



# 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 trailer lift axle suspension systems for the North American commercial vehicle industry. Our commitment to quality and product innovation drives the industry leadership position, thus 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 around the globe — trailer owners, dealers, fleets and OEMs. Our investment in new technologies will continue as we strive to deliver customers more value.

**INNOVATION BUILT IN™**

## TABLE OF CONTENTS

LIFT AXLE PARTS PLUS LOOKUP TOOL .....2

### TRAILER **STEERABLE** AXLE PRODUCTS

#### COMPOSILITE®

**EXS** (Weld-On or Bolt-On in 8, 10, 13.5 and 20K capacities) ..... 3,4

### TRAILER **NON-STEERABLE** AXLE PRODUCTS

#### COMPOSILITE

**EXF** (Weld-On or Bolt-On in 13.5 capacity) ..... 5

#### TOUGHLIFT®

**FM** (Weld-On or Bolt-On in 20 to 25K capacity) ..... 6

#### Value-Added Features / Options

Steerable ..... 7

Non-Steerable ..... 7

Air Control Systems ..... 8

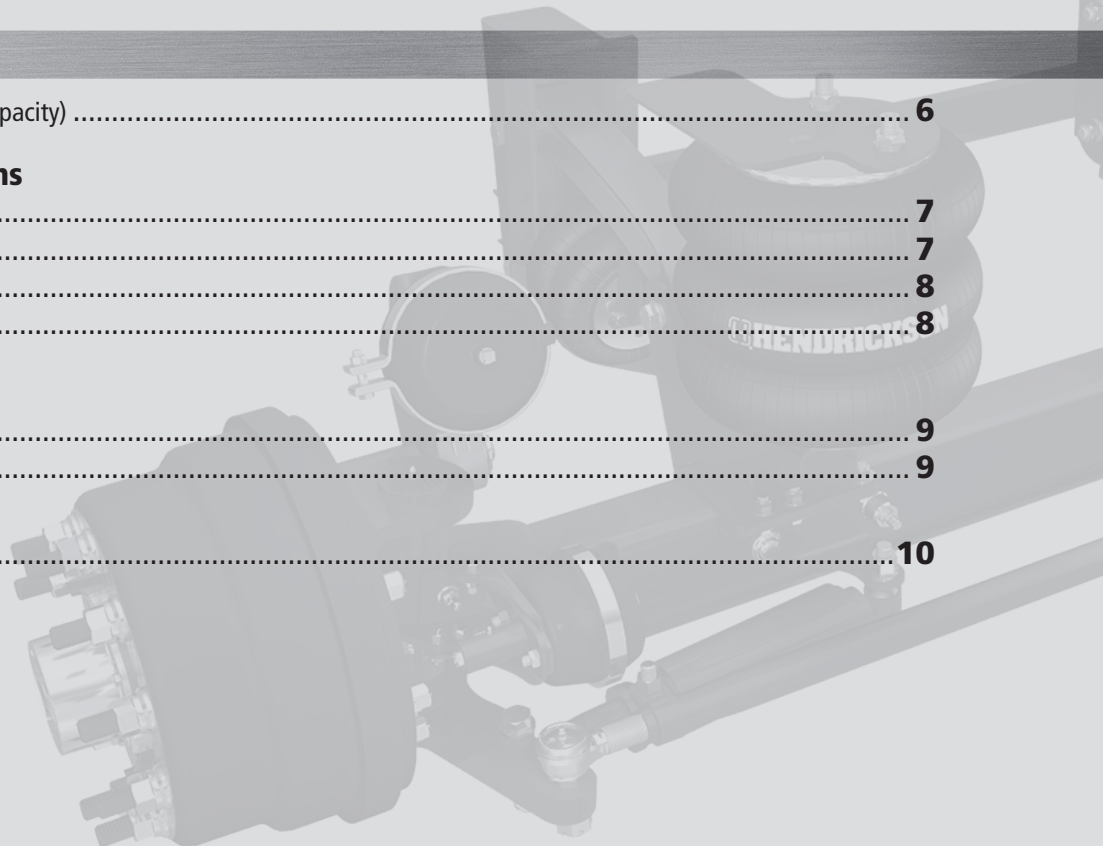
Air Disc Brakes ..... 8

#### Wheel-End Options

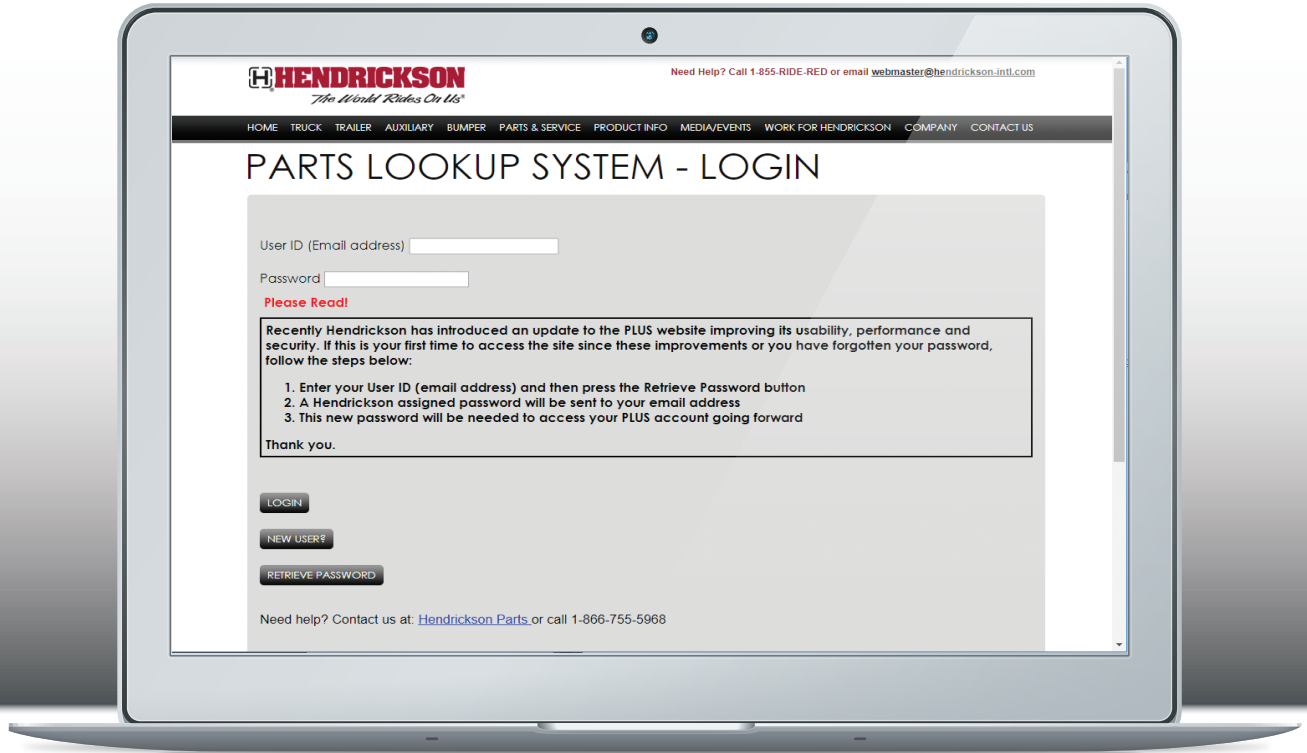
COMPOSILITE EXF ..... 9

COMPOSILITE EXS ..... 9

CUSTOMER SERVICE ..... 10



# H LIFT AXLE PARTS PLUS LOOKUP TOOL

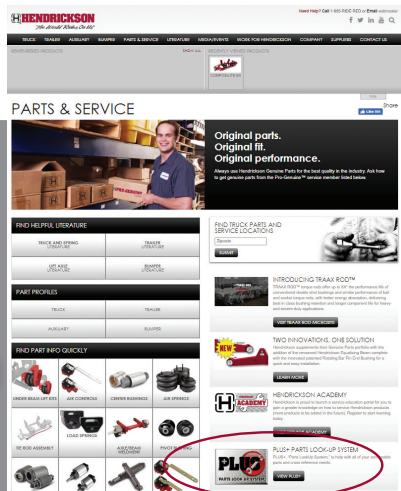


Visit us on the web and spec your Lift Axle in a few clicks!  
[www.hendrickson-intl.com/auxiliary](http://www.hendrickson-intl.com/auxiliary)

