

HINTRAAX®

**Integrated Trailer Air Suspension /
Axle / Brake Systems**

Value, performance and reliability
proven around the world



HHENDRICKSON
The World Rides On Us®

top-mount



INTRAAX® AANT 23K

The road-proven AANT provides the ultimate system for weight-conscious haulers running straight-frame platforms, container chassis, liquid tankers, grain hoppers, bottom dumps and livestock trailers. AANT teams tapered-beam and Hendrickson Large-Diameter Axle (LDA™) technologies for increased roll stiffness, reduced weight and improved durability. AANT 23K is a lighter weight version of the AAT 23K while still maintaining the smooth ride, superior performance and rugged durability you have come to expect.

See *INTRAAX AANT 23K flyer* - L764



AANT 23K

INTRAAX® AAT 23K•25K•30K

Ideal for platforms, tankers, dumps, grain hoppers and specialty trailers — on-highway or off-road. Satisfied operators continue to prove INTRAAX's reliability and performance, piling up thousands of miles on tens of thousands of trailers worldwide every year. With a well-deserved reputation for low maintenance and now with a 5¾-inch Large-Diameter Axle (LDA™), INTRAAX costs less to operate over the long haul and helps keep your rigs rolling down the road longer, doing what you want your trailers to do — boost your bottom line.

See *INTRAAX AAT 23K/25K/30K flyer* - L1153



AAT 25K

top-mount and low-ride extreme-duty



INTRAAX® AAEDT 30K•AAEDL 30K

To meet the grueling demands of logging, forestry, mining and construction operations, Hendrickson designed the INTRAAX extreme-duty models. Available in both top-mount (AAEDT 30K) and low-ride / liftable (AAEDL 30K), these models deliver the first integrated 30,000-pound capacity axle and suspension system for severe-duty and heavy-haul operations. Extreme-duty systems give you the muscle you need for rigorous off-road and heavy-hauling applications including loggers, chip vans, dumps, tankers, straight- and drop-deck platforms and specialty trailers. Rugged features include low-pressure air springs with steel pistons, high-dampening, extended-service shock absorbers and a 30,000-pound capacity axle. Heavy-duty options include rear-mount shock absorbers and chain down-stops for maximum suspension dampening and control.

See *INTRAAX AAEDT / AAEDL 30K flyer* - L741



AAEDT 30K



AAEDT 30K with optional chain down-stops and rear-mount shocks

AAEDL 30K with optional chain down-stops, rear-mount shocks and UNDER BEAM LIFT™ (UBL™)

low-ride / liftable



INTRAAX® AANL 23K

Continuing the evolution for weight-conscious haulers, we've incorporated tapered-beam and Hendrickson Large-Diameter Axle (LDA™) technologies for increased roll stiffness, reduced weight and improved durability into the AANL 23K suspension for a lighter weight option for the road-proven AAL 23K suspension. An optional UNDER BEAM LIFT™ (UBL™) provides the AANL with lift capability to increase operational flexibility, trailer maneuverability and tire life in tanker, grain, livestock and platform trailers. The lower ride-height AANL 23K gives operators of drop-decks, lowboys and flatbeds the exceptional freight protection, superior performance and operating efficiencies that have made INTRAAX the recognized leader in quality and the premier air suspension on the market.



AANL 23K



UNDER BEAM LIFT™ (UBL™)

See INTRAAX AANL 23K flyer - L958

INTRAAX® AAL 23K • 25K • 30K

Low-ride / liftable systems deliver the proven benefits of INTRAAX technology to applications including platforms, dumps, drop-decks, lowboys, tankers, B-trains, livestock and specialty trailers. The sleek low-profile design of the INTRAAX AAL covers a wide range of ride heights to meet a broad array of on-highway and off-road applications from low-deck trailers to high-clearance, off-road operations.



AAL 25K

See INTRAAX AAL flyer - L1066

INTRAAX® AANLS 20K

Bringing the durability, low-maintenance and lightweight advantages of suspension / axle / brake integration to a compact low-ride system, AANLS proves superlative for autohaulers, moving vans and drop-frame trailers. The system delivers a package about 120 pounds per axle lighter than comparable suspensions. AANLS gives operators the exceptional freight protection, superior performance and operating efficiencies they have come to expect from INTRAAX.



AANLS 20K

See INTRAAX AANLS 20K flyer - L817

top-mount and low-ride platform sliders



INTRAAX®-SP AAZNT 23K • 46K and AAZL 23K • 46K

AAZNT 23K • 46K (single- and tandem-axle) top-mount systems give platform slider operators flexibility, outstanding weight savings and low-maintenance advantages of advanced integration. AAZL 23K • 46K low-ride systems carry the same gains for low-ride flatbed and drop-deck slider applications.

