

Manitowoc[®]

**BUILD
SOMETHING
REAL.**[™]





BUILD SOMETHING REAL.™

Innovative lifting solutions that build real ROI.

Around the globe, major construction projects are either in the works or being engineered. One crane manufacturer is uniquely positioned to meet the construction industry's lifting needs, while simultaneously building real return on investment (ROI). That company is Manitowoc®. For decades, we have provided innovative, market-leading lifting equipment and related solutions that set global industry standards for performance and quality. The same is true today as we continue to help our customers Build Something Real.

What does it mean to Build Something Real? It means delivering more than simply the world's best cranes. Manitowoc delivers **REAL ROI**, **REAL PERFORMANCE**, **REAL QUALITY AND RELIABILITY**, **REAL AGILITY** and **REAL SUPPORT**. To achieve this, we provide our customers with cranes that have longer lifecycles so they can stay on the job and build the infrastructure, facilities and structures needed by a global economy. The Manitowoc promise is to Build Something Real through the most customer-focused product innovation and service in the industry.



Potain MDT CCS City cranes — set a new benchmark in the tower crane industry with the Crane Control System.

BUILDING BLOCKS OF MANITOWOC.

Manitowoc cranes are designed to lift profits for our valued customers.

We provide products that help our customers build successful companies.

The Manitowoc difference is supported by five key pillars:

REAL ROI. High resale value, reduced transport costs, lower site preparation costs, minimized depreciation, reduced maintenance costs, greater lifetime utilization and increased rental rates combine to create a greater ROI when you rely on Manitowoc cranes.

REAL PERFORMANCE. Innovations like the Manitowoc Crane Control System help ensure superior lifting performance, more productive load charts and easier operation.

REAL QUALITY AND RELIABILITY. Exhaustive component testing at four Manitowoc Product Verification Centers along with parts and system standardization across multiple crane lines combine to deliver the highest quality and reliability on the jobsite.

REAL AGILITY. Industry-leading Manitowoc manufacturing processes lower lead times and create production flexibility to ensure our customers get the crane they want when they want it.

REAL SUPPORT. Manitowoc Crane Care and Manitowoc Finance provide the 24/7 aftermarket product support and flexible finance options to ensure minimum downtime and maximum uptime.

Manitowoc MLC300 — features the industry-changing and patented VPC technology with the strongest load charts in its class.



REAL ROI.

Industry-leading innovation results in more productive and reliable cranes.

Meeting the world's lifting needs is serious business. As a leading crane manufacturer, Manitowoc has worked tirelessly on innovations that boost productivity. Our innovative products have achieved dozens of patents over the years in our never-ending quest for continuous improvement in crane performance, productivity and return on investment.

> Less counterweight means real ROI.

One of the most revolutionary ideas to hit the crane industry in years is the Variable Position Counterweight™ (VPC™) system for Manitowoc lattice-boom crawler cranes. The VPC system automatically positions the counterweight in response to the boom angle and the amount of weight lifted. This results in lower ground-bearing pressure, reduced ground preparation and less counterweight needed to make a lift. By comparison, a conventional crane outfitted with a ballast wagon or hanging tray (to accommodate adequate counterweight) can require nine times greater area for ground preparation. Less counterweight also dramatically reduces the number of truck loads needed during transport to the jobsite. With VPC, savings in transportation, ground preparation and crane assembly can be significant for crane owners.



UP TO **\$905,000** IN SAVINGS

SITE PREPARATION COST SAVINGS

Manitowoc VPC technology lowers site preparation costs due to the crane's greatly reduced ground-bearing pressure, which eliminates the cost of matting. VPC also reduces the need in loading/lifting counterweights. On a job requiring three cranes, that can add up to \$905,000.

REAL PERFORMANCE.

Performance innovations take productivity to new heights.

> Unique suspension drives versatility.

MEGATRAK® suspension system uses independent suspension and all-wheel steering to ensure that all wheels stay on the ground at all times so stresses and weight are not continually transferred between axles.

> Performance in the clutch.

The VIAB turbo clutch eliminates both fluid overheating and clutch burning, and allows for wear-free starting and braking.

✓ Enhanced control for real performance.

