- Outstanding durability
- Increased payload
- Superior ride quality

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

**QUIK-ALIGN® Pivot Connection**
- Fast and easy axle alignment
- Requires no welding or special tools

**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

**TRI-FUNCTIONAL® Bushing**
- Controls vertical, horizontal and roll forces of trailer
- Optimizes ride softness, control and stability

**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

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.

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.
### HSDS™ Specifications

#### MODELS

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

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.

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