Drawing on patented INTRAAX technology and unmatched slider box design experience, we developed platform slider systems that equip you with durable packages weighing as much as 800 pounds less than comparable sliders and up to 100 pounds less than mechanical sliders.

See INTRAAX-SP Platform Slider flyer - L792



AAZL 23K

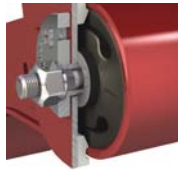


AAZNT 46K

Standard INTRAAX® features deliver black to your bottom line

Low Maintenance and Convenience Save Time and Money

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



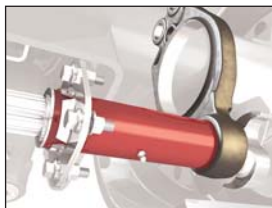
Performance Plus

- Low spring rates deliver superb ride quality
- High-capacity air springs with low operating pressures allow rapid air-up
- Rigid trailing arm with solid axle connection offers stable and durable design
- TRI-FUNCTIONAL bushings optimize ride softness and control
- Shock absorbers designed with premium seals and bonded bushings for long life
- Optional large-bore, high-dampening shocks provide greater suspension control
- Quality-controlled assembly including ABS sensor testing, ensures optimal performance



Responsive and Consistent Stopping Power

- Industry's first standard Cam Tube System™ enhances S-cam alignment and helps extend brake component life
 - Seven times more grease than spherical style camshaft assemblies
- 10-inch S-cam eliminates windup and reduces bushing wear
 - Up to a half inch less stroke required
 - Provides more braking reserve — without the cost of long-stroke chambers
 - Lower air consumption, critical for ABS performance
 - Faster application and release cycles
- Heat-treated components for greater durability



Superior Axle Design

Hendrickson stands as one of the world's largest trailer axle manufacturers



- Hendrickson Large-Diameter Axle (LDA™) usage has expanded within the INTRAAX® and INTRAAX-SP models
 - Trims up to 27 pounds compared to five-inch axle, allowing more cargo per load
 - Bending and torsional stiffness increased by as much as 14 percent for rugged durability
 - Greater roll stability
 - Reduced deflection under load
- Straighter, neutral-toe axle helps improve tire life and fuel mileage
- Spindle, axle wrap and spider mounting surfaces machined in one step after friction welding to ensure precise brake geometry and wheel positioning — giving you enhanced brake life and efficiency
- Patented axle wrap and window weld for optimal structural integrity
- Brake hardware attached to trailing arms rather than welded to axle, minimizing axle stress



Low-Maintenance Integrated Systems From a Single Source

- Long-term warranty on axle / beam connection*
- Leading structural warranty*
- Supported by OEMs, dealers and designated distributors throughout North America and Mexico
- Backed by Hendrickson's outstanding technical support staff
- Quickly replace damaged axles without grinding or welding
- Wide availability of Hendrickson Genuine Parts

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



INTRAAX® Options — spur your productivity and build trailer value

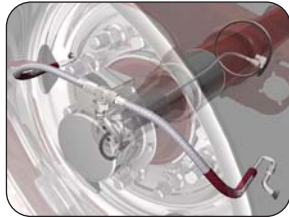
TIREMAAX®

Tire inflation systems

A value-added option, TIREMAAX® helps fleets and owner operators minimize costly tire wear and improve productivity and fuel mileage

- These patented systems draw from the trailer air supply to keep your trailer tires properly inflated
- Extended-service rotary parts designed for long life
- Patented filter and axle tube vent help prevent wheel-end contamination
- Available on INTRAAX®, VANTRAAX® and TRLAXLE™ non-integrated trailer axles

See TIREMAAX brochure - L1017



UNDER BEAM LIFT™ (UBL™)

Lightweight lift-axle mechanism adds operational flexibility, helps extend tire life and improves maneuverability

- Combine with INTRAAX® (low-ride or top-mount)
- Equalizes with fixed INTRAAX systems
- No chains, cables or metal-on-metal parts to wear or bind
- UBL-005 features a bolt-on UBL design for the AANL 23K

See UNDER BEAM LIFT flyer - L727



Specialized Suspensions

High Control

- Extends the advantages of an integrated system to single-axle and multi-articulated applications, requiring even greater road stability

See HIGH CONTROL flyer - L667

Raised-Center Axle

- Provides the answer for tanker operators requiring a raised-center axle adaptation



See INTRAAX Raised-Center Axle flyer - L1065

Hendrickson Wheel-End Options

Fully integrated solutions that help minimize operating costs and improve performance