The Crane Control System utilizes redundant sensors to monitor all crane movements and structural stresses in real time for ultimate man-to-machine communication. A user-friendly interface is visible on two full-graphic displays.



> A better built rope.

Revolutionary KZ-100 fiber hoist rope, co-developed by Manitowoc and Samson, is 80 percent lighter than wire rope and built to eliminate load spin, cabling, kinking, bird-caging and assorted damage caused by cable-spooling issues.

✓ Powerful and energy efficient.

Manitowoc meets energy efficiency standards while sustaining peak performance by incorporating the best globally compliant engines in our crane models.



REAL QUALITY AND RELIABILITY.

Putting quality to the test brings out our best every day.

At Manitowoc, we aim for the highest standards in all we do because it is not enough to say we are the best. We prove it by investing in testing facilities staffed by quality control engineers whose sole job is to validate the products, parts and materials we use to manufacture our many crane products.

> Manitowoc Product Verification Centers

No other crane company has made a greater commitment to test and verify the quality and performance of its crane products than Manitowoc. We are the only crane manufacturer with dedicated component testing facilities to ensure component reliability and improved return on investment for the customer. That is proven every day at the Product Verification Centers (PVCs) in Shady Grove, Pennsylvania; Lusigny, France; Charlieu, France; and Wilhelmshaven, Germany. The PVC utilizes advanced testing equipment and procedures to simulate real operating conditions to give Manitowoc engineers insights into the anticipated performance of cranes on the job. The PVC allows Manitowoc to accelerate product development, reduce warranty claims and jobsite downtime, and enable direct comparison of supplier components. Manitowoc engineers are able to identify potential difficulties early in development and resolve them long before our cranes reach jobsites.



REAL AGILITY.

Innovative manufacturing practices lead to faster delivery.

Manitowoc has been an industry leader in the design and manufacture of crane products that set new standards of excellence. Our manufacturing processes are governed by a company-wide commitment to lean strategies, systems and tools that eliminate waste and ensure increased control and management of product lead-times, quality, cost and on-time delivery. This process gives us the agility and flexibility to create product lines in multiple facilities and regions worldwide.

We invest in the latest tooling technologies and robotics, which enables us to keep product quality high and manufacturing costs low. One result of our production efficiencies is that we are able to build multiple products in a single facility. To ensure that our crane customers receive the return on investment they deserve, we invest in testing facilities designed to verify that our products will perform under the harshest work conditions. Why do we go to such lengths in our manufacturing processes? Because at Manitowoc, we believe that to Build Something Real, you have to build something that lasts. That is The Manitowoc Way.



> Standardized parts reduce downtime.

One of the many advantages of the Crane Control System (CCS) lies in its parts standardization. Twelve identical parts are used across all of the cranes outfitted with this unique control system. Fewer parts means less inventory. Through Manitowoc Crane Care, crane owners can quickly access the right parts for faster return to service. In addition, having fewer parts speeds up training across multiple crane lines. This CCS parts standardization currently applies to Manitowoc lattice-boom crawler cranes, Grove rough-terrain cranes, Grove GMK all-terrain cranes and Potain tower cranes.



✓ Manufacturing facilities strategically located to serve our global customers.

Our global manufacturing footprint and international partners enable us to provide localized products and service to our customers around the world. Having manufacturing facilities nearby enables us to provide our customers with faster delivery and optimal service.



REAL SUPPORT.

We make it easy to purchase and protect your crane investment.

Manitowoc supports you at purchase time — and years down the road. When our customers purchase a crane from us, they can be sure of unsurpassed support long after they take possession of the equipment. The parts, support and maintenance needed throughout the life of their crane is always just a phone call or mouse click away. Wherever, whenever, whatever; we're there.

> Manitowoc Crane Care offers peace of mind.



We are committed to designing predictive maintenance into every crane we make to ensure optimized uptime. But we do not stop there. We augment our exacting manufacturing processes with Manitowoc Crane Care service and technical support. This ongoing care for any crane in the Manitowoc brand portfolio is there for crane owners 24 hours per day, 365 days per year — throughout the crane's lifecycle. A 55-course training program is available (for Potain and Grove products) utilizing cutting-edge facilities and hands-on instruction. Further support is provided by Manitowoc Direct, the crane owner's source for up-to-date product information. CAPX (Customer Accessible Parts Express) offers 24/7 access to Manitowoc Crane Care's comprehensive parts literature library.

