



AUXILIARY TRAILER

STEERABLE and NON-STEERABLE
Lift Axle Suspension Systems



H HENDRICKSON
Specialty Products - Auxiliary Axle Systems

Hendrickson Specialty Products - Auxiliary Axle Systems

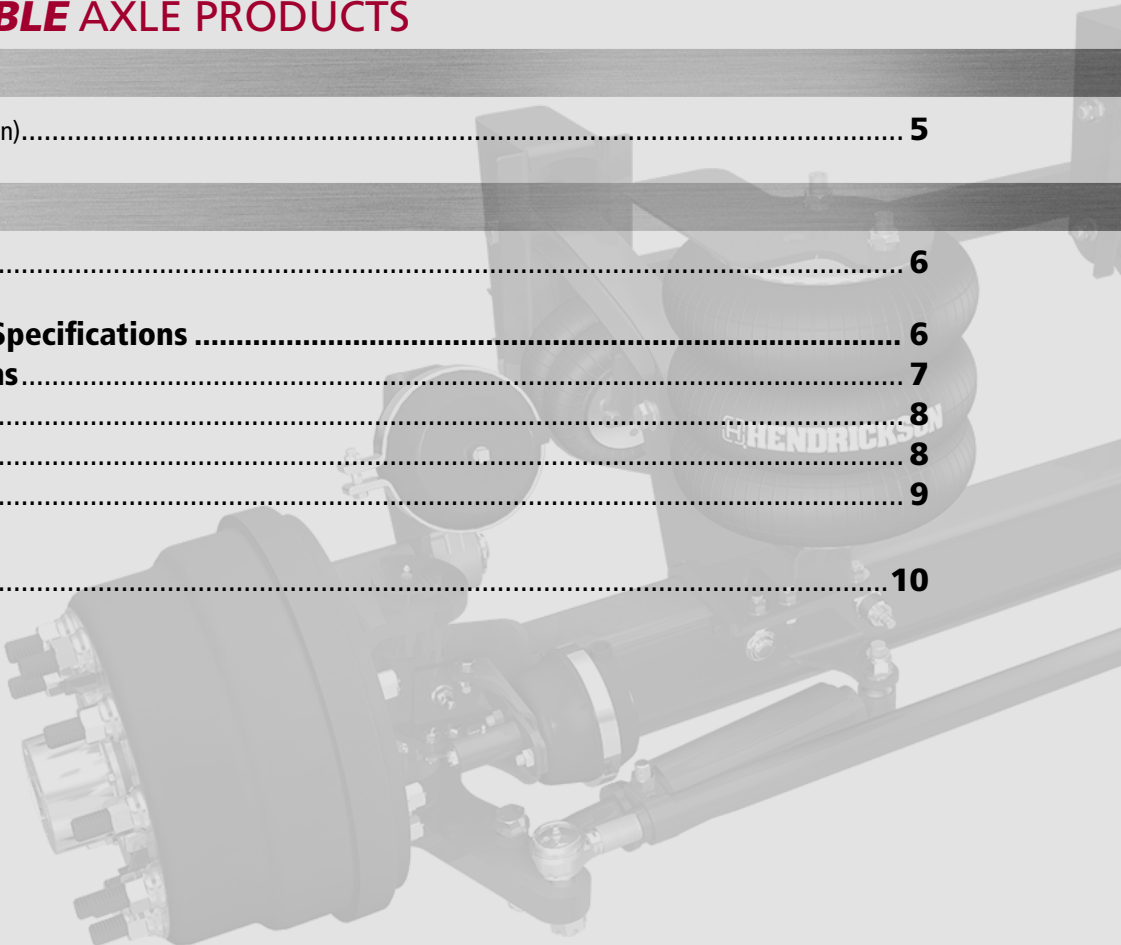
Platform of TRAILER Lift Axle Suspension Systems

