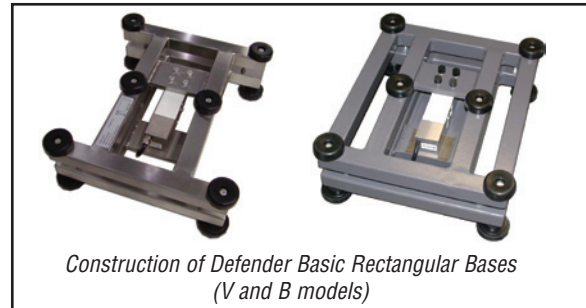
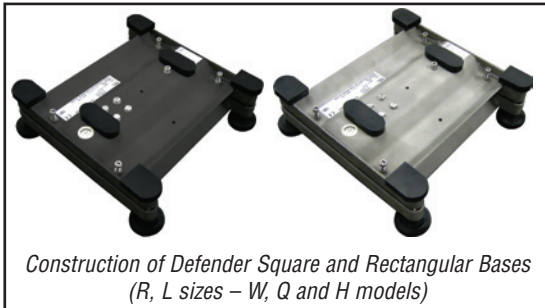




# Defender™ Bases

Painted and Stainless Steel Scale Bases



## Durable Industrial and Basic Bench Scale Bases

Building on the success of the Champ™ series of bench scales, the new OHAUS Defender™ Bases offer two levels of durability for the most demanding industrial applications. All Defender Bases offer removable stainless steel weighing pans, IP67 protected single-point loadcells, steel construction, non-slip adjustable feet and integral leveling bubbles.

For standard industrial applications, the Defender Square, Rectangular and Square Washdown Scale Bases (Q, H and W models) offer the same folded and welded steel plate construction found in the popular Champ and Champ II series. For basic use where budget is more of an issue, the Defender Basic Rectangular Bases (B and V models) – available in dry-use and washdown models – offer welded tubular steel construction for economical yet durable performance.

With NTEP certification and Measurement Canada approval, all of these bases can be used for both general applications as well as where legal for trade performance is required.

### Standard Features Include:

- Removable stainless steel weighing pans
- Steel frame construction with stainless steel for Washdown models, painted carbon steel for other models
- IP67 protected single point loadcells, with stainless steel loadcells for Washdown models, aluminum loadcells for other models
- Adjustable, non-slip rubber leveling feet and leveling bubble
- 1:5,000 certified performance for Defender Washdown Square and Square Bases (W and Q models), up to 1:3,000 performance for Defender Rectangular Bases (H, V and B models)

# Defender™ Bases Painted and Stainless

## Defender Square Washdown Bench Scale Bases (W model)

Model	D10WR	D25QWR	D50WL	D100WL	D250WX
Capacity x Readability	25 lb x 0.002 lb 10 kg x 1 g	50 lb x 0.005 lb 25 kg x 2 g	100 lb x 0.01 lb 50 kg x 5 g	250 lb x 0.02 lb 100 kg x 10 g	500 lb x 0.05 lb 250 kg x 20 g
Capacity x Certified/Approved Readability	25 lb x 0.005 lb 10 kg x 0.002 kg	50 lb x 0.01 lb 25 kg x 0.005 kg	100 lb x 0.02 lb 50 kg x 0.01 kg	250 lb x 0.05 lb 100 kg 0.02 kg	500 lb x 0.10 lb 250 kg x 0.05 kg
Maximum Certified Resolution	1:5,000	1:5,000	1:5,000	1:5,000	1:5,000
Load Cell Cable	8.25 ft. / 2.5 m L x 6-wire				
Load Cell Rated Output	2 mV/V ± 10%				
Load Cell Excitation Voltage	Maximum 20V (AC/DC) / Recommended 5~15V (AC/DC)				
Load Cell Input / Output Resistance	387 ± 10 ohms / 350 ± 4 ohms				
Leveling Components	Externally visible level bubble and adjustable non-slip leveling feet				
Operating Temperature	14°F to 104°F / -10°C to 40°C				
Base Dimensions (A x B x C x D x E) (refer to dimensional drawing)	12 x 12 x 3.7 x 2 x 13.2 in 305 x 305 x 95 x 52 x 335 mm		18 x 18 x 4.5 x 2.8 x 19.2 in 457 x 457 x 115 x 70 x 487 mm		24 x 24 x 5.4 x 3.5 x 25.2 in 610 x 610 x 137 x 90 x 640 mm
Shipping Dimensions (L x W x H)	19.3 x 16.1 x 17.3 in 490 x 410 x 440 mm		31.2 x 23.6 x 9.5 in 810 x 600 x 240 mm		39.4 x 29.9 x 9.8 in 1000 x 760 x 250 mm
Net Weight	26.9 lb / 12.2 kg		60 lb / 27.2 kg		77 lb / 35 kg
Shipping Weight	31.3 lb / 14.2 kg		64 lb / 29 kg		90 lb / 41 kg

