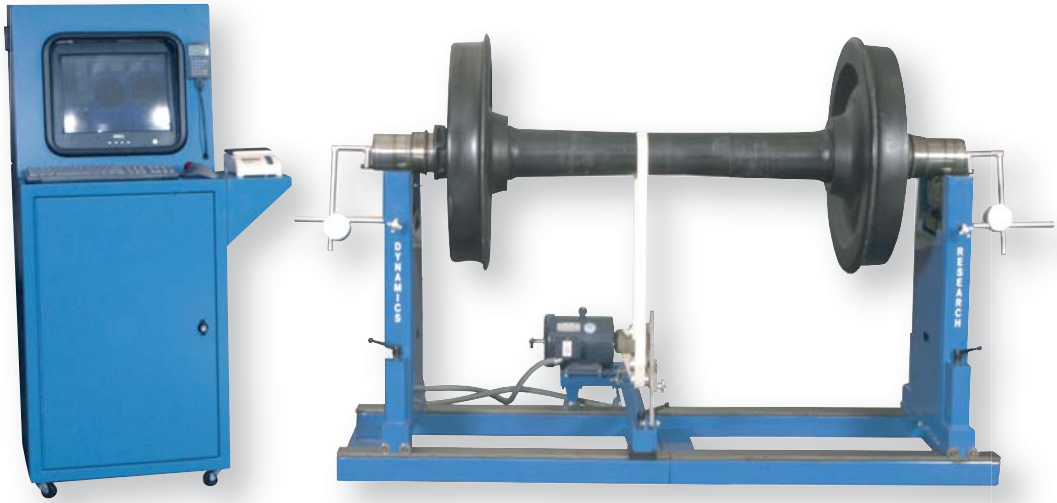
DYNAMICS RESEARCH CORP.

605E

5000 LB. DYNAMIC BALANCING MACHINE

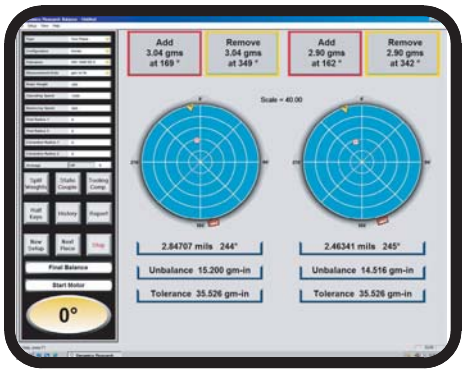
EVEN MORE THAN A BALANCER

In addition to precision balancing, you can use this equipment to improve record-keeping, estimate jobs, and store engineering and design programs right in the shop for greatest convenience and ease of use. With the state-of-the-art computer, you can use the system to serve many areas of your business.



Machine Features

- Using a reference mark on the shaft and an encoder on the motor, the angular position of the work piece is displayed on the monitor in degrees. This angle locates the position on the work piece for precise correction.
- End thrust is limited with an easily adjustable anti-friction end stop which moves with the work piece thereby not restricting motion generated by unbalance.
- The amount of unbalance is displayed digitally on a monitor along with a graphic display of the angle of correction. Unbalance is shown in oz-in, gm -in, gmm-mm, mils displacement, or in/sec velocity to name a few.
- The Dynamics Research Balancing Machine uses a computer and an analog to digital conversion system to gather data and perform the mathematical equations necessary to determine the amount of unbalance in one or two pre-selected planes using the influence coefficient method of balancing. This method provides precise correction indications with minimal cross effect.



- The latest Windows-based balancing program features a user-friendly report, menu driven operations and a full-page printout, driven by a 24 bit digital signal processor, using USB technology.
- Background vibration is eliminated by a digital tracking filter that is automatically tuned to rotational speed by the fiber optic phase indicator. All data is collected automatically without operator input.
- For setup and callibration, the use of trial weights establishes the true effect of a known unbalance at a specific correction plane on the work piece. Thus the machine is calibrated each time you use it.