✓ Manitowoc Finance flexibility is here.



Manitowoc supports its customers with flexible, affordable financing and leasing options in over 35 countries through its finance arm: Manitowoc Finance. We offer low competitive rates, and customers can take advantage of flexible financing options and payment schedules that are adaptable to any business need — including the structuring of terms to help customers make the best use of their cash reserves and compensate for seasonal business fluctuations.



CRANES FOR EVERY LIFTING NEED.

Manitowoc delivers industry-leading ROI throughout its brand portfolio.

MANITOWOC® GROVE® POTAIN® NATIONAL CRANE® SHUTTLELIFT®

Wherever heavy lifting is needed, there is a demand for a reliable, productive and durable crane to get the job done. Our broad portfolio includes industry-leading lattice-boom crawler, all-terrain, truck-mounted, tower, rough-terrain, boom truck and industrial cranes to meet a variety of applications.

Today our cranes are on the job in complex environments around the globe — installing roof trusses at residential building sites, lifting precast concrete for bridge work, hoisting I-beams for 100-story high-rises and assembling turbines on wind farms. On any jobsite where there is a lifting need, there is a Manitowoc crane ideally suited for the task.

> Lattice-Boom Crawler



> All-Terrain / Truck-Mounted



> Tower Crane



> Rough-Terrain / Boom Truck / Industrial / Military





MANITOWOC®

Manitowoc 18000 — versatile performance with high lifting capacity and a compact footprint.

LIFTING SUPERIORITY.

Industry-leading innovation drives performance and profitability.

We pride ourselves on building and supporting the best lattice-boom crawler cranes money can buy. That is why many of our cranes have been on the job 40 years or more, providing the lifting performance, productivity and return on investment our customers deserve. Recent innovations like our industry-first Variable Position Counterweight (VPC) and Crane Control System (CCS) enable these cranes to reach new heights in lift performance, reliability, safety and cost savings.

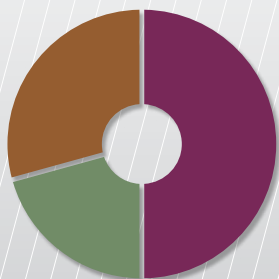
Manitowoc lattice-boom crawler cranes. Lift like a leader.

Manitowoc® brand crawler cranes have been the preferred choice among customers for over 85 years. With lift capacities from 80 USt (73 t) to 2,500 USt (2,300 t), we are dedicated to product innovation and customer support.



- Lattice-boom crawler cranes
- Capacity-enhancing attachments

> Sales by End Market



■	29%	INFRASTRUCTURE
■	0%	RESIDENTIAL
■	0%	COMMERCIAL CONSTRUCTION
■	50%	INDUSTRIAL / PETROCHEMICAL
■	21%	POWER / UTILITY

"The flexibility of the MLC650 makes it a game changer. It can be configured once and then stay built. One of our customers said it could have saved them \$3.5 million on a recent project."

– MALCOM SMITH
Tutt Bryant Heavy Lift and Shift

**\$1.45
MILLION**
AVERAGE YEARLY SAVINGS

TRANSPORT COST SAVINGS

With VPC technology, there is less counterweight to transport. This can result in 19 fewer truckloads needed to haul the crane, which is a \$1.45 million average yearly savings when transported 10 times.

GROVE®

*Grove GMK5250L – delivers
powerful lifting performance
and superior off-road mobility.*



WE DRIVE INNOVATION.

Dependable lifting performance and exceptional mobility.

Grove® is an industry leader in the all-terrain and truck-mounted crane market. Acquired by Manitowoc in 2002, Grove has achieved a number of firsts during its impressive history including the world's first slewing rough-terrain crane and the world's first trapezoidal boom.



- All-terrain cranes

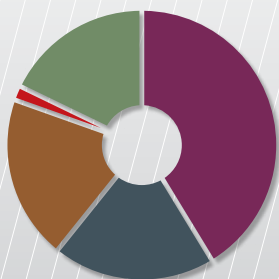
Grove means business.

