innovation **BUILT IN**

Hendrickson is a 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 axle systems; parabolic and multi-leaf springs; stabilizers; bumpers; and components to the global commercial transportation industry.





CONTENTS

TRUCK | TRAILER | AUXILIARY AXLE | BUMPER | W&C | MOTOR WHEEL | AFTERMARKET | OPERATIONS

TRUCK

On-Highway	
H-CP4™	6
H-CP™ TAG	6
COMFORT AIR®	6
HTB® LT	6
HAS™ Series	6
HA4™	6
AIRTEK®	7
SOFTEK® NXT	7
OPTIMAAX®	7
AIRTEK® NXT	7
STEERTEK NXT	7
FRONT AIR ASSIST	7

Vocational / Heavy-Haul

•	
ULTIMAAX®	8
瀚瑞森 HUV®	8
ULTIMAAX® Long Beam	8
HAULMAAX® EX	8
HN®	8
HAS™ (402, 460)	9
R^{TM}/RS^{TM}	9
PRIMAAX® EX	9
AIRTEK® NXT	9
ROADMAAX®	9
HPAS™	9
RT™ / RTE™	10
STEERTEK™ NXT	10
6 ROD	10
PARASTEER™ HD	10
FIREMAAX® EX	11
HN® FR	11
AR2™	11
COMFORT AIR®	11

Truck / Bus / Motorhome

PRIMAAX® EX	12
COMFORTLINER™	12
LUXAIR®	12
HWS™	12
H-TAS™	12
PARASTEER™	12
HAS™ Single-Axle	12
HTB®	13
COMFORT AIR®	13
SOFTEK®	13
НА4™	13
AIRTEK®	13
FRONT AIR ASSIST	13

Defense

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

AUXILIARY AXLE SYSTEMS

MLA® 3	16
COMPOSILITE® EXS	16
COMPOSILITE® EXF	16
COMPOSILITE® SCH	16

TOUGHLIFT® FM	17
TOUGHLIFT® FMO	17
TOUGHLIFT® FR	17
TOUGHLIFT® LKT	17
Value-Added Options	17

TRAILER

On-Highway	
INTRAAX®	18
AANT 23K	18
AANL 23K	18
AAT 23K / 25K / 30K	18
AAL 23K / 25K / 30K	18
AAEDT 30K	19
AANLS 20K	19
AAEDL 30K	19
INTRAAX® SP	19
AAZNT 23K / 46K / 69K	19
AAZL 23K / 46K	19

Vocational / Heavy-Haul /

Specialty / Vocational / Heavy-Haul

HSDS®	20
HT™ Series	20
Top-Mount	20
Underslung	20
Y-Beam	20
CONNEX® ST	20
CONNEX® CXU 23K / 25K	20
HTA® / HCA®	20

On-Highway

VANTRAAX® / ULTRAA-K®	21
ULTRAA-K® UTKNT 40K	21
HKANT 23K	21
HKANT 40K	21
HKANT 46K	21
HKANT 46K — Wide Spread	21
HKARL 46K	21
HKANL 23K	21
HKAL 46K	21
HKAT 50K	21
HKANT 69K23	21
HKAT 69K25 / 75K25	21

Wheel-End / Brake Options

RTR® READY-TO-ROLL®	22
HXL7®	22
HXL5®	22
HXL3®	22
Hendrickson MAXX22T™	22

Features / Options

 $\mathsf{LDA}^{\mathsf{TM}}$

TIREMAAX® PRO	23
UBL™	23
Lift Kits	23
ZMD®	23
Corrosion Protection	23
Brake Options	23

23

BUMPER

AERO CLAD®	24
All Makes Programme	25

W&C

TRR	26
TA-m	26
SL – Steerable Lift Axles	26
SL08	26
SL10	26
SL13	26
SL20	26
SL25	26
AL – Non-Steerable Lift Axles	27
AL25	27
TA – Trailer Air Suspensions	27
SP – Single Point	27
Trailer Loose Axles	27
Value-Added Options	27

MOTOR WHEEL

CentriFuse®	28
Crewson®	28

AFTERMARKET

Genuine Parts	29
Torque Rods / Bushings	30
Elastomers	31
Springs	32
Stabilisers	33
Composites	34

GLOBAL OPERATIONS

NAFTA	36
EMEA / ASIA PAC	37



Hendrickson is a 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; auxiliary lift axle systems; parabolic and multi-leaf springs; stabilisers; bumpers; and 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, fleets and dealers. Hendrickson's growing global position in the commercial transportation industry and its ongoing 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*°, reflects not only the spirit of the brand but also Hendrickson's 100 plus years of innovation built-in.



ADVANCED RESEARCH AND DEVELOPMENT

Hendrickson's entrepreneurial spirit has led to a series of valuable "firsts" that have changed the industry and inspired growth. From the production of our first tandem walking-beam suspension to the innovative designs of today's HAULMAAX® EX heavy-duty, lightweight, rubber truck suspension systems and ULTRAA-K® axle / air slider suspension systems, Hendrickson's approach to research and development continues to propel modernization. Hendrickson's **Innovation Built In™** philosophy drives next-generation technology for suspension systems and components that integrate with emerging intelligent vehicles in the medium- and heavy-duty trucking industry. Elements including brakes, remote sensors, wheelends, pneumatic controls and telematics hold tremendous promise for the trucks and trailers of tomorrow. Engaging and energizing the global trucking community, Hendrickson remains at the forefront of developing superior and unique suspensions and components that deliver value to our customers.





PRODUCT DEVELOPMENT

At Hendrickson innovation is built into every suspension system and component from the ground up. Every one of our associates is encouraged to discover, invent and modernise – this philosophy creates state-of-the-art products and makes Hendrickson a leader in the industry. Help minimise costs and maximise payloads with Hendrickson medium- and heavy-duty truck, tractor and trailer suspension systems; lift axle systems; truck and trailer axles and components; brakes; tire pressure control systems; bumpers; springs and stabilisers. 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® symbolises 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 designing, developing 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. www.MAAXUPTIME.com is our gateway that directs you to digital product and service training and support documents to assist professional dealers and truck service providers ensuring customer satisfaction and maximum equipment uptime. Whether it's Hendrickson Genuine Parts or original Hendrickson components, we stand behind our products and components every step of the way.

