

FOOT MASTER®  
LEVELING CASTERS  
*The Original Since 1989*

# GDL | GDH

S E R I E S



A NEW BREED OF LEVELING CASTERS.  
FOOT MASTER®

# THE **PRIDE** OF **TOP QUALITY.**

## **DESIGN**

An engineering response to a strategic question balancing form and function



## **MANUFACTURE**

Precision engineering with advanced technology reflects superb craftsmanship

## **SOLUTION**

The elimination of a problem to deliver successful outcomes and satisfaction



FOOT MASTER® invented THE ORIGINAL leveling caster in 1989, setting the standard for performance, capability and dependability.

The GD Series introduced an ingenious concept of a functional product combining the mobility of a caster, the adjustability of a level mount, and the stability of a rubber foot pad.

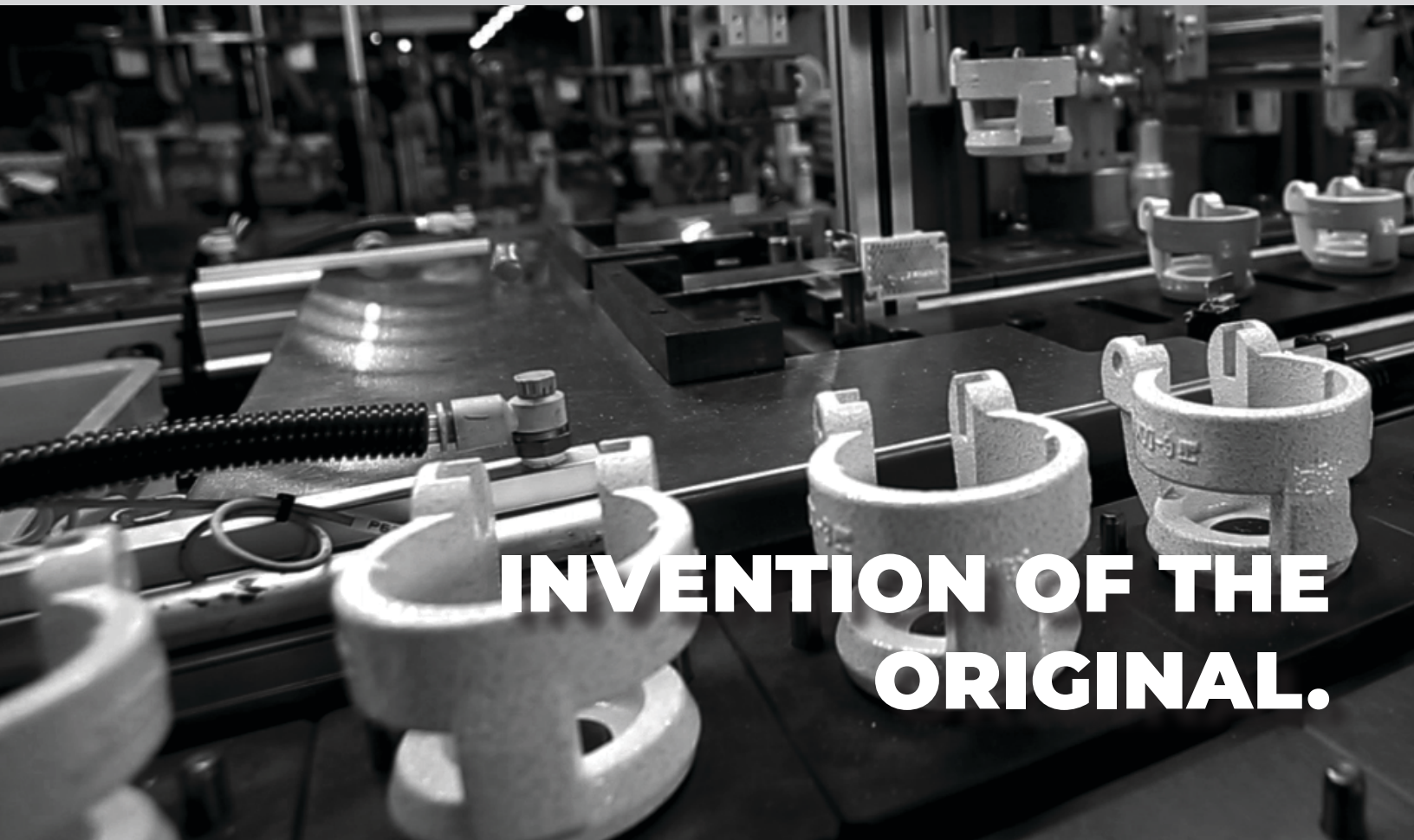
As a result of this remarkable innovation, the GD Series is leading the global market with thousands of companies utilizing this product to improve operations, efficiency and safety.