NTEP CC No. 01-048A1 / Measurement Canada approval AM-5719

## Defender Square Bench Scale Bases (Q model)

Model	D10QR	D25QR	D50QL	D100QL	D250QX
Capacity x Readability	25 lb x 0.002 lb 10 kg x 1 g	50 lb x 0.005 lb 25 kg x 2 g	100 lb x 0.01 lb 50 kg x 5 g	250 lb x 0.02 lb 100 kg x 10 g	500 lb x 0.05 lb 250 kg x 20 g
Capacity x Certified/Approved Readability	25 lb x 0.005 lb 10 kg x 0.002 kg	50 lb x 0.01 lb 25 kg x 0.005 kg	100 lb x 0.02 lb 50 kg x 0.01 kg	250 lb x 0.05 lb 100 kg 0.02 kg	500 lb x 0.10 lb 250 kg x 0.05 kg
Maximum Certified Resolution	1:5,000	1:5,000	1:5,000	1:5,000	1:5,000
Load Cell Cable	8.25 ft. / 2.5 m L x 6-wire				
Load Cell Rated Output	2 mV/V ± 10%				
Load Cell Excitation Voltage	Maximum 20V (AC/DC) / Recommended 5~15V (AC/DC)				
Load Cell Input / Output Resistance	410 ± 10 ohms / 350 ± 4 ohms				
Leveling Components	Externally visible level bubble and adjustable non-slip leveling feet				
Operating Temperature	14°F to 104°F / -10°C to 40°C				
Base Dimensions (A x B x C x D x E) (refer to dimensional drawing)	12 x 12 x 3.7 x 2 x 13.2 in 305 x 305 x 95 x 52 x 335 mm		18 x 18 x 4.5 x 2.8 x 19.2 in 457 x 457 x 115 x 70 x 487 mm		24 x 24 x 5.4 x 3.5 x 25.2 in 610 x 610 x 137 x 90 x 640 mm
Shipping Dimensions	19.3 x 16.1 x 17.3 in 490 x 410 x 440 mm		31.2 x 23.6 x 9.5 in 810 x 600 x 240 mm		39.4 x 29.9 x 9.8 in 1000 x 760 x 250 mm
Net Weight	26.9 lb / 12.2 kg		60 lb / 27.2 kg		77 lb / 35 kg
Shipping Weight	31.3 lb / 14.2 kg		64 lb / 29 kg		90 lb / 41 kg

NTEP CC No. 01-048A1 / Measurement Canada approval AM-5719

## Defender Rectangular Bench Scale Bases (H model)

Model	D15HR	D30HR	D60HR	D60HL	D100HL	D150HX	D300HX
Capacity x Readability	30lb x 0.005lb 15kg x 2g	60lb x 0.01lb 30kg x 5g	150lb x 0.02lb 60kg x 10g	150lb x 0.02lb 60kg x 10g	250lb x 0.05lb 100kg x 20g	300lb x 0.05lb 150kg x 20g	600lb x 0.1lb 300kg x 50g
Capacity x Certified/Approved Readability	30lb x 0.01lb 15kg x 0.005kg	60lb x 0.02lb 30kg x 0.01kg	150lb x 0.05lb 60 x 0.02 kg	150lb x 0.05lb 60kg x 0.02kg	250lb x 0.1lb 100kg x 0.05kg	300lb x 0.1lb 150kg x 0.05kg	600lb x 0.2lb 300kg x 0.1kg
Maximum Certified Resolution	1:3,000	1:3,000	1:3,000	1:3,000	1:2,500	1:3,000	1:3,000
Load Cell Cable	6.6 ft / 2 m L x 6-wire						
Load Cell Rated Output	2 mV/V ± 10%						
Load Cell Excitation Voltage	Maximum 20V (AC/DC) / Recommended 5~15V (AC/DC)						
Load Cell Input / Output Resistance	410 ± 10 ohms / 350 ± 4 ohms						
Leveling Components	Externally visible level bubble and adjustable non-slip leveling feet						
Operating Temperature	14°F to 104°F / -10°C to 40°C						
Base Dimensions (A x B x C x D x E) (refer to dimensional drawing)	14 x 12 x 3.7 x 2 x 15 in 355 x 305 x 95 x 50 x 380 mm		19.7 x 15.7 x 4.1 x 2.4 x 20.9 in 500 x 400 x 105 x 60 x 530 mm		21.7 x 16.5 x 4.9 x 2.8 x 22.8 in 550 x 420 x 125 x 70 x 580 mm		
Shipping Dimensions (L x W x H)	19.3 x 16.1 x 17.3 in 490 x 410 x 440 mm		29.1 x 27.2 x 9.1 in 740 x 690 x 230 mm		29.5 x 28 x 9.1 in 750 x 710 x 230 mm		
Net Weight	20 lb / 9 kg		42 lb / 19 kg		54 lb / 24.5 kg		
Shipping Weight	24 lb / 11 kg		48.5 lb / 22 kg		59.5 lb / 27 kg		

