

# TRAILER

COMMERCIAL VEHICLE SYSTEMS



**H** HENDRICKSON  
*The World Rides On Us®*



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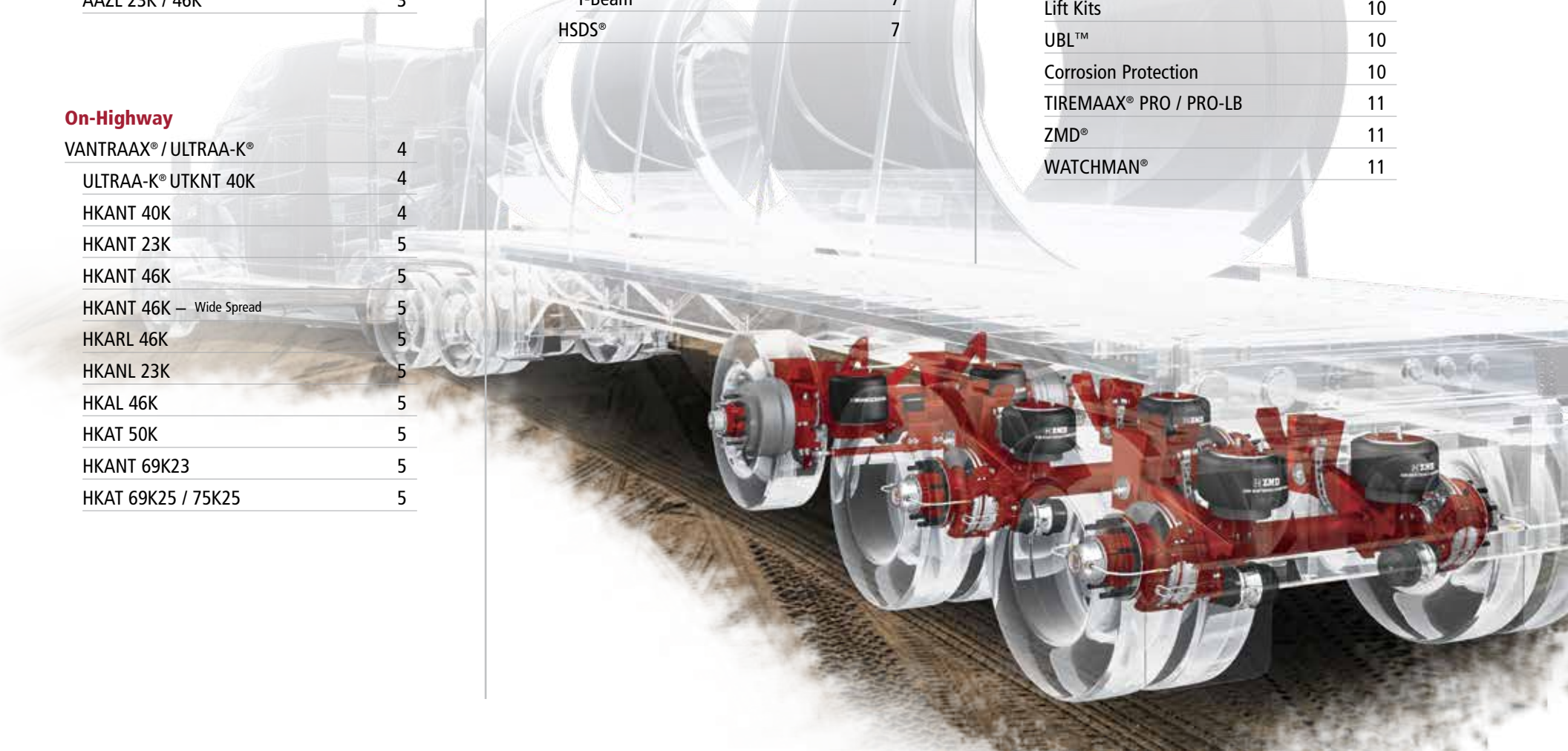
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Hendrickson Trailer Commercial Vehicle Systems designs and manufactures fully integrated suspension systems. Our unique expertise is bringing components together, creating an optimized system, maximizing performance, improving durability and minimizing weight savings.

We have become experts in complicated processes like friction welding and forging by vertically integrating brake and wheel-end components into axle assemblies. Taking a hands-on approach gives Hendrickson better control over quality and performance. We're thoroughly focused on the things you care about: weight reduction, durability and lower cost of ownership.