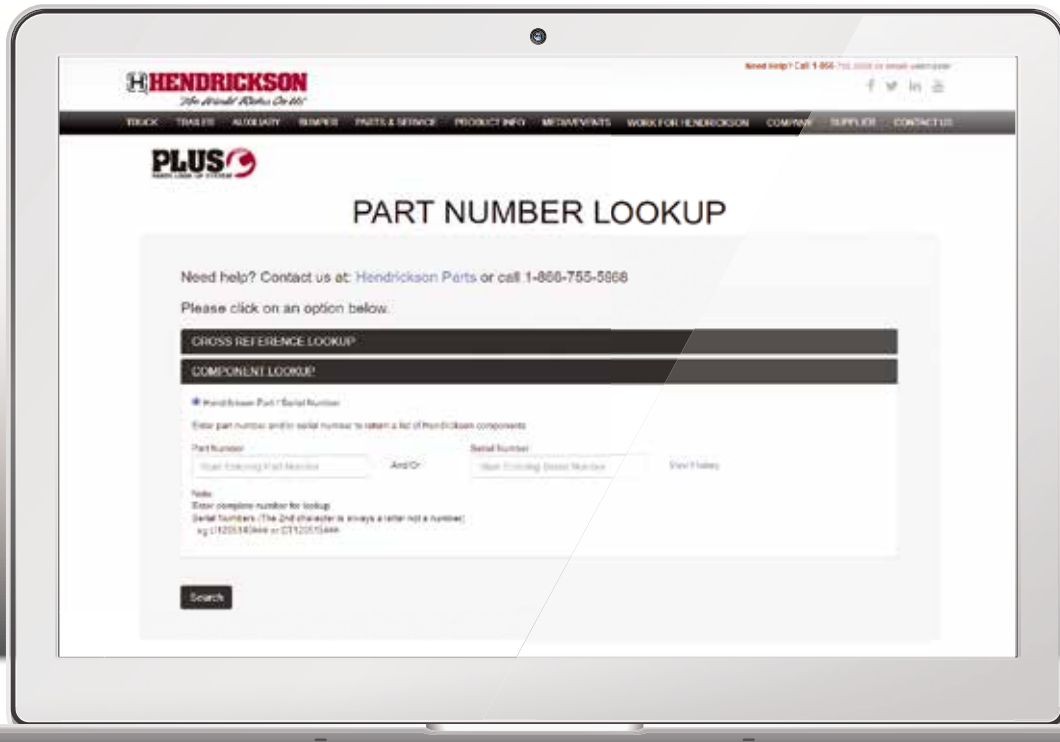
Hendrickson is a leading tier-one OEM supplier of heavy-duty lift axle suspensions for the North American commercial vehicle industry. Our commitment to quality and product innovation drives the industry leadership position, promoting the development of products that help enhance performance and durability.

Hendrickson has an extensive field sales, parts and service organization to support our customers. Our investment in new technologies will continue as we strive to deliver customers more value.

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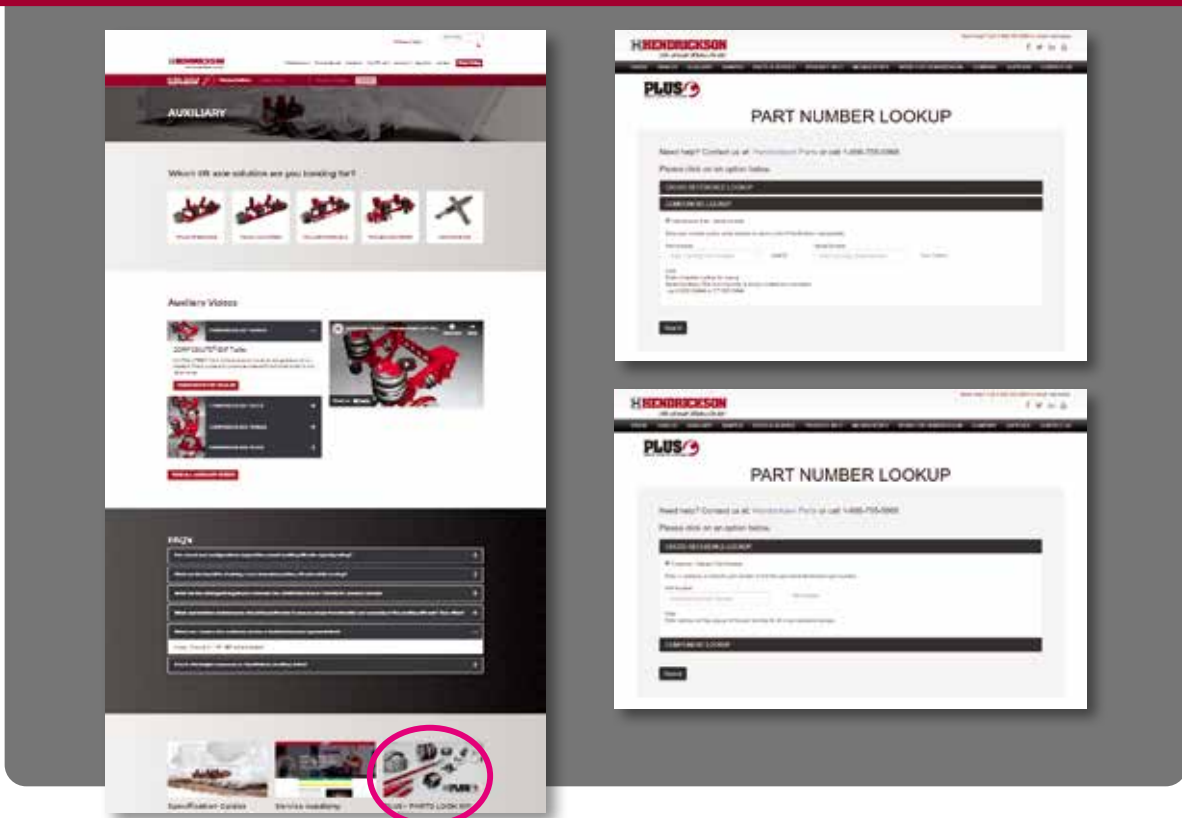
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PLUS+ Parts Look Up System

