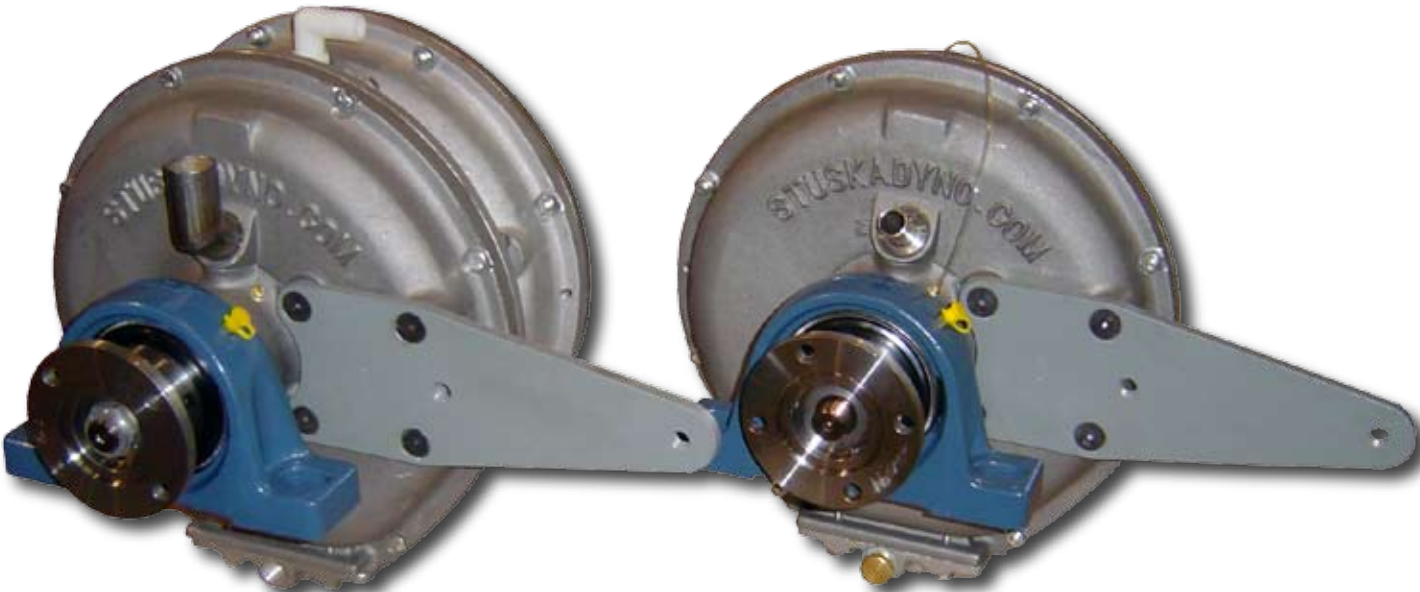


# Stuska Water Brakes



DYNAMOMETERS

A DIVISION OF POWER TEST INCORPORATED

# Stuska Water Brakes

Since 1963, Stuska Dynamometers has been manufacturing superior quality, long-lasting dynamometers and accessories. The fact that thousands of these dynamometers have been sold and many systems are still in operation after more than 40 years is proof of their reliability. Stuska has become synonymous with affordable, durable, reliable high-performance dynamometers.

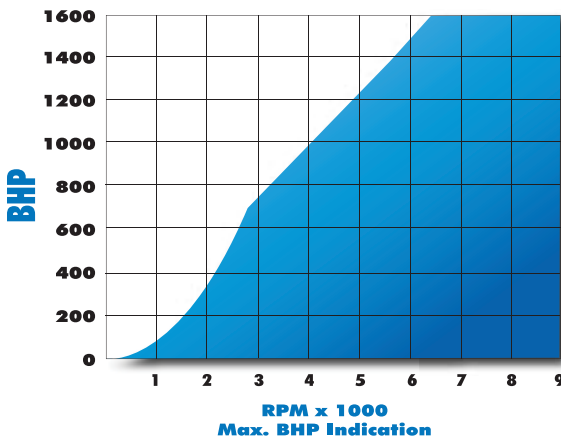
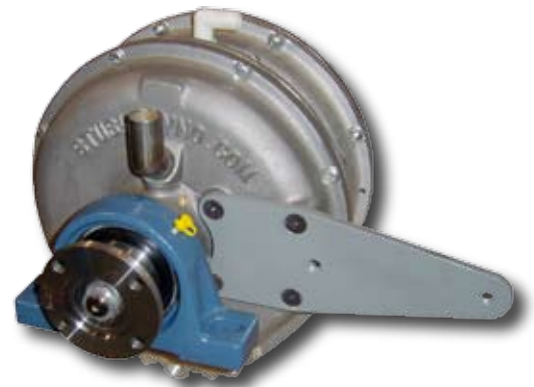
All Stuska water brakes have equal load capability in either direction of rotation and use water flow to create a controllable resistance to the engine. Stuska water brakes can easily perform continuous, steady load tests by adjusting the water flow through the dynamometer to match the desired load. Stuska offers the XS-211, XS-111, and XS-19 water brakes designed to handle most testing applications up to 1600 HP.



