

# Ultra-Low-Profile Scale



## **PHD779 Digital Floor Scales**

Exceptional Hygienic Design

Uniquely High Accuracy

Real-Time Monitoring

Failure-Proof Lifting



## **Smart Ultra-Low-Profile Scale**

Safe, Hygienic Design

**METTLER TOLEDO**

# PHD779 Ultra-Low-Profile Scales

## Hygienic Design, Smart Weighing

Combine the power of POWERCELL® technology with our fully optimized hygienic design. The ultra-low-profile PHD779 platforms alleviate the most common floor scale challenges to speed up every part of your process, from loading and unloading to cleaning between cycles.



### Rapid, Effective Sanitation

Clean faster and more effectively to simultaneously eliminate bacteria and maximize uptime. The thoughtful equipment design goes beyond standard stainless-steel construction to eliminate troublesome crevices, resulting in a truly hygienic floor scale.



### One Scale for Any Batch Size

Save time, costs and space with the scale that can be set up in minutes and handles a wide range of batch sizes. POWERCELL® technology delivers uniquely high accuracy, allowing you to weigh your smallest batch and largest load on one scale.



### Real-Time Monitoring

Condition monitoring and proactive alerts for overloads, shock loads, and extreme temperature deviations allow you to address issues faster to prevent waste and maximize uptime. Achieve peace of mind with full system visibility and control.

### We offer global and local partnership, no matter where you do business.

Whether you are a multinational business or a systems integrator serving customers worldwide, our globally approved weighing platforms enable you to standardize your weighing solutions to minimize procurement and engineering hours and deliver a reliable value to your customers or production facilities worldwide. Our comprehensive consulting and extensive weighing portfolio are available to help you simplify your job.



## Meet the specific needs of your regulated environment:



### 1. Pharmaceutical Industry

For pharmaceutical manufacturers, hygiene and accuracy are paramount. The PHD779 hygienic weighing platforms prevent contamination and help you to ensure accurate measurements so that you can deliver high-quality products, boost throughput, and minimize cleaning time.



### 2. Food and Beverage Industry

The tightening regulations and rapid growth in the food and beverage industry demand a solution that will stand up to the harshest cleaning processes and maintain peak performance. These platforms offer durable construction, IP69k load cell protection, and easy-to-clean surfaces.



### 3. Chemical Industry

In chemical production, corrosive materials and safety are top concerns. Maximize production uptime and achieve compliance in hazardous areas with these high-grade stainless-steel platforms that are globally approved.



### 4. Biotech Industry

Hygienic equipment is required in biotech environments to avoid contamination and extended downtime due to long cleaning cycles. The fully sealed platform with its unique hygienic design allows you to spend less time on washdown processes and to boost your productivity.

# Three Robust Models

## Same Powerful Performance

Choose from the static, mobile, or easy-lift models to optimize your operation. All members of the PHD779 family feature ultra-low platform heights for easy loading and unloading, hermetically sealed load cells to protect against water ingress, and factory calibration to speed up installation time.



### All PHD779 scales also offer the following benefits:

#### Performance Protection

With POWERCELL® technology, there is no junction box required. Cables and other key components are protected within the scale to eliminate the risk of hardware damage and maximize equipment uptime.

#### Operator Guidance

The center placement feature highlights load placement errors and directs your operator to position the load correctly, preventing incorrect measurements and minimizing waste.

#### Hazardous-Area Approved

The PHD779 series is available with global EX approvals for use in Zone 2/22 hazardous environments.



## PHD779static

The static model of the PHD779 satisfies the requirements of most traditional weighing applications with all the benefits of our thoughtful hygienic design, large platform sizes, uniquely high accuracy, and smart POWERCELL® technology.



## PHD779mobile

If you require the flexibility to weigh in multiple locations across your facility or easily relocate the scale when it is not in use, PHD779mobile enables you to streamline your processes with safe, convenient mobility. Efficiently move your scale to a different station, relocate when cleaning, or quickly reconfigure your workplace.



### Lock-and-Go Ramps

Simply rotate the ramps up to the locking position to move the scale.

### Instantaneous Setup

When you are ready, lower the ramps and weigh. The self-centering platform automatically adjusts to optimal weighing position.

