



HSDS™

Hendrickson Severe-Duty Air Suspension Systems

- Outstanding durability
- Increased payload
- Superior ride quality



HSDS 10t



HSDS 12t



HSDS 13t



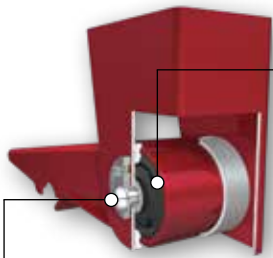
HSDS Underslung



To learn more about HSDS,
call 866.743.3247 or visit
www.hendrickson-intl.com

HENDRICKSON
The World Rides On Us®

HSDS™ Features and Benefits



TRI-FUNCTIONAL® Bushing

- Controls vertical, horizontal and roll forces of trailer
- Optimizes ride softness, control and stability

Shock Absorbers

- Helps reduce rough road vibrations
- Only available on HSDS 12t and 13t

QUIK-ALIGN® Pivot Connection

- Fast and easy axle alignment
- Requires no welding or special tools

Heavy-Duty Down Stops

- Helps prevent overextension of air springs and shocks
- Only available on HSDS 12t and 13t

Brake Drum

- Outboard mounted to allow brake service without disturbing wheel-end

Brake Shoe

- High quality brake lining and brake drum helps improve lining life

Wheel Hub

- Heavy-duty hub design

Internally Vented Wheel-End

- Patented filter system to help prevent contamination from entering wheel-end

Seal

- Millions of miles of proven performance

- Large volume of semi fluid grease for extended bearing life

Value-Added Options

- UBL™ UNDER BEAM LIFT™ is a lightweight mechanism which offers cost savings and operational flexibility
- Air disc brakes available
- TIREMAAX® tire inflation system helps maximize tire life and maintain peak fuel mileage

See TIREMAAX Brochure - L1017
See UBL UNDER BEAM LIFT Flyer - L727



Keeping You on the Road Longer

The HSDS™ system is designed to be lightweight without sacrificing durability. From component and suspension simulation modeling to rigorous real-world testing scenarios in Hendrickson's state-of-the-art facility to demanding test cycles and high-articulation events on challenging proving grounds courses, the HSDS system withstands extensive test environments. With nearly ten years of service in severe environments, the HSDS is a low maintenance and durable system that helps contribute to **reduced life cycle costs** and **less down time** in the following ways:

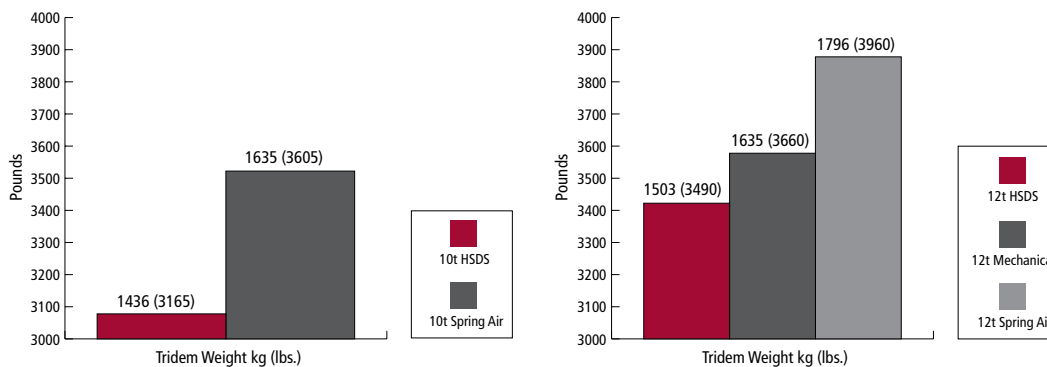
- High quality, heavy-duty, low-maintenance, easy to service wheel-end and brake system
- Progressive bushing rate and semi-active air springs provide long service life
- Easy alignment system
- Hendrickson parts and service readily available
- Comprehensive technical support and training available



Severe real world application

Less Weight = More Payload

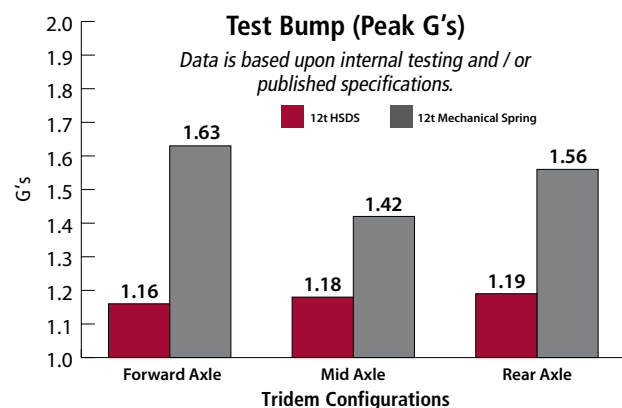
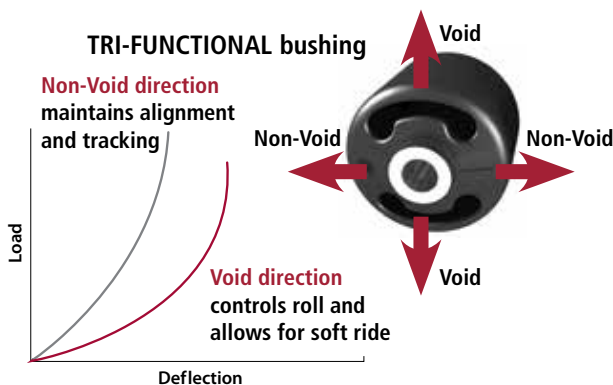
The unique features and components of the HSDS system help balance uncompromising durability with lightweight design. Hendrickson engineers use their experience to design rugged yet lightweight components that help save up to 470 lbs. per tridem installation compared to competitive mechanical or spring air suspensions. This allows trailer fleets to carry more payload in weight-critical hauling situations. In addition, numerous industry studies have linked lighter weight trailers with better fuel efficiency.