## XS-211

Recommended for high output gasoline and diesel engines, the XS-211 is rated at 1600HP and speeds up to 9000 RPM. The dual rotor absorption brake design offers unparalleled torque capacity at low rpms.

The XS-211 water brake is built with precision machined components, durable aluminum alloy castings, and a high strength, stainless steel shaft. A balanced rotor assembly, double row ball bearing assemblies on the input shaft, and carbon face seals allow for high-speed operation.



### Specifications:

- Two low-inertia aluminum alloy rotors
- Durable aluminum alloy cast body
- High-strength stainless steel input shaft with 1.25" diameter SAE taper input flange
- Available torque arm lengths: 6.302" and 12.604"
- Can be used in both horizontal and vertical configurations

### A Complete Testing Solution

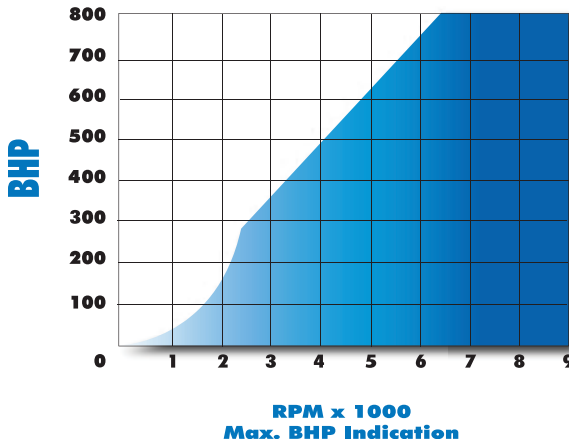
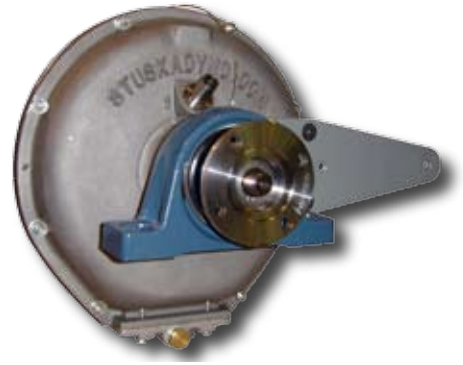
No matter what your needs are, Stuska Dynamometers can supply you with the right equipment to match your testing requirements, ranging from an individual water brake to a complete package including a test stand, data acquisition, automated load control, and a wide range of accessories. Contact your Stuska sales representative for more details.

For the budget-minded, a basic Stuska dynamometer system may include the absorption brake, trunnion bearings, load control valve, tubing, fittings, tachometer, cable and drive, drive shaft flange (except with the XS-19), and a complete hydraulic torque measuring system with gauge having full scale reading to match brake capacity or engine output. Installation dimensions and operating instructions are also included.

## XS-111

The single rotor version of the XS-211, the XS-111 is rated at 800HP and speeds up to 9000 RPM.

The single rotor XS-111 features the same durable construction as the XS-211, including durable aluminum alloy castings, and a high strength, stainless steel shaft. A balanced rotor assembly, double row ball bearing assemblies on the input shaft, and carbon face seals allow for high-speed operation.