Helps with all of your serviceable parts and cross reference needs.



Steerable Lift Axle Suspension Systems

Hendrickson offers the COMPOSILITE® family of lift axle suspension systems for steerable trailer applications. The COMPOSILITE EXS lift axle suspension system delivers the advantages trailer end-users have come to expect with Hendrickson products, with features and benefits providing reliability, cost-effectiveness and innovation. The COMPOSILITE EXS offers a bolt-on lockstraight mount for easier installation. A secondary bump stop is incorporated into the axle seat to accommodate extreme loads.

COMPOSILITE®

EXS 13K

Inset Lower Beams

- Optimized lateral stiffness
- Eliminates the need for V-rod



Hangers Designed for Trailers

- Weld-on or bolt-on options

Zero-Torsion Rubber Bushings

- Provide increased durability and bushing life
- Helps to improve overall cost of ownership with less downtime



Bolt-On Axle Seats

- Easier serviceability for ride height changes or altering tire sizes
- Less costly repairs: change seats, not axle
- Lower cost of ownership



Traditional Tie Rod with Coil Shocks

- CTR™ Compliant Tie Rod option is recommended for tag applications

Patented STEERTEK™ Axle Technology

- Proven design on front steer applications
- Weld-free axle connection
- Increased structural durability and warranty coverage*

Baffles for axle housing strength



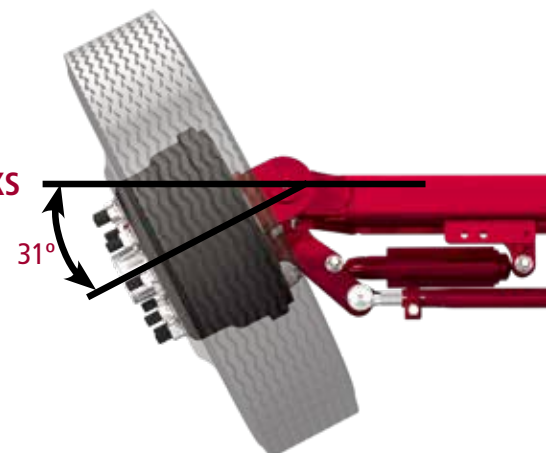
EXS 13K Specifications

Capacity:	Up to 13,500 pounds
Weight (weld-on) (with drum brakes):	900 pounds
Weight (bolt-on) (with drum brakes):	932 pounds
Travel:	13 inches
Lift:	10 inches
Wheel Cut:	31 degrees
Packaging Space:	22.1 inches

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

▲ 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.