# Headache-Free 360° Cleaning

## Engineered to Streamline Sanitation

Regulated production environments have become increasingly complex and so have the challenges to ensure a contamination-free manufacturing process. The PHD779lift floor scale, with a fully sealed bottom plate and unique failure-proof lifting functionality, reduces clean room hazards and helps you to protect operator and consumer safety.

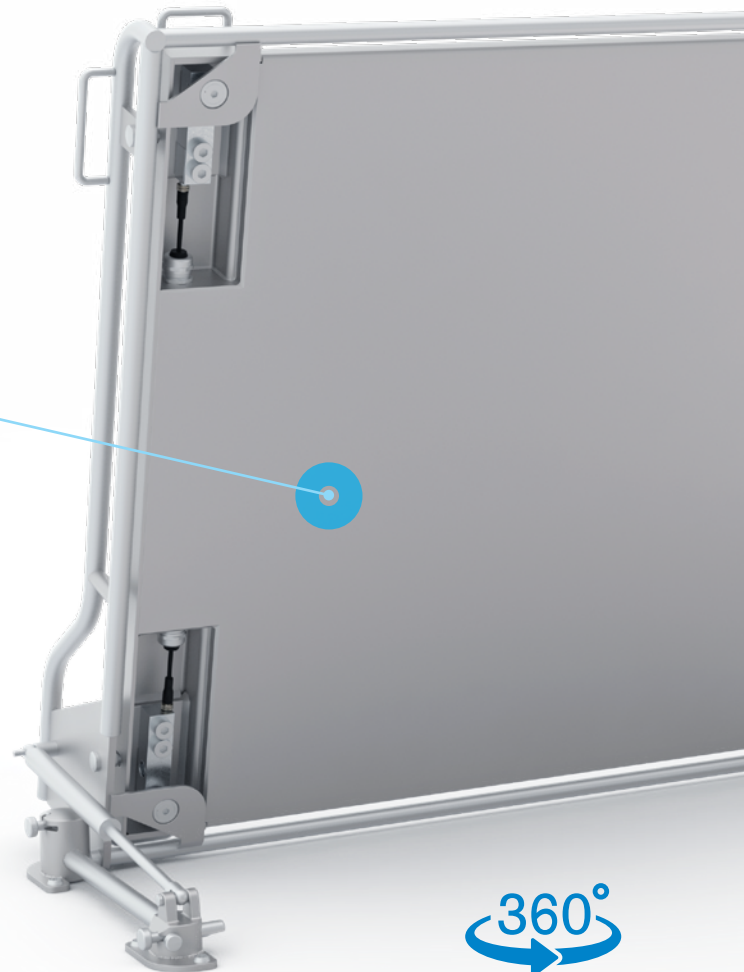
### No Cavities or Crevices

The fully sealed bottom plate eliminates hidden dirt traps to prevent bacteria accumulation so that you'll never have to worry if you missed a spot.



### Hygienic Frame Design

The hygienic frame design with rounded edges allows you to effectively clean to a microbiological level, achieve compliance, and protect your customers – all with less cleaning time required.





### 100% Visual Inspection

The innovative design allows for 100% visual inspection and eliminates the risk of water ingress in frequent washdown applications. Speed up and simplify cleaning processes with headache-free 360° cleaning.



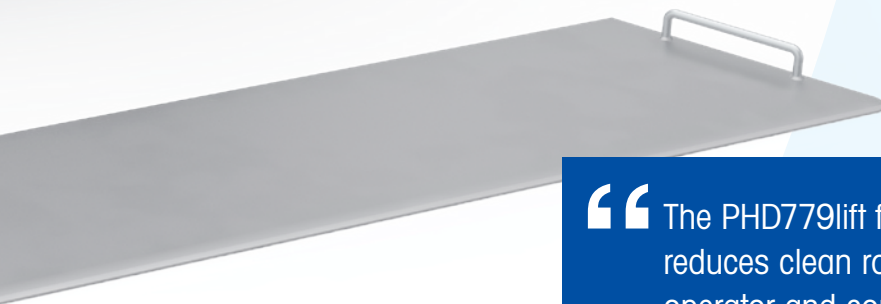
### Reduced Cleaning Time

Easily fulfill higher hygienic standards and reduce individual cleaning cycle time and frequency. The stainless-steel construction prevents moisture accumulation and allows you to eliminate contamination risk in regulated environments.



