Global Ride Solutions





CONTENTS

TRUCK | TRAILER | AUXILIARY AXLE | BUMPER AND

TRUCK

On-Highway	
STEERTEK NXT	6
AIRTEK®	6
AIRTEK® NXT	6
SOFTEK® NXT	6
НА4™	6
HAS™ Series	7
OPTIMAAX®	7
HTB® LT	7
H-CP4™	7
COMFORT AIR®	7
H-CP™ TAG	7

Vocational / Heavy-Haul	
ULTIMAAX®	8
PRIMAAX® EX	8
瀚瑞森 HUV®	8
HAULMAAX®	8
HAS™ (402, 460)	9
HN®	9
R^{TM}/RS^{TM}	9
Front Crane Air Suspension	9
Rear Crane Air Suspension	9
FIREMAAX® EX	10
AR2™	10
HN® FR	10
PARASTEER™ HD	10
RT™/RTE™	11
6 ROD	11
STEERTEK NXT	11

Truck / Bus / Motorhome

AIRTEK®	12
SOFTEK®	12
IFS™	12
COMFORT AIR®	12
HAS™ Single-Axle	12
PARASTEER™	12
PRIMAAX® / PRIMAAX® EX	13
COMFORTLINER™	13
HTB®	13
LUXAIR™	13
H-TAS™	13
HWS™	13

Military

•	
PRIMAAX® EX	14
HPAS™	14
HAULMAAX® / ULTIMAAX®	14
Independent	15
Long Travel Trailing Arm	15
RT™	15
Leaf Springs	15

Springs Truck

Stabilizers	
Truck	17

16

Torque Rods / Bushings

Truck	18

Elastomers

Truck / Trailer	19
iluck / ilulici	1.2

AUXILIARY AXLE SYSTEMS

COMPOSILITE®	20
SC 08 / 10 / 13 / 20	20
SC0 13 / 20	20
SCH 10	20
FX 13	20
FXO 13	20
COMPOSILITE® EX	20

TOUGHLIFT®	21
FM 20 / 25 (HLM)	21
FMO 20 / 25	21
FR 13 / 16 / 18 (HLR)	21
LK 25	21
MLA2™+	21
Loose Axles	21
Value-Added Options	21

TRAILER

Vocational / Heavy-Haul / **On-Highway**

5 7	
INTRAAX®	22
AAT 23K / 25K / 30K	22
AANT 23K	22
AAL 23K / 25K / 30K	22
AANL 23K	22
AAEDT 30K	23
AAEDL 30K	23
AANLS 20K	23
INTRAAX®- SP	23
AAZNT 23K / 46K / 69K	23
AA7L 23K / 46K	23

Specialty / Vocational / Heavy-Haul

CONNEX™- ST	24
CONNEX™ CXU 23K / 25K	24
HT™ Series	24
Top-Mount	24
Underslung	24
Y-Beam	24
HSDS®	24
TRLAXLE® / HTA® / HCA®	24

On-Highway

VANTRAAX®/ULTRAA-K®	25
ULTRAA-K® UTKNT 40K	25
HKANT 23K	25
HKANT 40K	25
HKANT 46K	25
HKANT 46K — Wide Spread	25
HKARL 46K	25
HKANL 23K	25
HKAL 46K	25
HKAT 50K	25
HKANT 69K23	25
HKAT 69K25 / 75K25	25

Wheel-End / Brake Options

	-
HXL7®	26
HXL5®	26
HXL3®	26
MAXX22T™	26

Features / Options

LDA™	27
Lift Kits	27
TIREMAAX® PRO	27
ZMD®	27
UBL™	27
Corrosion Protection	27
Brake Options	27

BUMPER AND TRIM

AERO CLAD®	28
All Makes Program	29

WATSON & CHALIN

Tru-Track Series	30
SL8K	30
SL10K	30
SL13K	30
SL20K	30
SL25K	30
AL25K	31
Single Point	31
Trailer Air Series	31
MS-2200	31
Value-Added Options	31

AFTERMARKET

Ganuina	Darte	32 -	22

GLOBAL OPERATIONS

NAFTA	34
EMEA / ASIA PAC	35

HENDRICKSON The World Rides On Us

Hendrickson is the leading global manufacturer and supplier of mediumand heavy-duty mechanical, elastomeric and air suspensions; integrated and non-integrated axle and brake systems; tire pressure control systems; parabolic and multi-leaf springs; stabilizers; and bumper and trim components to the global commercial transportation industry. Everyday around the world, millions of Hendrickson suspensions carry countless loads of freight and raw materials both on- and off-highway. We supply durable, lightweight, high-performing suspension systems and components to the major North and South American, European, Asian and Australian medium- and heavy-duty truck and trailer OEMs and fleets. Hendrickson's growing global position in the commercial transportation industry and its on-going drive to provide products and services benefits truck and trailer manufacturers, fleets and owner operators around the world. Our tagline, The World Rides On Us®, not only reflects the spirit of the brand but also Hendrickson's 100 plus years of engineering for efficiency.



UNPARALLELED RESEARCH AND DEVELOPMENT

Hendrickson's entrepreneurial spirit led to a series of valuable "firsts" that have changed the industry and inspired growth.

From production of our first tandem walking-beam suspension to the innovative designs of today's ULTIMAAX® advanced severe-duty vocational truck suspension and ULTRAA-K® axle / air slider suspension system, Hendrickson's approach to research and development continues to drive innovation. Hendrickson's unmatched passion drives next generation technology for suspensions and components that integrate with emerging intelligent vehicles in the medium and heavy-duty trucking industry. Elements including brakes, remote sensors, wheel-ends and pneumatic controls hold tremendous promise for the trucks and trailers of tomorrow. Engaging and energizing the global trucking community, Hendrickson remains at the forefront in the development of superior and unique suspensions and components that deliver value to our customers.





INNOVATIVE PRODUCT DEVELOPMENT

Hendrickson does not just innovate for innovation's sake, we innovate for functional superiority. Help minimize costs and maximize payloads with Hendrickson medium- and heavy-duty truck, tractor and trailer suspension systems; lift axle systems; truck and trailer axles and brakes; tire pressure control systems; bumpers; springs and stabilizers. Hendrickson develops ride solutions that are engineered and manufactured for durability and weight savings, reinforcing efforts by fleets and owner operators to help lower maintenance costs and boost the resale value of their vehicles. Hendrickson works closely with fleets and commercial truck and trailer manufacturers around the globe to advance new product development and support the industry's expanding requirements.



OUTSTANDING CUSTOMER SERVICE

Our customers demand and deserve quality service. **The World Rides On Us®** symbolizes our commitment to the customer. At Hendrickson that commitment begins early and runs deep. It starts by providing OEMs advanced engineering services to assist in the design, development and testing of equipment specific to their applications.

We support our products through extensive technical support and training services to help ensure the proper installation, operation, service and maintenance of Hendrickson equipment and aftermarket components. Under the Hendrickson PRO-GENUINE™ affiliation program, we provide comprehensive product training, ongoing technical support and marketing-related services to assist professional truck service providers to ensure customer satisfaction. Whether it's Hendrickson Genuine Parts or original Hendrickson components, we stand behind our products and components every step of the way.

