Industrial AGV Drive Wheels

Title	Industrial AGV Drive Wheels
Thumb	
Address	Anfeng Industrial Park, Dongtai City, Jiangsu, China
Website	https://www.poly-wheels.com/
Email	sale06@kfqizhongji.com

Description

In industrial automated logistics, the AGV drive wheel is more than just a contact point; it is the precision-engineered component that bears the vehicle’s full load and motor torque. As a leading AGV wheel manufacturer, our series redefines durability via NDI polyurethane technology and precision machining.



Premium NDI Casting: The Best Polyurethane for AGV Wheels

Standard wheels often suffer from bonding failure and deformation during 24/7 high-speed cycles. We utilize NDI (1,5-Naphthylene Diisocyanate) polyurethane to solve these challenges:

1. Eliminating Debonding: NDI features extremely low hysteresis loss, ensuring minimal internal heat buildup. This fundamentally solves the polyurethane degumming issue common in heavy-load applications.

2. Dynamic Load Excellence: Compared to MDI materials, our NDI wheels offer superior tear resistance and resilience, effectively protecting AGV motors and reducing operational noise.

High-Precision Hub Engineering for Industrial AGVs

The wheel hub is the skeleton of your automated guided vehicle. Our high-precision design ensures:

1. Heavy-Duty Matrix: Available in High-Strength Ductile Iron or Alloy Steel to prevent deformation under high torque output.

2. Zero Radial Runout: Every hub undergoes CNC machining and dynamic balancing to reduce vibration and extend the service life of your AGV drive system.

Superior Anti-Flat-Spotting Performance

When a heavy-duty AGV remains stationary, standard wheels develop permanent indentations. Our NDI tread provides:

1. Exceptional Creep Resistance: Even after carrying tons of weight for long durations, the wheel surface recovers its round profile instantly.

2. Smooth Startup: Reducing the initial resistance caused by "flat spots" protects the motor from instantaneous overload.

Technical Specifications

Model	Dimension	Wheel dimension (mm)	Wheel width (mm)	Install diameter (mm)	
AGV130/50	130*50	130	50	106	500
AGV144/32	144*32	144	32	95	300
AGV160/40	160*40	160	40	38	500
AGV165/37	165*37	165	37	93	400
AGV170/40	170*40	170	40	63	500
AGV177/37	177*37	177	37	93	500
AGV180/50	180*50	180	50	35	600
AGV190/40	190*40	190	40	20	500
AGV190/55	190*55	190	55	120	700
AGV200/42	200*42	200	42	115	600

AGV210/50	210*50	210	50	40	700
AGV250/55	250*55	250	55	35	1000

Industry Perspective: A Reliable Partner for Lithium Battery Manufacturing

In Lithium Battery production lines, the weight of raw material coils and finished battery modules is immense, and the environment demands extreme cleanliness.

Our drive wheels utilize the non-marking properties and extreme abrasion resistance of NDI to ensure heavy-tonnage transport while minimizing floor wear and dust generation. Furthermore, the wheel body is chemically inert to electrolyte vapors, making it the ideal choice for achieving a long-life, low-maintenance logistics system in battery Gigafactories.

Conclusion:

Behind every AGV drive wheel is a challenge to the limits of material science. We are committed to using NDI technology to solve your heavy-load, debonding, and vibration challenges—helping global industrial automation move steadier, faster, and further. Contact us !