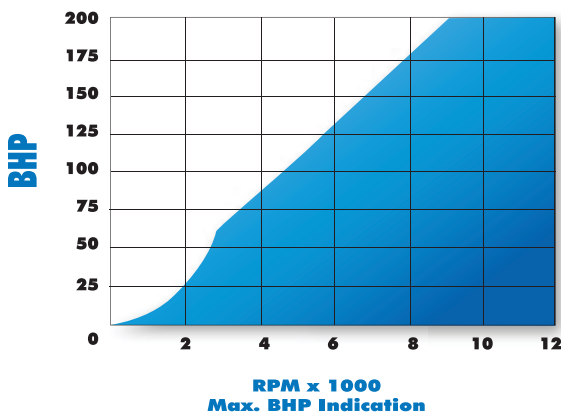


### Specifications:

- Low-inertia aluminum alloy rotor
- Durable aluminum alloy cast body
- High-strength stainless steel input shaft with 1.25" diameter SAE taper input flange
- Available torque arm lengths: 6.302" and 12.604"
- Can be used in both horizontal and vertical configurations

## XS-19

Designed especially for smaller sized and high-performance engines such as karts, snowmobiles, motorcycles, etc., the XS-19 water brake is recommended for performance testing smaller engines up to 200HP at speeds up to 12,000 RPM.



### Specifications:

- Low-inertia aluminum alloy rotor
- Durable aluminum alloy cast body
- High-strength stainless steel .937" diameter straight keyed input shaft
- Available torque arm lengths: 3.151" and 6.302"
- Compact size allows for a variety of applications
- Can be used in both horizontal and vertical configurations



A DIVISION OF POWER TEST INCORPORATED

# Stuska Test Stands and Accessories

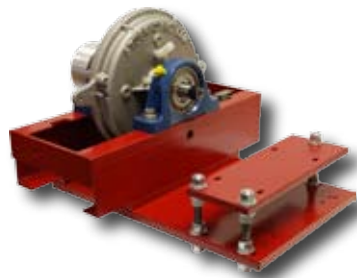
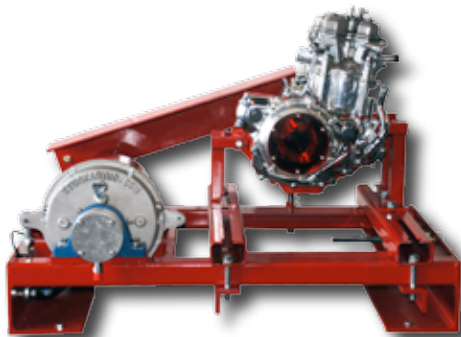
## **Universal Engine Dynamometer Test Stand**

Stuska's universal test stand provides a durable, convenient test stand at an affordable price. Available with an XS-111 or XS-211 water brake, the Universal Test Stand can be supplied with numerous accessories to fit almost any application. Includes all installed dynamometer components and a welded engine frame with insulator leveling pads.



## **Small Engine Test Stands**

Available in both bench top and floor standing configurations and equipped with a Model XS-19 absorption brake, Stuska small engine test stands can be custom built for testing vertical and horizontal shaft engines. This includes, but is not limited to: karts, snowmobiles, personal water craft, garden pulling tractors, motorcycles, etc. All Stuska small engine test stands can be equipped with our DPM data acquisition package.



## **Accessories and Additional Equipment**

Electronic data acquisition systems, automatic load control systems, engine coolant tanks and stand, and a wide variety of engine mounts and adaptor plates result in a seemingly endless variety of testing applications.

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### **Stuska Dynamometers - A division of Power Test, Inc.**

- Power Test, Inc. has extensive years of experience developing and manufacturing dynamometers and data acquisition and controls. We have used this experience to develop our PowerPro data acquisition system and to further develop the TrackMaster LC dynamometer system with Automatic Load Control.
- Our staff of courteous customer service technicians are here to meet your individual business needs and make your dynamometer and data acquisition experience a positive one.
- Power Test and Stuska are committed to our customer's needs by providing on-site training at your facility.
- Power Test, Inc. has been manufacturing heavy duty dynamometers since 1976. Power Test provides a full range of engine dynamometers and single, tandem, and multi-axle chassis dynamometers. Please visit [www.pwrtst.com](http://www.pwrtst.com) for more information about the full line of dynamometers, data acquisition, and dynamometer controls.

## **STUSKA DYNAMOMETERS**

N60 W22700 SILVER SPRING DRIVE SUSSEX, WI 53089 USA

phone: (262)252-4091 fax: (262)246-0436

[www.stuskadyo.com](http://www.stuskadyo.com)