Born from the idea of creating a smart solution for both easy movement and leveling set, these casters quickly became a necessity for production facilities.

Through diligent research, innovative development and excellence in engineering, FOOT MASTER has paved the way for countless concepts that have simply solved problems and made life easier.

With an increasingly high degree of success in precision machining, hospitals, retail environments, manufacturing floors and storage warehouses, FOOT MASTER® leveling casters have proven themselves to be an irreplaceable multi-functional leader in every industry they are deployed.

The GD Series is the predecessor to the entire leveling caster product line, all of which carry the proud heritage of quality and performance.



**INVENTION OF THE ORIGINAL.**

## A NEW BREED OF LEVELING CASTERS.

The GDL and GDH Series are the newest additions to a diverse and growing line of leveling caster products.

FOOT MASTER® leveling casters achieve both easy movement and leveling set, creating several advantages such as transporting items and materials efficiently, moving or relocating equipment, and faster deployment of devices and machines.

Designed and manufactured with The Pride of Top Quality, the GDL and GDH Series are made for anything that needs to be level, yet mobile such as industrial machines, server racks and medical equipment. Additionally, the GDH has an extended leveling shaft offering increased height adjustability, which is especially nice on surfaces with a slightly steeper grade.



# APPLICATIONS



# COMPONENTS



## ALUMINUM FRAME

To design the most optimal frame, meticulous attention is directed at setting parameters to form the strongest shape. Made from high quality cast aluminum, a generous weight capacity is achieved, up to 1500 lbs. Expert engineering to strict tolerances aptly integrates the other components.

Pressed steel is used to fashion a top plate that performs multiple functions. Material density and thickness create a strong union between the caster and it's application,  $\frac{1}{8}$ " (50) and  $\frac{1}{4}$ " (65/75) respectively. It is formed with a groove for the upper bearings and a hexagonal hole for the kingpin bolt.



## PRESSED STEEL PLATE



## UPPER BEARING RACEWAY

Easy maneuverability is obtained from the swivel section. Complementing the groove pressed into the top plate, a hardened steel raceway sleeve protects the aluminum frame from scoring and compression as the bearings rotate under heavy loads.

Stationed inside the aluminum frame, another hardened steel raceway sleeve and a kingpin nut comprise the lower raceway. A threaded kingpin is used to fasten the top plate and upper raceway to the frame, then tightened with exact amount of torque to ensure consistency and durability.

## LOWER BEARING RACEWAY



# COMPONENTS



## THREADED KINGPIN

Precision in design and scrutiny over quality led to the development of a stronger kingpin. External threads hold everything together, while internal threads facilitate the height adjustable shaft. Made using cold forged steel, a hex pattern for locking into the top plate is formed, then zinc plated.

## LEVELING FOOT

To obtain close dimensional tolerances, the leveling foot is also made using cold forged steel. The bottom end of the threaded adjustment shaft is mated with a fixed adjustable nut, as well as internal threads to secure the leveler base. A stop nut can traverse up and down the shaft to restrict user adjustability.