COMPOSILITE EXS Wheel Cut



COMPOSILITE®

EXS 20K

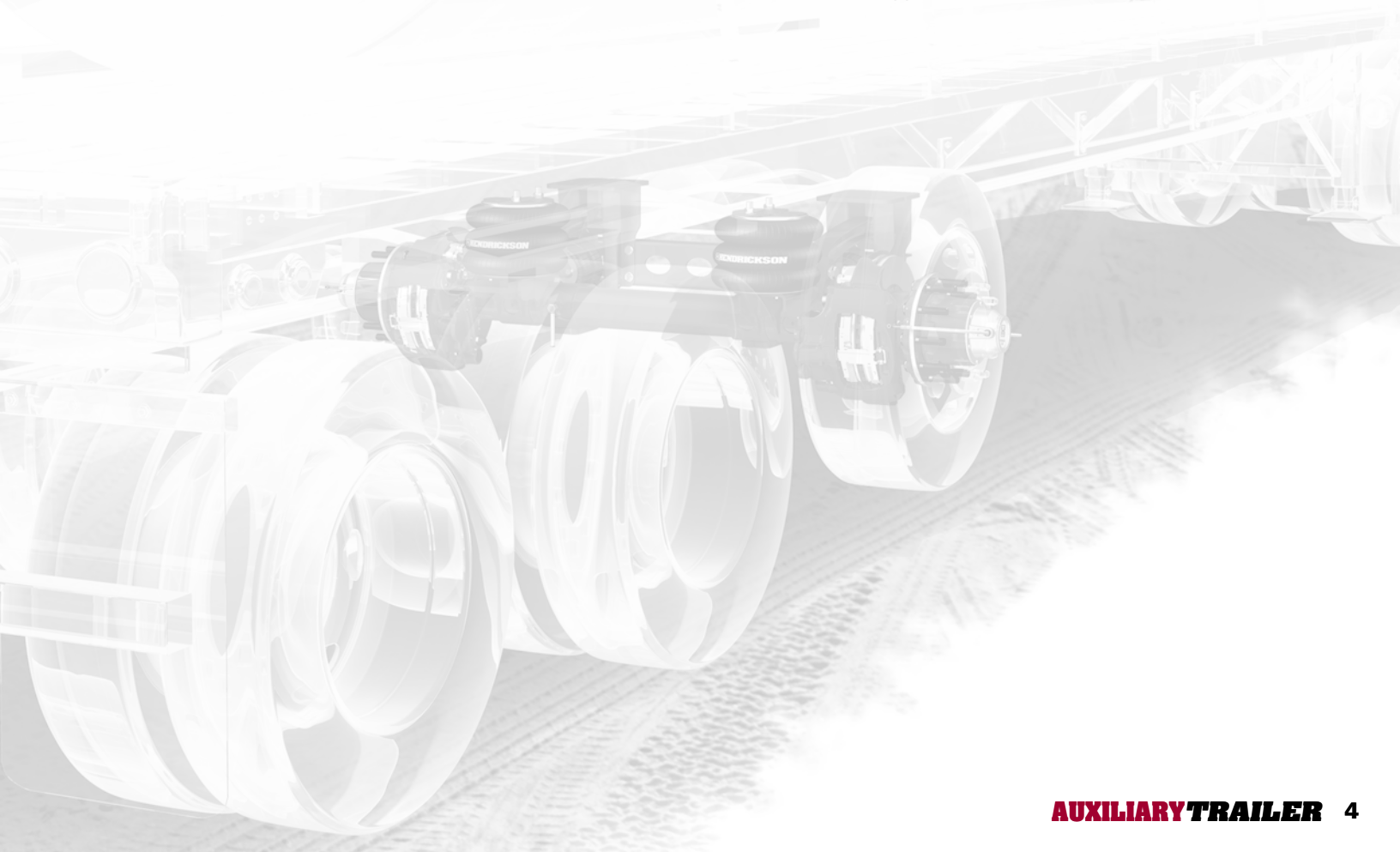


EXS 20K Specifications

Capacity:	Up to 20,000 pounds
Weight (with drum brakes):	1,443 pounds
Travel:	12 inches
Lift:	8 inches
Wheel Cut:	22 degrees
Packaging Space:	26.5 inches

EXS 20K Features

- Optimized package design
- Integrated knuckle and brake system
- 16.5 x 6 brake for super-single or flotation tires on approved rims