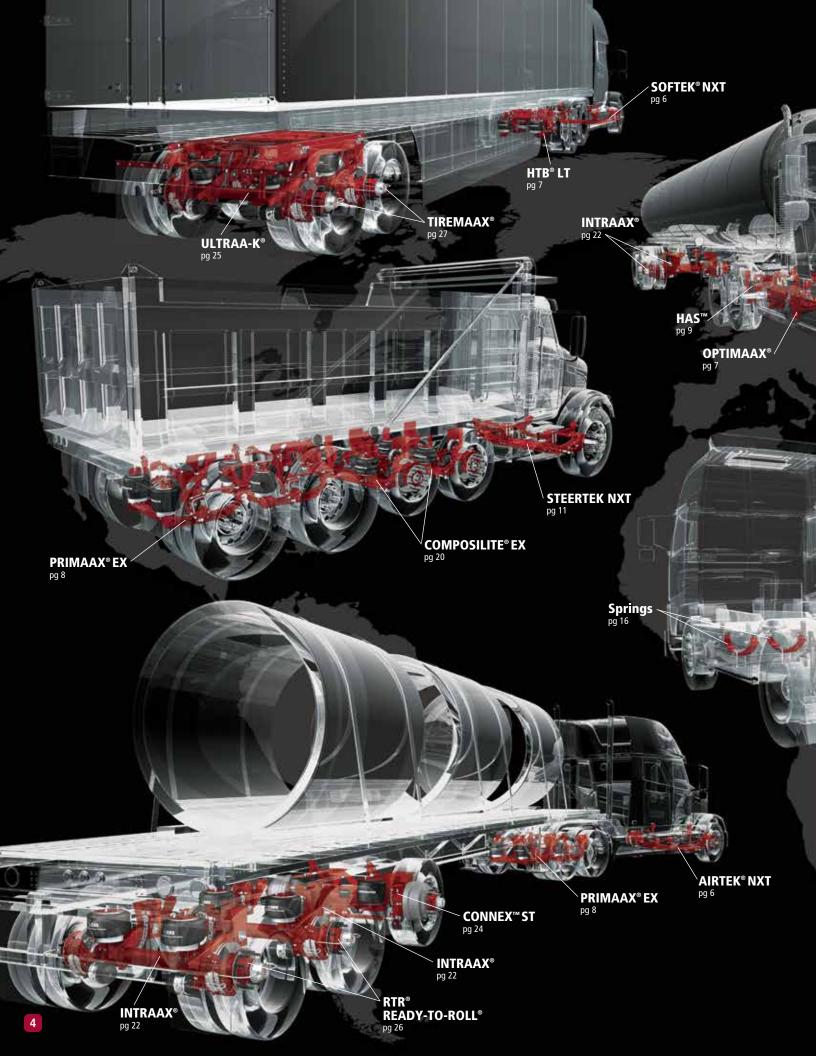


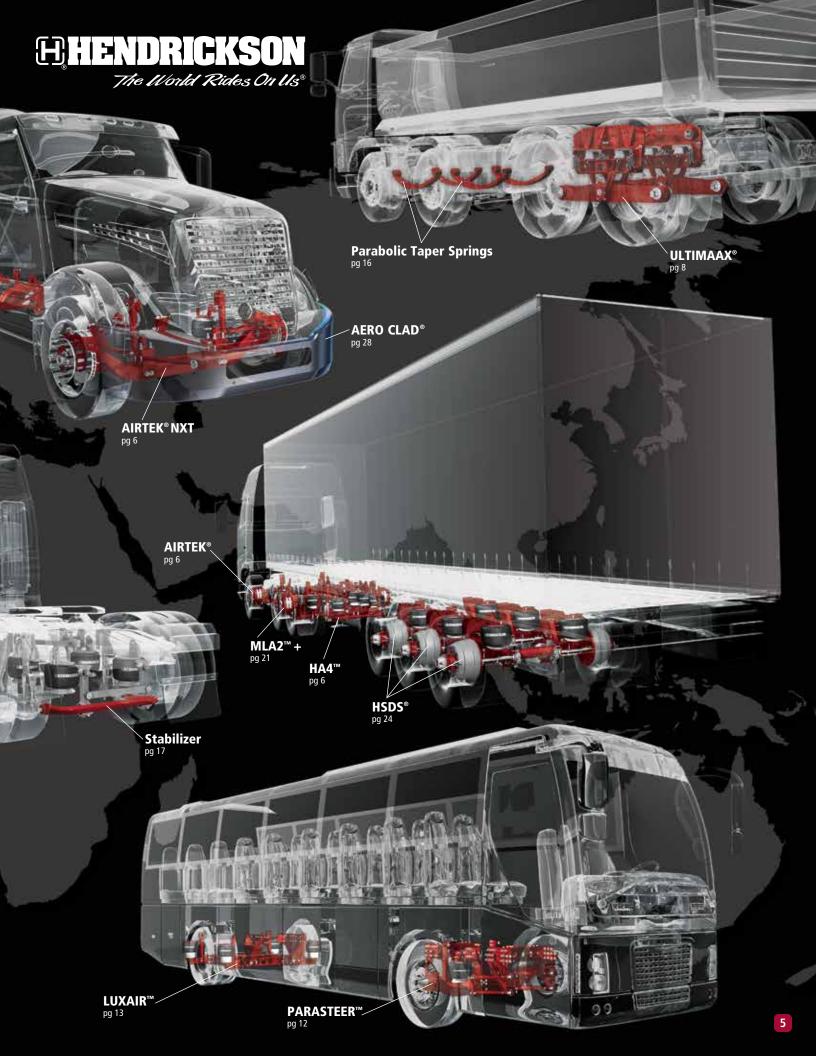


OUTREACHING GLOBAL NETWORKS

Wherever a customer is in need, Hendrickson is there. Our unmatched passion spans our global network of operations and employees. Hendrickson is prepared to provide and support cost-effective ride solutions to meet the world's demands. We presently have sales and distribution facilities and/or state-of-theart manufacturing centers in the U.S., Mexico, Canada, Colombia, United Kingdom, Germany, Austria, Romania, France, Turkey, India, China, Japan, Thailand, Australia and New Zealand. Collectively these facilities give Hendrickson the reach to service the entire commercial vehicle market and create a network that is truly global.







ON-HIGHWAY

SUSPENSION SYSTEMS

STEERTEK NXT

Fabricated steer axle for on-highway applications

- Designed as a platform for OEM proprietary and next generation front axle / suspension systems
- Fabricated axle assembly for lightweight design
- Saves up to 23 lbs. (10.4 kg) vs. traditional forged I-beam axles
- Box shaped cross-section is more rigid than traditional I-beam axles
- Two-piece knuckle reduces maintenance and downtime
- Standard 10-year, one-million mile limited warranty*
- Withstands increased brake torque requirements resulting from 2011 F.M.V.S.S. stopping distance regulations



AIRTEK® NXT

Next generation integrated front air suspension and fabricated steer axle system

- Combines STEERTEK NXT axle and air suspension technology with an advanced integrated clamp group design
- Provides superb ride, driver comfort and roll stability
- Up to 100 lbs. (52.6 kg) weight savings
- Compatible with drum and disc brakes



AIRTEK®

Integrated front air suspension and fabricated steer axle system

- Integrated design provides superb ride, driver comfort and roll stability compared to traditional two-leaf spring suspension
- Up to 97 lbs. (44 kg) weight savings
- Exclusive STEERTEK NXT axle for increased roll stiffness
- Integrated axle seat to improve ground clearance and reduce part complexity

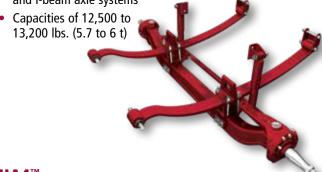


SOFTEK® NXT

Integrated monoleaf suspension and steer axle system

 Combines STEERTEK NXT axle and monoleaf technology with an advanced integrated clamp group design

 Saves over 100 lbs. (52.6 kg) vs. traditional two-leaf spring and I-beam axle systems



HA4™

Four-bag, drive-axle air suspension system

- Suitable for medium- and heavy-duty truck applications
- Non-torque reactive
- Capacity up to 28,600 lbs. (13 t)



HAS™ Series

Tandem axle air suspension

- Suitable for on-highway applications that require up to 25 percent off-highway travel
- Excellent ride quality
- Lightweight design
- Capacity of 40,000 and 46,000 lbs. (19 and 21 t)



HTB® LT

Lightweight, non-torque reactive, on-highway, rear air suspension

- Weight savings of up to 305 lbs. (138 kg) compared to other 40,000-lb. (19 t) capacity suspensions
- Non-torque reactive suspension maintains driveline pinion angles and significantly controls frame rise
- Large-volume air springs support the entire load to create a superior ride experience
- Unique, maintenance-free torque box system improves multi-axial stability and control





COMFORT AIR®

Rear air suspension designed for passenger and driver comfort in various on-highway applications

- Main support member designed for optimized roll stiffness and handling
- Air springs adjust to changing road conditions to deliver superior ride quality

 Featuring TRAXX ROD[™] torque rods for exceptional performance life

Capacities ranging from 20,000 to 28,600 lbs. (9 to 13 t) (single axle), 40,000 to 57,000 lbs. (19 to 26 t) (tandem axle)

OPTIMAAX®

Liftable forward tandem axle and suspension system

- Saves up to 400 lbs. (181 kg) and can help improve fuel economy by 3 – 5 percent vs. 6×4 configurations
- Designed for variable load carriers such as bulk haulers, grocery, livestock, beverage or applications experiencing empty back hauls
- Includes integrated lift axle, suspension and automated controls

Compatible with drum and disc brakes

• Capacity of 20,000 lbs. (9 t)



H-CP4™

Premium four-bag, drive-axle air suspension system

- Suitable for premium tractor and rigid applications offering superb ride quality and cargo protection
- Component count reduced by up to 60 percent compared to traditional systems
- Non-torque reactive
- Protects load and body from road shocks low frequency ride (1.25Hz)

 Capacity up to 28,600 lbs. (13 t)



H-CP™ TAG

Lightweight, non-torque reactive, auxiliary axle and air suspension system

- Suitable for medium- and heavy-duty truck applications
- Component count reduced by up to 60 percent compared to traditional systems
- Large-volume, direct-acting air springs support entire load to improve ride
- Capacity up to 20,000 lbs. (9 t)



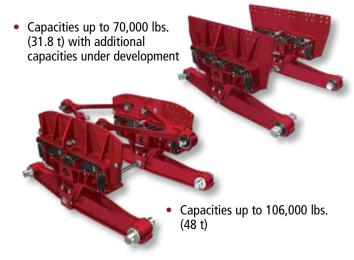
VOCATIONAL / HEAVY-HAUL

SUSPENSION SYSTEMS

ULTIMAAX®

Advanced severe-duty rubber suspension

- Recommended for dump, logging, refuse, mixer, oil field and mining applications
- Optimized design to balance robust durability and weight savings
- Progressive load springs provide a unique balance of unloaded ride quality and loaded stability
- Fabricated walking beam design equalizes axle loading while providing optimal clearance, axle travel and weight



瀚瑞森 HUV®

Advanced heavy-duty rubber suspension

- Applications include tractors and rigid trucks, including mixers, tankers, enclosed cargo and city dumpers
- Up to 948 lb. (430 kg) weight savings compared to 6-rod suspensions for additional payload
- Progressive rate springs provide a unique balance of empty ride quality and loaded stability
- Walking beam design equalizes axle loading while providing outstanding axle travel and mobility
- Capacity of 52,000 60,000 lbs. (24 27 t) with additional capacities under development



PRIMAAX® EX

Severe-duty vocational air suspension

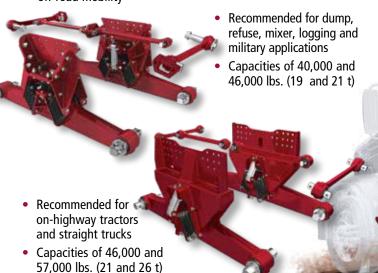
- Ideal for dump, logging, refuse, mixer, crane, oil field, military and heavy-haul applications
- Optimized configuration helps improve handling and roll stiffness for expanded applications
- Axle connection and torque rods help reduce torsional axle stress and driveline vibration
- Large-volume, low frequency air springs provide a smooth ride for on- and off-highway use
- Up to 12.5 in. (318 mm) of diagonal wheel articulation for superior mobility
- Capacities of 23,000 and 26,000 lbs. (10.5 and 11.8 t) (single axle), 46,000 and 52,000 lbs. (21 and 24 t) (tandem axle) and 69,000 and 78,000 lbs. (31.5 and 35.4 t) (tridem axle)



HAULMAAX®

Heavy-duty lightweight rubber suspension

- Hundreds of pounds lighter than competitive suspensions
- Provides superior combination of empty ride and loaded stability
- Reduced maintenance with fewer bushings and no lubrication requirements
- Up to 17 in. (432 mm) of diagonal articulation for greater off-road mobility



HAS™ (402,460) HN®

Tandem axle air suspension

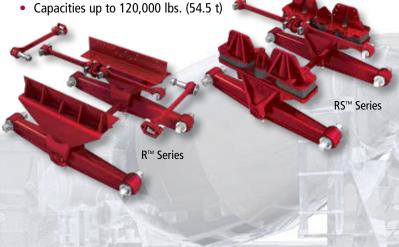
- Suited for both on- and off-highway applications
- Large-volume air springs deliver excellent ride quality and cargo protection
- Approved for up to 25 percent off-highway use
- Approved for use with lift axles
- Optional inboard shocks available
- Capacities of 40,000 and 46,000 lbs. (19 and 21 t)



R™/RS™

Severe-service, walking-beam suspensions

- Exceptional performance in mining, oil field, mixer, refuse, logging and other specialty applications
- R Series solid mount is an extra heavy-duty suspension where maximum roll stability is essential
- RS rubber load cushions absorb shock and provide high stability for severe-service applications



Heavy-duty rubber suspension

- Applications include dump, refuse, mixer, logging and military
- System results in excellent loaded stability and unloaded ride quality
- Up to 17 in. (432 mm) of diagonal articulation contributes to outstanding traction

 Reduced maintenance with fewer bushings and no lubrication requirements

 Capacities of 40,000, 46,000 and 52,000 lbs. (19, 21 and 24 t)



Integrated Front Air Suspension and Steer Axle

For truck crane applications

- · Single or twin front steer featuring STEERTEK NXT
- Trailing or leading arm configurationUp to 52 in. (1321 mm) axle spacing