### Painless, Failure-Proof Lifting

Gas-filled springs help you to reduce production area hazards and protect operators from physical strain, while safety locks minimize the risk of injuries or equipment downtime to keep your operation running safely.



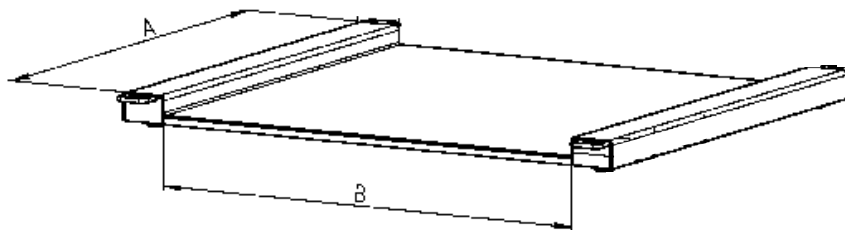
“ The PHD779lift floor scale, with a fully sealed bottom plate, reduces clean room hazards and helps you to protect operator and consumer safety. ”

Pharma Plant Manager

# Technical Specifications

## PHD779 Floor Platforms Model Specific Data

Maximum capacity	[kg]	300	600	1,200	1,500	2,000
Platform height	[mm]	35				45
<b>Sizes A × B</b>						
650 × 650	[mm]	•	•	•	•	
800 × 800	[mm]	•	•	•	•	
1,000 × 1,000	[mm]	•	•	•	•	
1,250 × 1,000	[mm]	•	•	•	•	•
1,250 × 1,250	[mm]	•	•	•	•	•
1,500 × 1,250	[mm]	•	•	•	•	•
1,500 × 1,500	[mm]	•	•	•	•	•



### Weights and Measures - Legal for Trade Data

OIML (International Organization of Legal Metrology)

OIML certification provides confidence that a weighing device complies with the OIML R76 regulation, which establishes the metrological characteristics required for weighing instruments and specifies methods and equipment for checking their conformity.

Maximum capacity	[kg]	300	600	1,200	1,500	2,000
<b>Approved Accuracy Resolution Class III Single Range 1×3,000e</b>						
Approved Readability (e min.)	[kg]	0.1	0.2	-	0.5	1 (2,000e)
Minimum Capacity	[kg]	2	4	-	10	
<b>Approved Accuracy Resolution Class III Single Range 1×6,000e (Note! This option could be available in the fourth quarter of 2023)</b>						
Approved Readability (e min.)	[kg]	0.05	0.1	0.2	-	0.5 (4,000e)
Minimum Capacity	[kg]	1	2	4	-	-
<b>Approved Accuracy Readability Class III Multi Range 2×3,000e</b>						
Max1/e1	[kg]	150/0.05	300/0.1	-	600/0.2	1,500/0.5
Max2/e2	[kg]	300/0.1	600/0.2	-	1,500/0.5	2,000/1.0
Minimum Capacity	[kg]	1	4	-	5	-
<b>Approved Accuracy Readability Class III Multi Range 2×6,000e (Note! This option could be available in the fourth quarter of 2023)</b>						
Max1/e1	[kg]	120/0.02	300/0.05	600/0.1	-	1,200/0.2
Max2/e2	[kg]	300/0.05	600/0.1	1,200/0.2	-	2,000/0.5
Minimum Capacity	[kg]	0.4	1	2	-	-
<b>Approved Accuracy Readability Class III Multi Range 2×10,000e (Note! This option could be available in the fourth quarter of 2023)</b>						
Max1/e1	[kg]	200/0.02	500/0.05	-	1,000/0.1	1,000/0.1
Max2/e2	[kg]	300/0.05	600/0.1	-	1,500/0.2	2,000/0.2
Minimum Capacity	[kg]	0.4	1	-	2	4

### Weigh and Measure OIML General Thresholds

<b>Zero Setting Range</b>	[%]	2% of Maximum Capacity
<b>Taring Range</b>	[kg]	Subtractive from 0 to Maximum Capacity
<b>Temperature Range</b>	[°C]	-10°C...+40°C
<b>Preload Range</b>	[%]	18% of Maximum Capacity



## Weighing - Performance Data

Performance data or typical values are determined in production with no wind drafts and no vibration. Typical values represent the statistical mean value of all measured devices.

