conditions.</p> <p>The test rig is equipped to conduct lubrication tests on gear wheels using lubricating oils of different gradations. There is also the possibility of carrying out acoustic measurements about the noise produced by the gears, and to analyse in detail the gear teeth relative motion by using optical instrumentations such as high-speed video cameras.</p>	