NTEP CC No. 99-203A3 / Measurement Canada approval AM-5675

### Features:

- Square Pan
- All 304 Stainless Steel Design
- Weld/Fold Steel Plate Base (R, L sizes)
- Stainless Steel IP67 Loadcell
- 150% Safe Overload Capacity
- 10,000-12,500d
- 5,000d NTEP Certified/ Measurement Canada Approved

### Features:

- Square 304 Stainless Steel Pan
- Painted Carbon Steel Frame
- Weld/Fold Steel Plate Base (R, L sizes)
- Aluminum IP67 Loadcell
- 150% Safe Overload Capacity
- 10,000-12,500d
- 5,000d NTEP Certified/ Measurement Canada Approved

### Features:

- Rectangular 304 Stainless Steel Pan
- Painted Carbon Steel Frame
- Weld/Fold Steel Plate Base (R, L sizes)
- Aluminum IP67 Loadcell
- 150% Safe Overload Capacity
- 6,000-7,500d
- 2,500d - 3,000d NTEP Certified / Measurement Canada Approved

# Steel Scale Bases

## Defender Basic Rectangular Washdown Bases (V model)

Model	D30VR	D60VR	D60VL	D150VL	D150VX	D300VX
Capacity x Readability (d)	60 lb x 0.01 lb 30 kg x 5 g	150 lb x 0.02 lb 60 kg x 10 g	150 lb x 0.02 lb 60 kg x 10 g	300 lb x 0.05 lb 150 kg x 20 g	300 lb x 0.05 lb 150 kg x 20 g	600 lb x 0.1 lb 300 kg x 50 g
Capacity x Certified/Approved Readability	60 lb x 0.02 lb 30 kg x 0.01 kg	150 lb x 0.05 lb 60 kg x 0.02 kg	150 lb x 0.05 lb 60 kg x 0.02 kg	300 lb x 0.1 lb 150 kg x 0.05 kg	300 lb x 0.1 lb 150 kg x 0.05 kg	600 lb x 0.2 lb 300 kg x 0.1 kg
Load Cell Cable	6.6 ft / 2m L x 6-wire					
Load Cell Rated Output	2 mV/V $\pm$ 10%					
Load Cell Excitation Voltage	Maximum 20V (AC/DC) / Recommended 5~15V (AC/DC)					
Load Cell Input / Output Resistance	410 $\pm$ 10 ohms / 350 $\pm$ 4 ohms					
Leveling Components	Externally visible level bubble and adjustable non-slip leveling feet					
Operating Temperature	-10°C to 40°C / 14°F to 104°F					
Base Dimensions (A x B x C x D x E)	14 x 12 x 4.8 x 3 x 15 in 355 x 305 x 123 x 75 x 380 mm		21.6 x 16.5 x 5.4 x 3.1 x 22.6 in 550 x 420 x 136 x 80 x 575 mm		25.6 x 19.7 x 5.6 x 3.5 x 26.6 in 650 x 500 x 143 x 90 x 675 mm	
Shipping Dimensions (L x W x H)	25.3 x 19.6 x 8.5 in / 642 x 497 x 212 mm		33.7 x 22.2 x 8.9 in / 857 x 564 x 225 mm		40.2 x 27 x 9.7 in / 1022 x 687 x 247 mm	
Net Weight	20 lb / 9 kg		46 lb / 21 kg		73 lb / 33 kg	
Shipping Weight	24 lb / 11 kg		53 lb / 24 kg		81.5 lb / 37 kg	