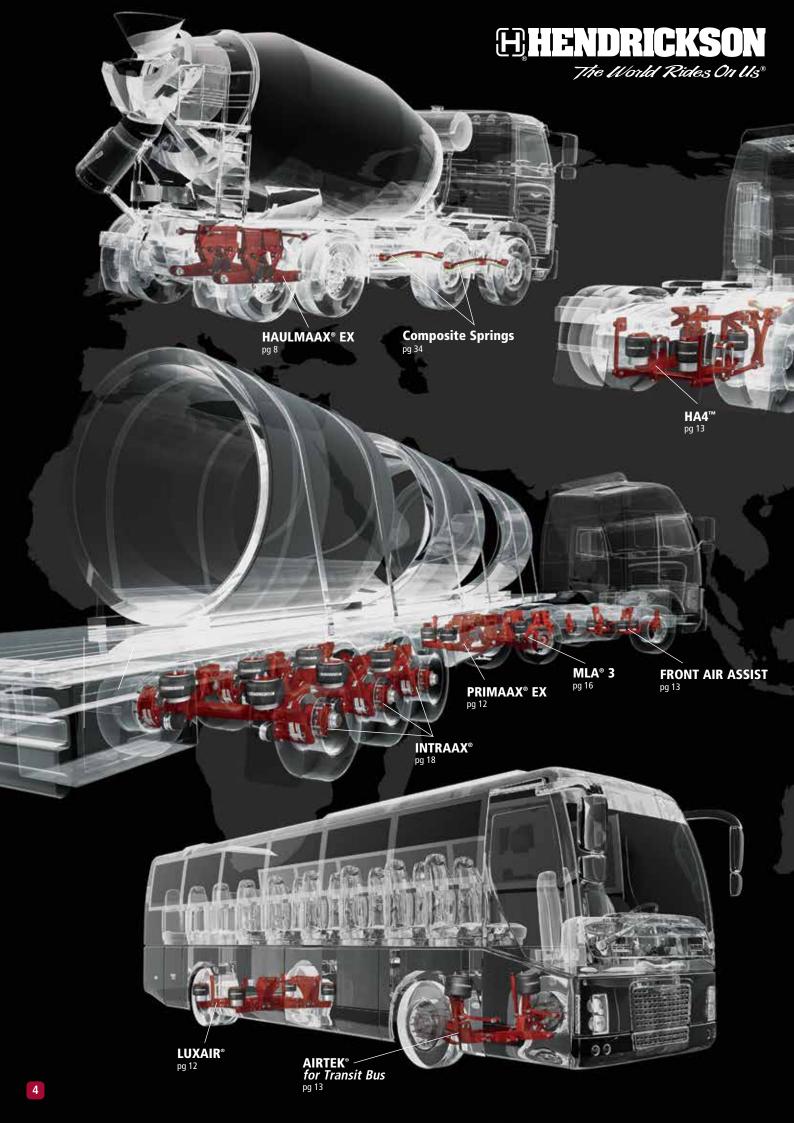


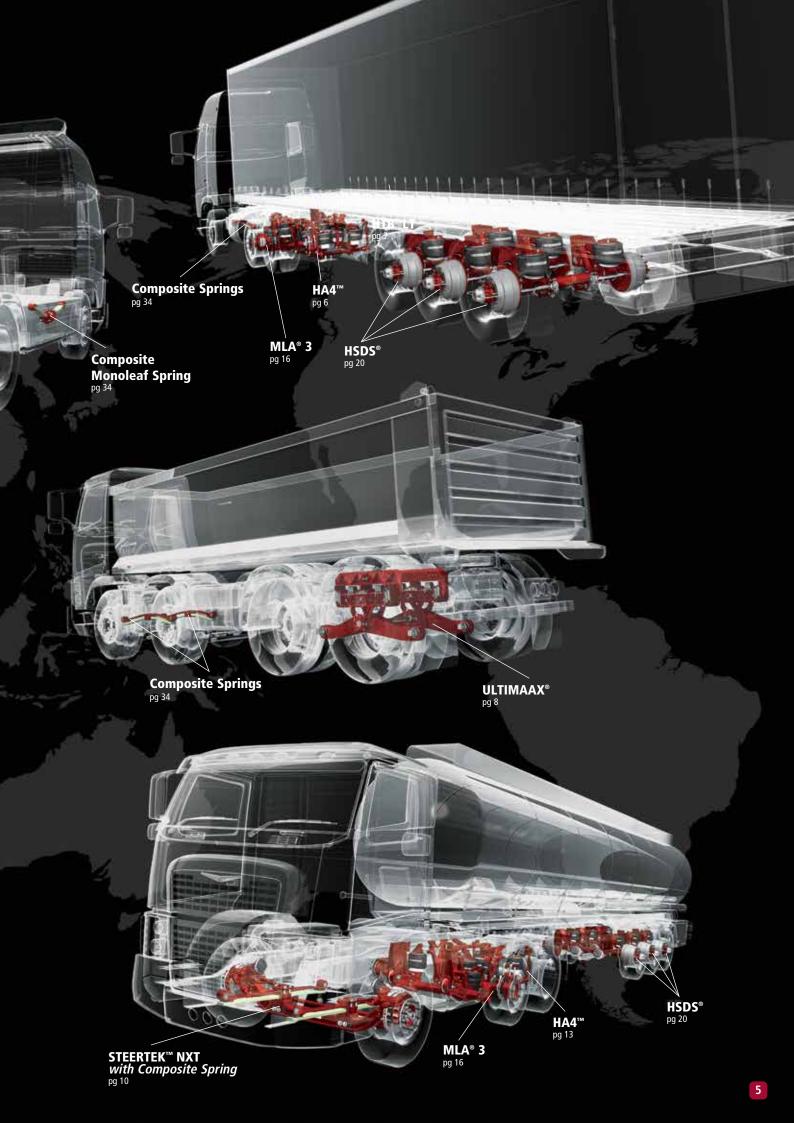


OUTREACHING GLOBAL NETWORKS

Wherever a customer is in need, Hendrickson is there. Our Innovation Built In philosophy 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-the-art manufacturing and research and development centers in the United States, Canada, Mexico, Colombia, United Kingdom, Germany, Austria, Romania, France, Poland, 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

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 13t



H-CP™ TAG

Lightweight, non-torque reactive, auxiliary axle 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 9t



COMFORT AIR®

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

- Main support member designed for optimised roll stiffness and handling
- Air springs adjust to changing road conditions to deliver superior ride quality
- Featuring TRAAX ROD® torque rods for exceptional performance life
- Capacities ranging from 3.5 to 13t (single axle), 18.1 to 26t (tandem axle)



HTB® LT

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

- Weight savings of up to 125kg compared to other 19t 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



