

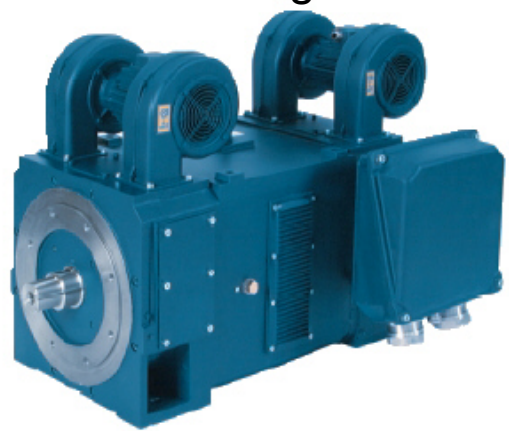


HERCULES Task 3.2: “Intelligent Turbocharger”, Status at March 2006



Kemmerich Elektromotoren, Subtask 3.2.1:

- An asynchronous electric Power Take Out/Power Take In unit yielding 380 kW has been successfully commissioned on a test rig.
- Operation at 20000 RPM verified
- Ceramic bearings tested under high-speed operating conditions



High speed motor & frequency converter & feedback unit



MAN B&W A/S, Subtasks 3.2.1-3.2.4:

- 2-stroke applications involving PTO/PTI & Variable Turbine flow Areas in preparation
- Process optimisations



MAN B&W Diesel

HERCULES Task 3.2: “Intelligent Turbocharger”, Status at March 2006



PBS Turbo s.r.o., Subtasks 3.2.2-3.2.3:

- Development of active & passive compressor controls for increased operation ranges

MAN B&W AG, Subtasks 3.2.1-3.2.4:

- Provision of Variable Turbine flow Areas, 1300 h of successful operation achieved
- 4-stroke applications, VTA-controlled two-stage turbocharging under assembly for preliminary investigations at a burner test rig