## WHEEL AXLE

These new leveling casters are equipped with a bolted wheel axle. Tight tolerances achieved using cold forged steel ensure a precise axle diameter. It is expertly crafted to attain balance, lending easy rollability while restricting axle bore elongation, solving a common problem which exacerbates over time.

## NYLON 66 WHEEL

Made of two monomers each containing six carbon atoms, hexamethylenediamine and adipic acids, nylon 66 is used for its tensile strength and high abrasion resistance. Nylon 66 has outstanding dimensional stability and compressive strength, and is known for its low coefficient of friction under heavy loads.



# COMPONENTS

*\*GDL-75 & GDH-75 MODELS ONLY*



## **NYD WHEEL**

For increased maneuverability, GDL-75 and GDH-75 models were outfitted with a wider Nylon 66 wheel. Additionally, two precision ball bearings make movement easy and smooth. The NYD wheel is designed to function with the optional brake system.

## **BRAKE SYSTEM**

Available only on GDL-75/GDH-75, the wheel brake system consists of a lock and release pin installed through the frame. When set to the "on" position, the cold forged steel pin is inserted into one of the holes circumferencing the wheel. To release is as easy as pulling the pin and rotating the adjustment ring to set in the "off" position.



## **WHAT'S THE DIFFERENCE BETWEEN GDL & GDH?**

### **LEVELING FOOT EX**

Offering increased height capability, the threaded adjustment shaft for GDH/GDHD is longer than GDL/GDLD. It extends up and through the kingpin assembly, requiring a cylindrical cavity in the base/leg of the application. For an easy leveling set with a power tool, a hex tip is forged atop the shaft. It is mated with a fixed adjustable nut, as well as internal threads to secure the leveler base. A stop nut can traverse up and down the shaft to restrict user adjustability.



### **WHAT DOES THE "D" INDICATE FOR GDLD & GDHD?**

#### **DUAL NYLON 66 WHEELS**

Dual wheel casters can increase weight capacity while using a smaller diameter wheel. As a result, two 72 mm wheels afford the GDLD and GDHD Series extra leveling height and ease of movement.