HAS™

Axle air suspension

- Suitable for on-highway applications that require up to 25 percent off-highway travel
- Excellent ride quality
- Lightweight design
- Capacity of 5.4 and 10.5t (single) and 18 and 21t (tandem)



HA4™

Drive-axle air suspension system

- · Suitable for medium- and heavy-duty truck applications
- Non-torque reactive suspension maintains driveline pinion angles
- Excellent ride quality with load supported by air springs, protecting the load and body from road shocks

 High suspension travel with raise / lower capability

- Compatible with air disc or drum brakes
- Capacity up to 13t





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 44kg 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 fabricated steer axle system

- Combines STEERTEK NXT axle and monoleaf technology with an advanced integrated clamp group design
- Saves over 52.6kg vs. traditional two-leaf spring and I-beam axle systems



OPTIMAAX®

Liftable forward tandem axle and suspension system

- Saves up to 159kg 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 9t

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 29.5kg weight savings
- Compatible with drum and disc brakes



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 12.7kg 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



FRONT AIR ASSIST

Heavy-duty front air truck suspension system

- Lightweight with high durability and low maintenance
- Low part count in a compact package with up to 52-degrees of wheel cut
- Excellent ride comfort, raise and lower capability with up to 200mm travel
- Non-torque reactive with optimised steering geometry results in very low castor change
- Capacity up to 8t



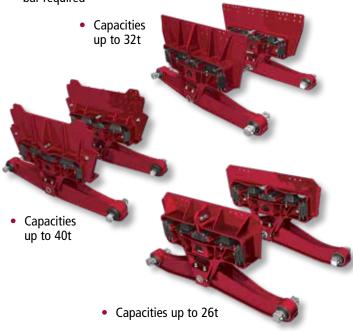
VOCATIONAL / HEAVY-HAUL

SUSPENSION SYSTEMS

ULTIMAAX®

Advanced severe-duty rubber suspension

- Weight savings up to 250kg for higher payload
- Reduced maintenance no lubrication points
- Progressive roll stability in most cases, no stabiliser bar required



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 430kg weight savings compared to 6-rod suspensions for additional payload

 Progressive rate springs provide a unique balance of empty ride quality and laden stability

Walking beam design equalises axle loading while providing outstanding axle travel and mobility

 Capacity of 24 - 27t with additional capacities under development

ULTIMAAX® Long Beam for India

Advanced severe-duty rubber suspension

- Offers up to 2t additional load capacity
- Up to 200kg lighter than mechanical suspensions in the same class
- Optimised design to balance robust durability and weight savings
- Fabricated walking beam design equalises axle loading while providing optimal clearance, axle travel and weight
- · Rear axle spacing of 1830mm
- Capacities up to 37t



Heavy-duty lightweight rubber suspension

- Weight savings up to 230kg for higher payload
- Increased job site rating for expanded applications
- Superior combination of empty ride and laden stability
- Improved durability through advanced elastomer technology
- Reduced maintenance due to optimised geometry and lubrication-free components
- Up to 432mm of diagonal articulation for greater mobility
- Capacities of 18.1, 20.9 and 24t



HN®

Heavy-duty rubber suspension

- Applications include dump, refuse, mixer, logging and military
- System results in excellent laden stability and unladen ride quality
- Up to 432mm of diagonal articulation contributes to outstanding traction
- Reduced maintenance with fewer bushings and no lubrication requirements
- Capacities of 19, 21 and 24t



HAS™ (402,460)

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 19 and 21t



R™/RS™

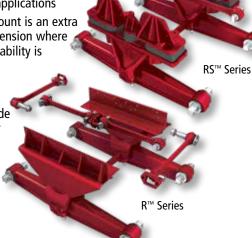
Severe-service walking-beam suspensions

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

Capacities up to 54.5t



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

Capacities up to 11.5t (single) and 23t (tandem)



AIRTEK® NXT

Integrated front air suspension and fabricated steer axle system for truck and crane applications

Single or twin front steer featuring STEERTEK[™] NXT axle



ROADMAAX®

Rear air suspension system for truck crane applications

- Up to 1829mm axle spacing
- Eliminates torque rods for lower maintenance



HPAS™

High-performance air suspension for truck crane applications

- 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
- Capacity up to 13.6t per axle



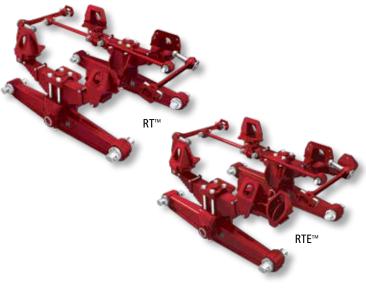
VOCATIONAL / HEAVY-HAUL

SUSPENSION SYSTEMS

RT™/RTE™

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 unladen ride quality and laden stability
- RT capacities up to 29.5t and RTE capacities up to 23t



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 7 to 11t



6 ROD

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 26 to 29t and 32 to 48t
- 48t model is available for heavy-duty construction and mining applications



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





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 manoeuvres
- Integrated stabiliser 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 10.8, 12.2 and 14t (single axle) and 21.7, 24.4 and 28.1t (tandem axle)



HN® FR

Heavy-duty rubber suspension

- Ratings approved for fire and rescue applications
- System delivers the ideal combination of stability, ride quality and articulation
- Equalising beams distribute load equally between both axles for improved traction

System can be tailored to meet the specific needs of unique vehicle applications



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 19 and 21t



COMFORT AIR®

Heavy-duty air suspension

- Main support member designed for optimised roll stiffness and handling
- Air springs adjust to changing road conditions to deliver superior ride quality
- Featuring TRAAX ROD® torque rods for exceptional performance life
- Capacities ranging from 9 to 13t



TRUCK / BUS / MOTORHOME

SUSPENSION SYSTEMS

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
- Single-axle capacities up to 11.5t



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 11t



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 an outstanding level of passenger comfort



HWS™

Lightweight, drive-axle, air suspension system

- Suitable for medium-duty rigid and tractor unit applications
- Reduced weight, incorporating new technologies and materials

 Optional stabiliser bar for additional roll control in demanding applications

 QUIK-ALIGN® axle alignment system simplifies axle alignment

Capacities up to 6.5t



H-TAS™

Lightweight, 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 9.5t



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 7t



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 5.4 to 10.5t





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 9.5t for air configurations and 8t for mechanical configurations



COMFORT AIR®

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

- Wide footprint of frame hanger reduces stress to the frame
- Suspension geometry improves ride and handling
- Capacities ranging from 6.8 to 11.8t