 Capacities up to 26,000 lbs. (11.8 t) (single axle) and 52,000 lbs. (24 t) (tandem axle)



- Up to 72 in. (1829 mm) axle spacing
- Eliminates torque rods for lower maintenance
- Capacities up to 30,000 lbs. (13.6 t) (single axle) and 60,000 lbs. (27 t) (tandem axle)

VOCATIONAL / HEAVY-HAUL

SUSPENSION SYSTEMS

FIREMAAX® EX

Heavy-duty air suspension

- Designed specifically for fire and rescue applications
- Improved ride for firefighter comfort and equipment protection
- Superior handling for greater driver control during lane changes and tight road maneuvers
- Integrated stabilizer design results in greater stability compared to other air suspensions
- Dual height control valves maintain proper suspension ride height for shifting or uneven loads
- Capacities of 24,000, 27,000 and 31,000 lbs. (10.8, 12.2 and 14 t) (single axle) and 48,000, 54,000 and 62,000 lbs. (21.7, 24.4 and 28.1 t) (tandem axle)



HN® FR

Heavy-duty rubber suspension

- Ratings approved for fire and rescue applications
- VARIRATE® spring system delivers the ideal combination of stability, ride quality and articulation
- Equalizing beams distribute load equally between both axles for improved traction
- System can be tailored to meet the specific needs of unique vehicle applications
- Capacities of 42,000, 48,000, 54,000 and 58,000 lbs. (19, 21.7, 24.4 and 26.3 t)



AR2™

Original equipment or aftermarket replacement truck air suspension

- Applications include dump, crane / boom and platform
- Converts most RT[™]/ RTE[™] steel spring suspensions to an air suspension
- Better ride, longer component life, reduced weight and improved durability
- High articulation capabilities for on- and off-highway applications
- Capacities of 40,000 and 46,000 lbs. (19 and 21 t)



PARASTEER™ HD

Single, twin- and tri-steer axle air suspension

- · Applications include crane, concrete, oil field and specialty
- No fixed steer axle spacing constraints, providing excellent axle spacing flexibility
- Air springs equally support one hundred percent of the vertical load for excellent ride quality
- Kneeling capability for improved driver ingress / egress
- System weight remains constant as steer axle spacing increases
- Heavy-duty rubber bushings require no lubrication
- Capacities of 14,600 20,000 lbs. (6.6 9 t) per axle



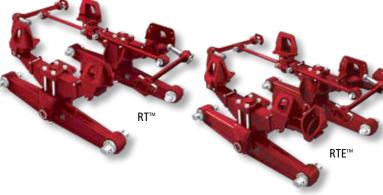


Durable steel leaf spring, walking-beam suspensions

- Well suited for dump, refuse, mixer, mining and military applications
- Proven reliability for over 85 years
- RTE Series features extended leaf spring for improved unloaded ride quality and loaded stability
- RT capacities up to 65,000 lbs. (29.5 t) and RTE capacities up to 50,000 lbs. (23 t)

Premium double-drive suspension system

- Suitable for tractors and rigid trucks in on- and off-highway applications
- Provides very high articulation and superb traction on all wheels
- High roll resistance and lower ride frequency with rubber bolsters and long-life, heavy-duty 'V' links and torque rods
- Rated at 42,000, 46,000, 50,000, 57,000 and 70,000 lbs. (19, 21, 23, 26 and 32 t)
- 105,000 lbs. (48 t) model is available for heavy-duty construction and mining applications





STEERTEK NXT

Fabricated front steer axle for heavy-duty applications

- Designed as a platform for OEM proprietary and next generation front axle and suspension systems
- Fabricated axle assembly for lightweight design
- Box shaped cross-section is more rigid than traditional I-beam axles
- Withstands increased brake torque requirements resulting from 2011 F.M.V.S.S. stopping distance regulations
- Compatible with drum and disc brakes
- Capacities ranging from 15,430 24,250 lbs. (7 11 t)



TRUCK / BUS / MOTORHOME

SUSPENSION SYSTEMS

AIRTEK®

Integrated front air suspension and steer axle system designed for comfort and improved performance

- High-volume air springs provide superb ride and driver comfort
- Low maintenance design helps keep trucks, buses and motorhomes on the road

Up to 55-degrees of wheel cut greatly improves maneuverability

 Capacities ranging from 10,000 to 14,600 lbs. (4.5 to 6.6 t)



AIRTEK® for low floor buses

Integrated front air suspension and steer axle system designed for transit bus applications

 High-volume air springs provide superb ride along with passenger and driver comfort

 Unique integrated system design achieves lower ride heights to ease passenger entry and exit

 Capacities ranging from 16,000 to 20,000 lbs. (7 to 9.1t)



COMFORT AIR®

Single-axle, rear air suspension designed for passenger and driver comfort in various medium-duty truck, bus, ambulance and motorhome applications

- Wide footprint of frame hanger reduces stress to the frame
- Suspension geometry improves ride and handling
- Capacities ranging from 15,000 to 23,000 lbs. (6.8 to 10.5 t)



COMFORT AIR®

Single-axle, rear air suspension designed specifically for cut-away and speciality vehicles

- Optimized configuration provides improved driver feel for increased handling and confidence when performing maneuvers
- Designed to achieve 3.5 in. of kneel
- Designed to reduce roll forward during kneeling operation
- Capacity up to 10,000 lbs. (4.5 t)



SOFTEK®

Integrated front mechanical suspension and steer axle system designed for passenger and driver comfort

- Highly engineered for optimized ride and performance
- · Robust design for high durability and low maintenance
- Efficient design contributes to a smooth and quiet ride

Optimized steering performance delivers up to 55-degrees of wheel cut

• Capacities ranging from 8,000 to 14,600 lbs. (3.6 to 6.6 t)



IFS™

Independent front suspension designed for premium ride and handling for motorhome chassis

- Up to 57-degrees of wheel cut for exceptional maneuverability
- Shock and spring travel directly proportional to wheel travel, for superior ride and handling
- Compatible with both disc and drum brakes
- Capacities of 12,000 and 14,600 lbs. (5.4 and 6.6 t)



HAS™ Single-Axle

Rear air suspension

 Range of models for medium-duty tractors, pick-up / delivery, beverage, bus and motorhome applications

- Excellent ride quality
- Low ride heights available
- Capacities ranging from 12,000 to 23,000 lbs. (5.4 to 10.5 t)



PARASTEER™

Front axle air suspension system designed specifically for bus and motorhome applications

- Four-bar parallelogram linkage provides outstanding ride, steering and handling qualities
- Rubber bushings require no lubrication
- Capacity up to 15,600 lbs. (7 t)



PRIMAAX® / PRIMAAX® EX

Revolutionary air suspension system

- Suitable for tractor and rigid applications
- Non-reactive to brake and acceleration torque
- Roll-resistant design simplifies installation and maintenance
- Superior ride and handling provide enhanced driver comfort and protection to vehicle loads and body
- Capacity up to 23,000 lbs. (10.5 t)
- Single-axle capacities up to 26,000 lbs. (11.8 t)



HTB®

Single-axle, rear air or mechanical suspension designed for stability and ride comfort

- Available in both air and mechanical configurations
- Patented torque box system* provides roll stability and lateral / longitudinal control
- Flexible design balances roll stiffness and articulation without compromising ride performance
- Capacities up to 21,000 lbs. (9.5 t) for air configurations and 17,500 lbs. (8 t) for mechanical configurations



* U.S. and foreign patents granted and / or pending.

H-TAS™

Lightweight, two-bag, drive-axle, air suspension system

- Suitable for medium-duty tractor and rigid applications
- Rubber pivot bushings provide quiet operation and require no lubrication
- Fewer components, easier assembly
- QUIK-ALIGN® axle alignment system simplifies axle alignment
- Capacities up to 23,000 lbs. (10.5 t)

COMFORTLINER™

Premium drive axle air suspension for transit and coach bus applications

- Fabricated u-beam assembly improves stability, ride and handling
- Air springs adjust to changing road conditions to deliver superior ride quality
- D-pin axle connection lowers axle stress for reduced maintenance
- QUIK-ALIGN® axle alignment system simplifies axle alignment
- Capacities up to 24,000 lbs. (11 t)



LUXAIR™

Premium lightweight drive axle air suspension for transit and coach bus applications

- Robust fabricated construction for exceptional reliability in various road conditions
- Multiple shock and air spring combinations available
- Non-reactive to brake and drive torque
- High volume air springs provide outstanding level of passenger comfort

 Capacities up to 31,000 lbs. (14 t)



HWS™

Lightweight, two-bag, drive-axle, air suspension system

- Suitable for medium-duty rigid and tractor unit applications
- Reduced weight, incorporating new technologies and materials
- Optional stabilizer bar for additional roll control in demanding applications
- QUIK-ALIGN® axle alignment system simplifies axle alignment

Capacities up to 16,500 lbs. (7.5 t)



For over a century, Hendrickson's products have carried countless loads of freight and raw materials both on- and off-highway. Our expertise as a global manufacturer and supplier of heavy-duty suspensions doesn't stop there – based on our commercial vehicle suspension technology, we also supply products for robust military vehicles that support and protect armed forces around the world.

Hendrickson has supported military applications for over 80 years through various programs including the M915 and M916 tractors and the HMTT, HETS, PLS, MVT, MTVR, LVSR, MRAP and HMMWV vehicles.

Through our experience and strengths in design and development, we understand that each military application is demanding, and thus, requires proven technology. Our involvement early in the process enables Hendrickson to deliver reliable, durable and innovative suspension systems to help support and protect those who protect us.