Grove means lifting versatility. From 50 USt (45 t) capacity truck-mounted cranes to seven-axle, 550 USt (450 t) capacity all-terrain cranes, Grove combines jobsite mobility with unsurpassed lifting performance. With industry-leading technology like Crane Control System, MEGATRAK independent hydro-pneumatic suspension, MEGAFORM™ boom design and TWIN-LOCK™ pinning system, Grove delivers the performance capabilities that drive profits for crane owners and operators.



- Truck-mounted cranes

> Sales by End Market



19%	INFRASTRUCTURE
1%	RESIDENTIAL
20%	COMMERCIAL CONSTRUCTION
39%	INDUSTRIAL / PETROCHEMICAL
21%	POWER / UTILITY

"We send our GMK6300L to jobs that previously used a 500-ton crane that still needed a jib rigged to attain enough reach. It has reduced our costs because we can now perform more jobs much faster."

– FRANK KULBE
Heider Kranverleih

30%
MORE EFFICIENT

The latest technology engines, transmissions and turbo clutches lead to improved fuel efficiency as high as 30% on all-terrain cranes. Options such as the "Fuel Saver" further reduce consumption and engine hours and therefore lower maintenance cost.

17%
STRONGER

The GMK5250L features up to 17% stronger load-charts over its competition. This results in higher utilization, provides greater ROI and ensures unparalleled resale value.



POTAIN®

Potain Igo T 85 A — self-erecting with impressive load chart capacities and a variable height lattice mast.

THE SKY IS THE LIMIT.

A world leader in tower cranes reaches new heights.

Potain® has installed more than 100,000 tower cranes around the world. Manitowoc added Potain to its stable of crane brands in 2001, and today the company manufactures more than 60 different models ranging from small self-erecting cranes with lift capacities starting at 1.1 USt (1.0 t) to large top-slewing cranes with lift capacities up to 88.2 USt (80 t).



- Top-slewing tower cranes

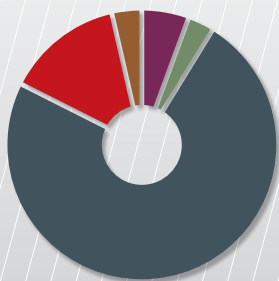
Potain towers over the rest.

From new homes in suburbia to skyscrapers in the world's most modern cities, Potain tower cranes are raising the bar in tower crane productivity. Designed for fast assembly and erection even in complex jobsites, Potain tower cranes combine outstanding lifting capacities; fast, efficient winching speeds; and precision operator control.



- Self-erecting tower cranes

> Sales by End Market



2%	INFRASTRUCTURE
15%	RESIDENTIAL
76%	COMMERCIAL CONSTRUCTION
5%	INDUSTRIAL / PETROCHEMICAL
2%	POWER / UTILITY

"Quality, security and safety are key considerations for us. With Potain there's a compelling price-to-quality ratio. We keep our Potain cranes for around 15 years, and after that time we always find them easy to resell."

– BÉRIC SCALABRE
Bouygues Construction

3.25
HOURS FASTER TO SET UP

Potain tower cranes with Crane Control System can be put into service in as little as 15 minutes, saving valuable time and money on the jobsite.

8 – 10%
MORE LIFT PERFORMANCE

Potain tower cranes with Crane Control System can significantly increase lift performance, resulting in greater productivity on the jobsite.

**NATIONAL
CRANE®**

National Crane NBT55 — boasts fully integrated machine control for ease of operation.



GROVE®

Grove RT9150E — well-suited for rough terrain and heavy-duty lifting in a compact space.



SHUTTLELIFT®

Shuttlelift CD5520 — easy maneuvering and versatility with state-of-the-art design for both indoor and outdoor applications.



READY FOR ANY LIFT.

The industry's most versatile mobile cranes.

The Manitowoc portfolio of cranes includes industry-leading mobile cranes that combine impressive lift capacities with exceptional jobsite mobility. These versatile cranes are durable, dependable and loaded with features that make them among the most popular lifting solutions on the market. Available in every application from truck cranes to rough-terrain cranes, these lifting machines offer capacities ranging from 8 USt (7.3 t) to 150 USt (135 t).

Impressive lifting for any jobsite.