COMFORT AIR®

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

- Optimised configuration provides improved driver feel for increased handling and confidence when performing manoeuvres
- Designed to achieve 90mm of kneel
- Designed to reduce roll forward during kneeling operation
- Capacity up to 4.5t



SOFTEK®

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

- Highly engineered for optimised ride and performance
- Robust design for high durability and low maintenance

Efficient design contributes to a smooth and quiet ride

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

 Capacities ranging from 3.6 to 6.6t

HA4™

Four air spring, drive-axle air suspension system

 Suitable for medium- and heavy-duty truck applications

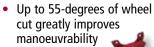
- Non-torque reactive
- Capacity up to 13t



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



 Capacities ranging from 4.5 to 6.6t



AIRTEK® for Transit Bus

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 7 to 9.1t



FRONT AIR ASSIST

Heavy-duty front air truck suspension system

- Lightweight with high durability and low maintenance
- Low part count in a compact package with up to 52-degrees of wheel cut
- Excellent ride comfort, raise and lower capability with up to 200mm travel
- Non-torque reactive with optimised steering geometry results in very low castor change
- Capacity up to 8t



DEFENSE

SUSPENSION SYSTEMS

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 defense applications for over 80 years through various programmes 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 defense 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

- Optimised 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 318mm of diagonal wheel articulation for superior mobility



HAULMAAX® EX / 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 432mm 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 24t — ULTIMAAX® severe-duty suspension is available in capacities up to 48t with additional capacities under development
- ULTIMAAX® severe-duty suspension is available in capacities up to 48t with additional development

HPAS™

Air strut suspension and intellegent air system

- 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
- Capacity up to 13.6t per axle





Independent Suspension

Heavy-duty front and rear independent suspension

- Superior mobility and manoeuvrability to help maintain traction in rugged, off-road terrain
- Modular design and multiple premium options allow for customisation 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, manoeuvrability 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 3.6 to 13.2t



- Fully customisable 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 305mm of wheel travel for superior mobility
- Compatible with HPAS for active ride height control and load leveling
- Capacities up to:
 - 12.2t (single-axle)
 - 24.5t (tandem-axle)
 - 36.7t (tridem-axle)



RT™

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
- Equalising beams utilise a central pivot point to help maintain tyre contact with the ground for improved traction
- Suspension design provides a low center of gravity for increased stability
- Up to 381mm 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 29.5t



Leaf Spring Capabilities

Parabolic and multi-leaf springs

Parabolic Taper-leaf

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

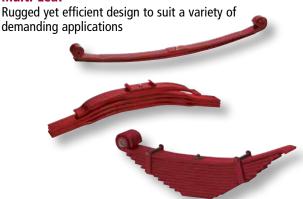
Monoleaf

Innovative spring designed to optimise 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



VOCATIONAL / HEAVY-HAUL

SUSPENSION SYSTEMS

MLA® 3

Revolutionary 'Next Generation' lifting pusher axle and suspension design

- · Advanced manufacturing processes
 - No direct welding to axle beam
 - Ultra-lightweight fabricated trailing arm suspension
 - No clamp group to service
- Additional weight savings compared to current lift axle systems
- Tuned pivot bushing for optimal roll stability and steering performance
- Increased payload and optimised vehicle efficiency
- Increased chassis packaging space for fuel tanks and auxiliary equipment
- 17.5-inch wheel size options with a 4.8t capacity
 - 44 tonnes gvw (6 axles combination) on all variants

COMPOSILITE® SCH

High-lifting steerable lift axle system

- High lift tag axle for the mixer market
- Provides up to 24 in. of travel
- Fabricated knuckle with integrated brake
- Capacity up to 4.5t

COMPOSILITE® EXS

Lightweight steerable lift axle systems for trucks and trailers

- Inset lower beams for improved lateral stiffness
- Weld-free hanger design minimizes stress risers
- Zero-torsion rubber bushings
- STEERTEK™ axle technology with weld-free axle connection
- Traditional tie rod with CTR option for tag positions
- Bolt-on axle seats for easy serviceability
- Structural warranty coverage increased for Hendrickson-made components – from 5- to 7-years*
- Available for standard and / or roll-off lift axle applications
- Available in 3.6, 4.5, 6.1 and 9t capacity models replacing the SC steerable models



COMPOSILITE® EXF

Lightweight non-steerable lift axle systems for trucks and trailers

- Inset lower beams improve lateral stability
- Zero-torsion rubber bushings
- Extended bump stops added for extreme axle loading conditions
- INTRAAX® axle technology with axle wrap design
- Structural warranty coverage increased for Hendrickson-made components – from 5- to 7-years*
- Available for standard and / or roll-off lift axle applications
- Available in 6.1t capacity models replacing the FX non-steerable models





TOUGHLIFT® FM

Heavy-duty non-steerable lift axle systems

- QUIK-ALIGN® simplifies axle alignment process for quick and reliable adjustment
- TRI-FUNCTIONAL® bushings improve absorption of brake and acceleration forces while providing superior roll stiffness
- Self-shearing TORQ-RITE® nut to assure proper clamp load



TOUGHLIFT® FR

High lifting non-steerable 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 5.9, 7.3 and 8.2t



TOUGHLIFT® FMO

Heavy-duty non-steerable 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 11.3t



TOUGHLIFT® LKT

Dual tire steerable lift axle system

- QUIK-ALIGN® simplifies axle alignment process for quick and reliable adjustment
- TRI-FUNCTIONAL® bushings improve absorptions of brake and acceleration forces while providing superior roll stiffness
- Hendrickson leading kingpin knuckle design minimises kingpin offset for a more efficient turning result
- Minimum 20 degree wheel cut for truck applications Ontario SPIF compliant



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

COMPOSILITE® EX Trailer Wheel-End Options

- EXF13 available with Hendrickson MAXX22T[™] air disc brakes
- EXS13 and EXF13 available with HXL and TIREMAAX®

LC Air Controls

- Lift axle controls for a wide range of approved truck and trailer applications
- Diaphragm-operated valves help prevent any potential sticking
- Quicker lift-timing than spool 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 5-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 including Hendrickson's MAXX22T™ optimised trailer air disc brake*
- Available with TIREMAAX® automatic tyre inflation systems
- * Available on select models
- ** Contact your local Hendrickson representative for 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 tippers, grain and livestock trailers
- Installation efficiency tapered hangers allow installation without additional gussets on trailer frames as narrow as 102mm
- ZMD® ZERO MAINTENANCE DAMPING® shockless ride technology available