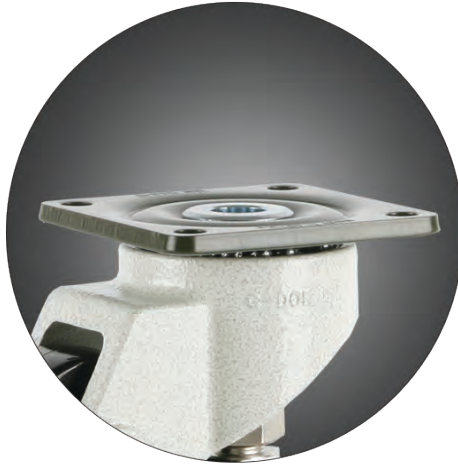




# FOOT MASTER® LEVELING CASTERS

Mounting Options & Plate Configurations

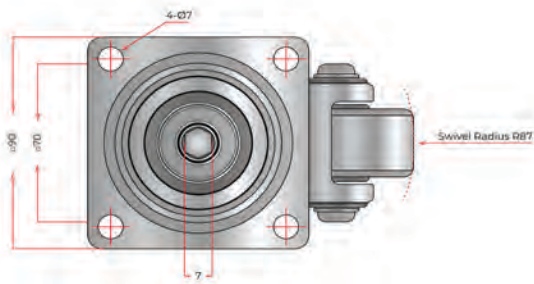
**GDL**



**GDH**

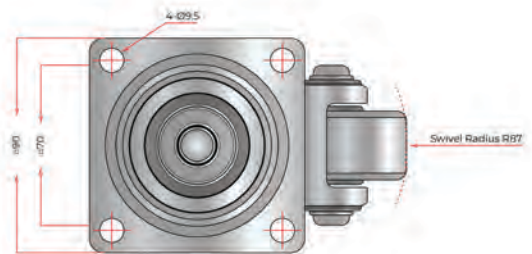


**SWIVEL**



**Available for**

**GDL-50  
GDH-50**



**Available for**

**GDL/GDH-65  
GDL/GDLD/GDH/GDHD-75**

# FOOT MASTER®

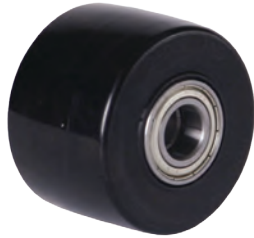
## LEVELING CASTERS

Wheel Types



### **NYN WHEEL**

**Material:** Nylon 66  
**Hardness:** Shore D70  
**Temp:** 14°F to 194°F  
**Models:** GDL/GDH-50  
GDL/GDH-65  
GDLD/GDHD-75 dual wheels



### **NYD WHEEL**

**Material:** Nylon 66  
**Hardness:** Shore D70  
**Temp:** 14°F to 194°F  
**Models:** GDL/GDH-75



### **MCN WHEEL**

**Material:** MC Nylon  
**Hardness:** Shore D80  
**Temp:** 14°F to 194°F  
**Models:** GDL/GDH-50  
GDL/GDH-65











### **HUP WHEEL**









**Material:** Cast Polyurethane  
**Hardness:** Shore D70  
**Temp:** 14°F to 194°F  
**Models:** GDL/GDH-50  
GDL/GDH-65

# FOOT MASTER® LEVELING CASTERS










## Product Numbers










### GDL/GDLD

METRIC	SWIVEL	SWIVEL WITH BRAKE	WHEEL TYPE	 mm	 mm	 Kg	 mm	 mm	 mm	 mm	 mm
	GDL-50-ASF-NYN	-	NYN	50	25	150	73+10	45	73x73	58x58	7
	GDL-65-ASF-NYN	-		63	28	500	98+18	56	90x90	70x70	9.5
	GDLD-75-ASF-NYN	-		72	25x2	700	108+20	64	90x90	70x70	9.5
	GDL-75-ASF-NYD	GDL-75-BSF-NYD	NYD	75	55	700	110+18	64	90x90	70x70	9.5
	GDL-50-ASF-MCN	-	MCN	49	25	150	73+10	45	73x73	58x58	7
	GDL-65-ASF-MCN	-		63	28	500	98+18	56	90x90	70x70	9.5
	GDL-50-ASF-HUP	-	HUP	49	25	150	73+10	45	73x73	58x58	7
	GDL-65-ASF-HUP	-		63	28	500	98+18	56	90x90	70x70	9.5

STANDARD	SWIVEL	SWIVEL WITH BRAKE	WHEEL TYPE	 in	 in	 lbs	 in	 in	 in	 in	 in
	GDL-50-ASF-NYN	-	NYN	2	1	330	2.9+0.4	1.77	2.9x2.9	2.28x2.28	0.27
	GDL-65-ASF-NYN	-		2.5	1.10	1102	3.8+0.7	2.20	3.5x3.5	2.75x2.75	0.37
	GDLD-75-ASF-NYN	-		2.8	1x0.07	1543	4.25+0.8	2.52	3.5x3.5	2.75x2.75	0.37
	GDL-75-ASF-NYD	GDL-75-BSF-NYD	NYD	2.9	2.16	1543	4.33+0.7	2.52	3.5x3.5	2.75x2.75	0.37
	GDL-50-ASF-MCN	-	MCN	1.9	1	330	2.9+0.4	1.77	2.9x2.9	2.28x2.28	0.27
	GDL-65-ASF-MCN	-		2.5	1.10	1102	3.8+0.7	2.20	3.5x3.5	2.75x2.75	0.37
	GDL-50-ASF-HUP	-	HUP	1.9	1	330	2.9+0.4	1.77	2.9x2.9	2.28x2.28	0.27
	GDL-65-ASF-HUP	-		2.5	1.10	1102	3.8+0.7	2.20	3.5x3.5	2.75x2.75	0.37