Manitowoc is proud to serve the myriad lifting needs of its diverse customers with National Crane®, Grove® and Shuttlelift® cranes. Customers in the mining, forestry, petrochemical, environmental, municipal, military, industrial and emergency sectors appreciate their impressive industry-leading load charts and jobsite maneuverability.



- Stand-up control boom trucks
- Swing-seat control boom trucks

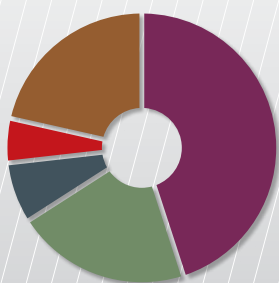


- Rough-terrain cranes
- Telescopic crawler cranes
- Military cranes



- Industrial cranes

> Sales by End Market



20%	INFRASTRUCTURE
6%	RESIDENTIAL
8%	COMMERCIAL CONSTRUCTION
46%	INDUSTRIAL / PETROCHEMICAL
20%	POWER / UTILITY

"Crane equipment has a very demanding lifecycle in a mining environment. But Grove rough-terrain cranes are so well-built and durable that we can often get up to 20 years' service from them."

– JUAN OLIVARES CORTES
Zaldívar Copper Mine

HIGH TOP-TIER RESALE VALUE

Manitowoc cranes deliver top-tier products that provide an unrivaled combination of innovative features, operational versatility and rugged durability — resulting in resale values that are consistently the highest in the industry.

THE MARKETS WE SERVE.

COMMERCIAL CONSTRUCTION

Manitowoc cranes are at work on some of the biggest commercial construction projects in the world. From building corporate headquarters and high-rise office towers to the most modern sports stadiums, our lifting machines are on the job — reaching new levels of productivity with industry-leading Potain tower cranes, Manitowoc lattice-boom crawler cranes, Grove all-terrain and rough-terrain cranes, and National Crane boom trucks.



RESIDENTIAL CONSTRUCTION

Housing the world's growing population, both in developed and undeveloped nations, is vital work. Whether the project entails suburban housing, high-density mixed-use urban projects, or high-rise apartments or condominiums, versatile lifting solutions are available from Grove truck-mounted cranes, National Crane boom trucks, Potain city-range top-slewing and self-erecting tower cranes.



INFRASTRUCTURE

Creating the infrastructure that makes modern life possible is an ongoing endeavor. Roads and highways. Bridges that span the world's waterways. Airports and rail systems needed to move people and freight. All of these will require construction projects of staggering proportions in the coming decades. The heavy lifting will be achieved using Potain tower cranes, Manitowoc lattice-boom crawler cranes, Grove all-terrain and rough-terrain cranes and National Crane boom trucks.





POWER / UTILITIES

An increasingly urban and modernized world needs a ready supply of energy to power its buildings and transportation infrastructure. Power plant construction and maintenance requires heavy-lifting cranes with the capacity to pick and carry loads weighing hundreds of tons. In recent years, wind farms around the world have relied on Manitowoc lattice-boom crawler cranes, Grove rough-terrain, all-terrain and telescopic cranes, and National Crane boom trucks.



INDUSTRIAL

Factories around the globe rely on powerful, mobile and versatile cranes to facilitate plant maintenance procedures and day-to-day material handling. Managers have relied on Grove rough-terrain cranes, Shuttlelift and Grove YardBoss industrial cranes, and National Crane boom trucks.