### Features:

- Rectangular Pan
- All 304 Stainless Steel Design
- Tubular Steel Frame
- Stainless Steel IP67 Loadcell
- 125% Safe Overload Capacity
- 6,000-7,500d
- 3,000d NTEP Certified/Measurement Canada Approved

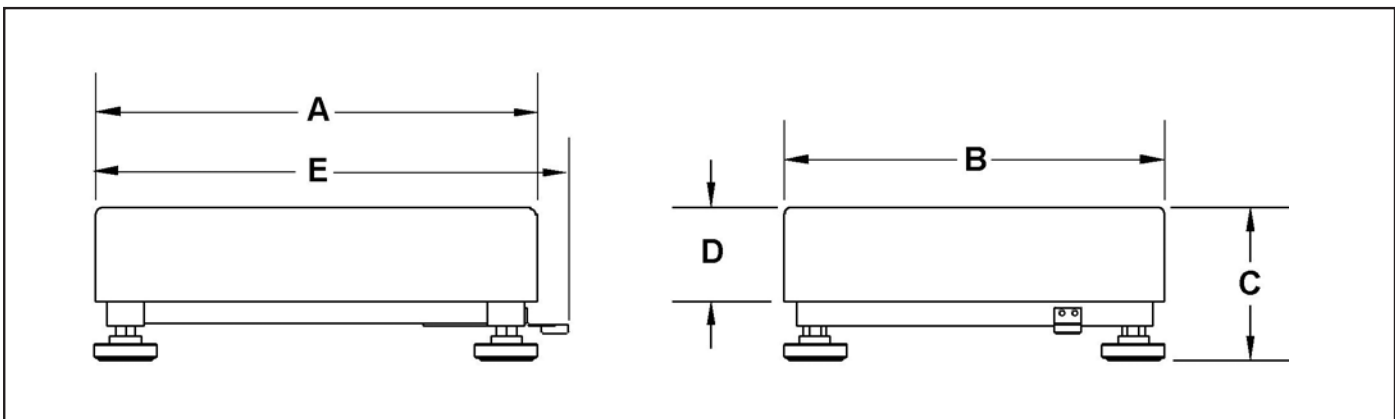
## Defender Basic Rectangular Bases (B model)

Model	D30BR	D60BR	D60BL	D150BL	D150BX	D300BX
Capacity x Readability (d)	60 lb x 0.01 lb 30 kg x 5 g	150 lb x 0.02 lb 60 kg x 10 g	150 lb x 0.02 lb 60 kg x 10 g	300 lb x 0.05 lb 150 kg x 20 g	300 lb x 0.05 lb 150 kg x 20 g	600 lb x 0.1 lb 300 kg x 50 g
Capacity x Certified/Approved Readability	60 lb x 0.02 lb 30 kg x 0.01 kg	150 lb x 0.05 lb 60 kg x 0.02 kg	150 lb x 0.05 lb 60 kg x 0.02 kg	300 lb x 0.1 lb 150 kg x 0.05 kg	300 lb x 0.1 lb 150 kg x 0.05 kg	600 lb x 0.2 lb 300 kg x 0.1 kg
Load Cell Cable	6.6 ft / 2 m L x 6-wire					
Load Cell Rated Output	2 mV/V $\pm$ 10%					
Load Cell Excitation Voltage	Maximum 20V (AC/DC) / Recommended 5~15V (AC/DC)					
Load Cell Input / Output Resistance	410 $\pm$ 10 ohms / 350 $\pm$ 4 ohms					
Leveling Components	Externally visible level bubble and adjustable non-slip leveling feet					
Operating Temperature	-10°C to 40°C / 14°F to 104°F					
Base Dimensions (A x B x C x D x E)	14 x 12 x 4.8 x 3 x 15 in 355 x 305 x 123 x 75 x 380 mm		21.6 x 16.5 x 5.4 x 3.1 x 22.6 in 550 x 420 x 136 x 80 x 575 mm		25.6 x 19.7 x 5.6 x 3.5 x 26.6 in 650 x 500 x 143 x 90 x 675 mm	
Shipping Dimensions (L x W x H)	25.3 x 19.6 x 8.5 in 642 x 497 x 212 mm		33.7 x 22.2 x 8.9 in 857 x 564 x 225 mm		40.2 x 27 x 9.7 in 1022 x 687 x 247 mm	
Net Weight	20 lb / 9 kg		35 lb / 16 kg		62 lb / 28 kg	
Shipping Weight	24 lb / 11 kg		42 lb / 19 kg		70.5 lb / 32 kg	