What innovations are ahead for Hendrickson? That depends on our customers. We collaborate with fleets and end-users, including the technicians who service our systems. We educate service specialists on how to maintain and service our systems. We listen to the end-user and utilize their insights to direct us on how to add value to the Trailer commercial transportation industry moving forward.

We'll continue to serve the global commercial transportation industry with innovative products that work better, work harder and add to the bottom line for Fleets and Trailer manufacturers worldwide. Hendrickson – *The World Rides On Us*®.





# VOCATIONAL SUSPENSION SYSTEMS

## INTRAAX®

*Lightweight, integrated air suspension / axle / brake system*

- 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 MAXX22T™ optimized trailer air disc brake\*
- Available with TIREMAAX® tire pressure control systems

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

See L614 INTRAAX brochure

## 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.
- ZMD® shockless ride technology available
- Ride heights from 12 to 19 in.
- Galvanized frame bracket option for bolt-on frame brackets
- Capacity of 23,000 lbs.



## 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.
- ZMD shockless ride technology available on select AAT 23K and 25K models
- RCA raised-center axle available in 5 in. axle diameter only
- Galvanized frame bracket option for bolt-on frame brackets
- Capacities of 23,000, 25,000 and 30,000 lbs.



## 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
- One of the lightest low-ride-height / liftable trailer air suspensions on the road today
- Ride heights from 6.5 to 17 in.
- Galvanized frame bracket option for bolt-on frame brackets
- Capacity of 23,000 lbs.



*Shown with optional UBL™ UNDER BEAM LIFT™*

## INTRAAX® AANLS 20K

*Complete integrated system in a highly compact, low-ride-height assembly*

- Compact system ideal for the tight confines of auto haulers, moving vans and other drop-frame van trailers
- Offers a choice of 15 in. brakes needed for 19.5 in. tires or conventional 16.5 in. brakes
- Ride heights from 6.25 to 12 in.
- Capacity of 20,000 lbs.





## **INTRAAX® AAL 23K / 25K / 30K**

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

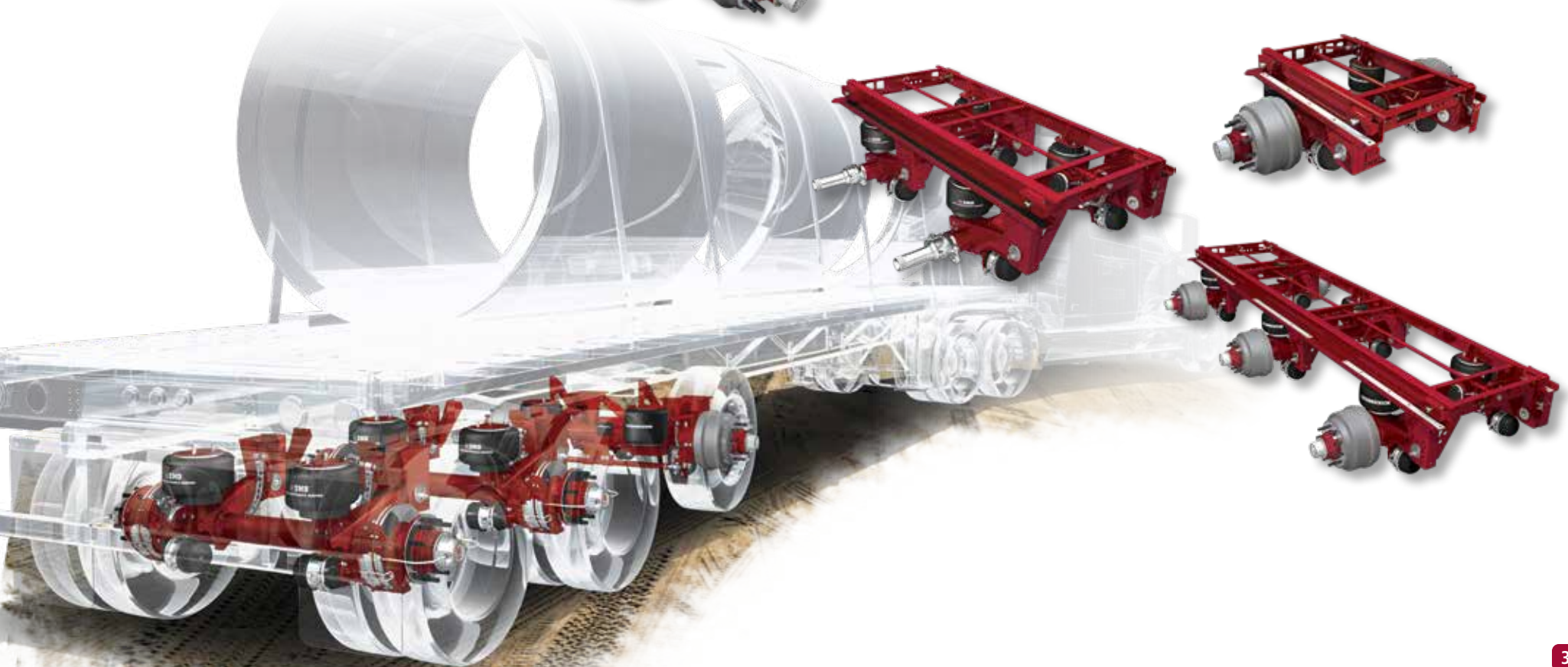
- For drop-decks, lowboys, platforms, tankers, vans and specialty trailers
- All the advantages of INTRAAX®, including low weight, high durability and integrated system performance with minimal maintenance
- Ride heights from 6.5 to 19 in.
- RCA raised-center axle available in 5 in. axle diameter only
- Galvanized frame bracket option for bolt-on frame brackets
- Capacities of 23,000, 25,000 and 30,000 lbs.



