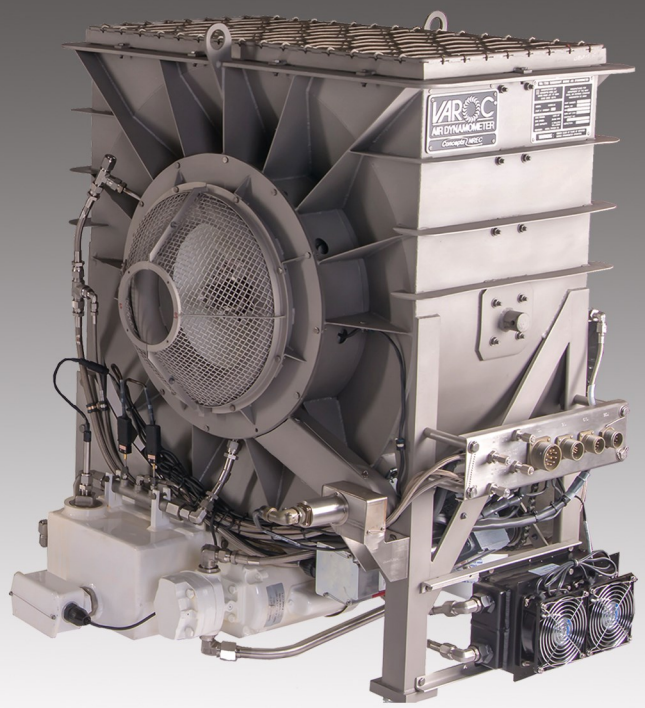
Concepts NREC®

EXPERTS IN TURBOMACHINERY

VAROC® Air Dynamometers

For reliable, low-maintenance load testing of gas turbine engines



Decades of Proven Experience

For over 35 years, VAROC dynamometers have been used worldwide in military and civilian applications to test a broad range of gas turbine engines.

By using **ambient air** as the working fluid, VAROC dynamometers offer **enhanced ease-of-use, reliability, and control** relative to other load-testing devices.

Stable and Precise Load Control

VAROC air dynamometers exhibit **no cavitation or uneven fluid heating**, allowing stable load to be held indefinitely. Additionally, variable shrouds allow **min-to-max load transitions within one second**.

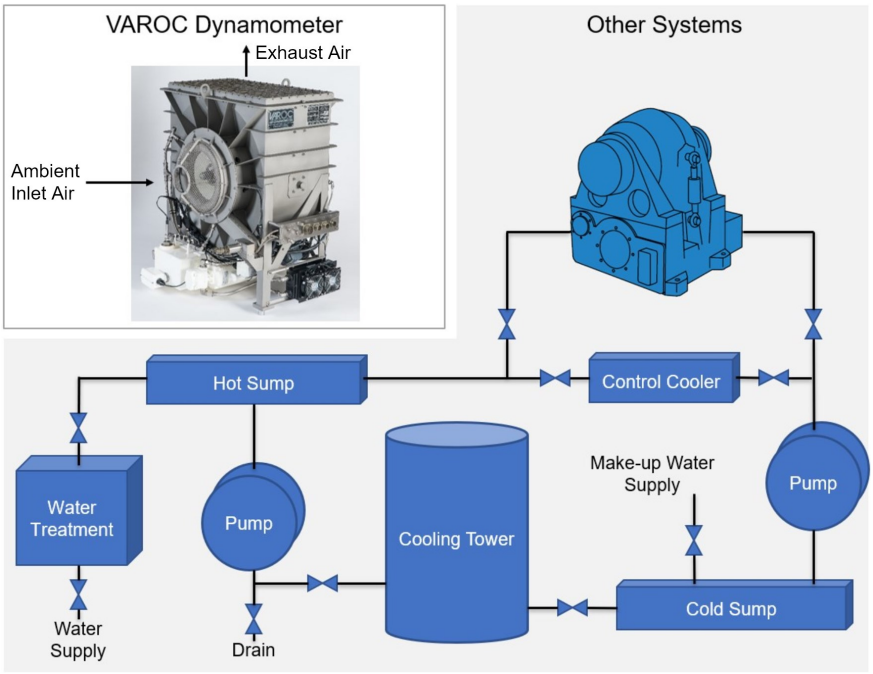
When combined with Concepts NREC-offered phase shift torque measurement systems, engine load can be tested to **accuracy levels of 0.1% full load**.

Operation in Any Environment

In addition to **stationary test cell** application, the VAROC design allows for **mobile deployment** between multiple test sites, with allowable ambient temperatures ranging from -40°C to 40°C.

Straightforward Installation and Maintenance

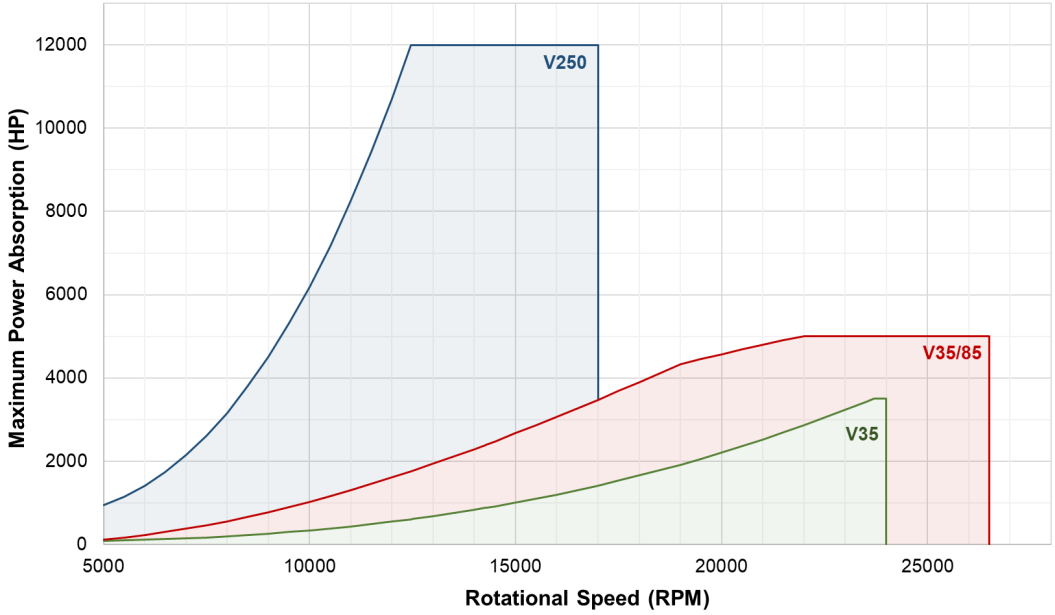
Unlike water-based systems, VAROC dynamometers require **almost no supporting infrastructure**. VAROC rotors are inertia-matched, which typically renders **independent flywheels unnecessary**.



Wide-Range Operation

Three standard models are available, with each unit handling a wide range of operating conditions. Typically, **one VAROC can be used for multiple engine models** at a single testing facility.

For applications which may not fit a standard VAROC model, **custom designs are also available**.



Worldwide Support

VAROC air dynamometers are proudly **manufactured in the USA**, supported by Concepts NREC worldwide.

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