

HD Elite Balancer

The world's #1 heavy-duty diagnostic balancer

**AUTOMATIC WHEEL
MEASUREMENTS!**

**MADE
IN USA**

HUNTER ENGINEERING COMPANY ST. LOUIS, MO



HD Elite Balancer quickly measures runout with every balance

EXCLUSIVE

Unmatched Speed!



- ✓ Measure runout and balance faster than any traditional balancer!

PATENTED

Laser Vision System



- ✓ Eliminate error opportunities
- ✓ More information in less time



Roller contacts wheel surface

OPTIONAL | PATENTED

Diagnostic Load Roller



- ✓ Roller detects high spot of tire and allows matching
- ✓ Measures entire contact patch for accurate results



 Designates features requiring diagnostic load roller.

EXCLUSIVE

Most durable shaft in the industry

**MADE
IN USA**
HUNTER ENGINEERING COMPANY ST. LOUIS, MO

PATENTED

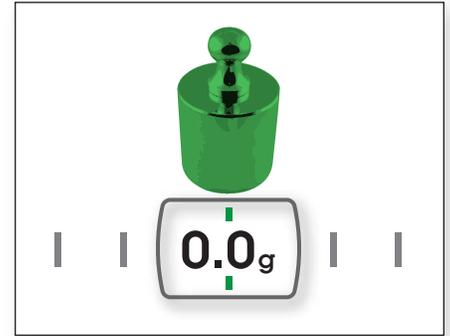
Automatic CenteringCheck®



- ✓ Ensures proper centering
- ✓ Eliminates setup errors

PATENTED

eCal Auto-Calibration



- ✓ True “self-calibration”
- ✓ No operator input required

PATENTED

Enhanced SmartWeight®



- ✓ Even better balance
- ✓ Maximum efficiency
- ✓ More single weight solutions

STANDARD

Touchscreen Interface



- ✓ Intuitive interface
- ✓ Quickly train new technicians

STANDARD

Wheel Lift



- ✓ Easily lifts wheel assemblies up to 500 lbs
- ✓ Aids proper mounting

Balance Any Size Wheel



- ✓ Services cars and light trucks
- ✓ Uses standard adaptors



HD Elite Balancers help eliminate wheel-related vibration and increase tire life

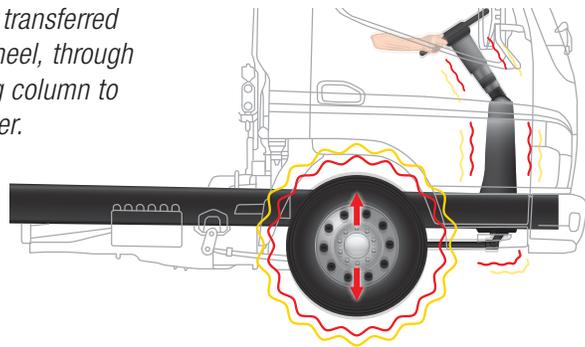


1 An Unknown Force Vibrates the Spindle

Customer complains about strong vehicle vibrations.



Vibration is transferred from the wheel, through the steering column to the customer.

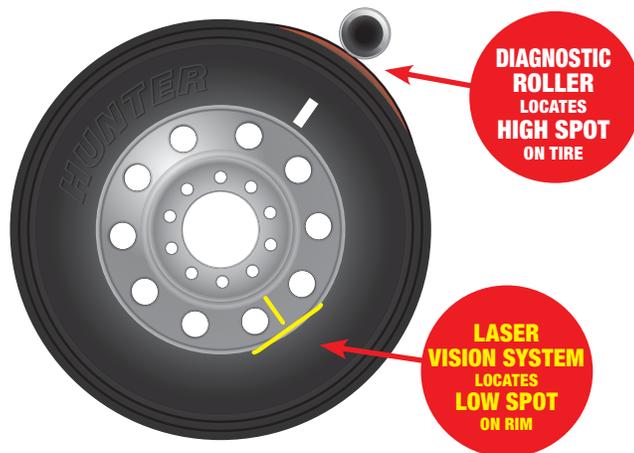


2 Specialized Sensors Measure the Assembly



Roller contacts wheel surface

The HD Elite balancer automatically measures runout (eccentricity) of a tire and wheel assembly.