## **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.
- Available in both top-mount and low-ride models
- Capacity of 23,000 lbs. (single-axle) configurations, 46,000 lbs. (tandem-axle) configurations and 69,000 lbs. (tri-axle) configurations
- ZMD® shockless ride technology available on select models





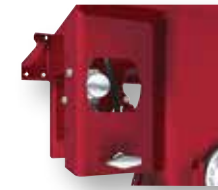
# ON-HIGHWAY SUSPENSION SYSTEMS

## 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
- SURELOK® system options available for stable and efficient payload transfer
- LDA™ Large-Diameter Axles provide heavy-duty performance from an ultra-light axle
- Hot-dip wax and soft coat finish available for lasting corrosion resistance
- Hendrickson MAXX22T™ optimized trailer air disc brake available\*
- ZMD® shockless ride technology is available on select models
- Available with TIREMAAX® tire pressure control systems

\*Air disc brakes not available on HKANL and HKAL.



QUIK-DRAW®

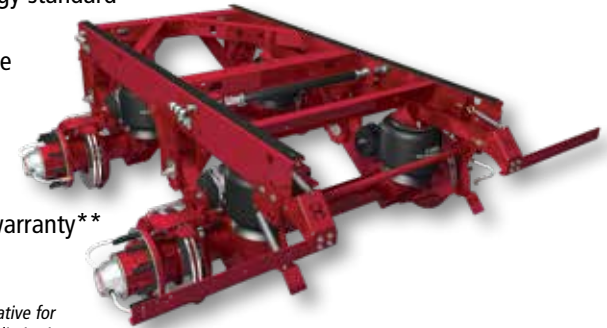


SURELOK®

## ULTRAA-K UTKNT 40K

- Stronger than VANTRAAX® 40K HD model
- Lightweight tandem slider technology
- ZMD shockless ride technology standard
- 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 10-year structural corrosion warranty\*\*
- Capacity of 40,000 lbs.

\*\* Contact your local Hendrickson representative for complete warranty terms, conditions and limitations.



## HKANT 40K

- Lightweight tandem slider
- Engineered for dry-freight and refrigerated vans
- Capacity of 40,000 lbs.





### HKANT 23K

- Single-axle slider
- Capacity of 23,000 lbs.



### 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.



### HKANT 46K

- Tandem slider tailor-made for heavy-duty applications
- Capacity of 46,000 lbs.



### HKAL 46K

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



### HKANT 46K - Widespread

- 121 in. spread tandem
- Capacity of 46,000 lbs.



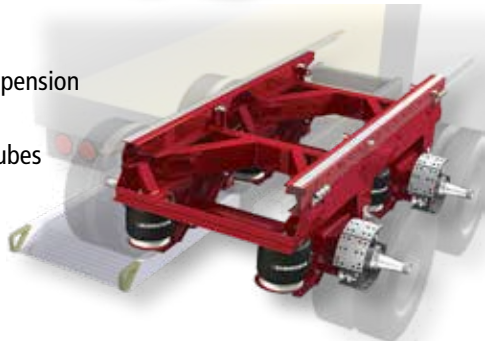
### HKAT 50K

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



### HKARL 46K

- Lightweight ramp-ready air slider suspension
- Features 30 x 6.5 in. ramp bay
- Eliminates heavy, expensive spacer tubes
- Capacity of 46,000 lbs.