Non-Steerable Lift Axle Suspension Systems

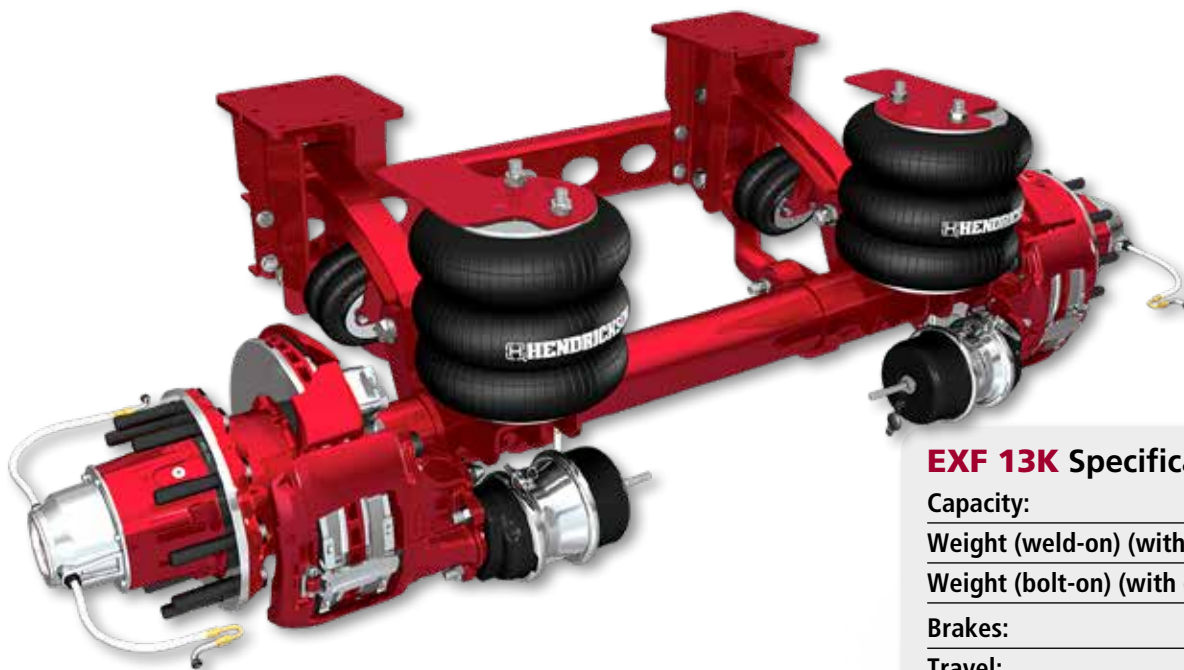
Hendrickson's non-steerable lift axle suspension systems offer the same reliability and durability as Hendrickson's steerable products. Hendrickson's TOUGHLIFT® platform of lift axle suspension systems delivers a rugged round tube axle design to accommodate a wide range of trailer applications. The COMPOSILITE® and TOUGHLIFT product families complement the full line of non-steerable capacities ranging from 13,500 to 25,000 pounds.

The TOUGHLIFT FMW is rated from 20,000 to 25,000 pounds and has proven its rugged effectiveness for the trailer market. The series is engineered to accommodate a wide range of ride heights with features like Hendrickson's TRI-FUNCTIONAL® bushing and QUIK-ALIGN®.

COMPOSILITE®

EXF 13K *(Weld-On or Bolt-On)*

The COMPOSILITE® EXF non-steerable suspension was designed with the features and benefits of the steerable suspension system up to a 13,500-pound capacity. The lightweight fabricated axle is equipped with the EXS model's common components, such as Hendrickson integrated 15 × 4-inch brakes, zero-torsion bushings and identical air springs. A compact design improves installation for tight frame space availability, while in-line air springs minimize package space and help reduce the risk of possible trailer configuration interferences.



EXF 13K Specifications

Capacity:	Up to 13,500 pounds
Weight (weld-on) (with drum brakes):	860 pounds
Weight (bolt-on) (with drum brakes):	896 pounds
Brakes:	15 × 4-inch
Travel:	13 inches
Lift:	10 inches
Packaging Space:	22.1 inches

TOUGHLIFT®

FMW 20K-25K (Weld-On)

Hendrickson's TOUGHLIFT® FMW non-steerable lift axle suspension system was developed for on- and off-highway applications, accommodating the TRI-FUNCTIONAL® Bushing to help absorb brake and acceleration forces while providing superior roll control. The QUIK-ALIGN® feature simplifies the alignment process, eliminating welding of the alignment collar. TOUGHLIFT FMW applications are available in 5/8- or 3/4-inch axle wall thicknesses and capacities up to 25,000 pounds.

FMW Specifications

Capacity:	Up to 25,000 pounds
Weight (with drum brakes):	1,189 pounds
Travel:	9.5 inches
Lift:	6.5 inches
Axle Type:	5-inch round
Packaging Space:	26 inches



