

DILLON ***ED-series Crane Scales*** ***frequently asked questions (FAQ)***

1. Who are the customers for the Dillon ED-series Crane Scale?

The ED-series crane scale is suited for your customers who need to know weight, but do not plan to trade or bill based on that weight. This covers many typical uses and some examples include:

- ✓ Loading trucks to maximize payload yet prevent overload fines
- ✓ Preventing overload of an overhead hoist
- ✓ Ensuring manufacturing output level is consistent with inputs
- ✓ Mixing ingredients
- ✓ Ascertaining volume remaining in barrels and generating a printout

2. What is the appeal of the ED-series Crane Scales?

They are perfect for your customers that would enjoy paying 42% to 64% less than a traditional crane scale. Despite that price reduction, all ED-series crane scales offer these features:

- ✓ 5:1 Minimum Ultimate Safety Factor meets OSHA overhead lifting safety standards
- ✓ Many shackle and hook combinations for a perfect fit
- ✓ NEMA4X design is suitable for outdoor use
- ✓ Extremely affordable price

Depending upon the model, there are plenty more features and options:

- ✓ Remote readout and control by wire or Radio-Link
- ✓ Computer/printer interface
- ✓ Backlight
- ✓ Gravity compensation
- ✓ Custom units of measure and lockout
- ✓ Heavy-duty reinforced shipping/storage crate

The ED-series offers unmatched convenience for your customers. Connect a wireless Radio-Link system and the operator need not have a close, unblocked viewing angle of the display. Plug into a computer for effortless data entry and eliminate potentially costly data entry errors!

3. Who are the competitors of the ED-series Crane Scales?

They fit into a market niche that no other crane scale manufacturer covers. The ED-series crane scales offer features and flexibility that you will not find in any other crane scale at an extremely competitive price. We accomplish this by designing for cost. This will address most, but not all, potential crane scale customers.

4. What overhead lifting safety precautions do ED-series Crane Scales incorporate?

Dillon does not compromise on standards for overhead lifting safety. We:

- ✓ Achieve a minimum of 5:1 ultimate safety factor on all load-bearing components (7:1 on aluminum).
- ✓ Specify only certified, traceable materials in load-bearing elements.
- ✓ Confirm that heat treatment falls within extremely tight tolerances.
- ✓ Conduct nondestructive examinations on 100% of machined or custom-forged load-bearing components.
- ✓ Partner with industry standard hardware suppliers such as Crosby-Laughlin.

5. What are the hardware choices?

Upper hardware

<i>Standard anchor shackle</i>	This popular open bail design is the most economical choice. It is the same hardware used on a dynamometer version.
<i>Oversize shackle</i>	This closed bail design is suitable when the crane scale will be installed on a hook larger than the standard shackle will fit.
<i>Master-link</i>	This lower-cost alternative combines a large link with the standard anchor shackle to get a larger opening. It is lower in cost and can be easily added even after the sale.

Lower hardware

<i>Non-swivel hook</i>	This choice is the most and economical and typically has lower headroom than other choices. It should not be used if no torsional relief exists.
<i>Basic swivel hook</i>	This swivel allows the hook to be rotated for alignment. Once a load is placed on the hook, it will no longer swivel due to a large amount of friction.
<i>Swivel-under-load hook</i>	The hook will swivel easily, whether under no load or full-scale load. The weight rests against a large bearing, so friction is significantly reduced. This is typically the most expensive and consumes the greatest amount of headroom.

6. How does the EDxtreme achieve accuracy improvements over the previous generation crane scale (ED-2000plus)?

The ED-2000plus accuracy specification was derated in a crane scale version because we recognized the manner in which crane scales are typically used. Operators typically do not take precautions with alignment, and the instrument will often start initial loading with shackles off-angle 15 degrees or more. This transferred side load and inaccuracy to the weighment.

The EDxtreme was designed to minimize these effects by a bearing (up to 10K) or a concentrating ridge (25K and above), improved transducer material selection and strain gage selection & matching. We find that the resulting performance will satisfy users at 0.1% full-scale.

7. Are there environments where the ED-series Crane Scales should NOT be used?

While they are economical solutions for most applications, they are not suitable for the following extreme environments:

- ✓ Extreme heat (e.g. foundry)
- ✓ Abrupt temperature changes (moving from room temperature to outdoors)
- ✓ Highly corrosive
- ✓ Magnetic
- ✓ Explosive
- ✓ Legal-for-trade or ultra-high precision

These environments are suited to the more expensive extreme-duty crane scales.

8. Can you show some sales examples where the ED-series Crane Scales compete against a traditional crane scale?

The next two pages show a couple of attractive sales examples.