PRIMAAX® EX

Severe-duty vocational air or coil spring suspension

- Optimized geometry contributes to high roll stiffness characteristics
- Axle connection and torque rods help reduce torsional axle stress and driveline vibration
- Option to use large-volume, low frequency air springs or heavy-duty coil springs to help smooth the ride in rugged conditions
- Up to 12.5 in. (318 mm) of diagonal wheel articulation for superior mobility

 Capacities of 23,000 and 26,000 lbs. (10.5 and 11.8 t) (single-axle), 46,000 and 52,000 lbs. (21 and 24 t) (tandem-axle) and 69,000 and 78,000 lbs. (31.5 and 35.4 t) (tridem-axle)

HPAS™

High performance air suspension

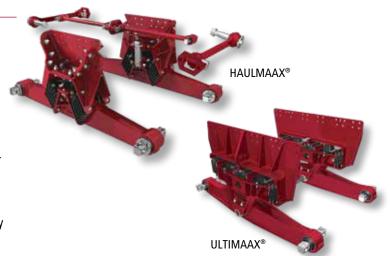
- Complete ride height with spring damper control system, improves vehicle handling and increases roll stability
- Reduced packaging size and easy vehicle retrofit packages
- Debris and environmental resistance
- Provides raising and lowering capability
- Multiple ride height capability
- Adaptable to multiple load range requirements, increasing payload capability while maintaining ride quality at all load ranges and multiple axle combinations



HAULMAAX® / ULTIMAAX®

Heavy-duty and severe-duty rubber suspensions

- Load springs offer tremendous roll stability for vehicles traveling in harsh environments and are adjustable to help improve ride quality for different body and equipment configurations
- Up to 17 in. (432 mm) of diagonal articulation helps keep the axle in traction for greater off-highway mobility
- Reduced maintenance with fewer bushings and no lubrication requirements
- Systems can be tailored to meet the specific requirements for frame width, ride height and axle spacing for unique vehicle applications
- HAULMAAX® heavy-duty suspension is available in tandem capacities up to 46,000 lbs. (21 t) — ULTIMAAX® severe-duty suspension is available in capacities up to 105,000 lbs. (48 t) with additional capacities under development





Independent Suspension

Heavy-duty front and rear independent suspension

- · Superior mobility and maneuverability to help maintain traction in rugged, off-road terrain
- Modular design and multiple premium options allow for customization of ride quality, stability and handling characteristics to help protect the chassis, cargo and passengers
- Capable of mating with Hendrickson's HPAS[™] suspension for advanced ride quality, maneuverability and performance
- Highly-engineered and validated sub-frame for field retrofits offers ease of installation while providing the durability required in severe environments
- Advanced shocks and coil springs designed to offer optimal ride and vehicle performance with ease of serviceability and minimal down time
- Axle capacities ranging from 8,000 to 29,000 lbs. (3.6 to 13.2 t)



Long Travel Trailing Arm Air Suspension

Severe-duty air suspension

- Fully customizable design allows for a variety of packaging, ride heights, ride tuning and stability requirements
- Large-volume, low frequency air springs or optional heavy-duty coil springs help smooth the ride in rugged conditions
- Over 12 in. (305 mm) of wheel travel for superior mobility
- Compatible with HPAS for active ride height control and load leveling
- Capacities up to: 27,000 lbs. (12.2 t) (single-axle) 54,000 lbs. (24.5 t) (tandem-axle) 81,000 lbs. (36.7 t) (tridem-axle)

Leaf Spring CapabilitiesParabolic and multi-leaf springs

Parabolic Taper-leaf

Custom designed for a variety of on- and off-highway applications

Monoleaf

Innovative spring designed to optimize steering kinematics and significantly save weight

Off-Highway Bogie

Rear heavy-section parabolic springs designed and produced for a variety of off-highway applications

Multi-Leaf

Rugged yet efficient design to suit a variety of demanding applications



Durable steel leaf spring suspension

- Genuine Hendrickson springs are made from high-strength steel and are heat-treated and shot-peened for exceptional fatigue life
- Equalizing beams utilize a central pivot point to help maintain tire contact with the ground for improved traction
- Suspension design provides a low center of gravity for increased stability
- Up to 15 in. (381 mm) of diagonal articulation for outstanding traction and mobility
- Rugged beam-to-axle connection extends bushing life and allows easy axle alignment
- Optional shock kit available for improved ride
- Tandem capacities up to 65,000 lbs. (29.5 t)



SPRINGS

Committed to Advancing Global Spring Technology

As a leader in the industry, we are committed to advancing global spring technology. In proprietary, state-of-the-art research and design centers, our engineers develop products for today and ride solutions for future generations. Advanced Hendrickson proprietary processing allows us to achieve maximum hardness in springs, for extended fatigue life and higher strength to withstand demanding braking requirements. We've reduced the number of leaves required for many of our spring products, leading to lower cost and weight; benefits that all customers come to expect.

We continue vertical integration by manufacturing many of our own spring bushings. This gives us better quality control of the entire spring assembly and ensures overall performance. Hendrickson engineers work with vehicle manufacturers to design and model innovative prototypes and conduct rigorous testing in the lab and in real-world conditions; providing you with smart, efficient and cost-effective solutions.

A Leaf Spring for Every Need

Hendrickson offers a wide range of leaf springs from monoleaf to multileaf springs to customized solutions. We design springs for light-through heavy-duty commercial vehicles; with spring thicknesses ranging up to 2.5 in. (63 mm) and a maximum length of 8 ft. (2400 mm). Hendrickson manufactures springs weighing from 15 to 882 lbs. (7 to 400 kg). Our weight-saving solutions can total up to 220.5 lbs. (100 kg) saved per truckload; we understand every pound counts in the transportation industry. Whatever the end user requires — reliability, durability, weight reduction or innovative designs — Hendrickson is the world's spring provider for your transportation needs.



STABILIZERS

Refining Vehicle Stability, Handling and Comfort

More than 30 years of expertise in stabilizer design allows Hendrickson to further enhance commercial vehicle stability, handling and comfort. Stabilizers play a key role in truck and bus suspension designs and are becoming increasingly important in weight-critical applications for the next generation of trucks.

Stabilizer Design and Testing

Each customized component is designed, prototyped and tested by our engineers to meet both vehicle manufacturer requirements and Hendrickson stringent criteria. Each stabilizer design is tested in our lab and in real-world conditions, providing the end user with innovative and cost-effective solutions. These proprietary competencies enable us to continuously improve our manufacturing quality and production processes for all our components and suspension systems.

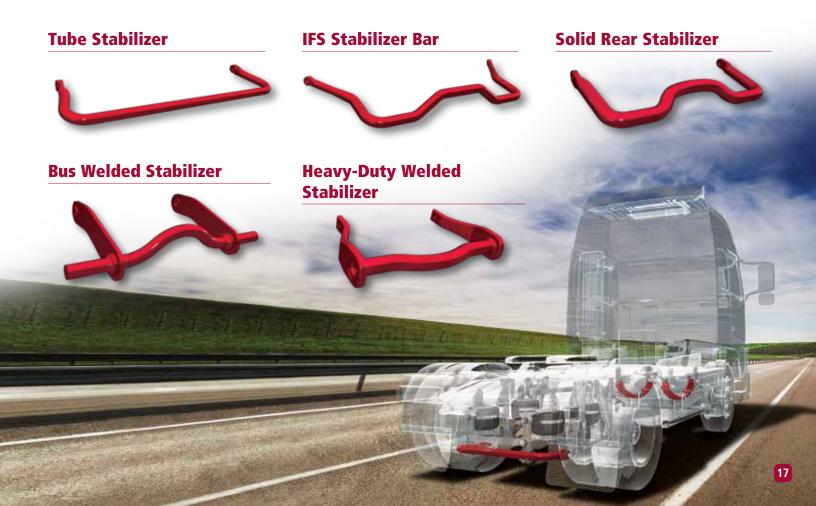


Lighter and Value Added

Hendrickson tube stabilizers are up to 45 percent lighter than solid stabilizers and enable significant reduction in both unsprung and total weight savings. Our stabilizers help the end user meet today's fuel consumption challenge and the expectations of higher payloads.

Our expertise lies in medium to large diameter stabilizers. Hendrickson delivers state-of-the-art tube stabilizers with diameters up to 2.6 in. (65 mm) and wall thickness of .39 in. (10 mm). In addition, our advanced two-stage coating line ensures anti-corrosion surface protection, resulting in superior durability and added value for the end users.

Whatever your spring or stabilizer requirements are, Hendrickson holds the solution for your transportation needs. Hendrickson has over 100 years of experience in the global heavy-duty commercial vehicle industry, that's why . . . The World Rides On Us[®].



TORQUE RODS / TORQUE ROD BUSHINGS

Through unrelenting pursuit of innovation and quality for the past century, Hendrickson remains a pioneer in the commercial vehicle industry. We are a leader in the advancement of suspension and component technology as a result of more than sixty years of development and over twenty years of elastomer manufacturing experience. These accomplishments allow us to fully integrate systems, modules and components that meet commercial vehicle demands for durability, weight savings and low life cycle costs.

TRAXX ROD™ - Family of Torque Rods

Extended Life

Advanced bushings and flat rod body construction work together to provide up to 5 times* longer life than competitive torque rod and conventional double shot bushing assemblies.

Flexibility

Available with straddle or taper pin bushing design.

Broad Application

Bushing and rod bodies specifically designed for each capacity and application criteria.

Weight Efficiency with High Strength No castings needed. Manufactured using high-strength materials utilizing Hendrickson's expertise in robotically-welded fabrications.

Packaging

Available in a variety of lengths and hub sizes.

Durability

Rod body and bushing designs meet rigorous testing parameters required for all Hendrickson products.

* Based on internal testing of bushing walkout, retention and durability. Actual product performance may vary depending on component and vehicle configuration, operation, service and other factors.



TRAXX ROD™ Bushings







Heavy-duty



Severe-duty



Taper Pin



Offering a wide variety of bushing designs to meet global application or attachment requirements. From light-duty on-highway to demanding vocational applications, our designs are customized solutions to deliver extended performance and restrict walk out. Whatever the application requires – reliability, outstanding durability, articulation, innovative designs – we are pushing the boundaries of torque rod performance for your transport needs.

Additional Torque Rod offerings

ULTRA ROD® and ULTRA ROD® PLUS

Forged or cast rod body construction with unique bonded bushings. Both forged and cast rod bodies provide structural integrity, while the unique bonded bushing reduces the friction and heat that can damage ordinary bushings – providing longer life and greater payload.



ELASTOMERS

Hendrickson's unique elastomer design capabilities result in higher performing, more durable maintenance-free components.

Why use rubber in heavy truck suspensions?

- Reduce overall suspension weight
- Lower component costs
- Increase durability in harsh operating environments
- Ease of service and replacement

- Reduce maintenance requires no lubrication
- Provides isolation and damping through energy absorption
- Add system compliance for greater articulation and mobility

Spring Eye Bushings

Spring eye bushings are designed as a system providing enhanced spring performance in the areas of roll stability, ride and durability.







Rate Ring Cartridge



Bar Pin

Rubber Springs

Our advanced components have re-defined the way rubber spring suspensions perform. The innovative, high grade rubber designs withstand heavy loads in rugged applications.



Shear Spring (ULTIMAAX®)



Progressive Spring (ULTIMAAX®)



Progressive Spring



Bolster Spring (HAULMAAX®)



Progressive Spring (HAULMAAX®)



Beam Bushings

Premium rubber beam end bushings provide enhanced flexibility between the beam and the axle to absorb braking and accelerating forces and provide designed articulation / compliance to help ensure high-mobility demands. Equalizing beam center bushings are designed for specific types of Hendrickson walking beam suspension capacities and configurations to maximize system performance.