Specifications

STEERABLE Lift Axle Specifications

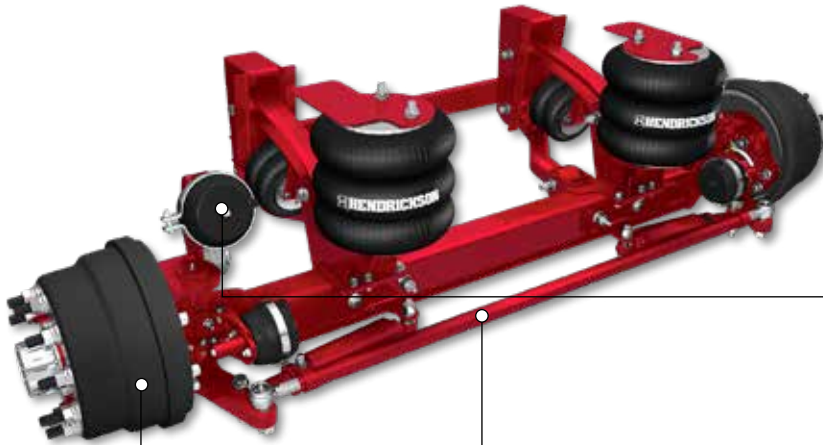
BRAND	MODEL	MAXIMUM CAPACITY (lbs.)	APPLICATION WEIGHT (w/ drum brakes) (lbs.)	RIDE HEIGHTS (inches)
COMPOSILITE®	EXS 13 (Weld-On)	13,500	900	8.5-20.5
	EXS 13 (Bolt-On)	13,500	932	8.5-20.5
	EXS 20 (Weld-On)	20,000	1,443	10.5-15.5
	EXS 20 (Bolt-On)	20,000	1,443	10.5-15.5

NON-STEERABLE Lift Axle Specifications

BRAND	MODEL	MAXIMUM CAPACITY (lbs.)	APPLICATION WEIGHT (w/ drum brakes) (lbs.)	RIDE HEIGHTS (inches)
COMPOSILITE®	EXF 13 (Weld-On)	13,500	860	8.5-21.5
	EXF 13 (Bolt-On)	13,500	896	8.5-21.5
TOUGHLIFT®	FMW 20 (Weld-On)	20,000	1,189	9.0-17.0

Value-Added Features / Options

Hendrickson offers a variety of value-added options to help increase productivity for the end-user operating a lift axle.



Steerable Weld-On Model

Lockstraight

- Locks suspension straight when vehicle is placed in reverse or raised
- Bolt-on kit can be added in the field at any time

Traditional Tie Rod with Coil Shocks

- CTR™ Compliant Tie Rod option is recommended for tag applications

Air Disc Brakes

- For extremely demanding brake usage applications, air disc brakes provide consistent performance during extended cycles such as long descending grades

Pre-Plumbed System

Integrated air control system, reducing installation time through pre-located air tanks, hoses and valves

TIREMAAX® PRO or CP plus the HXL packages (Available on COMPOSILITE® EXF or EXS)



Inset Lower Beams

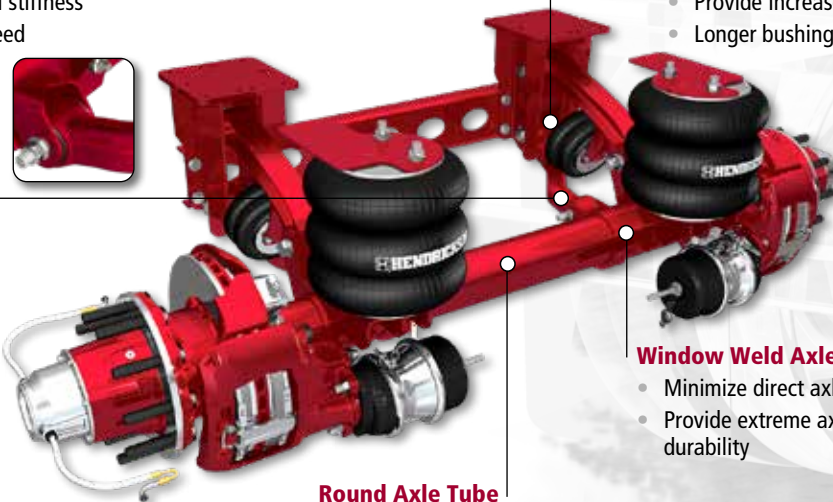
- Optimized lateral stiffness
- Eliminates the need for V-rod option



Zero-Torsion Rubber Bushings

- Provide increased durability and bushing life
- Longer bushing life promotes less downtime

Non-Steerable Bolt-On Model



Window Weld Axle Seat Wraps

- Minimize direct axle tube welding
- Provide extreme axle connection durability



Round Axle Tube

- All axles are mechanically straightened to help ensure proper tire wear
- Multiple spindles and wheel-end options offered
- Track length options made easier

