HUNTER Engineering Company

# HD Elite Balancer

## The world's #1 heavy-duty diagnostic balancer

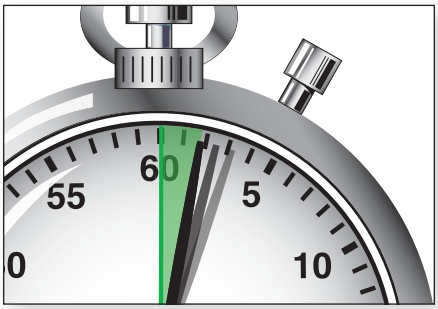
**AUTOMATIC WHEEL MEASUREMENTS!**

MADE IN USA
HUNTER ENGINEERING COMPANY ST. LOUIS, MO

# HD Elite Balancer quickly measures runout with every balance

*EXCLUSIVE*

## Unmatched Speed!




- ✔ Measure runout and balancer faster than any traditional balancer!

*PATENTED*

## Laser Vision System

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


*OPTIONAL | PATENTED*

## Diagnostic Load Roller

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


*EXCLUSIVE*

**Most durable shaft in the industry**

*Designates features requiring diagnostic load roller.*

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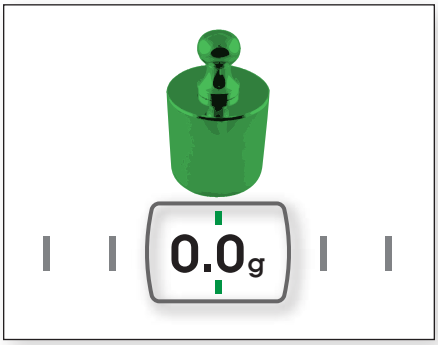
*PATENTED*

## 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

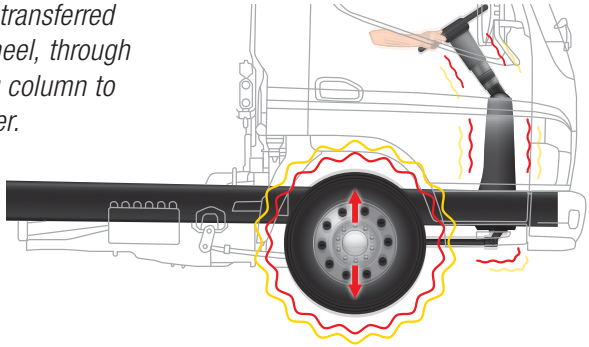
- Services cars and light trucks
- Uses standard adaptors

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

## 1 An Unknown Force Vibrates the Spindle

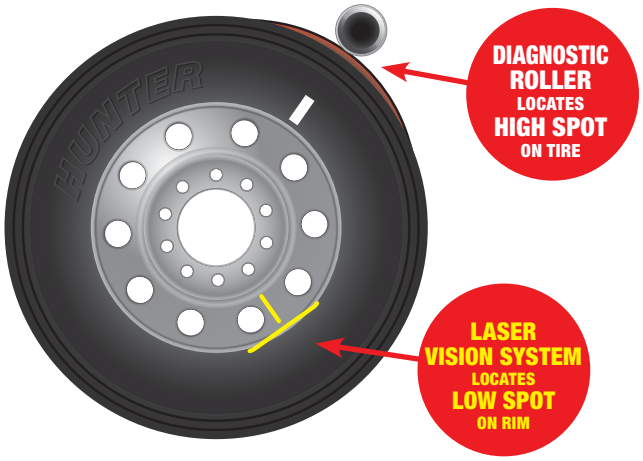
***Customer complains about strong vehicle vibrations.***

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



## 2 Specialized Sensors Measure the Assembly


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




*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.***

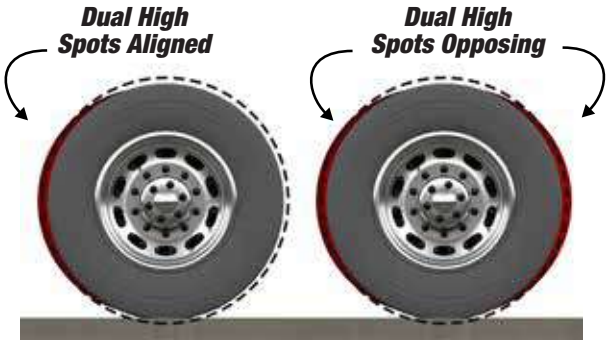

*Runout-related vibration is minimized, ensuring your customer a smoother ride and longer tire life.*