DIAGNOSTIC ROLLER LOCATES HIGH SPOT ON TIRE

LASER VISION SYSTEM LOCATES LOW SPOT ON RIM

The roller measures the entire contact patch of the tire, detecting if the assembly is out of round.

3 Match-Mounting Cancels the Vibration



Match-mounting the high spot on a tire to the low spot on a rim makes the assembly roll as smoothly as possible.



RUNOUT MINIMIZED

Runout-related vibration is minimized, ensuring your customer a smoother ride and longer tire life.

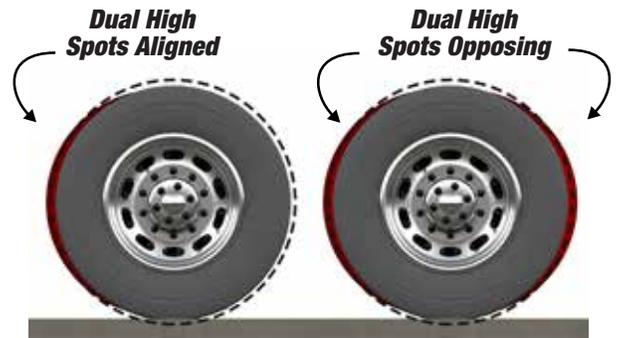
Matching dual assemblies to maximize tire life



Opposing High Spots

Dual tire assemblies with aligned high spots behave like single assemblies with runout. Marking and installing wheels with high spots 180 degrees opposed makes the dual assembly more round than the two assemblies alone.

- ✓ Reduces Vibration
- ✓ Increases Tire Life



Unequal Load on Duals

Mismatched diameters on dual tires causes the larger tire to carry more load, thus generating more heat and reducing tire life. The lesser diameter tire may develop premature tire wear due to slippage relative to the road surface.

- ✓ Increases Tire Life

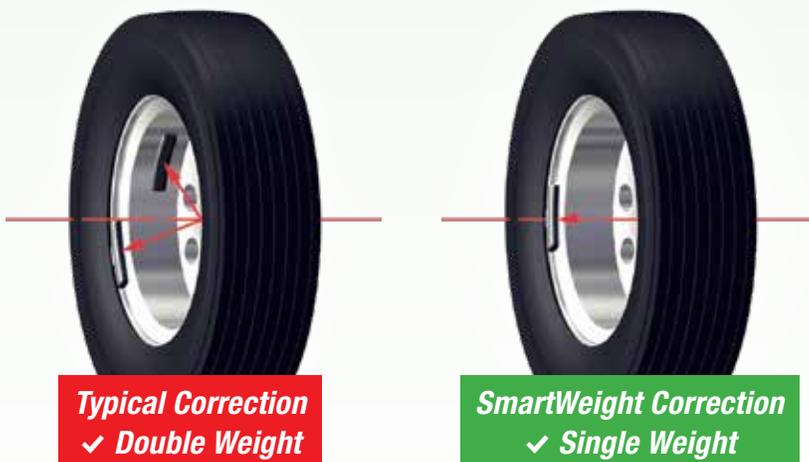


SmartWeight® reduces labor costs and service time

- ✓ Provides better balance
- ✓ Maximizes productivity
- ✓ Minimizes weight usage
- ✓ Reduces labor costs

Saves Labor Time

SmartWeight® reduces “floor-to-floor” cycle time on more than 30% of wheels balanced by optimized use of a single weight to achieve the best possible balance.



View your savings LIVE!