Value-Added Features / Options

Air Control Systems



		AVAILABLE MODELS		
LIFT AXLE APPLICATION		INSIDE-MOUNTED	OUTSIDE-MOUNTED (COMPOSITE)	OUTSIDE-MOUNTED (STAINLESS)
	Non-Steerable	LC-NSI_R2	LC-UCO_R2	LC-USO_R2
	Steerable	LC-SSI_R2		
	Reverse Lift and Lock	LC-LSI_R2	LC-LCO_R2	LC-LSO_R2
	Reverse Down and Lock	LC-RSI_R2	LC-RCO_R2	LC-RSO_R2
	Reverse Caster	LC-ASI_R2	LC-ACO_R2	LC-ASO_R2

Air Disc Brakes

Versatile Braking Application

Air disc brakes are designed for extremely demanding brake usage and provide consistent performance during extended braking application cycles such as long descending grades. Combined with the market-leading lightweight advantages of COMPOSILITE® and TOUGHLIFT® axles, Hendrickson air disc packages deliver leading technology and a competitive edge.

To learn more about Air Disc Brakes for the Lift Axle Models, call (800) 660-2829.



Other air disc brake options, such as the Hendrickson MAXX22T™ (pictured to the right) available soon.

COMPOSILITE® and TOUGHLIFT®

Strengthen your competitive edge

Worldwide, OEMs, Fleets and Owner-Operators put their trust in Hendrickson for innovative trailer airlift suspension technology. For decades, Hendrickson lift axle suspension systems have proven their ability to handle the rigors of severe trailer applications. COMPOSILITE and TOUGHLIFT lift axle platforms bring numerous features to meet hauling challenges. Drivers can choose various ride height ranges for light- and extreme-duty applications. The option of single- or dual-tire accommodation is also available to optimize maximum capacity range and turning radius / wheel cut.

For more information on the COMPOSILITE or TOUGHLIFT Trailer lift axle products, contact your local trailer dealer or Hendrickson Auxiliary Axle Systems (Specialty Products Group) at 1-800-660-2829.

Hendrickson's COMPOSILITE® EX lift axle suspension systems offer brake and wheel-end options that match the INTRAAX® family of trailer axles. Drivers can have the equivalent of Hendrickson TIREMAAX®, HXL® and Hendrickson MAXX22T™ air disc brake packages across all trailer positions.

COMPOSILITE® EXF Wheel-End Options

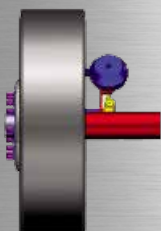
DRUM BRAKE OPTIONS			
Spindle / Hub Material	TIREMAAX®	HXL3® / HXL5® Wheel-Ends	☞ Standard Wheel-End
N-Spindle / DI Single Wheels Dished In	Yes 13,500 lb. Axle Rating	Yes 13,500 lb. Axle Rating	Yes 13,500 lb. Axle Rating
P-Spindle / DI Single Wheels Dished Out	Yes 13,200 lb. Axle Rating	Yes 13,200 lb. Axle Rating	Yes 13,200 lb. Axle Rating
FF-Spindle / DI or AL Single Wheels Dished In	Not Available	Not Available	Yes 13,500 lb. Axle Rating
DISC BRAKE OPTIONS - HENDRICKSON MAXX22T™			
Spindle / Hub Material	TIREMAAX	HXL3 / HXL5 Wheel-Ends	☞ Standard Wheel-End
P-Spindle / DI Single Wheels Dished Out	Yes 12,200 lb. Axle Rating	Yes 12,200 lb. Axle Rating	Yes 12,200 lb. Axle Rating
DISC BRAKE OPTIONS - BENDIX ADB22X			
Spindle / Hub Material	TIREMAAX	HXL3 / HXL5 Wheel-Ends	☞ Standard Wheel-End
P-Spindle / DI Single Wheels Dished Out	Yes 11,000 lb. Axle Rating	Yes 11,000 lb. Axle Rating	Yes 11,000 lb. Axle Rating
FF-Spindle / DI or AL Single Wheels Dished In	Not Available	Not Available	Yes 13,500 lb. Axle Rating