# 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.

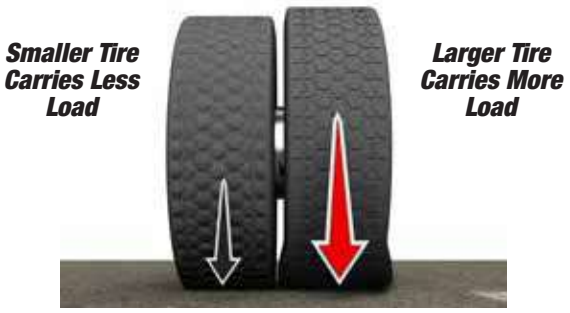
- ✔ Reduces Vibration
- ✔ Increases Tire Life




## 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.

**Typical Correction**
✔ **Double Weight**

**SmartWeight Correction**
✔ **Single Weight**

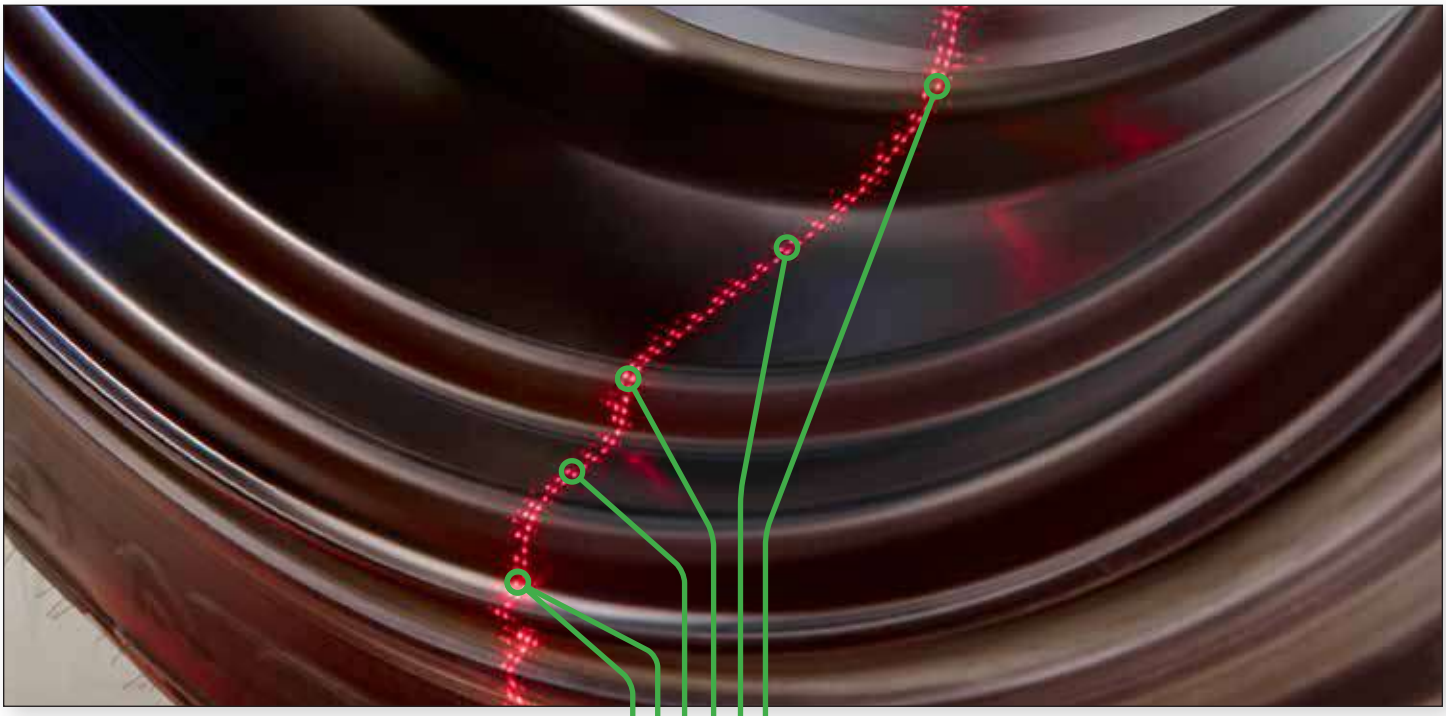
### View your savings LIVE!