### Features:

- Rectangular 304 Stainless Steel Pan
- Painted Carbon Steel Frame
- Tubular Steel Base
- Aluminum IP67 Loadcell
- 125% Safe Overload Capacity
- 6,000-7,500d
- 3,000d NTEP Certified/Measurement Canada Approved

## Outline Dimensions



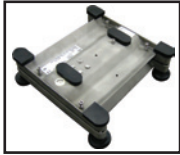
# Defender™ Scale Bases

## Standard Features:

### Defender Washdown Square, Square and Rectangular Bases

#### Durable Base Frame Construction

Stainless steel pans and stainless or painted form-and-weld frames (R, L sizes) provide maximum durability, rigidity and structural integrity. Load-unload cycle tested to ensure long-term performance.



#### Fully Adjustable Feet

Four rugged, adjustable feet help prevent slippage on wet or uneven surfaces

#### Level Bubble Included

#### Removable Stainless Steel Pans

For quick cleaning, all bases come with removable stainless steel pans

#### Base Construction

Defender Square Washdown Bases feature all stainless steel construction - pans, basework and loadcells, for complete washdown protection. Defender Square and Rectangular Bases are made from painted carbon steel with stainless steel pans and aluminum loadcells.

#### IP67 Loadcells

For added durability, all loadcells are protected to IP67 against water and condensation



### Defender Basic Washdown Rectangular and Rectangular Bases

#### IP67 Loadcells

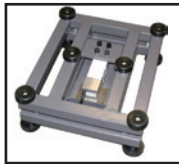
For added durability, all loadcells are protected to IP67 against water and condensation

#### Removable Stainless Steel Pans

For quick cleaning, all bases come with removable stainless steel pans

#### Durable Base Frame Construction

Defender Basic Rectangular Bases are made from welded tubular steel, providing economical durability for industrial applications. Load-unload cycle tested to ensure long-term performance.



#### Level Bubble Included

#### Base Construction

Defender Basic Washdown Bases also feature all stainless steel construction. Defender Basic Rectangular Bases are made from painted carbon steel with stainless steel pans and aluminum loadcells.

#### Fully Adjustable Feet

Four rugged, adjustable feet help prevent slippage on wet or uneven surfaces



## Options and Accessories

### Mounting Accessories

	OHAUS Number
Base Mount Kit, T51P .....	80500722
Column Mount Kit, 13.75in/35cm, painted, T31P/T32XW .....	80251743
Column Mount Kit, 26.75in/70cm, painted, T31P/T32XW .....	80251744
Column Mount Kit, 13.75in/35cm, stainless steel, T31P/T32XW .....	80251745
Column Mount Kit, 26.75in/70cm, stainless steel, T31P/T32XW .....	80251746
Column Mount Kit, 13.75in/35cm, painted, T51P/T51XW .....	80500723
Column Mount Kit, 26.75in/68cm, painted, T51P/T51XW .....	80500724
Column Mount Kit, 13.75in/35cm, stainless steel, T51P/T51XW .....	80500725
Column Mount Kit, 26.75in/68cm, stainless steel, T51P/T51XW .....	80500726

Compatible with all existing columns for Champs with GD/CW11/CD31/33/CKW indicators

### Compliance

- **Legal for Trade:** NTEP CC No. 01-048A1 for W and Q bases, 99-203A3 for H bases and 08-021 for B, V bases; Measurement Canada Approval No. AM-5717 for W and Q bases, AM-5667 for H bases and AM-5632 for B and V bases
- **Safety and EMC:** UL<sub>us</sub> 2005/95/EC low voltage directive: EN60950-1:2001, FCC Part 15 Class A 2004/108/EC EMC directive: EN61326-1:1997; +A1:1998; +A2:2001; + A3>2003
- **Other:** Compliant to Directive 2002/96/EC on waste electrical and electronic equipment (WEEE)
- **Quality:** OHAUS quality management system registered to ISO 9001:2008

### OHAUS CORPORATION

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