Ride heights from 305 to 480mm

 Galvanised frame bracket option for bolt-on frame brackets

Capacity of 10.4t



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 34kg
- Ride heights from 165 to 430mm
- Galvanised frame bracket option for bolt-on frame brackets
- Capacity of 10.4t



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, tippers, grain, livestock and specialty trailers for on- and off-highway applications
- Ride heights from 340 to 480mm
- Raised-center axle available in 127mm axle diameter only
- ZMD® ZERO MAINTENANCE DAMPING® shockless ride technology available (AAT 23K only)
- · Galvanised frame bracket option for bolt-on frame brackets
- Capacities of 10.4, 11.3 and 13.6t



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 165 to 480mm
- · Raised-center axle available in 127mm axle diameter only
- Galvanised frame bracket option for bolt-on frame brackets
- Capacities of 10.4, 11.3 and 13.6t





INTRAAX® AAEDT 30K

Top-mount system for extreme-duty applications

- Tames the grueling demands of loggers, chip vans, tippers, 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 355 to 430mm

Galvanised frame bracket option for bolt-on frame brackets

Capacity of 13.6t

Shown with optional chain down stops and rear-mount shocks

INTRAAX® AAEDL 30K

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

- Designed for the tough demands of loggers, chip vans, tippers, 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 230 to 480mm

bolt-on frame brackets



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 54kg lighter than comparable air suspensions
- Offers a choice of 380mm brakes needed for 19.5 in. tyres or conventional 419mm brakes

Ride heights from 160 to 305mm Capacity of 9t

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 165 to 460mm
- Available in both top-mount and low-ride models
- Capacity of 10.4t (single-axle) configurations,



SPECIALTY / VOCATIONAL / HEAVY-HAUL

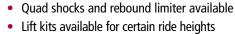
SUSPENSION SYSTEMS

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 355 to 580mm



Capacities up to 13.6t

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



HTTM

Reliable, affordable and flexible options for dependable operation

- Designed for use with multiple brake sizes including 310mm
- Multiple brake chamber orientations available
- TRI-FUNCTIONAL® Bushing with up to a 5-year limited warranty*
- QUIK-ALIGN® axle alignment system standard on most models
- 5-year / 800,000-kilometer structural warranty*
- Off-the-shelf replacement parts
- * Contact your local Hendrickson representative for complete warranty terms, conditions and limitations.

Top-Mount Air Suspensions

(HT190T, HT230T, HT250T and HT300T)

Ride heights from 300 to 580mm

 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 9, 10.4, 11.3 and 13.6t



Underslung Air Suspensions (HT190U, HT250US and HT300US)

- Ride heights from 90 to 430mm
- High control versions available for certain models of all rated capacities
- Select models available for use with steerable axles
- Capacities of 9, 11.3 and 13.6t



HT[™] (cont.)

Y-Beam Air Suspensions

(HT250YS and HT300YB)

- Ride heights of 165, 190 and 230mm
- For use in conjunction with HT250US and HT300US or other suspensions on applications such as lowboys, etc.
- Capacities of 11.3 and 13.6t

CONNEX® ST

Trailer self-steer suspension system

- Ideal for multi-axle trailer applications
- Assists with compliance of Ontario SPIF regulations
- Helps increase manoeuvrability
- Standard with RTR® READY-TO-ROLL® wheel-end packages, HXL3® or HXL5®
- Available with TIREMAAX® automatic tyre inflation systems
- Ride heights from 355 to 480mm
- Capacity of 11.3t



CONNEX® CXU 23K / 25K

Unitised air suspension and axle system

- Ideal for low-ride height applications that require 310mm drum brake package
- Available with TIREMAAX® automatic tyre inflation systems
- Standard with RTR® READY-TO-ROLL® wheel-end package HXL5®
- Ride heights from 140 to 165mm
- Galvanised frame bracket option for bolt-on frame brackets
- Capacities of 10.4 and 11.3t



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



ON-HIGHWAY

SUSPENSION SYSTEMS

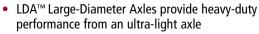
VANTRAAX® / ULTRAA-K®

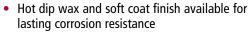
Low-maintenance slider systems for dry-freight, refrigerated and specialty van trailers

QUIK-DRAW®

SURELOK®

- 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





Air disc brakes available including Hendrickson's MAXX22T™ optimised trailer air disc brake*

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



- Saves more than 158kg when compared with equivalent systems
- Capacity of 21t



HKARL 46K

- Lightweight ramp-ready air slider suspension
- Features 762 × 165mm ramp bay

Lightweight liftable single axle slider

Designed for dry, refrigerated and

Increased suspension up travel for

specialty van market

lift applications

Capacity of 10.4t

Low-ride-height tandem

Heavy-duty tandem slider

Suitable for drop-frame van

HKAL 46K

applications

Capacity of 21t

- Eliminates heavy, expensive spacer tubes
- Capacity of 21t

HKANL 23K

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 18t
- ** Contact your local Hendrickson representative for complete warranty terms, conditions and limitations.

HKANT 23K

- Single-axle slider
- Up to 90kg lighter than most competitive systems
- Capacity of 10.4t



HKANT 40K

- Lightweight tandem slider
- Engineered for dry-freight and refrigerated vans
- Capacity of 18t



HKANT 46K

- Tandem slider designed for heavy-duty applications
- Up to 79kg lighter than similar 21t capacity systems
- Capacity of 21t



Ideal for carrying heavy loads and running on secondary roadways

HKAT 50K

Capacity of 22.7t



HKANT 69K23 / HKAT 69K25 / HKAT 75K25

- Lightweight tridem slider
- Designed for moving freight across North American borders
- Available in 1.524 and 1,828mm axle spacing -1,245mm 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 minimise 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 tyre 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



Hendrickson MAXX22T™

Optimised trailer air disc brake system

- Hendrickson proprietary MAXX22T[™] brake calliper
- 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

The only ADB system offered with Hendrickson comprehensive warranty*coverage

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

FEATURES / OPTIONS

VOCATIONAL / HEAVY-HAUL / ON-HIGHWAY

Superior Axle Design



- LDA[™] Large-Diameter Axles featured on most INTRAAX® and VANTRAAX® suspension systems
 - Up to 14kg lighter than comparable 127mm axle, 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 kilometers of dependable service
- Single source for comprehensive technical support, training and warranty

1



Advanced tyre pressure control system

- Automatically inflates tyres using the trailer air supply
- Prevents over-inflation by relieving air from the tyres back through the controller
- Patented controller is designed to recognise normal pressure increase due to operation
- Constantly pressurises and equalises tyres



UBL™ UNDER BEAM LIFT™

Adds operational flexibility and helps extend tyre life, improve manoeuvrability 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 galvanising and improves installation efficiency

Lift Kits

- CL, HTCL, VCL and HTBL lifts available for use on select HT series models with capacities of 10.4 and 13.6t
- 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 pressurised 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 Galvanised: 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 420mm × 220mm brakes can help increase kilometers between lining changes
- Cam Tube System™ for trailer suspensions helps extend life of brake camshafts and bushings



BUMPER

VOCATIONAL / ON-HIGHWAY

Hendrickson has North America'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

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.