Rate Ring **End Bushing**



Spherical **End Bushing**



Voided Center Bushing



Tri-Functional® III **Trailer Bushing**



VOCATIONAL / HEAVY-HAUL

COMPOSILITE® SC

Lightweight steerable lift axle platforms for truck and trailer

- Adjustable ride height and frame width feature allows stocking of one suspension for multiple vehicle requirements
- Up to 31-degree of wheel cut on the 8,000, 10,000 and 13,500 lb. (3.6, 4.5 and 6 t) models provide outstanding maneuverability
- In-line air springs maximize packaging space and provide additional protection from road debris
- Truck applications available up to 8,000, 10,000, 13,500 and 20,000 lbs. (3.6, 4.5, 6 and 9 t)
- Trailer applications available up to 8,000, 10,000, 13,500 and 20,000 lbs. (3.6, 4.5, 6 and 9 t) as weld-on or bolt-on configurations



COMPOSILITE® SCH

High-lifting steerable lift axle system

- High lift tag axle for the mixer market
- Provides up to 24 in. (607 mm) of travel
- Fabricated knuckle with integrated brake
- Capacity up to 10,000 lbs. (4.5 t)



COMPOSILITE® EX

Lightweight steerable and non-steer lift axle systems for truck and trailer

- Inset lower beams for improved lateral stiffness
- Weld free hanger design minimizes stress risers
- Zero-torsion rubber bushings
- Patented STEERTEK axle with weld-free axle connection
- Traditional tie rod with CTR option for tag positions
- Bolt-on axle seats for easy serviceability
- Structural warranty coverage increase of Hendrickson made components - from 5 to 7 years*
- Available later 2018 EXS and EXF in 8,000 10,000, 13,500 and 20,000 lbs. (3.6, 4.5, 6 and 9 t) models replacing



COMPOSILITE® SCO

Lightweight steerable lift axle systems for roll-offs

- Beams are spaced inboard one-inch for additional clearance and unique air spring plates mount to the inside frame rail
- Adjustable ride height and frame width feature allows stocking of one suspension for multiple vehicle requirements
- Integrated knuckle is adaptable for custom requests and results in a lighter weight
- Scalloped hanger improves clearance around the cylinder
- SCO13 capacities up to 13,500 lbs. (6 t)
- SCO20 capacities up to 20,000 lbs. (9 t)



COMPOSILITE® FX

Lightweight non-steer lift axle system

- Compact package reduces space needed for operation
- Fabricated axle reduces suspension weight and maintains durability
- Integrated brakes
- Capacity up to 13,500 lbs. (6 t)



COMPOSILITE® FXO

Lightweight non-steer lift axle system for roll-offs

- Beams are spaced inboard one-inch for additional clearance and unique air spring plates mount to the inside frame rail
- Scalloped hangers improve clearance around the cylinder
- Also available in steerable version
- Integrated brakes
- Capacity up to 13,500 lbs. (6 t)





TOUGHLIFT® FM (HLM)

Heavy-duty non-steer lift axle systems

- QUIK-ALIGN® axle alignment system simplifies axle alignment
- TRI-FUNCTIONAL® Bushings for increased life span
- Self-shearing TORQ-RITE® nut to assure proper clamp load



TOUGHLIFT® FMO

Heavy-duty non-steer lift axle system for roll-offs

- Fits as flat to the frame as possible providing maximum clearance from cylinder beams and other sliding components
- Scalloped hangers improve clearance around the cylinder
- Ride spring components are positioned inside the frame rails
- Beams are spaced inboard for additional clearance
- Upper air spring mounting plates moved to inside of frame rail for clearance – in similar fashion to FXO 13K roll-off version
- Capacity up to 25,000 lbs. (11.3 t)



TOUGHLIFT® FR (HLR)

High lifting non-steer tag lift axle systems

- High lift design with round axles provides significant ground clearance
- Ride springs protected by axle location
- · Design allows greater clearance of vehicle undercarriage
- Capacities of 13,000, 16,000 and 18,000 lbs. (5.8, 7.3 and 8.2 t)



TOUGHLIFT®LK

Dual tire steerable lift axle system

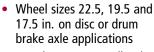
- Lockstraight mechanism
- Protected lift air springs
- Fabricated knuckle design
- Adjustable tie rod
- Self-centering steering dampers
- Available in Truck or Trailer applications
- Capacity up to 25,000 lbs. (11.3 t)



MLA2™+

Lightweight mid-lift axle and air suspension system

- The European industry standard 6×2 solution
- Significant weight savings over twin-steer options with greatly reduced operating costs



• Rated up to 17,600 lbs. (8 t



Auxiliary Loose Axles

- Hendrickson's lightweight auxiliary axles are durable and available for use with other approved vocational suspension systems
- Drop center configurations feature industry-standard spindles and provide flexibility for a variety of vehicle applications



Value-added Options

Air Disc Brakes

- Maintain stability
- Reduce brake fade
- Greater downhill performance
- Symmetrically balanced left and right brake power
- Brake pad changes and adjustments are quicker





Pre-plumbed Integrated
Air System — reduces installation
time through pre-located air tanks,
hoses and valves

VOCATIONAL / HEAVY-HAUL / ON-HIGHWAY

SUSPENSION SYSTEMS

INTRAAX®

Value, performance and reliability proven around the world

- LDA™ Large-Diameter Axle reduces weight, improves performance and increases stiffness*
- TRI-FUNCTIONAL® Bushing up to a five-year limited warranty**
- QUIK-ALIGN® axle alignment system standard
- Available with UBL™ UNDER BEAM LIFT™ kits*
- 10-year warranty on axle / beam connection**
- Air disc brakes available*
- Available with TIREMAAX® PRO and CP automatic tire inflation systems

 ** Contact your local Hendrickson representative for
 - * Available on most models complete warranty terms, conditions and limitations.

INTRAAX® AANT 23K

Narrow-bushing, tapered-beam air suspension / axle / brake system

- Lightweight integrated trailer suspension solution
- Optimum performance for straight-frame platforms, container chassis, tankers, bottom dumps, grain and livestock trailers
- Installation efficiency tapered hangers allow installation without additional gussets on trailer frames as narrow as 4 in. (102 mm)
- ZMD® ZERO MAINTENANCE DAMPING® shockless ride technology available
- MAXX22T[™] optimized trailer air disc brake available

 Ride heights from 12 to 19 in. (305 to 483 mm)

 Galvanized frame bracket option for bolt-on frame brackets

 Capacity of 23,000 lbs. (10.5 t)

o19 in.

INTRAAX® AANL 23K

Low-ride height / liftable air suspension / axle / brake system

- Optimal for low-ride height drop-decks, lowboys and liftable applications on platforms, tankers and specialty trailers for on- and off-highway applications
- One of the lightest low-ride-height / liftable trailer air suspensions on the road today by an average of 75 lbs. (34 kg)
- MAXX22T[™] optimized trailer air disc brake available
- Ride heights from 6.5 to 17 in. (165 to 432 mm)
- Galvanized frame bracket option for bolt-on frame brackets
- Capacity of 23,000 lbs. (10.5 t)



INTRAAX® AAT 23K / 25K / 30K

Fully integrated top-mount air suspension / axle / brake system

- Hendrickson's first integrated trailer suspension system setting the industry standard for weight savings, reduced maintenance and outstanding durability
- Designed for platforms, tankers, dumps, grain, livestock and specialty trailers for on- and off-highway applications
- Ride heights from 13.5 to 19 in. (343 to 483 mm)
- Raised-center axle available in 5 in. (127 mm) axle diameter only
- MAXX22T™ optimized trailer air disc brake available
- · Galvanized frame bracket option for bolt-on frame brackets
- Capacities of 23,000, 25,000 and 30,000 lbs. (10.5, 11.3 and 13.6 t)



INTRAAX® AAL 23K / 25K / 30K

Low-ride-height / liftable air suspension / axle / brake system

- For drop-decks, lowboys, platforms, tankers, vans and specialty trailers in on- and off-highway applications
- All the advantages of INTRAAX® including low weight, high durability and integrated system performance with minimal maintenance
- Ride heights from 6.5 to 19 in. (165 to 483 mm)
- Raised-center axle available in 5 in. (127 mm) axle diameter only
- MAXX22T[™] optimized trailer air disc brake available
- Galvanized frame bracket option for bolt-on frame brackets
- Capacities of 23,000, 25,000 and 30,000 lbs. (10.5, 11.3 and 13.6 t)



INTRAAX® AAEDT 30K

Top-mount system for extreme-duty applications

- Tames the grueling demands of loggers, chip vans, dumps, tankers, platforms and specialty trailers
- Low-pressure air springs with steel pistons
- High-damping, extended-service shock absorbers
- Heavy-duty options including rear-mount shocks and chain down stops
- Ride heights from 14 to 17 in. (356 to 432 mm)

Galvanized frame bracket option for bolt-on frame brackets

Capacity of 30,000 lbs. (13.6 t)

> Shown with optional chain down stops and rear-mount shocks



INTRAAX® AANLS 20K

Delivers complete system integration in a highly compact, low-ride-height system

- Compact system ideal for the tight confines of autohaulers, moving vans and other drop-frame van trailers
- Up to 120 lbs. (54 kg) lighter than comparable air suspensions
- Offers a choice of 15 in. (381 mm) brakes needed for 19.5 in. (495.3 mm) tires or conventional 16.5 in. (419 mm) brakes
- MAXX22T[™] optimized trailer air disc brake available
- Ride heights from 6.25 to 12 in. (159 to 305 mm)



INTRAAX® AAEDL 30K

Low-ride-height / liftable system for extreme-duty applications

- Designed for the tough demands of loggers, chip vans, dumps, tankers, straight and drop-deck platforms and specialty trailers
- Low-pressure air springs with steel pistons and full bottom plate coverage
- High-damping, extended-service shock absorbers
- Heavy-duty options include rear-mount shocks and chain down stops
- Ride heights from 9 to 19 in. (229 to 483 mm)

Galvanized frame bracket option for bolt-on frame brackets

Capacity of 30,000 lbs. (13.6 t)

> Shown with optional chain down stops and rear-mount shocks

INTRAAX®-SP AAZNT 23K / 46K / 69K **AAZL 23K / 46K**

Platform sliders designed for flatbed and drop-deck trailers

- Fully-integrated, air suspension slider system features outstanding weight savings and high durability with minimal maintenance
- Ride heights from 6.5 to 18 in. (165 to 432 mm)
- Available in both top-mount and low-ride models
- MAXX22T[™] optimized trailer air disc brake available
- Capacity of 23,000 lbs. (10.5 t) (single-axle) configurations, 46,000 lbs. (21 t) (tandem-axle) configurations and 69,000 lbs.