- Suspension-through-wheel-end systems deliver low maintenance, durability and reduced weight with the convenience of a single-source supplier
- Wide range of READY-TO-ROLL® (RTR®) wheel-end options
 - **Hendrickson Value System™ (HVS®)** features a three-year limited on-highway warranty*
 - **Hendrickson Long-Life System™ (HLS®)** features a five-year limited on-highway warranty*
 - **Hendrickson Extended-Life 7-year System (HXL7®)** features a seven-year limited on-highway warranty*

See READY-TO-ROLL® (RTR®) Wheel-End flyer - L1064

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



HVS® System



HLS® System



HXL7® System

Brake Options

Extend intervals between brake service

- Foundation brake geometry designed for less S-cam windup and greater brake efficiency
- 16.5- and 15-in. sizes fit 22.5-, 24.5- and 19.5-in. wheel equipment
- Hendrickson Extended Service (HXS®) and wide HXS brakes with thicker lining blocks extend brake life
- Wide HXS (16.5 × 8.625 in.) brakes can help increase the miles between brake service
- Air disc brakes available

See Understanding Air Ride - L761 (Brake Efficiency)

See Air Disc Brake flyer - L889

Suspension Coating Options

Extend the life of your suspension components by selecting Hendrickson's premium coating options

- | | |
|-------------------------|---|
| • Suspension axle/beams | • Frame brackets/air spring mounting plates |
| — Black primer | — Black primer |
| — Black soft-coat | — Black soft-coat |
| — Gray soft-coat | — Gray soft-coat |
| | — Galvanizing |

Extreme-Duty Options

Options for special applications, available on most models

- Chain down-stops to limit suspension rebound
- Rear-mount shock absorbers for extra dampening



INTRAAX® sharpens your competitive edge



Worldwide, OEMs, fleets and owner operators put their trust in INTRAAX® more than any other trailer air suspension. They demand unmatched performance and benefits, and they know INTRAAX delivers.

The first integrated trailer air suspension / axle / brake system, INTRAAX tames virtually any application with a straightforward, functional design derived from the world's most sophisticated engineering. The INTRAAX family brings a breadth of models to meet your hauling challenges — top-mount, low-ride, extreme-duty, single and tandem sliders and liftable models in capacities from 20,000 to 30,000 pounds.

Put your trust in INTRAAX to help increase payload, protect your cargo and operators, and keep your equipment operating at peak efficiency. For more information as to what the patented INTRAAX offers for your hauling needs, contact your local trailer dealer or Hendrickson at **1-866-RIDEAIR (743-3247)**.

INTRAAX Specifications

	Model	Suspension Capacity (lbs.)	Axle Rating ¹ (lbs.)	Axle Dia. (inches)	Ride Height (inches)	Base Model Weight (lbs.)
Primary	AANT 23K	23,000	23,000	LDA™	12, 13.5, 14, 15, 16, 17	490
	AAT 23K	23,000	23,000	LDA™	13.5, 14, 15, 16, 17, 18, 19	520
	AAT 25K	25,000	25,000	LDA™	13.5, 14, 15, 16, 17, 18, 19	546
	AAT 30K	30,000	25,000	LDA™	13.5, 14, 15, 16, 17, 18, 19	552
	AAEDT 30K	30,000	30,000	5	14, 15, 16, 17	684
	AANLS 20K	20,000	20,000	5	6.25, 7, 9, 12	546
	AANL 23K	23,000	23,000	LDA™	6.5, 7.5, 8, 9, 12, 14, 15, 16, 17	518
	AAL 23K	23,000	23,000	5	6.5, 7.5, 8, 9, 12, 14, 15, 16, 17, 19	591
	AAL 25K	25,000	25,000	5	6.5, 7.5, 8, 9, 12, 14, 15, 16, 17, 19	617
	AAL 30K	30,000	25,000	5	9, 12, 14, 15, 16, 17, 19	644
	AAEDL 30K	30,000	30,000	5	9, 12, 14, 15, 16, 17, 19	664
Slider	AAZNT 23K	23,000	23,000	LDA™	13.5, 14, 15, 16, 17	766 ²
	AAZNT 46K	46,000	23,000	LDA™	13.5, 14, 15, 16, 17	1444 ³
	AAZL 23K	23,000	23,000	5	6.5, 7.5, 8, 9, 12	858 ²
	AAZL 46K	46,000	23,000	5	6.5, 7.5, 8, 9, 12	1628 ³

¹Axle structure rating only. Brakes rated separately. ²Based on 37-inch I-beam model. ³Based on 37-inch I-beam model with 49-inch axle spread.

For additional details and specifications, see the following Hendrickson publications: *Application Guide - L707* • *INTRAAX Top-Mount Specifications - L600* • *INTRAAX Low-Ride-Height / Liftable Specifications - L729* • *INTRAAX-SP Specifications - L840*

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

All literature referenced in this brochure is available on our web site **www.hendrickson-intl.com**
or call **1-866-RIDEAIR (743-3247)**

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