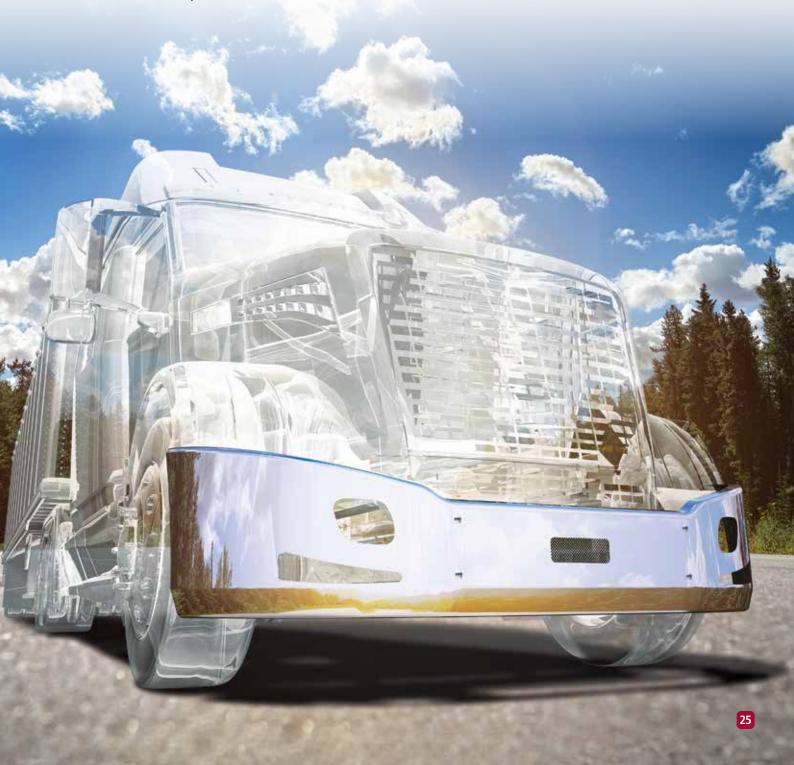




Genuine Hendrickson - All Makes Programme

Hendrickson's North American All Makes Bumper Programme offers aftermarket replacement bumpers designed to be a less expensive alternative to the original equipment. The All Makes Programme 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 website
- · 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



VOCATIONAL / HEAVY-HAUL

LIFT AXLE AND SUSPENSION SYSTEMS



W&C is a pioneering, global supplier of lift axles, axles, truck and trailer suspension systems for the commercial vehicle industry. With a market focus and customer driven approach, W&C is committed to deliver durable products in the marketplace which are custom engineered for demanding applications. Whether a dump, mixer, bulk hauler, tanker, flatbed or logger, W&C invests in comprehensive research and development to help truck and trailer end users benefit from improved uptime.

TRR

Truck heavy-duty lightweight rear rubber suspension

· Maximum payload and durability

 Soft spring rate in unladen condition

- Reliable, long-lasting end bushings
- High-strength, lightweight fabricated hanger and beam
- Low-maintenance
- Capacity ranging from 21 26t



TA-m

Trailer air suspension system

Multiple configurations for a variety of applications

• Ride heights up to 610mm

Extended-life bushings

2-year limited warranty*



SL — Steerable Lift Axles

- Capacities from 3.6 9t
- Parallelogram design for a constant axle caster
- Versatile, adjustable ride height and frame width features
- Minimized packaging space up to 22.1 in.
- · Configurations available for all authorized lift axle applications
- Custom engineering available for specific customer requirements
- Backed by a 5-year limited warranty*

SL08

Lightweight compact design, steerable lift axle suspension system

- Ride heights up to 19 in.
- Six stud hub for 17.5 in. wheels
- Capacity of 3.6t

SL10

Lightweight compact design, steerable lift axle suspension system

- Ride heights up to 19 in.
- Eight stud hub for 19.5 in. wheels
- Capacity of 4.5t

SL13

Our most popular capacity steerable lift axle suspension system

- Ride heights up to 17 in.
- Ten stud hub for 19.5, 22.5 and 24.5 in. wheels
- Air disc brakes available
- Capacity of 6.1t

SL20

Robust and innovative steerable lift axle suspension system

- Ride heights up to 14 in.
- Compatible with 445/65R22.5 tires
- Capacity of 9t



SL25

Steerable lift axle suspension system designed for use with dual or super single tires

- · Ride heights up to 14 in.
- Assists fleets in complying with applicable Ontario regulations for Safe, Productive and Infrastructure-Friendly (SPIF) vehicles.
- Capacity of 25,000 lbs.





TA — Trailer Air Suspensions

Primary trailer air suspension systems that deliver rugged performance and excellent ride quality

- Ride heights up to 19 in.
- Proven technology for a wide range of applications
- Available as suspension kit or as an assembly with axles
- Custom axle tracks available
- ALIGN-TRAC[™] Quick, easy alignment system
- 5-year limited warranty*



WCAXL

SP — Single Point Suspensions

Robust spring suspension for on- and off-highway trailer applications

- Straddle mount or trunnion mount
- Custom trunnion lengths available
- Available as suspension kit or as an assembly with axles
- Custom axle tracks available
- Applications: End Dump, Side Dump, Belly Dump, Logger, Container Chassis and more
- 5-year limited warranty*
- Capacities of 50,000 80,000 lbs.



Trailer Loose Axles

Offering a full line of axles that helps finalize the full line of trailer suspensions such as the TA, Single Point and Multi-Spring families

- Straight, 6 or 9 in. drop
- Axle tracks: 71.5 and 77.5 in. standard
- Axle wall: 1/2, 5/8 and 3/4 in.
- N or P spindles
- Air disc brakes available
- Custom axle tracks available
- Tire inflation system available
- Axle capacity up to 25,000 lbs.

AL — Non-Steerable Lift Axle

AL25

Lift axle suspension system with outstanding performance and proven durability

- Ride heights up to 15 in.
- Two-pin axle connection with rubber bushings
- Positive axle stop straps
- Capacity up to 25,000 lbs.