COMPOSILITE® EXS Wheel-End Options

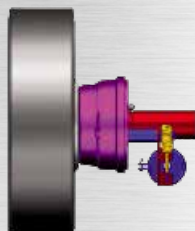
13K DRUM BRAKE OPTIONS			
Spindle / Hub Material	TIREMAAX®	HXL3® / HXL5® Wheel-Ends	☞ Standard Wheel-End
N-Spindle / DI Single Wheels Dished In	Yes	Yes	Yes
FF-Spindle / DI, ADI or AL Single Wheels Dished In	Not Available	Not Available	Yes
13K DISC BRAKE OPTIONS - BENDIX			
Spindle / Hub Material	TIREMAAX	HXL3 / HXL5 Wheel-Ends	☞ Standard Wheel-End
FF-Spindle / DI or AL Single Wheels Dished In	Not Available	Not Available	Yes
20K DRUM BRAKE OPTIONS			
Spindle / Hub Material	TIREMAAX	HXL3 / HXL5 Wheel-Ends	☞ Standard Wheel-End
FL-Spindle / DI Single Wheels Dished In	Not Available	Not Available	Yes
20K DISC BRAKE OPTIONS - BENDIX			
Spindle / Hub Material	TIREMAAX	HXL3 / HXL5 Wheel-Ends	☞ Standard Wheel-End
FL-Spindle / DI or AL Single Wheels Dished In	Not Available	Not Available	Yes

DRUM BRAKE OPTIONS

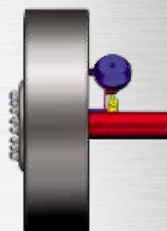
N-SPINDLE WITH
DISHED IN WHEELS



P-SPINDLE WITH
DISHED OUT WHEELS

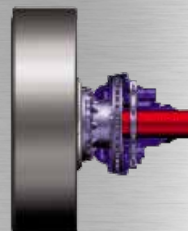


FF-SPINDLE WITH
DISHED IN WHEELS

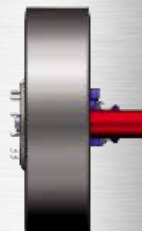


DISC BRAKE OPTIONS

P-SPINDLE WITH
DISHED OUT WHEELS



FF-SPINDLE WITH
DISHED IN WHEELS



Customer Service

Hendrickson Lift Axle Suspension Systems — We'll put it all together for you



Not sure of your application requirements? Hendrickson's customer support team will help guide you through the process, getting you the right auxiliary lift axle for the job!

Hendrickson offers a wide variety of lift axles for today's market, meeting the requirements of many applications. Our technical support team is dedicated to help you find the lift axle suspension system that best fits your needs.

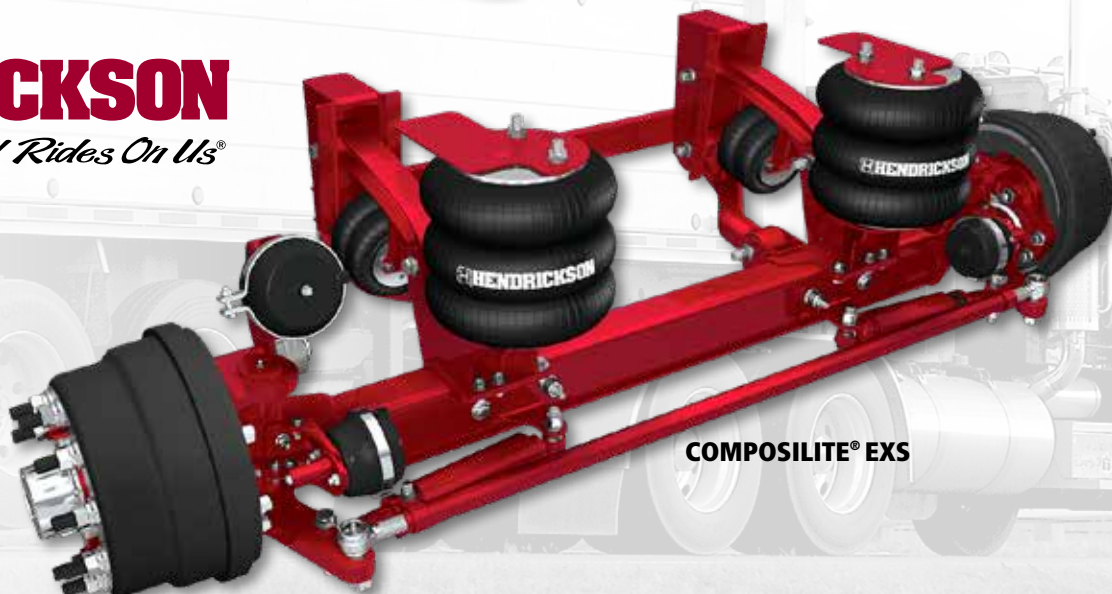
Customer Service

1.800.660.2829



TOUGHLIFT® FMW

HENDRICKSON
The World Rides On Us®



COMPOSILITE® EXS

AUXILIARY TRAILER



Auxiliary Axle Systems
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These products are 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. 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 **800.660.2829** or **800.668.5360** in Canada for additional information.



www.hendrickson-intl.com

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