SPECIALTY / VOCATIONAL / HEAVY-HAUL

SUSPENSION SYSTEMS

CONNEX™-ST

Trailer self-steer suspension system

- Ideal for multi-axle trailer applications
- Assists with compliance of Ontario SPIF regulations
- Helps increase maneuverability
- Standard with RTR® READY-TO-ROLL® wheel-end packages, HXL3® or HXL5®
- Available with TIREMAAX® automatic tire inflation systems
- Ride heights from 14 to 19 inches (356 to 483 mm)
- Capacity of 25,000 lbs. (11.3 t)



CONNEX™ CXU 23K / 25K

Unitized air suspension and axle system

- Ideal for low-ride height applications that require 12.25 in. (311 mm) drum brake package
- Available with TIREMAAX® PRO and CP automatic tire inflation systems
- Standard with RTR® READY-TO-ROLL® wheel-end package HXL5®

Ride heights from 5.5 to 6.5 in. (140 to 165 mm)

 Galvanized frame bracket option for bolt-on frame brackets

 Capacities of 23,000 and 25,000 lbs. (10.5 and 11.3 t)

tion

HT™ Series

Reliable, affordable and flexible options for dependable operation

- Designed for use with multiple brake sizes including 12.25 in. (311 mm)
- Multiple brake chamber orientations available
- TRI-FUNCTIONAL® Bushing with up to a five-year limited warranty*
- QUIK-ALIGN® axle alignment system standard on most models
- 5-year / 500,000-mile structural warranty*
- Off-the-shelf replacement parts

Top-Mount Air Suspensions

(HT190T, HT230T, HT250T and HT300T)

- Ride heights from 12 to 23 in. (305 to 584 mm)
- High control versions available for certain models of all rated capacities
- Some models available for use with steerable axles and air disc brakes
- Capacities of 20,000, 23,000, 25,000 and 30,000 lbs. (9, 10.5, 11.3 and 13.6 t)

HT™ Series (cont.)

Underslung Air Suspensions

(HT190U, HT250US and HT300US)

- Ride heights from 3.5 to 17 in. (89 to 432 mm)
- High control versions available for certain models of all rated capacities
- Some models available for use with steerable axles
- Capacities of 20,000, 25,000 and 30,000 lbs. (9, 10.4 and 13.6 t)

Y-Beam Air Suspensions

(HT250YS and HT300YB)

- Ride heights of 6.5, 7.5 and 9 in. (165, 190.5 and 228.7 mm)
- For use in conjunction with HT250US and HT300US or other suspensions on applications such as lowboys, etc.
- Capacities of 25,000 and 30,000 lbs. (11.3 and 13.6 t)

HSDS®

Hendrickson severe-duty system

- Delivers rugged dependability and outstanding ride quality and control for curtainsiders, platform trailers, tippers, tankers and container chassis
- Patent pending beam-to-axle connection** for rugged performance and durability in severe operating environments

 Ride heights from 14.5 to 23 in. (368 to 584 mm)

 Quad shocks and rebound limiter available

 Lift kits available for certain ride heights

 Capacities up to 30,000 lbs. (13.6 t)

** U.S. and foreign patents granted and / or pending.



TRLAXLE® / HTA® / HCA® Trailer Axles

For on-highway, vocational and heavy-haul

- Lightweight and durable non-integrated trailer axles are available for use with HT series suspensions and other approved suspension systems, both air and mechanical
- Straight axle configurations featuring industry-standard spindles for a variety of vehicle applications
- Available with industry-standard drum brakes in various sizes,
 Hendrickson linings and wheel-end arrangements
- MAXX22T[™] optimized trailer air disc brake available on TRLAXLE® only



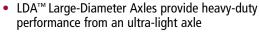
ON-HIGHWAY

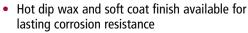
SUSPENSION SYSTEMS

VANTRAAX® / ULTRAA-K®

Low-maintenance slider systems for dry-freight, refrigerated and specialty van trailers

- Integrates INTRAAX® suspension and K-2® slider box technology for enhanced durability and industry leading weight savings
- Equipped with QUIK-DRAW® pneumatic pin-pull mechanism for easy wheel-base adjustments
- DST®* Dock Stabilizing Technology™ and SURELOK® system options available for stable and efficient payload transfer







^{*}DST and air disc brakes not available on HKANL and HKAL.

ULTRAA-K® UTKNT 40K

- Stronger than VANTRAAX® 40K HD model
- Lightweight tandem slider technology
- ZMD® ZERO MAINTENANCE DAMPING® shockless ride technology
- Pivoting mud flap brackets help prevent mud flap damage
- Protected height control valve mounting location
- Hot dip wax, exclusive to ULTRAA-K[®] provides a limited ten-year structural corrosion warranty**
- Capacity of 40,000 lbs. (18 t)
- ** Contact your local Hendrickson representative for complete warranty terms, conditions and limitations.

HKANT 23K

- Single-axle slider
- Up to 200 lbs. (90 kg) lighter than most competitive systems
- Capacity of 23,000 lbs. (10.5 t)

HKANT 40K

- · Lightweight tandem slider
- Engineered for dry-freight and refrigerated vans
- Capacity of 40,000 lbs. (18 t)

HKANT 46K

- Tandem slider tailor-made for heavy-duty applications
- Up to 175 lbs. (79 kg) lighter than similar 46,000-lb. capacity systems
- Capacity of 46,000 lbs. (21 t)



QUIK-DRAW®



HKARL 46K

- Lightweight ramp-ready air slider suspension
- Features 30 × 6.5 in. (762 × 165 mm) ramp bay
- Eliminates heavy, expensive spacer tubes
- Capacity of 46,000 lbs. (21 t)

HKANT 46K - Wide spread

when compared with

equivalent systems

121 in. (3,073 mm) spread tandem

Capacity of 46,000 lbs. (21 t)

Saves more than 350 lbs. (158 kg)

HKANL 23K

- · Lightweight liftable single axle slider
- Designed for dry, refrigerated and specialty van market
- Increased suspension up travel for lift applications
- Capacity of 23,000 lbs. (10.5 t)

HKAL 46K

- Low-ride-height tandem
- Suitable for drop-frame van applications
- Capacity of 46,000 lbs. (21 t)

HKAT 50K

- · Heavy-duty tandem slider
- Ideal for carrying heavy loads and running on secondary roadways
- Capacity of 50,000 lbs. (22.7 t)

HKANT 69K23 / HKAT 69K25 / HKAT 75K25

- Lightweight tridem slider
- Designed for moving freight across North American borders
- Available in 60 and 72 in. (1,524 and 1,828 mm) axle spacing –
 49 in. (1,245 mm) axle spacing is available for HKANT 69K23 only





WHEEL-END / BRAKE OPTIONS

VOCATIONAL | HEAVY-HAUL | ON-HIGHWAY

With RTR® READY-TO-ROLL® wheel-end packages, Hendrickson offers fully integrated solutions that help minimize operating costs and improve performance. RTR wheel-end packages are available on INTRAAX®, INTRAAX®-SP, VANTRAAX®, ULTRAA-K®, CONNEX™ and CONNEX-ST integrated air suspension systems and TRLAXLE® non-integrated axles.

Hendrickson wheel-end systems deliver lowmaintenance, durability and reduced weight with the convenience of a single-source supplier.

HXL7°, HXL5° and HXL3° Wheel-ends

- Field serviceable with Hendrickson approved components
- Cost-effective, extended service option that delivers durability and outstanding performance
- Standard with Hendrickson's patented wheel-end ventilation system**
- Available with TIREMAAX® PRO tire pressure control system
- Set at light preload for improved bearing and seal life
- Tamper deterrent
- PRECISION240® and PRECISION320® spindle nut systems allow for ultra-precise bearing adjustment
- Extended service seal resists leaking and helps prevent contamination ingress
- Ductile iron, aluminum or Dura-Light Hub available

HXL7® Hendrickson Extended-Life 7-Year System™

- 7-year limited warranty*
- Semi-fluid grease
- Corrosion resistant hubcap



HXL5® Hendrickson Extended-Life 5-Year System™

- 5-year limited warranty*
- Semi-fluid grease
- Die cast aluminum hubcap



HXL3[®] Hendrickson Extended-Life 3-Year System™

- 3-year limited warranty*
- Affordable oil-bath wheel-end
- Die cast aluminum hubcap



MAXX22T™

Optimized trailer air disc brake system

- Hendrickson proprietary MAXX22T™ brake caliper
- Lightweight rotor and torque plate deliver unparalleled weight savings over ductile iron designs
- Enhanced weight savings with the Dura-Light Hub option
- Bolt-on dust shield for easier installation and maintenance



^{**} U.S. and foreign patents granted and / or pending.

EATURES / OPTIONS

Superior Axle Design



- LDA™ Large-Diameter Axles featured on most INTRAAX® and VANTRAAX® suspension systems
 - Up to 31 lbs. (14 k) lighter than comparable 5-in. (127 mm) axlè, allowing more cargo per load
 - Bending and torsional stiffness increased by as much as 22 percent for reduced deflection
 - Axle wrap, spindle and spider mounting surfaces are machined in one step to ensure precise brake geometry and wheel positioning
 - Brake hardware attached to trailing arms rather than welded to axle, minimizing axle stress

Low Maintenance and Convenience

Time and money saving features

- Simple, functional design uses fewer parts that means fewer parts to wear out
- QUIK-ALIGN® fast and easy axle realignment system requires no welding or special tools
- TRI-FUNCTIONAL® Bushings proven technology for miles of dependable service
- Single source for comprehensive technical support, training and warranty

TIREMAAX® PRO

Advanced tire pressure control system

- Automatically inflates tires using the trailer air supply
- Prevents over-inflation by relieving air from the tires back through the controller
- Patented controller is designed to recognize normal pressure increase due to operation
- Constantly pressurizes and equalize tires



UBL™ UNDER BEAM LIFT™

Adds operational flexibility and helps extend tire life, improve maneuverability and increase fuel economy

- Combine with INTRAAX®, VANTRAAX® and some HT™ Series suspension models
- No chains, cables or metal-on-metal parts to wear or bind
- Bolt-on UBL feature is compatible with galvanizing and improves installation efficiency

Lift Kits

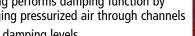
- CL, HTCL, VCL and HTBL lifts available for use on select HT series models with capacities of 23,000 to 30,000 lbs. (10.4 and 13.6 t)
- Easily adjustable CL available for HT250US models
- SBL® SIDE BEAM LIFT® available for HT250US models



ZMD® ZERO MAINTENANCE DAMPING®

Hendrickson exclusive ride technology

- Reduced suspension maintenance by eliminating shocks
- Air spring performs damping function by exchanging pressurized air through channels





- Uniform damping levels
- Robust chain downstop provides maximum durability
- Reduced risk of CSA violations from leaking or worn shocks
- Superior driver comfort, ride quality and cargo protection
- Standard on ULTRAA-K® and available as an option on select VANTRAAX® and INTRAAX® models

Corrosion Protection / Coatings

Hendrickson coatings help protect your investment

- Hot Dip Wax: Exclusive to ULTRAA-K®, a self-healing, pliable coating that re-seals itself in areas with minimal damage. Entire slider box is coated for exceptional coverage and comes with a 10-year structural corrosion warranty.*
- Black or Grey Soft-Coat: A self-healing, pliable, water resistant coating that re-seals itself in areas with minimal damage
- **Hot-Dipped Galvanized:** Zinc coating for improved chip and corrosion resistance. Available on INTRAAX® bolt-on frame brackets and limited VANTRAAX® and ULTRAA-K® slider boxes
- **Black Primer:** Uses a multi-stage cleaning and preparation process for high adhesion
- **AAXTREME COAT®:** Premium brake shoe coating provides superior corrosion protection in tough environments
- e-Coat: All Hendrickson brake shoes are standard with high quality e-Coat for improved resistance to rust-jacking
- * Contact your local Hendrickson representative for complete warranty terms, conditions and limitations.