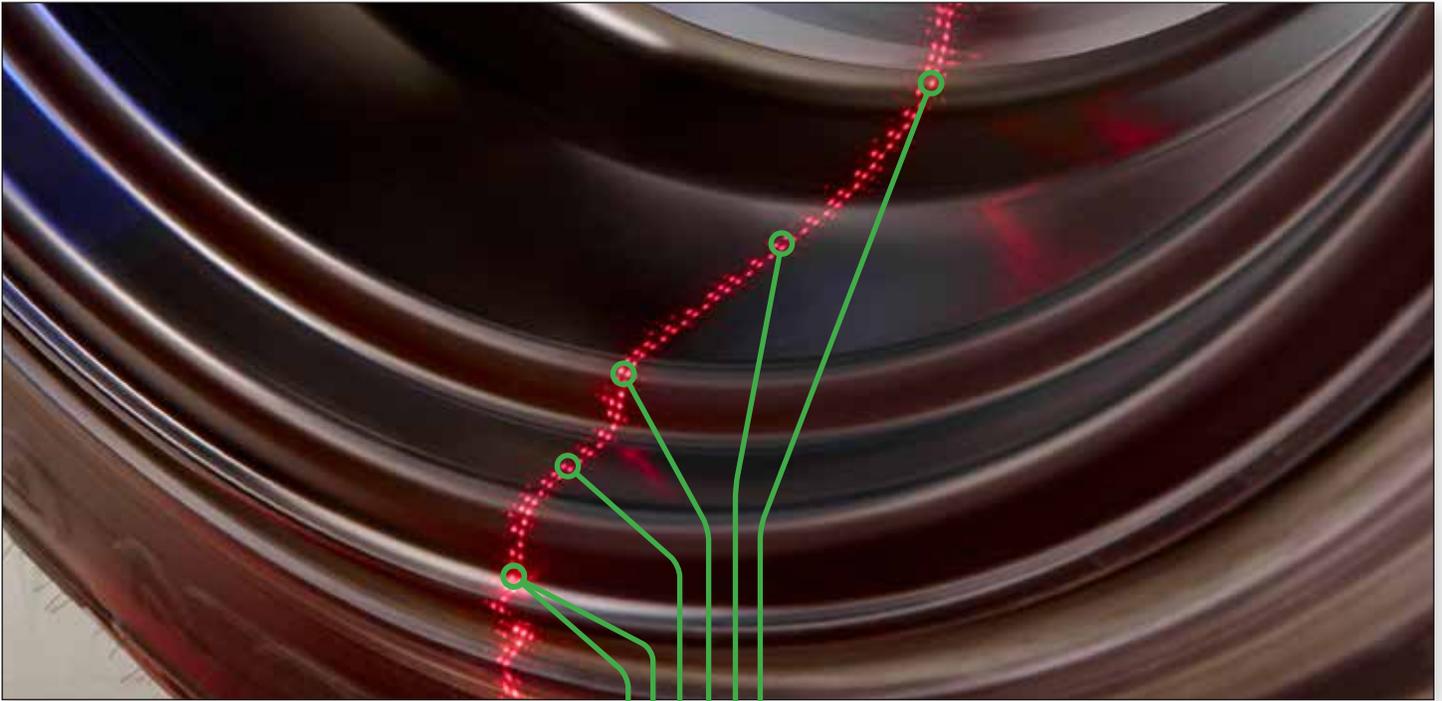


Watch your investment grow



- ✓ See weight and labor savings based on **your** shop's numbers

HD Elite vision technology unlocks more benefits in less time!



Wheel dimensions

AUTOMATIC

Automatically determines weight plane locations



Weight mode

AUTOMATIC

Selects clip or tape weight usage, if desired



Rim runout

AUTOMATIC

Calculates force-match solution



Spoke location

AUTOMATIC

Automatically hides tape weights behind spokes



SmartWeight® optimized

AUTOMATIC

Allows more single weight solutions



Rim profiled

AUTOMATIC

Creates three-dimensional model of the rim



Reduce operator error

- ✓ Automatically measures wheel dimensions
- ✓ Automatically selects weight mode
- ✓ Automatically measures rim runout

Optional Equipment

Configurations Without Diagnostic Load Roller

- ✓ Maintains all superior balancing features
- ✓ Eliminates diagnostic roller benefits
- ✓ Reduces overall package price



HDE11 shown

Popular Equipment Accessories



PATENTED

HammerHead® Top-Dead-Center Laser

- ✓ Greater weight placement accuracy to avoid mistakes
- ✓ More single-spin balances improve productivity and shop profitability
- ✓ Overhead LED light illuminates work area



Color Printer*

- ✓ Help sell premium service
- ✓ Explain results to customer



* Printer model may vary from pictured

 Available as a field-installed option.