Maximum Capacity	[kg]	300	600	1200	1500	2,000
<b>Recommended Readability (min.)</b>						
15,000d	[kg]	0.02	0.05	-	0.1	-
30,000d	[kg]	0.01	0.02	-	0.05	-
60,000d	[kg]	0.005	0.01	0.02	-	-
Minimum Weight @ 1% for 60,000d	[kg]	0.8	1.6	2.4	3.0	4.1
<b>Typical Values</b>						
Repeatability sd (at full load) for 3,000e/15,000d	[g]	6	12	17	25	25
Repeatability sd (at max. load) for 6,000e/30,000d	[g]	5	10	15	20	20
Repeatability sd (at max. load) for 10,000e/60,000d	[g]	4	8	12	15	15
Error of indication (at half load)	[g]	10	25	30	35	35
Error of indication (at full load)	[g]	15	33	42	55	55

## Floor Platforms Preload Range

		Total Preload of non-approved PHD779 Floor Platforms					
Maximum Capacity		[kg]	300	600	1,200	1,500	2,000
Platform Size	650 × 650 mm	[kg]	470	1,390	850	2,560	-
	800 × 800 mm	[kg]	460	1,370	830	2,540	-
	1,000 × 1,000 mm	[kg]	420	1,340	800	2,510	-
	1,250 × 1,000 mm	[kg]	400	1,320	780	2,490	2,040
	1,250 × 1,250 mm	[kg]	380	1,300	760	2,470	2,010
	1,500 × 1,250 mm	[kg]	350	1,270	730	2,440	1,990
	1,500 × 1,500 mm	[kg]	290	1,210	670	2,380	1,960

## Mechanical Thresholds

Maximum Capacity	[kg]	300	600	1,200	1,500	2,000
<b>Maximum Static Safe Load (kg)</b>						
Central Load	[kg]	880	2540	2540	5280	5280
Side Load	[kg]	440	1270	1270	2640	2640
Corner Load	[kg]	220	635	635	1320	1320

## Glossary

Weighing Terms	Simple Definition
<b>Readability</b>	The smallest difference in mass that can be read on a weighing instrument. For instruments with a digital display, the readability is equal to the division value or actual scale interval of the display. Recommended readability (min.) is what is prescribed by the manufacturer; whereas approved readability is prescribed (or mandated) by weights and measures authorities.
<b>Resolution</b>	Smallest difference between displayed indications that can be meaningfully distinguished - this is a non-technical expression for the number of scale intervals. Sometimes confused with readability.
<b>Minimum Capacity</b>	The lower range of a scale that should not be used, this range is mandated by weights and measures intended to eliminate excessive relative weighing errors. In industry, it is recommended to use minimum weight instead because it is considered a more accurate method that considers the customer's production tolerance.
<b>Repeatability</b>	Ability of a weighing instrument to provide results that agree one with the other when the same load is deposited several times in a practically identical way on the load receptor under reasonably constant test conditions. Repeatability is expressed as a standard deviation.
<b>Error of Indication at full load / half load</b>	The difference between the weight indicated on the display and the actual test weight (full load / half load) placed on the scale. The value represents the combined error of non-linearity, sensitivity offset and repeatability. Note: Sometimes this is wrongly referred to as sensitivity error, or span error.
<b>Minimum Weight</b>	Smallest (sample) weight required for a weighment to achieve a desired weighing tolerance. Weighing below the minimum weight threshold results in errors because the sample weight is too small to achieve the defined process tolerance.

# Accessories

## Customize to Your Application

### Ramps

Ramps allow easy access from any side of a scale, eliminating the need to lift heavy loads onto the platform.

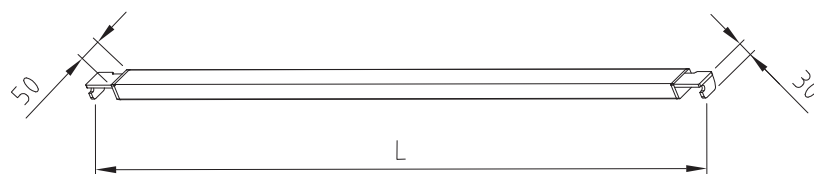
Ramp		Ramp 650 mm	Ramp 800 mm	Ramp 1,000 mm	Ramp 1,250 mm	Ramp 1,500 mm
Dimensions	W [mm]	650	800	1000	1250	1500
	H [mm]	35 (45mm if 2,000 kg scale capacity is selected)				
	L [mm]	330				
Material		Stainless steel AISI304/1.4301				
		Optional: Stainless Steel AISI316/1.4571				



### Stop Bar

A stop bar minimizes the risk of improper loading or driving off the platform when loading heavy containers. Stop bars are easy to attach and detach for different applications or simplified cleaning processes, and they can be used in multiples to secure your loading process in all directions.