Above data is based upon internal testing and / or published specifications.

Superior Driver Comfort and Equipment Protection

The ingenuity behind the HSDS system is found in the unique combination of the TRI-FUNCTIONAL® bushing, air springs and shock absorbers. The trailer is supported by the TRI-FUNCTIONAL bushings and the air springs, which work together to absorb road irregularities. The air spring is a semi-active device which adjusts its spring rate to match the load it carries. It is located very close behind the axle and supports a majority of the load. The bushing also increases spring rate as it is loaded to match the load conditions while heavy duty shocks absorb additional vibrations. The result is HSDS's unique balance of empty and loaded ride quality and loaded stability which not only helps protect the driver, but also cushions the load and helps protect the chassis and cargo from excessive vibration due to potholes and other road inputs. The HSDS suspension is compliant with the regulation that requires 75 percent or more of the spring action be provided by the air spring.





	MODELS					
	HSDS 10t	HSDS U 10t	HSDS 12t	HSDS U 12t	HSDS 13t	HSDS U 13t
BEAM TYPE	Top-Mount	Underslung	Top-Mount	Underslung	Top-Mount	Underslung
SUSPENSION CAPACITY¹ tonnes (lbs.)	10t (22,000 lbs.) at 6.9 Bar (100 psi)	10t (22,000 lbs.) at 5.0 Bar (72 psi)	12t (26,500 lbs.) at 6.0 Bar (87 psi)	12t (26,500 lbs.) at 6.1 Bar (88 psi)	13t (28,700 lbs.) at 6.5 Bar (95 psi)	13t (28,700 lbs.) at 5.2 Bar (75 psi)
AXLE DIAMETER mm (in.)	127 (5)					
RIDE HEIGHTS mm (in.)	355 - 580 (14 - 23)	140 - 390 (5.5 - 15.5)	370 - 580 (14.5 - 23)	140 - 390 (5.5 - 15.5)	370 - 580 (14.5 - 23)	140 - 430 (5.5 - 17)
AXLE TRACKS² mm (in.)	1,727 - 2,229 (68.0 - 87.75)					
AXLE SPACING mm (in.)	1,245 - 1,829 (49 - 72)					
AXLE CONFIGURATION	1, 2, 3 or 4 axles					
HUB PILOTED HUBS	10 studs × 11.25 in. (286 mm)		10 studs × 335 mm (13.2 in.)		8 studs × 275 mm (10.5 in.)	
BRAKES mm (in.)	380 × 220 (15 × 8.625) HXS [®]		310 × 190 (12.25 × 7.5) HXS		420 × 180 (16.5 × 7) HXS	
FRAME TYPES	Steel or Aluminum				Steel	
SUSPENSION WEIGHT RANGE³ kg (lbs.)	465 (1,025) - 535 (1,179)	500 (1,124) - 569 (1,254)	504 (1,112) - 575 (1,267)	510 (1,124) - 580 (1,279)	542 (1,195) - 597 (1,317)	526 (1,159) - 596 (1,315)

1. Axle structure rating only. Brakes rated separately.
2. Contact Hendrickson for non-standard options.
3. Weight includes suspension, axle, brakes, wheel-ends and slack adjusters.

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

All applications must comply with applicable Hendrickson 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, and operation, service and maintenance instructions.

Call Hendrickson at 330.489.0045 or 866.RIDEAIR (743.3247) for additional information.



www.hendrickson-intl.com

TRAILER COMMERCIAL VEHICLE SYSTEMS
2070 Industrial Place SE
Canton, OH 44707-2641 USA
866.RIDEAIR (743.3247)
330.489.0045 • Fax 800.696.4416

Hendrickson Canada
250 Chrysler Drive, Unit #3
Brampton, ON Canada L6S 6B6
800.668.5360
905.789.1030 • Fax 905.789.1033

Hendrickson Mexicana
Circuito El Marqués Sur #29
Parque Industrial El Marqués
Pob. El Colorado, Municipio El Marqués,
Querétaro, México C.P. 76246
+52 (442) 296.3600 • Fax +52 (442) 296.3601