STANDARD

Convenient Storage Options

Adaptor tree conveniently stores oversized balancer accessories.



Specifications*



HDE33 shown

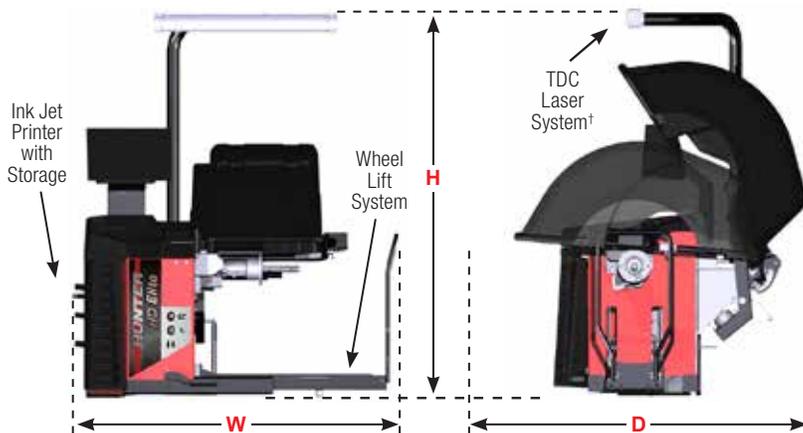
Power requirements	196-253V, 10 amp, 50/60 Hz, 1 ph NEMA L6-20P plug included
Air supply requirements	100-175 psi (7-12 bar)
Capacity	
Rim width	1.5 in to 19.5 in (38 mm to 495 mm)
Rim diameter	10 in to 30 in (254 mm to 762 mm)*
ALU	7.5 in to 38 in (191 mm to 965 mm)*
Max. tire diameter	52 in (1321 mm)
Max. tire width	19.5 in (495 mm)
Max. tire weight	500 lbs (227 kg)
Min. tire diameter for roller application	26 in (660 mm)
Imbalance resolution	± 0.05 oz (1.0 g)
Placement accuracy	512 positions, ± 0.35°
Balancing speed	100 rpm
Motor	Programmable drive system and DC motor

* Extreme wheel sizes may require manual data entry.

Model Overview



	HDE33	HDE32	HDE11	HDE10
Diagnostic Load Roller	✓	✓		
TDC Laser System	✓	✓		
Ink Jet Print w/Storage	✓		✓	
Width (W)	75.75 in 1924 mm	71 in 1803 mm	75.75 in 1924 mm	71 in 1803 mm
Height (H)	88 in 2223 mm	88 in 2223 mm	80.5 in 2045 mm	80.5 in 2045 mm
Depth (D)	73.5 in 1867 mm	73.5 in 1867 mm	73.5 in 1867 mm	73.5 in 1867 mm
Weight	824 lb 374 kg	804 lb 365 kg	762 lb 346 kg	742 lb 337 kg



Because of continuing technological advancements, specifications, models and options are subject to change without notice. Printer may differ from versions shown throughout brochure images.

The HD Elite Wheel Balancer is a Class 1 laser product.

CLASS 1 LASER PRODUCT
IEC 60825-1 ed. 2 2007 USA
EN/IEC 60825-1 ed. 3 2014 non-USA



Be sure to check out other Hunter literature for more quality products from Hunter Engineering.

† When equipped with the TDC system, the balancer is a Class 2M laser product.

LASER RADIATION - DO NOT STARE INTO THE BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. Viewing the laser output with magnifiers or related optical instruments within a distance of 100 mm from the laser aperture may pose an eye hazard



LASER LIGHT
DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS (MAGNIFIERS)
CLASS 1M LASER PRODUCT
535-670nm $3000\mu W$ CW
CLASSIFIED PER IEC 60825-1, ED 1.2, 2001-08

HUNTER Engineering Company

www.hunter.com