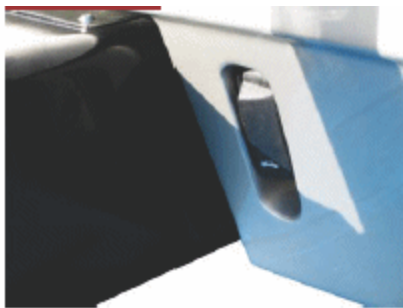


## RS-10K

### RS-10K Features:



- Square tube drawbar - reduced risk of drawbar damage
- Height adjustable - hitch allowing for perfect dyno setup
- Wireless control system - with additional wire link if required
- Energy source, AC Generator - no minimum speed
- Heavy Duty absorber - high efficiency, latest design
- Independent suspension - with air ride for superior ride quality
- Hydraulic brakes - master cylinder in the chassis
- Parking brake lever on tongue - BPW Germany
- Emergency brake system - runaway safety
- Airbags on top of axle - rod end load reduced
- Auto level system with compressor - maximizes control and axle life
- Innovative hood system - easy access and one hand lifting
- Heavy Duty nose wheel - ease of moving around in workshop
- Tie Down hooks on chassis - for transport use
- Generator driven or by wall outlet - for inside use during calibration, etc.



### Specifications:

Length 4000 mm (157.5 in)  
Width 2000 mm (78.75 in)  
Height 1000 mm (39 in)  
Weight, dry 1400 kg (3086 lb)

Max Weight with ballast 1600 kg (3526 lb)  
Load Cell 10000 N (2248 lb)  
Max Speed 130 kph (80 mph)



EXPERIENCE THAT MEASURES UP

## RS40-50K Towing Dynamometers



There are many important features of the RS-40K and RS-50K towing dynamometers. This series of towing dynamometers is designed for continuous duty testing and are extra heavy duty. The difference between the RS-40K and RS-50K is capacity and generator size. The RS-50K has four absorbers whereas the RS-40K has three absorbers and a smaller generator set. All other features are the same. The RS-40K and 50K's unique features are as follows:

1. Tandem axle for increased traction and stability.
2. Stable tongue weight. Critical when towing with busses and light vehicles.
3. Air suspension. This is an important feature as it maintains constant hitch height and load preventing excessive hitch load. It also helps maximize traction on rough or uneven surfaces.
4. Self contained inertia air braking system. This is important for testing vehicles that are not equipped with air brakes.
5. Multiple absorbers for long life. 3 for RS-40K and 4 for RS-50K. The towing dynamometers are not designed to the maximum capability of the absorbers. Experience has shown that when absorbers are used at their capacity limit the rotors warp and there is premature bearing failures.
6. Heavy duty diesel generator for power and control. This is superior to batteries and charging systems. It allows for continuous testing at very low speeds without draining batteries.
7. Adjustable hitch height.
8. Spring and shock dampened drawbar assembly for low hysteresis. This means very stable load readings.
9. Extra heavy duty linear bearing drawbar support for maximum drawbar pull accuracy.
10. Water ballast tank for ease of ballast adjustment.
11. Wireless, touch screen, control between test vehicle and towing dynamometer. This eliminates control cables and connectors. These cables are usually damaged from frequent use.
12. Closed loop control of speed or drawbar pull. Closed loop control of speed for competitors is no problem but most of them have had problems in closed loop control on drawbar pull. Because of the unique hitch design, these towing dynos do not have these problems.
13. Programmable hill simulation.
14. Heads Up drivers aid. When operating in a hill simulation program it is necessary for the operator to adjust the throttle to match the requirements of the program. The display gives a visual reference for the operator to follow.
15. No transmission or transfer case to change speeds for high and low range. This means that the RS-40K can meet all of the requirements from 6 mph (10 kph) to 62 mph (100 kph) without having to stop and change gears.

### Specifications:

Length: 270" (6,858 mm)	Weight, Dry: 14,900 lb (6,760 kg)	Overload Protection +/- 500 lb: 9,000 lb (40,000 N)
Width: 96" (2,438 mm)	Weight, With Ballast: 21,200 lb (9,619 kg)	Max Drawbar Pull @ 6 mph (10 kph): 9,000 lb (40,000 N)
Height: 72" (1,829 mm)	Load Cell: 11,240 lb (50,000 N)	Max Drawbar Pull: 11,240 lb (50,000 N)
		Max Speed: 68 mph (110 kph)



**Taylor**  
**Dynamometer**  
EXPERIENCE THAT MEASURES UP

## RS-90K



The RS-90K is designed to maintain constant drawbar pull or constant speed within the parameters set forth in the specifications and the performance curve charts.

The RS-90K is controlled from the test vehicle cab via the Hand Held Control Unit. Drawbar pull is accurately measured by means of a 5th wheel assembly that is held in place by a friction free linear bearing assembly and restrained by a 90,000 N load cell. Road speed is measured by means of a magnetic pick up and a toothed wheel that is attached to the RS-90K drive line.

Power is transmitted through a drive shaft to a two speed transfer case with a neutral clutch. Attached to the output shaft of the transfer case are four electric brake retarders. The retarders are controlled by signals from the in-cab instrumentation that is located in the vehicle being tested. Power on the retarders is supplied by a generator set and converted into a DC voltage through the power controllers located in the control cabinet.

The transfer case is controlled from the control panel located at the right front of the RS-90K. The transfer case has two gear selections and a neutral clutch. The transfer case ratios are 1:1 and 2.23:1.

### Specifications:

<b>Length:</b>	990 cm (390 in)	<b>Tires</b>	
<b>Width:</b>	259 cm (102 in)	<b>Size:</b>	11R/24.5
<b>Height:</b>	259 cm (102 in)	<b>Pressure:</b>	105 psi
<b>Weight, Dry:</b>	12,500 kg (27,550 lb)	<b>Max Speed Transfer Case High Gear:</b>	
<b>GVW:</b>	25,000 kg (55,118 lb)		120 kph (75 mph)
<b>Load Cell:</b>	90,000 N (20,133 lb)	<b>Max Speed Transfer Case Low Gear:</b>	
<b>Overload Protection +/- 1,500 N:</b>	45,000 N (10,067 lb)		55 kph (34 mph)
<b>Maximum Drawbar Pull:</b>	90,000 N (20,133 lb)		