### HKANT 69K23 / HKAT 69K25 / HKAT 75K25

- Lightweight tridem slider
- Designed for moving freight across North American borders
- Available in 60 and 72 in. axle spacing – 49 in. axle spacing is available for HKANT 69K23 only





# SPECIALTY / VOCATIONAL SUSPENSION SYSTEMS

## CONNEX® ST CXSL 25K

### Trailer steerable suspension system

- Ideal for multi-axle trailer applications
- Assists with compliance to Ontario SPIF regulations
- Helps increase maneuverability
- Standard with RTR® READY-TO-ROLL® wheel-end packages, HXL3® or HXL5®
- Available with TIREMAAX® tire pressure control systems
- Ride heights from 13 to 19 in.
- Capacity of 25,000 lbs.

See L1243 CONNEX ST flyer



## CONNEX®

### Unitized air suspension and axle system

- Ideal for low-ride height applications that require 12.25 and 16.5 in. drum brake packages
- Available with TIREMAAX tire pressure control systems
- Standard with RTR READY-TO-ROLL wheel-end package, HXL5
- Standard with QUIK-ALIGN® pivot connection
- Capacities of 23,000 and 25,000 lbs.

## CXU 23K / 25K

- Galvanized frame bracket option for bolt-on frame brackets
- Ride heights from 5.5 to 9 in.

## CXY 23K / 25K

- Yoke-type suspension; ideal for applications such as lowboys
- Designed to be used in conjunction with CXU suspensions
- Ride heights from 6.5 to 9 in.



## TRLAXLE®

### Non-integrated trailer axles

- 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
- Hendrickson MAXX22T™ optimized trailer air disc brake available
- Available with TIREMAAX tire pressure control systems

See L961 TRLAXLE flyer

See L1223 HTA flyer

See L979 HCA flyer







## HT™ Series

*Reliable, affordable and flexible air suspensions*

- Designed for use with multiple brake sizes, including 12.25 in.
- 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 / 500,000-mile structural warranty\*
- Individual replacement parts available

See L632 HT brochure

### Top-Mount Air Suspensions

(HT190T, HT230T, HT250T and HT300T)

- Ride heights from 12 to 23 in.
- 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.



HT300T

### Underslung Air Suspensions

(HT190U, HT250US and HT300US)

- Ride heights from 3.5 to 17 in.
- 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.



HT250US

### Y-Beam Air Suspensions

(HT250YS and HT300YB)

- Ride heights of 6.5, 7.5 and 9 in.
- 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.



HT300YB

## HSDS®

*Hendrickson severe-duty system*

- Delivers rugged dependability and outstanding ride quality and control for curtainsiders, platform trailers, tippers, tankers and container chassis
- Patented beam-to-axle connection<sup>▲</sup> for rugged performance and durability in severe operating environments
- Ride heights from 3.5 to 23 in.
- Quad shocks and rebound limiter available
- Lift kits available for certain ride heights
- Capacities up to 30,000 lbs.

See L1184 HSDS flyer

<sup>▲</sup> This product is covered by at least one or more U.S. and/or foreign patents and/or pending U.S. and/or foreign patent applications. See Hendrickson for details.



HSDS 12t / 13t  
Top Mount



HSDS 10t  
Top Mount



HSDS 10t / 12t  
Underslung



HT250UB-DB



HSDS 10t with ADB  
Top Mount

\* Contact your local Hendrickson representative for complete warranty terms, conditions and limitations.



# WHEEL-END / BRAKE OPTIONS

## VOCATIONAL / ON-HIGHWAY

### RTR® READY-TO-ROLL®

*Extended-life wheel-end packages*

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 low-maintenance, 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<sup>▲</sup>
- Available with TIREMAAX® tire pressure control systems<sup>▲</sup>
- 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

<sup>▲</sup> This product is covered by at least one or more U.S. and/or foreign patents and/or pending U.S. and/or foreign patent applications. See Hendrickson for details.