Brake Options

Extend intervals between brake service

- HXS[®] Hendrickson Extended Service[™] brakes with thicker lining blocks extend brake life
- Wide HXS 16.5 \times 8.625 in. (419 mm \times 219 mm) brakes can help increase miles between lining changes
- Cam Tube System[™] for trailer suspensions helps extend life of brake camshafts and bushings

BUMPER and TRIM

VOCATIONAL / ON-HIGHWAY

Hendrickson has the industry's leading comprehensive product offering of heavy duty truck bumpers for OEM and aftermarket needs. Hendrickson products feature advanced materials specifically designed for bumpers and flexible manufacturing technology to provide customers value through durability, weight reduction and fuel economy.

Bumper Materials and Finishes

- AERO CLAD® stainless steel clad aluminum
- Steel thickness up to 3/8 in.
- Aluminum thickness up to 1/4 in.
- E-coat and top coat finishes
- Polished or brushed finishes
- Chrome and anodized finishes
- AERO GUARD® heavy duty TPO plastic

OEM Bumper Designs and Modules

- · New complex shapes achieved with advanced forming technologies
- AERO Dynamic Forming Process provides cost effective tooling for multiple materials and finishes
- Line sequencing of bumper modules including trim, lights, wiring, hardware and other components
- · Precision assembly and torque control
- In-house die simulation
- Various materials and finishes including exclusive AERO CLAD®

AERO CLAD®

Stainless steel clad aluminum bumpers

- · Lightweight design for better fuel economy
- Bright mirrored finish 10 times thicker than chrome
- Resists corrosion, cracking, pitting, peeling, rusting or fading
- Full 5-year limited warranty*
- * Contact your local Hendrickson representative for complete warranty terms, conditions and limitations.







Genuine Hendrickson - All Makes Program

Hendrickson's All Makes Bumper Program offers aftermarket replacement bumpers designed to be a less expensive alternative to the original equipment. The All Makes Program provides parts personnel a wider variety of bumpers than those available through an OEM.

- Comprehensive line of materials and finishes
- New catalog with photos and features / benefits
- Build a bumper configurator available on Hendrickson web site
- · Premium grade materials for high quality and finishing
- Free mobile app for more popular bumper selections
- · Hundreds of bumper options
- Metal and non-metal bumpers



OCATIONAL / HEAVY-HAUL

SUSPENSION SYSTEMS



Tru-Track Series

- Capacities from 8,000 20,000 lbs. (3.6 9.1 t)
- Industry advantage quick-change ride height system
- Industry advantage frame width adjustability
- Super Short Rail (SSR) versions
- Backed by a 5-year limited warranty*
- * Contact your local W&C representative for complete warranty terms, conditions and limitations.

SL8K Tru-Track Alumilite

Lightweight compact design, steerable lift axle suspension system

- Compact packaging design from 20.83 in. (529 mm)
- Ride heights up to 19 in. (483 mm)



SL10K Tru-Track Alumilite

Newest steerable, lightweight lift axle suspension system – ideal for dump, mixer and refuse applications

- Compact packaging design up to 23.2 in. (589 mm)
- Ride heights up to 19 in. (483 mm)



SL13K Tru-Track Alumilite

Our most popular capacity steerable lift axle suspension system

- Compact packaging up to 22.69 in. (576 mm)
- Ride heights up to 17 in. (432 mm)
- · Air disc brakes now available
- Wide based arms available



SL20K Tru-Track

Robust and innovative steerable lift axle suspension system for truck and trailer

- Compatible with 445/65R22.5 tires
- Ride heights up to 14 in. (356 mm)
- 20K model offers 26.21 in. (665 mm) packaging space with up to 16.5 in. (419 mm) ride height
- Air disc brakes available Capacity of 20,000 lbs. (9.1 t)

SL25K

Steerable lift axle suspension system designed for use with dual or super single tires - ideal for dump, heavy-haul and miscellaneous applications

- · Compliant with Ontario, Canada "SPIF" regulations
- Ride heights up to 14 in. (356 mm)
- Capacity of 25,000 lbs. (11.3 t)





AL25K Auxiliary Liftable

Lift axle suspension system with outstanding performance and proven durability – ideal for dump, refuse, heavy-haul and logging applications

Industry standard for many years

Ride heights up to 15 in. (381 mm)

 Two-pin axle connection with rubber bushings

Positive axle stop straps

Air disc brakes available

 Capacity of 25,000 lbs. (11.3 t)



Strong spring trailer suspension for on- and off-highway applications – ideal for end dumps, side dumps, belly dumps and logging applications

- Straddle mount or trunnion mount
- Severe-duty straddle plate available for 50,000 lbs. (22.7 t) and additional capacities
- Capacities of 44,000 80,000 lbs. (20 36.3 t)



Trailer Air Series

Primary trailer air suspension systems that deliver rugged performance, excellent ride quality and are ideal for numerous applications including, lowboy, drop-deck and container chassis

• Ride heights up to 19 in. (483 mm)

Extended-life bushings

Available with or without axles

Special axle tracks available

 Capacities of 25,000 -30,000 lbs. (11.3 - 13.6 t)





Low Mount

MS-2200

Rugged steel spring trailer suspension for on- and off-highway applications – ideal for end dumps, side dumps, belly dumps and logging applications

- Single, tandem or triple axle configuration
- Fabricated hangers and equalizers
- 49 in. (1245 mm) axle spacing standard
- Capacities up to 25,000 lbs. (11.3 t) per axle



W&C Value-added Options

Air Disc Brakes

- Maintain stability
- Reduce brake fade
- Greater downhill performance
- Provide symmetrically balanced left and right brake power
- Allow for quicker brake pad changes and adjustments

Subframes

- Built to customer specifications
- Pre-plumbed options
- Pre-aligned system

Pre-plumbing

· Saves installation time

Loose Axles

- Assembled in house
- 6 9 in. drop center configurations available
- Tire inflation system available
- Options of fully dressed axles including wheel ends, brake adjusters, brake chambers and dust shields
- Air disc brakes available

COMPONENTS / AFTERMARKET

SPRINGS

Hendrickson offers a wide range of leaf springs from monoleaf to multileaf springs to customized solutions. We design springs for light through heavy-duty commercial vehicles; with spring thicknesses ranging up to 2.5 in. (63 mm) and a maximum length of 8 ft. (2400 mm). Hendrickson manufactures springs weighing from 15 to 882 lbs. (7 to 400 kg). Our weight-saving solutions can total up to 220 lbs. (100 kg) saved per truckload.



TRAXX ROD™

Family of fabricated torque rods

Advanced bushings and flat rod body construction work together to provide up to 5 times* longer life than competitive torque rod and bushing assemblies.

No castings needed. Manufactured using high-strength materials utilizing Hendrickson's expertise in robotically-



* Based on internal testing of bushing walkout, retention and durability. Actual product performance may vary depending on component and vehicle configuration, operation, service and other factors.

STABILIZERS

Hendrickson tube stabilizers are up to 45 percent lighter than solid stabilizers and enable significant reduction in both unsprung and total weight savings. Our stabilizers help the end user meet today's fuel consumption challenge and the expectations of higher payloads.



ULTRA ROD® and ULTRA ROD® PLUS*

Forged or cast rod body construction with unique bonded bushings. Both forged and cast rod bodies provide structural integrity, while the unique bonded bushing reduces the friction and heat that can damage ordinary bushings — providing longer life and greater payload.



ELASTOMERS

Hendrickson's unique elastomer design capabilities result in higher performing, more durable maintenance-free components.

Spring Eye Bushings

Spring eye bushings are designed as a system providing enhanced spring performance in the areas of roll stability, ride and durability.

Rubber Springs

Our advanced components have re-defined the way rubber spring suspensions perform. The innovative, high grade rubber designs withstand heavy loads in rugged applications.



Premium rubber beam end bushings provide enhanced flexibility between the beam and the axle to absorb braking and accelerating forces and provide designed articulation / compliance to help ensure high mobility demands.





Why Use Rubber in Heavy Truck Suspensions?

- Reduce overall suspension weight
- Lower component costs
- Increase durability in harsh operating environments
- Ease of service and replacement
- Reduce maintenance requires no lubrication
- Provides isolation and damping through energy absorption
- Add system compliance for greater articulation and mobility



AIR SPRINGS

Hendrickson is one of the world's largest consumers and providers of air springs. We maintain our own brand of air springs to service Hendrickson truck, tractor and trailer air suspensions and lift axle systems. Our air springs are designed to optimize the performance of each of our suspension models.

Our patented ZMD® ZERO MAINTENANCE DAMPING® air spring performs the damping function allowing shocks to be eliminated from select Hendrickson trailer suspension systems.



Hendrickson offers a wide variety of industry brake linings for trailer suspensions, including HXS® Hendrickson Extended Service™ linings for increased operating efficiencies on INTRAAX®, VANTRAAX® and ULTRAA-K® air suspension systems. Hendrickson offers a more efficient braking system by utilizing a shorter S-cam and beam-mounted hardware. Standard on INTRAAX, VANTRAAX and ULTRAA-K air suspension systems, Hendrickson's Cam Tube System™ extends brake life and improves responsiveness by locking out contaminants.

AIR / ELECTRONIC VEHICLE CONTROLS

Hendrickson manufactures innovative suspension systems for the commercial vehicle industry, so we insist on providing leading-edge suspension controls. A variety of pneumatic and electronic controls are available.



Hendrickson shock absorbers are available worldwide to service Hendrickson truck and tractor suspensions, trailer suspensions and lift axle systems.

Hendrickson shocks provide specific strokes, seal designs, bore diameters and damping characteristics to enhance the performance of the entire system.

PIVOT CONNECTIONS

Hendrickson trailer suspensions and select truck suspensions use pivot connection systems featuring QUIK-ALIGN® axle alignment system, for long-life service and accurate axle alignment.



Protect your investment with HENDRICKSON Genuine Parts



Hendrickson views education and knowledge as paramount attributes in an industry where equipment uptime is the primary metric. To facilitate these attributes, Hendrickson offers a vast array of tools to support parts and service personnel, along with do-it-yourselfers.