✔ Track your weight savings

### 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

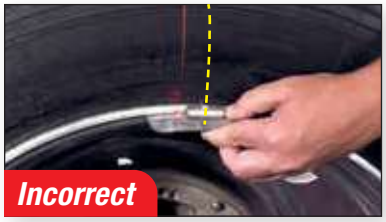

*HDE11 shown*

# 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

*STANDARD*

## Convenient Storage Options

Adaptor tree conveniently stores oversized balancer accessories.

** Printer model may vary from pictured*

*Available as a field-installed option.*

# Specifications*

*HDE33 shown*

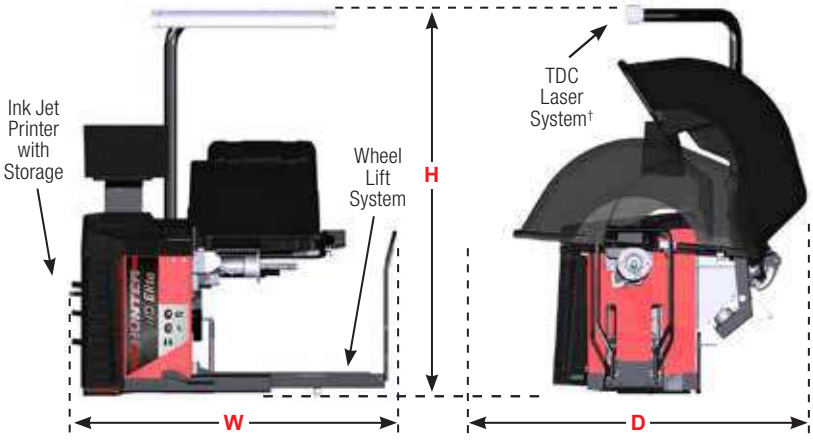
| | |
|---|---|
| **Power requirements** | 196-253V, 10 amp, 50/60 Hz, 1 ph<br>NEMA L6-20P plug included |
| **Air supply requirements** | 100-175 psi (7-12 bar) |
| **Capacity** | |
| **Rim width** | 1.5 in to 19.5 in (38 mm to 495 mm) |
| **Rim diameter** | 10 in to 30 in (254 mm to 762 mm)* |
| **ALU** | 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** | 24 in (610 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

MADE IN USA
HUNTER ENGINEERING COMPANY ST. LOUIS, MO

| | HDE33 | HDE32 | HDE11 | HDE10 |
|---|---|---|---|---|
| **Diagnostic Load Roller** | ✓ | ✓ | | |
| **Wheel Lift System** | ✓ | ✓ | ✓ | ✓ |
| **TDC Laser System** | ✓ | ✓ | | |
| **Ink Jet Print w/Storage** | ✓ | | ✓ | |
| **Width (W)** | **77 in**<br>1956 mm | **69 in**<br>1753 mm | **77 in**<br>1956 mm | **69 in**<br>1753 mm |
| **Height (H)** | **87.5 in**<br>2223 mm | **86.5 in**<br>000 mm | **81 in**<br>2057 mm | **81 in**<br>2057 mm |
| **Depth (D)** | **73 in**<br>1854 mm | **73 in**<br>1854 mm | **73 in**<br>1854 mm | **73 in**<br>1854 mm |
| **Weight** | **985 lb**<br>447 kg | **934 lb**<br>424 kg | **915 lb**<br>415 kg | **864 lb**<br>392 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
635-670nm <390uW CW
CLASSIFIED PER IEC 60825-1, ED 1.2, 2001-08

HUNTER Engineering Company
www.hunter.com

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Supersedes Form 5881-T 05/17