### HXL7® Hendrickson Extended-Life 7-Year System™

- 7-year limited warranty\*
- Semi-fluid grease
- Corrosion-resistant hubcap
- Outboard Mounted Rotor option available with Hendrickson MAXX22T™ system for enhanced serviceability



PRECISION320® nut system

### 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



### Brake Options

*Extend intervals between brake service*

- HXS® Hendrickson Extended Service™ brakes with thicker lining blocks extend brake life
- Wide HXS 16.5 × 8.625 in. brakes can help increase miles between lining changes
- Cam Tube System™ for trailer suspensions helps extend life of brake camshafts and bushings

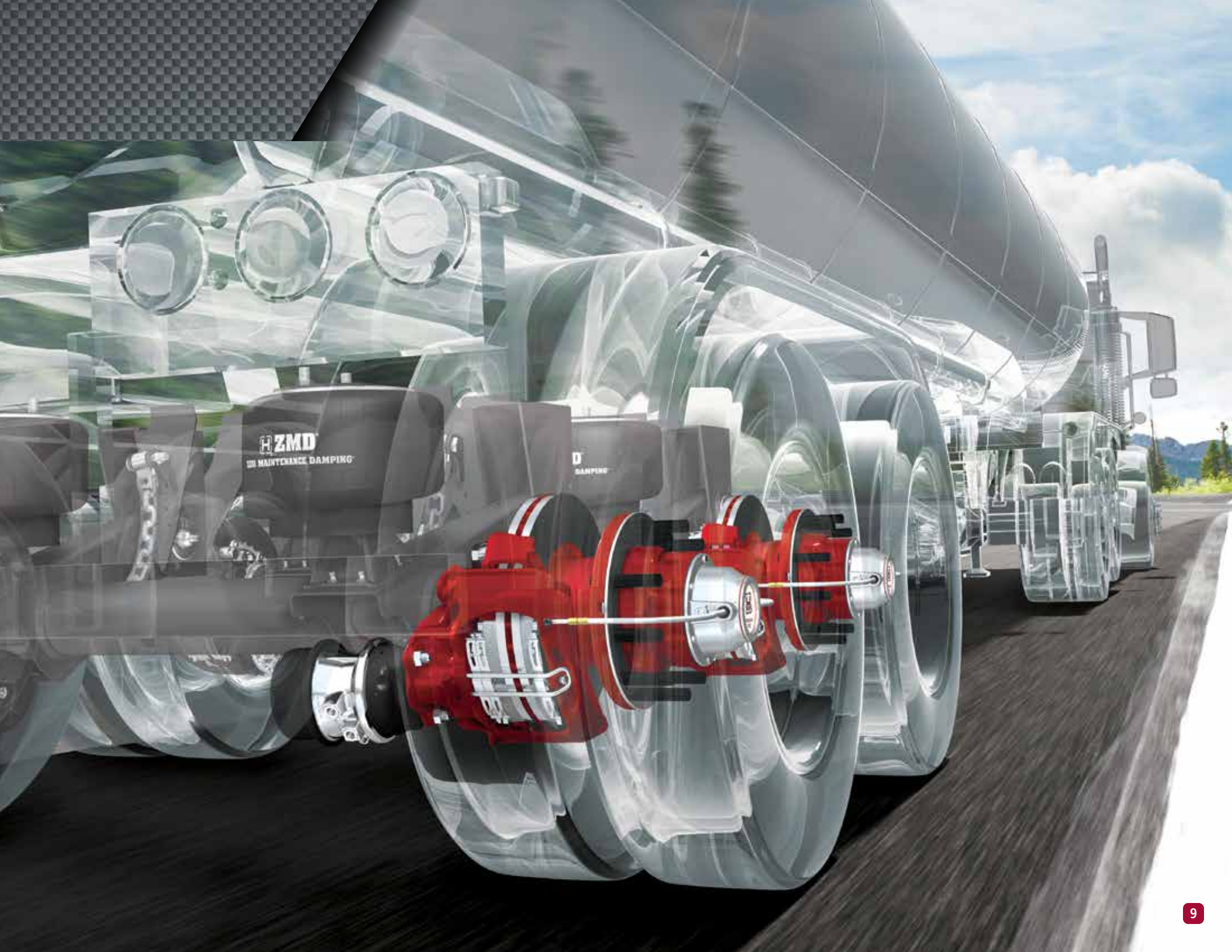
### Hendrickson MAXX22T™

*Optimized trailer air disc brake system*

- Proprietary Hendrickson MAXX22T™ system
- Lightweight rotor and torque plate deliver superior 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
- Available with Outboard Mounted Rotor Technology\*\*