Hendrickson's website is the single point of entry to our information and educational highway. Part sell sheets, tech tips, parts lists and technical publications are only a key stroke away. With the endless and dynamic change in our industry, more complex tools are required. Hendrickson's website offers access to lift axle and bumper configurators, Parts Look Up System (PLUS+) and on-line educational videos from the Hendrickson Academy. With the combination of Hendrickson genuine parts and support tools, fleets and owner-operators can perform with confidence knowing Hendrickson systems and components support their efforts to help achieve maximum uptime.

Original parts. Original fit. Original performance.

Global Operations

Hendrickson Corporate Offices

500 Park Boulevard, Suite 450 Itasca, Illinois 60143-1285 USA 630.874.9700 • Fax 630.875.1204

NAFTA

Hendrickson Truck Commercial Vehicle Systems

800 South Frontage Road Woodridge, Illinois 60517-4904 USA 630.910.2800 855.RIDERED (743.3733)

655 Hendrickson Drive Lebanon, KY 40033-9178 USA

101 South Progress Drive West Kendallville, IN 46755-3262 USA 532 Romeo Street Stratford, Ontario Canada N5A 7X1

Ave. Rassini #801 Colonia Nicolas Bravo C.P. 26030 Piedras Negras, Coahuila Mexico

Hendrickson Trailer Commercial Vehicle Systems

2070 Industrial Place SE Canton, Ohio 44707-2641 USA 330.456.7288 866.RIDEAIR (743.3247)

5701 Airport Road Mitchell, SD 57301-6273 USA

180 Mount Zion Road Lebanon, IN 46052-8186 USA

151 International Boulevard Clarksville, TN 37040-5304 USA

565 Pin Oak Drive Somerset, KY 42503-7501 USA

940 North Black Branch Road Elizabethtown, KY 42701-9800 USA

Hendrickson Canada

250 Chrysler Drive, Unit#3 Brampton, Ontario Canada L6S 6B6 905.789.1030 800.668.5360

Hendrickson Mexicana

Circuito El Marqués Sur #29 Parque Industrial El Marqués Pob. El Colorado, Municipio El Marqués, Querétaro, México C.P. 76246 +52 (442) 296 3600

Hendrickson Commercial Vehicle Specialty Products

Hendrickson Auxiliary Axle Systems

277 North High Street Hebron, Ohio 43025-8008 USA 740.929.5600 800.660.2829

Hendrickson Bumper and Trim

501 Caton Farm Road Crest Hill, Illinois 60441 USA 815.727.4031 800.356.6737

Watson & Chalin

725 E. University Dr. McKinney, TX 75069-2325 USA 972.547.6020 800.445.0736

Sales and Distribution

Hendrickson Latin America U.S. +1 305.677.9070 Colombia +57 318 366 1369



EMEA

Hendrickson Commercial Vehicle Systems Europe

Gussstahlwerkstraße 21 8750 Judenburg, Austria +43 3572 44011 400

Hendrickson Germany GmbH Hans-Böckler-Str. 3 47877 Willich, Germany

Hendrickson Romania S.R.L. Str. Forjorilor, Nr 22 550233 Sibiu, Romania

Hendrickson France S.A.S. 201 rue de Sin Le Noble 59503 DOUAI Cedex, France

Hendrickson France S.A.S. Avenue des Forges 90700 Chatenois-les-Forges, France

Hendrickson Poland Toruń sp. z o.o. ul. Na Zapleczu 25 87-100 Toruń

Hendrickson Commercial Vehicle Systems UK

1-9 Booth Drive Park Farm Industrial Estate Wellingborough, NN8 6GR, England +44(0) 1604 493161

Hendrickson Turkey Sirketi Turkiye Subesi 10016 Sokak, No: 8 A.O.S.B. Cigli, 35620 Izmir, Turkey +90 232 328 2280

ASIA PAC

Hendrickson Commercial Vehicle Systems Oceania

Hendrickson Austrailia 32 - 44 Letcon Drive Dandenong South, Victoria, 3175, Australia +61 3 8792 3600

Hendrickson New Zealand Unit P, 24 Allright Place Mt Wellington, Auckland, 1006 +64 9 570 4721

Watson & Chalin Korea 4ma 502-1ho, Sihwa Industrial Complex, Seonggok-dong, Danwon-gu, Ansan-si, Korea, 425-836 +82 31 434 1730

Hendrickson Commercial Vehicle Systems China

No. 1668 North Section of Chunbo Road, East New Dist of Jinan High-Tech Industrial Development Zone, Jinan City, Shandong Province, China, 250104 +86 531 8880 9055

Hendrickson Commercial Vehicle Systems India

Plot No. 4 & 5, Gat. No. 679/2 Behind Hotel Gandharva Alandi Kuruli Road, Kuruli (Chakan) Taluka Khed, Pune 410501, India +91 2135 662600

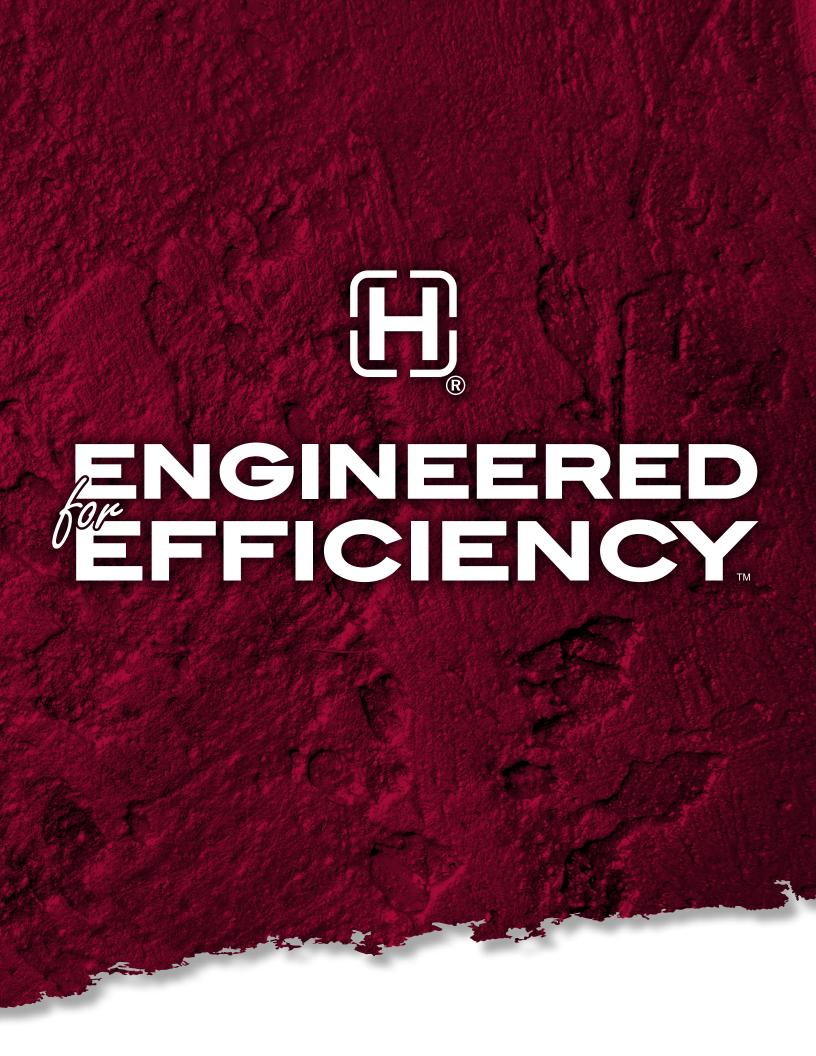
TATA AutoComp Hendrickson

Gate 431,1 Medankarwadi Chackan - Alandi Road Taluka Khed Pune 410 501, India +91 2135 670600

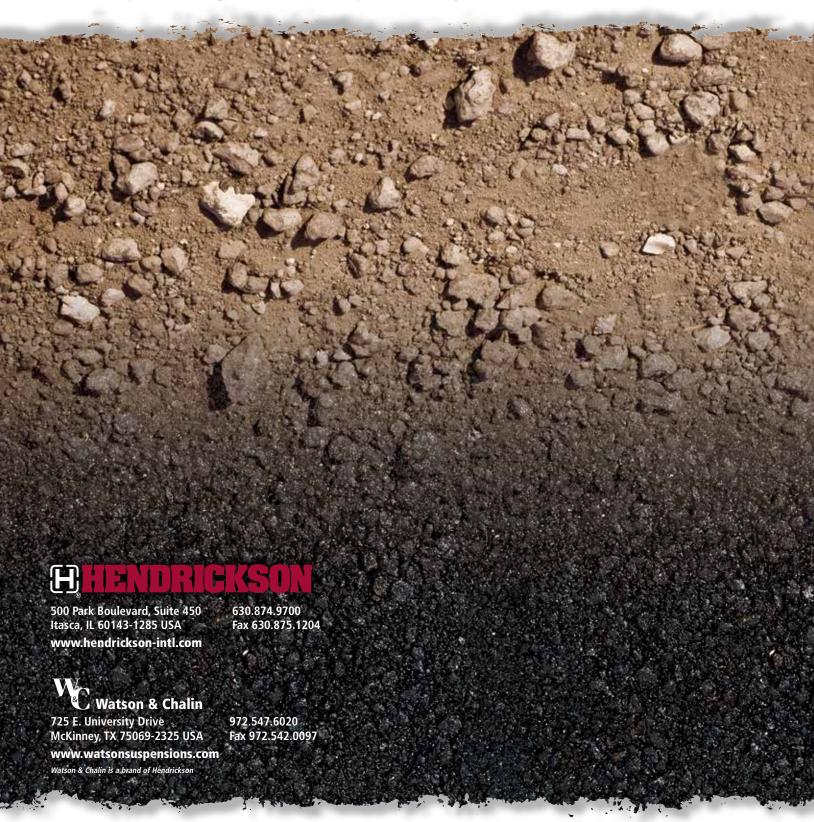
Sales and Distribution

Hendrickson Japan +81 90 6464 3069 Hendrickson South Africa +61 455 600 646 Hendrickson Thailand +66 81 341 6765





Hendrickson is the leading global manufacturer and supplier of medium- and heavy-duty mechanical, elastomeric and air suspensions; integrated and non-integrated axle and brake systems; tire pressure control systems; auxiliary lift axles systems; parabolic and multi-leaf springs; stabilizers; and bumper and trim components to the global commercial transportation industry.



Weights and rated capacities in this publication are listed in pounds (lbs.) and metric tons (t).

Actual product performance may vary depending upon vehicle configuration, operation, service and other factors.

Information contained in this literature was accurate at the time of publication. Product changes may have been made after copyright date that are not reflected.