CALL 1-866-459-5700 • (330) 523-5210 • FAX (330) 523-5212
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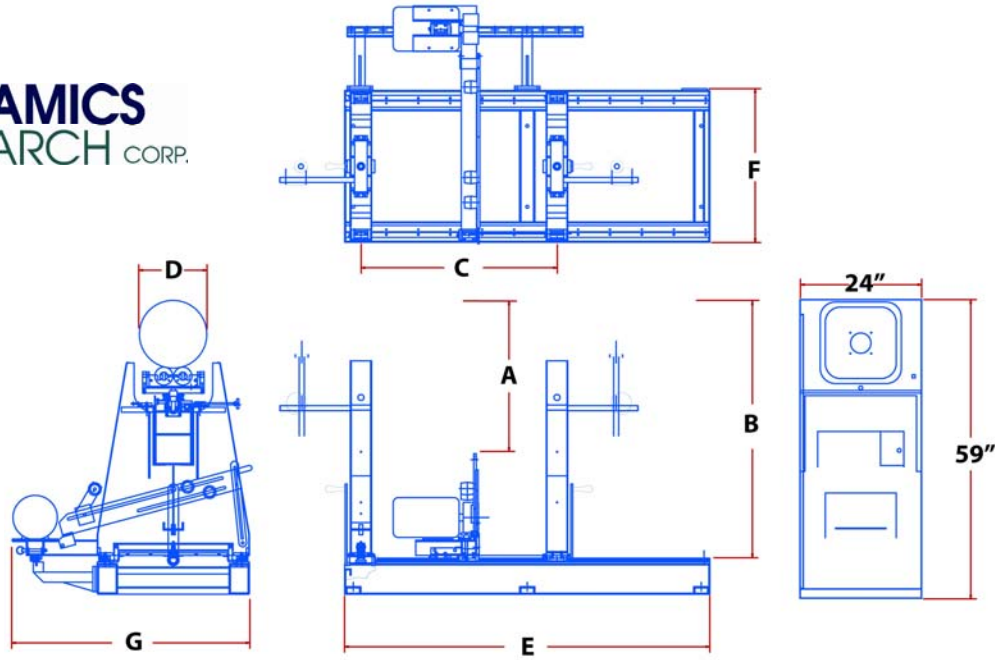

Rotor Dimensions

(A) Maximum diameter over drive	63 inches (1600 mm)
(B) Maximum diameter over bed	63 inches (1600 mm)
(C) Maximum distance between support bearings centerlines	68 inches (1727 mm) using one bed unlimited splitting beds
Minimum distance between support bearings centerlines	Outboard: 4 inches (102 mm) Inboard: 9 inches (229 mm) 1” (25.4 mm) with optional fixture
(D) Journal diameters on standard bearing set	1/8 to 17 in. (3.2 to 431 mm)

Machine Base

(E) Base length	2-48 inch beds (1219 mm)
(F) Base Width	32 inches (813 mm)
(G) Width (Including drive)	50 inches (1270 mm)

Rotor Mass and Unbalance Limitation

Maximum Weight	5,000 lbs. (2268 Kg)
Minimum Weight	1 lb. (.454 g)
Maximum Weight per Support	3,500 lbs. (1589 Kg)
Maximum Overload per Support	3,750 lbs. (1702 Kg)
Maximum indicated sensitivity per Plane (instrument readout capability)	.0001 ounce-inch .03 gram-inch
Maximum Achievable Residual Unbalance	.004 ounce-inch total .002 ounce-inch/plane under ideal rotor conditions but not to exceed .000005 inches mass center displacement
Maximum Unbalance reduction per Run	95%
Shipping Weight	1,700 lbs. (773 Kg) (pallet) 2,100 lbs. (995 Kg) (crate)

Motor & Control

Variable Frequency AC Drive with programmable acceleration/deceleration patterns

DC Injection breaking	0.1 to 240 Hz Output
Rated horsepower	5 hp at 1800 RPM (2.2 Kw)
Speed Range	10 to 4000 RPM
Power Required	200 to 230 Volt, 3 phase 60 Hz or 380 to 460 Volt, 3 phase 50/60 Hz Optional
Recommended Balancing Speed	150-4000 RPM