W&C Value-Added Options

Air Disc Brake

- Better stopping power
- Higher and consistent brake torque output
- Increased service intervals (depending on the application)
- Better uptime while servicing brake pads

Pre-Plumbing System (only on truck lift axles)

- Fewer fittings to enhance system performance and reduce maintenance
- Better response when air is engaged
- Helps save time and money during installation
- 100 percent leak tested at the factory



BRAKE DRUMS / COMPONENTS



CentriFuse® Lite

The industry's premier lightweight brake drum

- Up to 105kg lighter than competitive options, supporting fleets in their efforts to increase fuel economy and revenue-producing payload**
- Ideal for weight-sensitive applications, such as refrigerated fleets, tanker fleets and bulk haulers
- Permanently bonded steel shell provides proven resistance to heat cracks
- Proprietary alloy braking surface reduces fade and wear with superior heat absorption
- Mass centering process improves balance for a smoother ride. Balance weights eliminate the need to machine away critical material from steel shell, like competitors
- Backed by a 10-year written limited warranty*
- 9t axle load rating

uces fade ion

CentriFuse® HD

Severe service brake drum solution

- Permanently bonded steel shell provides proven resistance to heat cracks
- Helps reduce maintenance cost and total vehicle weight
- Proprietary alloy provides superior heat absorption for reduced fade and wear
- Mass centering process improves balance for a smoother ride
- Backed by a 3-year written limited warranty*
- 11.8t axle load rating



Motor Wheel®, the manufacturer of CentriFuse® brake drums and Crewson® brake adjusters, is known to deliver products that provide lightweight durability, improved fuel efficiency and reduced maintenance and meet the demand for frequent braking. Our CentriFuse brake drums are designed and manufactured in the USA, along with the engineering and assembly of our Crewson brake adjusters.

Original CentriFuse®

The proven standard in brake drum technology

- Up to 83kg lighter than competitive options, supporting fleets in their efforts to increase fuel economy and revenue-producing payload**
- Permanently bonded steel shell provides proven resistance to heat cracks
- Proprietary alloy provides superior heat absorption for reduced fade and wear
- Mass centering process improves balance for a smoother ride
- Selected by a wide range of truck and trailer OEMs for proven performance in both new and aftermarket applications
- Backed by a 10-year written limited warranty*
- 23,000 lb. axle load rating



Crewson®

Automatic Brake Adjusters

- Optional Auto-Check® feature enables one to check air chamber stroke without crawling under the vehicle
- Cam guard lubrication system protects against seizing and corrosion between the S-Cam and ABA
- Clearance-sensing adjuster system features the industry's premiere reduced-wear clutch
- High-strength gearset provides the ABA with durable operation in demanding conditions
- Blue powder coat protects the ABA from harsh winter conditions
- Gear is sealed with a proprietary system that protects it from environmental contamination
- Pushrod cutoff tool for accurate measurements





- * Contact your local Motor Wheel representative for complete warranty terms, conditions and limitations.
- ** Total estimated weight savings for a typical Tractor and Trailer equipped with 4 axles and 8 drums.



AFTERMARKET

Why Hendrickson Genuine Parts

Before Hendrickson introduces a new suspension system or component into the market, we often collaborate with world-leading vehicle OEMs to meet strict specifications, protocols and test parameters. Hendrickson designs, tests and validates the suspension and components as a system with the advanced tools, equipment and validation processes.

It all starts with Hendrickson's INNOVATION BUILT IN™ philosophy by gaining real-world road inputs with our innovative technology and equipment, enabling us to understand how the suspension system performs while integrated with the entire truck or trailer chassis. Once road inputs are captured, the data is available to be loaded into a computer model with proprietary software, where Hendrickson can model system operation with real road inputs. As the model predicts system performance, Hendrickson can digitally change component characteristics, formulas, placement and design to tune the system for the desired behavior. Our state-of-the-art testing laboratories, utilise specialised test rigs to simulate actual application use of suspension systems. After successful lab trials, Hendrickson will further validate the product during

rigorous proving ground testing and field evaluations, allowing Hendrickson to monitor actual application results before full production launch.

Hendrickson Genuine Parts provide the same quality components installed in Hendrickson original equipment systems — designed, tested and validated as a system for greater component life, optimum performance, and support to fleets working to maximise equipment uptime.



Protect your investment with HENDRICKSON Genuine Parts

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

MAAXUPTIME.com offers access to the bumper configurator, **Parts Look Up System (PLUS+)**, electronic parts catalogs, on-line educational videos from the **Hendrickson Academy** and Hendrickson's website link. MAAXUPTIME.com is a single point of entry to our information and an educational highway where you can find the right part and install it correctly the first time. With the endless and dynamic changes in our industry, more complex tools are required. With the combination of Hendrickson Genuine Parts and MAAXUPTIME.com, 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.

TORQUE RODS AND BUSHINGS

Through the unrelenting pursuit of innovation and quality for the past century, Hendrickson remains a pioneer in the commercial vehicle industry. Our leadership in the advancement of suspension and component technology has been further enhanced as a result of more than sixty years of elastomer 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.

TRAAX 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 utilising 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.

TRAAX ROD® Torque Rod Bushings







Severe-duty



Taper Pin



Spnericai



Rate Ring

Offering a wide variety of bushing designs to meet global application or attachment requirements, we customise 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 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 AND BUSHINGS

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

Rubber Springs

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



Shear Spring (ULTIMAAX®)



Progressive Spring (ULTIMAAX® 40T)



Progressive Spring (ULTIMAAX® 32T)



Progressive Spring (ULTIMAAX® 460/600)



Progressive Spring (HUV®)



Bolster Spring (HAULMAAX® EX)



Progressive Spring (HAULMAAX® EX)



Spring Eye Bushings

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



Thru Bolt



Rate Ring Cartridge



Bar Pin



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 Bushina



TRI-FUNCTIONAL® II
Trailer Bushing



TRI-FUNCTIONAL® III Trailer Bushing





SPRINGS

Committed to Advancing Global Leaf Spring Technology

As a leader in the industry, we are committed to advancing global leaf 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 optimum 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 customers come to expect.

At Hendrickson 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 leaf spring assemblies 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 customised solutions from monoleaf to multi-leaf springs. We design springs forlight- through heavy-duty commercial vehicles, with spring thicknesses ranging up to 63mm and a maximum length of 2400mm. Hendrickson manufactures springs weighing from 7 to 400kg. Our weight-saving solutions can save up to 90kg per truckload; we understand every kilogramme counts in the transportation industry.