# FEATURES / OPTIONS

## LDA™ Large-Diameter Axle

*Superior axle design*

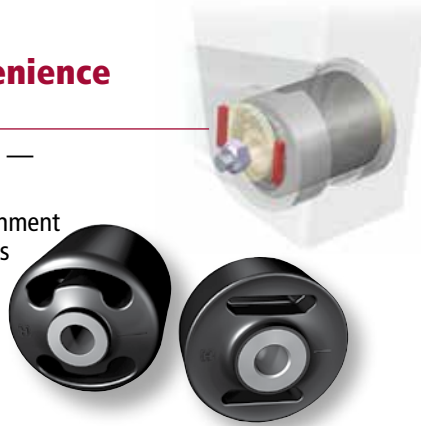


- LDA™ Large-Diameter Axles featured on most INTRAAX® and VANTRAAX® suspension systems
  - Lighter than comparable 5 in. axles, allowing more cargo per load
  - Bending and torsional stiffness increased for reduced deflection
  - Axle wrap, spindle and spider mounting surfaces are machined in one step 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

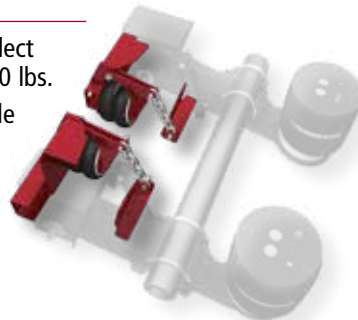
*Time and money-saving features*

- Simple, functional designs use 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



## 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.
- SBL® SIDE BEAM LIFT® and CL center lift kits available for HT250US models
- CL center lift kits available for HT250US models



## UBL™ UNDER BEAM LIFT™

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

- Combine with INTRAAX®, VANTRAAX®, CONNEX® ST and some HT™ Series suspension models
- No chains, cables or metal-on-metal parts to wear or bind
- Bolt-on UBL feature is available in both galvanized and painted versions for installation flexibility



## 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 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:** Standard coating allowing topcoat application
- **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.

## WATCHMAN®

### Wheel-end sensor technology

- Available on suspension models that specify TIREMAAX® PRO or TIREMAAX PRO-LB tire pressure control systems
- Constantly monitors trailer tire pressures and wheel-end temperatures
- Provides real-time alerts to the fleet's back office when a potential issue is detected
- Helps accelerate issue resolution and maximize uptime when employed as part of a fleet's proactive maintenance routine



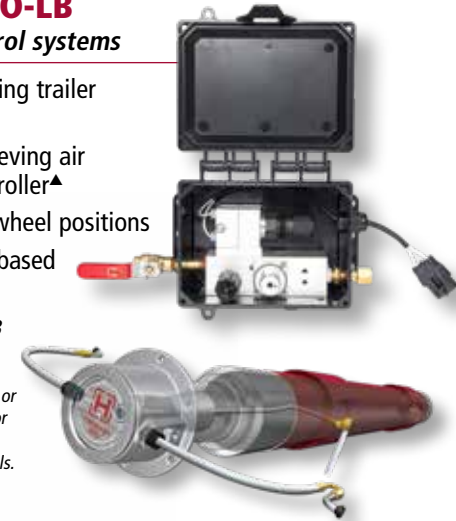
## TIREMAAX® PRO / PRO-LB

### Advanced tire pressure control systems

- Automatically inflate tires using trailer air supply
- Prevents overinflation by relieving air from tires back through controller<sup>▲</sup>
- Equalize pressure across all wheel positions
- PRO-LB adjusts tire pressure based on axle load

See *TIREMAAX brochure – L1313*

<sup>▲</sup> This product is covered by at least one or more U.S. and/or foreign patents and/or pending U.S. and/or foreign patent applications. See Hendrickson for details.



## ZMD® ZERO MAINTENANCE DAMPING®

### Hendrickson exclusive ride technology

- Reduces suspension maintenance by eliminating shocks
- Patented air spring<sup>▲</sup> performs damping function by exchanging pressurized air through channels
- Uniform damping levels
- Robust chain down stop provides maximum durability
- Reduces 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 VANTRAAAX®, INTRAAAX® SP and INTRAAAX models







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. Every day 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 ongoing drive to provide products and services benefits truck and trailer manufacturers, fleets and owner-operators worldwide. Our tagline, The World Rides On Us® reflects the brand's spirit and Hendrickson's 100-plus years of engineering for efficiency.





innovation  
**BUILT IN**<sup>TM</sup>



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.



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

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

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

Contact Hendrickson for additional details regarding specifications, applications, capacities, operation, service and maintenance instructions.

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