Sales Example #1

Application:

A customer needs a high-accuracy digital crane scale for regular weighing with a swivel hook for alignment. They need a remote display at a table that feeds into a computer. The customer wants flexibility to add to their network in the future.

Compare:

EDxtreme crane scale and Communicator radio remote versus the MSI Port-A-Weigh-plus crane scale and Cell Scale remote.

	Dillon EDxtreme crane scale with Communicator remote	MSI Porta-Weigh-plus MSI-9300 with MSI-9750 remote
Radio specifications		
Radio technology	2.4 GHz spread spectrum frequency hopper supports 32 networks, each with multiple scales. No site license required in USA and Canada.	2.4 GHz spread spectrum frequency hopper supports 32 networks, each with multiple scales. No site license required in USA and Europe.
Range	up to 300 feet outdoors	up to 1000 feet outdoors
Remote display	128x64 pixel dot graphic LCD display. Optional backlight.	128x64 pixel dot graphic LCD display. Backlight
Remote power supply	Four common AA-cell alkalines	Rechargeable battery pack
Remote enclosures	NEMA4X enclosure or ABS plastic handheld unit	NEMA4
Simultaneously monitor several scales	Yes	Yes
Standard output from radio remote	Two communication ports can drive scoreboard and simultaneously feed computer or printer	One RS-232 port
Crane scale specifications		
Accuracy	0.1% full scale	0.1% applied
Achieve 5:1 USF	100% of capacities	67% of capacities
Suitable for outdoor use	Yes	Yes
Display on instrument	1.0 inch LCD. Optional backlight.	1.2 inch LED
Displayed resolution	1000 or 5000 divisions, user configurable	2500 divisions
Temperature range	-4° to 140° F (-20° to 60° C)	-40° to 185° F (-40° to 85° C)
Battery	Two C-cell alkalines	12V rechargeable
Battery life	40 hours typical usage	20-30 hours, variable
Various hardware choices	Shackle and hook style choices	Shackle style choice only
Warranty	2 year	1 year
System prices (list)		
2,000 to 2,500 lb.	starting at \$2978 (save 66%!)	\$8730
5,000 lb.	starting at \$3133 (save 64%!)	\$8730
10,000 lb.	starting at \$3435 (save 61%!)	\$8930
20,000 to 25,000 lb.	starting at \$4145 (save 57%!)	\$9670
50,000 lb.	starting at \$5850 (save 51%!)	\$11,870

Items in **bold** represent a significant advantage over the other crane scale

Sales Example #2

Application:

Customer looking for an inexpensive digital crane scale for simple, routine measurements.

Compare:

EDjunior crane scale versus the MSI-3360 Challenger 2 crane scale

	<i>Dillon EDjunior</i>	<i>MSI Challenger 2</i>
Accuracy	0.2% full scale	0.1% applied
Display	0.9 inch LCD	1.2 inch LED
Displayed resolution	1000 divisions	2000 divisions
Factor of safety	7:1	5:1
Outdoor use?	Yes, NEMA4X design	No, indoor only
Continued regular use?	Absolutely!	No, occasional only
Battery	Two C-Cell alkaline	6V rechargeable
Maximum battery life	320 hours	100 hours
Hardware choices	Upper: Anchor shackle, oversize shackle or master link. Lower: Fixed or swivel hook.	Upper: Lifting eye only. Lower: Swivel hook only.
Display of text prompts	Dot-graphic display offers easy to read & unabbreviated text	7-segment display of text prompts (e.g. "teSt" and then "LCnt1" signifies overload count.
Case material	Precision machined 2024 Aircraft Quality Aluminum (powder-coat)	Alodined Cast Aluminum
Warranty	2 year	1 year
Price comparisons (list)		
2,000/2500 lb.	starting at \$998 (44% lower!)	\$1795
5,000 lb.	starting at \$1083 (47% lower!)	\$2050
10,000 lb.	starting at \$1183 (42% lower!)	\$2050

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9. What do you have to help my sales efforts?

There are four documents to help you understand and sell these crane scales:

1. Sales literature – a full-color piece that is feature-benefit focused.
2. Specifications sheet – all of the engineering detail you may want to know.
3. Price page – guides you through pricing and ordering
4. FAQ sheet – this sheet answers some questions you may have

Our website can also help significantly:

- ✓ Steer customers there so they can see the literature while talking over the phone.
- ✓ Access the user's and service manuals

Have an application question? Interested in acquiring demo equipment? Looking for marketing suggestions? We are eager to help you, so don't hesitate to call us!