PETROCHEMICAL

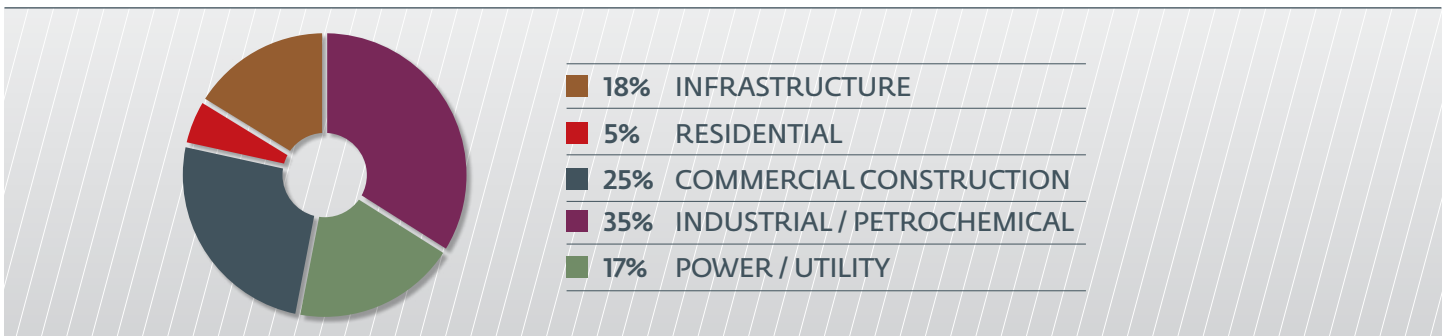
Emerging world markets continue to create greater demand for petrochemical energy sources. The plants needed to refine oil and gas require massive lifts during their construction and subsequent expansions. Manitowoc lattice-boom crawler cranes and Grove all-terrain, rough-terrain and truck-mounted cranes are the preferred lifting solutions for these vital projects.



MANITOWOC SALES.

Wherever there is a job to do, Manitowoc is ready to perform. We provide lifting solutions for dealers, rental companies, large and small construction companies, and the military. Our combination of quality, innovation and unrivaled customer support fuels our crane sales and ensures repeat business.

> Sales by End Market Segment

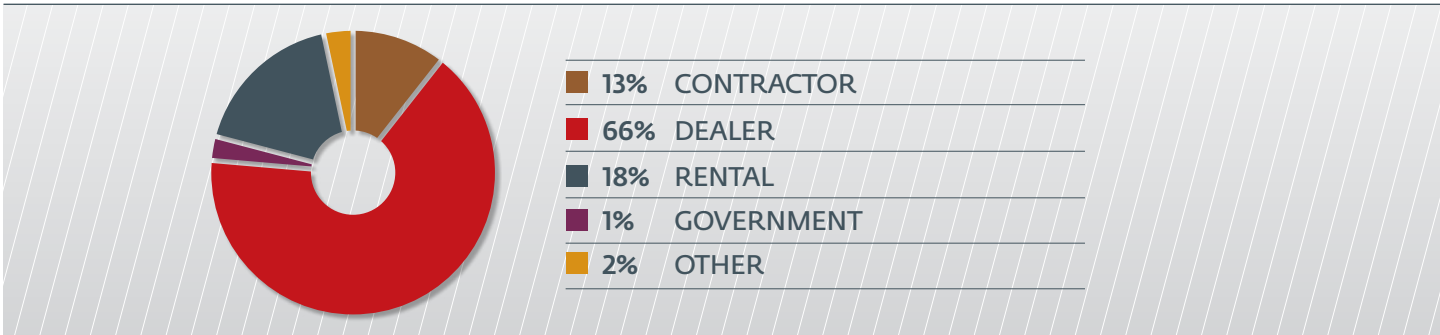


> Sales by Region





> Sales by Customer Type



OVER **140,000** CRANES IN SERVICE

SUPERIOR DURABILITY AND LIFECYCLE

Manitowoc cranes are designed to work all day, every day and deliver a long service life, remaining in operation long after other cranes have been retired.

MANITOWOC.

BUILT BY THE BEST.

Building Something Real starts with our people.

At Manitowoc, our pledge to Build Something Real carries the weight of over 5,000 dedicated employees working from manufacturing facilities in seven countries around the world. Our highly skilled workforce enables us to build the world's most innovative crane products more efficiently — even under the most demanding production schedules. Every crane produced on our assembly lines is the result of unsurpassed manufacturing processes and tireless attention to detail. Going forward, our people will continue to focus on designing and manufacturing the best lifting solutions money can buy.

"I'm building something real — fantastic products made by hardworking, talented and passionate people."



– **DEB O'LEARY**
Welder

"The cranes we manufacture aren't just helping to build the world, they're helping build economic growth and prosperity for all of us."



– **JODY LEIDIG**
CNC Programmer

"The pride and passion our workers have for their jobs show through in the unrivaled quality of our cranes."



– **HOLGER HABER**
Product Manager

"Our customers want a crane that performs at the highest level for years to come. I take pride in providing that quality from the start."



– **CHIN MENG LIM**
Technician





World Headquarters

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