For demanding application requirements, reliability, durability, weight reduction and innovative designs — Hendrickson is the world's spring provider for all your transportation needs.



Refining Vehicle Stability, Handling and Comfort

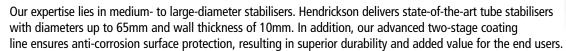
More than 30 years of expertise in stabiliser design allows Hendrickson to further enhance commercial vehicle stability, handling and comfort. Stabilisers play a key role in truck and bus suspension designs and are becoming increasingly important in weight-critical applications for the next generation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

Stabiliser Design and Testing

Each customised component is designed, prototyped and tested by our engineers to meet both vehicle manufacturer requirements and Hendrickson stringent criteria. Each stabiliser 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

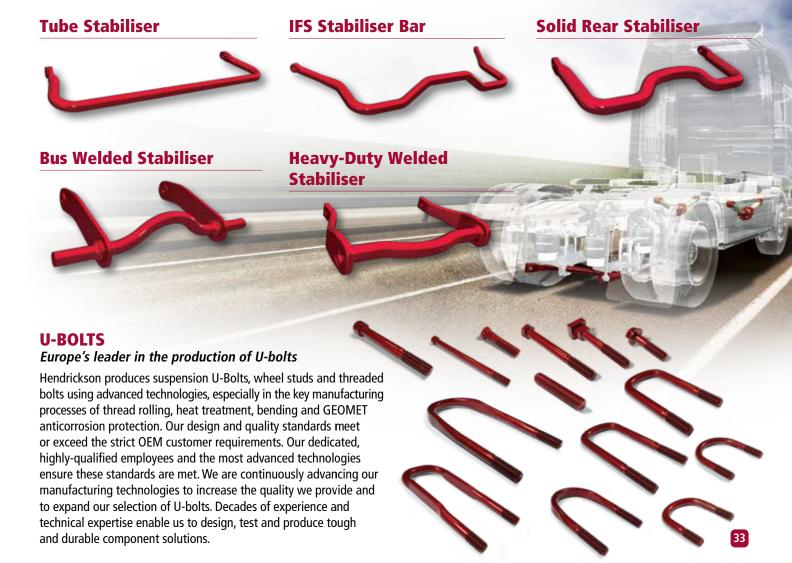
Hendrickson tube stabilisers are up to 45 percent lighter than solid stabilisers and enable significant reduction in both unsprung and total weight savings. Our stabilisers help the end user meet today's fuel consumption challenge and the expectations of higher payloads.







Whatever your spring or stabiliser 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[®].



COMPOSITES

LITEFLEX® Composite Springs for Light Weight Solutions

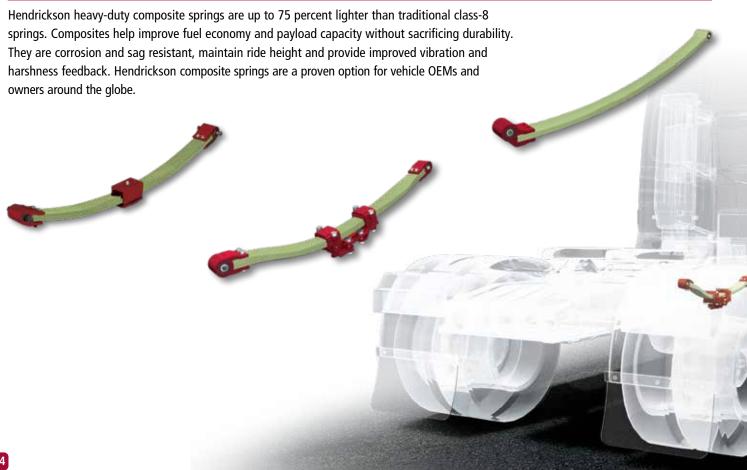
Hendrickson's INNOVATION BUILT IN™ philosophy delivers a product where vehicle OEMs, fleets and owner-operators can benefit from an improved ride, weight reduction, lower maintenance, improved vibration and harshness feedback. Hendrickson's LITEFLEX composite springs are the proven choice for today's short- and long-haulers.

LITEFLEX® Medium-Duty Springs

Hendrickson composite transverse springs create space by reducing traditional suspension towers, reduce weight with composite materials and require smaller / lighter support structures, like stabilizer bars. The result is less weight and increased hauling ability. OEMs enjoy composite springs that are up to 70 percent lighter than their steel equivalents. This weight savings helps OEMs improve efficiency while increasing capacity limits.



LITEFLEX® Heavy-Duty – Class 8 Springs



LITEFLEX® Automotive Springs

Hendrickson composite springs for the passenger and light truck segments offer many unique benefits over steel suspension systems. Among them are weight reduction for improved range, improved ride and comfort versus steel springs and corrosion and sag resistance. Our springs offer vehicle OEMs better packaging with systems that require less space, allowing for lower hood lines, elimination of coil towers and oftentimes lower drag coefficients. Smaller spring requirements also allow for larger interior space and / or more passenger amenities without adding to the overall vehicle weight.



LITEFLEX® Trailer Springs

Hendrickson's composite trailer springs are designed with the vehicle OEM, fleet and owner-operator in mind. They are corrosion and sag resistant, maintain ride height and provide improved vibration and harshness feedback.



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OUR COMMITMENT

INNOVATION BUILT IN™ builds upon our legacy as innovators and manufacturers of suspension systems and components for the global medium- and heavy-duty commercial vehicle industry.

Serve the transportation industry with innovative products that work to deliver improved productivity, profitability and value.

Supply the commercial vehicle industry around the world with durable and cost-effective, advanced ride solution technologies.

Champion dedicated leadership and employees who uphold our proud heritage through creativity, integrity and service.

Develop superior, differentiated products that promote leading-edge manufacturing and distribution processes.

Forge strategic relationships that allow us to engineer and manufacture systems, modules and components that meet commercial vehicle owners' needs for durability, weight savings and minimized maintenance.

Advance the design of suspension and component technology by working cooperatively to exceed the demands of our fleet and OEM customers.







innovation BUILT IN

NOTES



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

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

All applications must comply with applicable Hendrickson / Motor Wheel / W&C specifications and must be approved by the respective vehicle manufacturer with the vehicle in its original, as-built configuration.

Contact Hendrickson / Motor Wheel / W&C for additional details regarding specifications, applications, capacities, operation, service and maintenance instructions. Information contained in this literature was accurate at the time of publication.

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