

COMPLETE RANGE FOR INDUSTRIAL ENGINES AND POWERTRAIN TESTING APPLICATIONS

Ready-to-use system

Reduced engineering costs

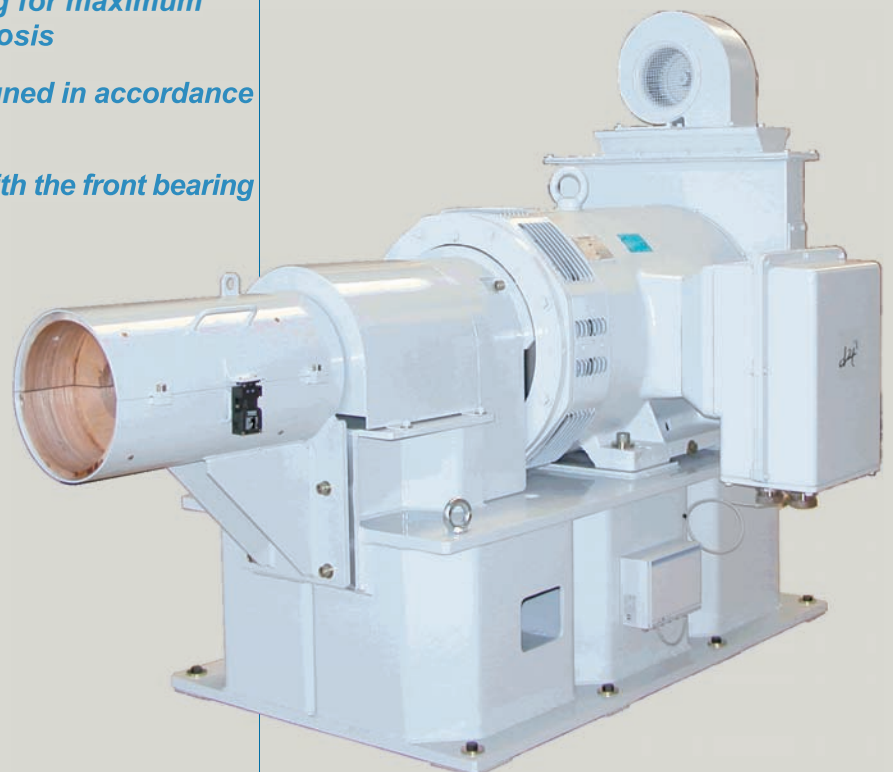
**Torque calibration system
complies with national standards**

**Torquemeter assembly integrated
on the frame**

**Complete rotational analysis of
the engine driveline**

D2T has developed a complete range of high torque AC dynamometers for dynamic applications

- ✓ From 1,300 to 3,200 N·m
- ✓ Dynamic and road load simulation tests
- ✓ 4 quadrants
- ✓ IGBT drive and integrated management by DTC (ABB)
- ✓ Integrated monitoring for maximum safety and fast diagnosis
- ✓ Coupling flange designed in accordance with DIN standards
- ✓ Supply of the frame with the front bearing



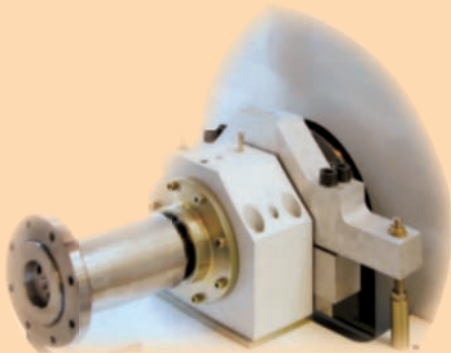
OVERVIEW

The MDC range is ideal for industrial and heavy-duty engine test beds, to carry out steady-state tests (durability/performance) as well as all dynamic applications (emission regulations tests and road load simulation).

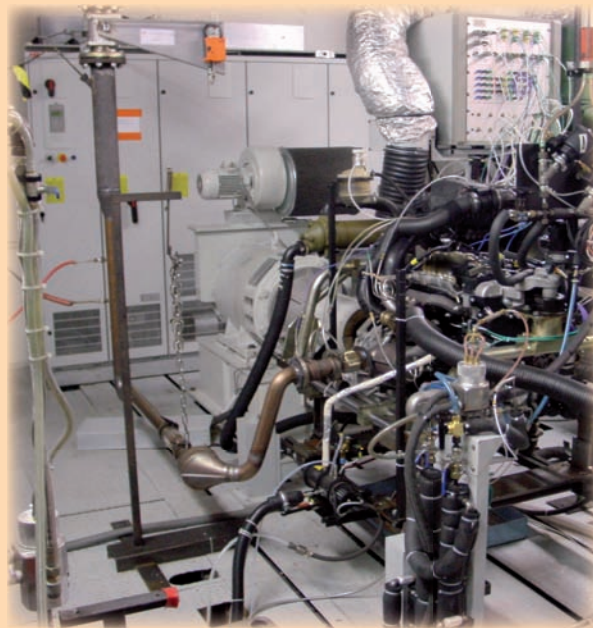
A standard range limited to 3,200 rpm for torque values from 1,300 to 3,200 N·m (630 kW maximum power), are available for 400, 480 and 660 V power supply.

A special HV range is designed for rotation speeds upto 6,000 rpm.

A front bearing is mounted between the torquemeter and the engine drive line to take into account high constraints of heavy-duty applications (high torque). This bearing can support high load capacities on the front coupling flange and can guarantee the dynamometer serviceability.



FLANGE COUPLING



A complete solution for heavy-duty engine test bed requirements.

STANDARD SUPPLY AND OPTIONS

STANDARD

- Welded steel frame to support the AC motor, the torquemeter and the front bearing
- AC motor with terminal box and cooling fan (including a filter)
- Torquemeter with the conditioning and filtering unit for speed and torque measurements
- Winding temperature safety with PTC thermal switch
- DSM module for safety management
- Front coupling flange in accordance with DIN standard
- Power cabinet with the IGBT drive inverter / converter and the Profibus link
- Complete set of control and measurement cables (13 meter length)

OPTIONAL

- Complete torque calibration system
- Set of weights for torque calibration
- Temperature safety of the dynamometer bearing
- Vibration safety of the bearings
- Standard drive shaft guard
- Power cables (EMC compliant)
- Air/water cooling exchanger in closed loop