### GDH/GDHD

METRIC	SWIVEL	SWIVEL WITH BRAKE	WHEEL TYPE	 mm	 mm	 Kg	 mm	 mm	 mm	 mm	 mm	 mm	
	GDH-50-ASF-NYN	-	NYN	50	25	150	73+35	45	73x73	58x58	7	M10x56L	7
	GDL-65-ASF-NYN	-		63	28	500	98+48	56	90x90	70x70	9.5	M16x60L	11
	GDHD-75-ASF-NYN	-		72	25x2	700	108+37	64	90x90	70x70	9.5	M16x60L	11
	GDH-75-ASF-NYD	GDH-75-BSF-NYD	NYD	75	55	700	110+35	64	90x90	70x70	9.5	M16x60L	11
	GDH-50-ASF-MCN	-	MCN	49	25	150	73+35	45	73x73	58x58	7	M10x56L	7
	GDH-65-ASF-MCN	-		63	28	500	98+48	56	90x90	70x70	9.5	M16x60L	11
	GDH-50-ASF-HUP	-	HUP	49	25	150	73+35	45	73x73	58x58	7	M10x56L	7
	GDL-65-ASF-HUP	-		49	28	500	98+48	56	90x90	70x70	9.5	M16x60L	11

STANDARD	SWIVEL	SWIVEL WITH BRAKE	WHEEL TYPE	 in	 in	 lbs	 in	 in	 in	 in	 in	 in	
	GDH-50-ASF-NYN	-	NYN	2	1	330	2.9+1.38	1.77	2.9x2.9	2.28x2.28	0.27	M0.39x2.20L	0.27
	GDL-65-ASF-NYN	-		2.5	1.10	1102	3.8+1.89	2.20	3.5x3.5	2.75x2.75	0.37	M0.63x2.36L	0.43
	GDHD-75-ASF-NYN	-		2.8	1x0.07	1543	4.25+1.46	2.52	3.5x3.5	2.75x2.75	0.37	M0.63x2.36L	0.43
	GDH-75-ASF-NYD	GDH-75-BSF-NYD	NYD	2.9	2.16	1543	4.33+1.38	2.52	3.5x3.5	2.75x2.75	0.37	M0.63x2.36L	0.43
	GDH-50-ASF-MCN	-	MCN	1.9	1	330	2.9+1.38	1.77	2.9x2.9	2.28x2.28	0.27	M0.39x2.20L	0.27
	GDH-65-ASF-MCN	-		2.5	1.10	1102	3.8+1.89	2.20	3.5x3.5	2.75x2.75	0.37	M0.63x2.36L	0.43
	GDH-50-ASF-HUP	-	HUP	1.9	1	330	2.9+1.38	1.77	2.9x2.9	2.28x2.28	0.27	M0.39x2.20L	0.27
	GDL-65-ASF-HUP	-		1.9	1.10	1102	3.8+1.89	2.20	3.5x3.5	2.75x2.75	0.37	M0.63x2.36L	0.43

## FAMILY OF TOP QUALITY CASTERS



**LIGHT DUTY**



**MEDIUM DUTY**



**HEAVY DUTY**



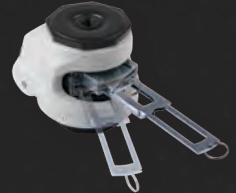
**LEVELING**

## The Pride of Top Quality **FOOT MASTER<sup>®</sup>** North America

FOOT MASTER designs, engineers and manufactures casters and wheels that address industry specific performance gaps. From our global headquarters in South Korea, engineers are striving to develop the best caster products in the world. This pursuit of perfection starts with an intense focus to serve customers and solve problems.

### THE FIRST STEP OF INNOVATION

Integrated ratcheting system improves height adjustability in leveling casters



Advanced technology introduces superior shock absorbing with special rubber cushion



Self-aligning, dual swivel casters reduce drive motor overload and minimize offset



Forged steel, strong welds and double thrust bearings to optimize heavy loads



Premium drive and guide wheels customized for superior performance



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