Model		650 mm	800 mm	1,000 mm	1,250 mm	1,500 mm
Dimensions	L [mm]	761	911	1111	1361	1611
	H [mm]	30				
	W [mm]	50				
Material		Stainless steel AISI304/1.4301				
		Optional: Stainless Steel AISI316/1.4571				



## General Specifications

<b>Model</b>	<b>PHD779</b>		
Platform Material	Stainless steel AISI304/1.4301		
	Optional: Stainless Steel AISI316/1.4571		
Load Plate Surface	Ceramic bead blasted, Ra < 5µm		
	Optional: ground, Ra < 1µm, welding lines, cutting edges and bottom plate excluded		
Sizes	650 x 650 – 1500 x 1500 mm		
Capacities	300 – 2,000 kg		
Compliance	Metrology	OIML Class III	
	EMC	10 V/m	
Hazardous Area Approvals	ATEX	II 3G Ex nA IIC T6 Gc II 3G Ex ec IIC T6 Gc II 3D Ex tc IIIC T85°C Dc Load cell SLB615D: DEKRA 14ATEX0030X* Load Frame: BVS 23 ATEX H/B 018*	
	IECEX	Ex nA IIC T6 Gc Ex ec IIC T6 Gc Ex tc IIIC T85°C Dc Load cell SLB615D: IECEX DEK 15.0077X*	
	cFMUS	NI/II/2/ABCFG/T6 -40°C≤Ta≤55°C Load cell SLB615D: FM17US0281	DIP/III/2/T6 -40°C≤Ta≤55°C FM17CA0143
Temperature Range	Compensated	-10°C – +40°C	
	Operating (Non-Ex Version)	-20°C – +65°C	
	Operating (Ex Version)	-20°C – +55°C	
Home Run Cable/ Length	Polyurethane / 3 m, 10 m, 20 m		
Load Cell	SLB615d, e-polish, IP68/69k		
Indicator	IND246 POWERCELL (246H5), IND570 POWERCELL (T57000H5), IND780PDX, IND570xx POWERCELL, IND930/IND970 POWERCELL, IND360 POWERCELL		
Ingress Protection	IP68 / 69K		
Scale Interfaces	POWERCELL® CanOpen Network		

\* Product Compliance Document System:  
[www.mt.com/global/en/home/search/compliance](http://www.mt.com/global/en/home/search/compliance)



## Explore Our Service Solutions

### Tailored to Fit Your Equipment Needs

METTLER TOLEDO Service delivers resources to enhance your efficiency, performance, and productivity by providing service packages that fit your operational needs, maximize your equipment lifetime, and protect your investment.

► [www.mt.com/IND-Service](http://www.mt.com/IND-Service)



#### Start with professional installation

Installation services include support for your unique production situation:

- Professional IQ/OQ/PQ/MQ documentation
- Initial calibration and confirmation of fit-for-purpose
- Hazardous area installations



#### Calibrate for quality and compliance

The professional Accuracy Calibration Certificate (ACC) determines measurement uncertainty in use over the entire weighing range. Corresponding annexes give a clear pass/fail statement for specific tolerances applied, such as fit-for-purpose (GWP®), OIML R76, NTEP HB44, or further regulations.



#### Maintain accuracy over time

Receive professional guidance (GWP® Verification™), including a routine testing plan that specifies four key factors to maximize your efficiency and ensure quality:

- Tests to perform
- Testing frequency
- Weights to use
- Tolerances to apply



#### Extend your warranty coverage

Add two years of preventive maintenance and repair coverage to protect your equipment purchase and achieve maximum productivity and budget control.



#### Schedule maintenance

Full preventative maintenance plans offer inspection, functional testing, and proactive replacement of worn parts. Health inspections offer a full assessment of current equipment condition with professional maintenance recommendations.

[www.mt.com/PHD779](http://www.mt.com/PHD779)

For more information

#### METTLER TOLEDO Group

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