## STEP 1

Configure Your Lift Axle Suspension System

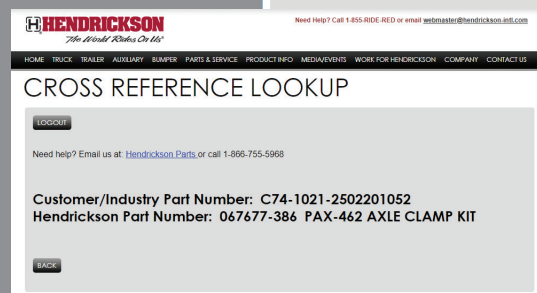
Configure your Lift Axle Suspension System to your specifications with a few simple drop down menu picks



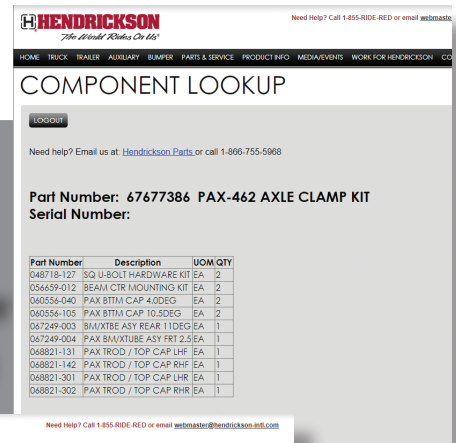
## STEP 2

Get Results

- Part Number
- Part Details



Results will give you a part number and details about your Lift Axle Suspension System



# Steerable Lift Axle Suspension Systems

Hendrickson offers the COMPOSILITE® family of lift axle suspension systems for steerable trailer applications. The new COMPOSILITE EX series of lift axle suspension systems deliver the advantages trailer end-users have come to expect with Hendrickson products: reliability, cost-effectiveness and high quality. All steerable models now offer a bolt-on lock straight 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



#### Weld-Free Hanger Design

- No welding on front side rail hangers minimizes stress risers
- Flat hanger design allows for flexibility of bolt hole patterns

#### Zero-Torsion Rubber Bushings

- Provides increased durability and bushing life
- Helps to improve overall cost of ownership and reduce downtime



#### Traditional Tie Rod with Coil Shocks

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

#### Patented<sup>▲</sup> STEERTEK™ Axle Technology

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

#### 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

Baffles for axle hosing strength

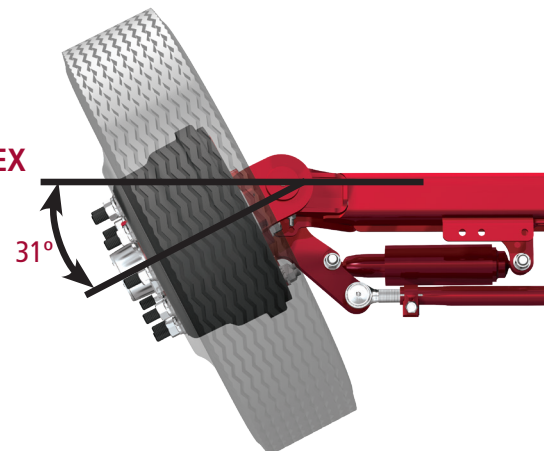
### EXS 13K Specifications

Capacity:	13,500 pounds
Weight (with drum brakes):	913 pounds
Travel:	13 inches
Lift:	Up to 10 inches
Wheel Cut:	31 degrees
Packaging Space:	22.1 inches

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

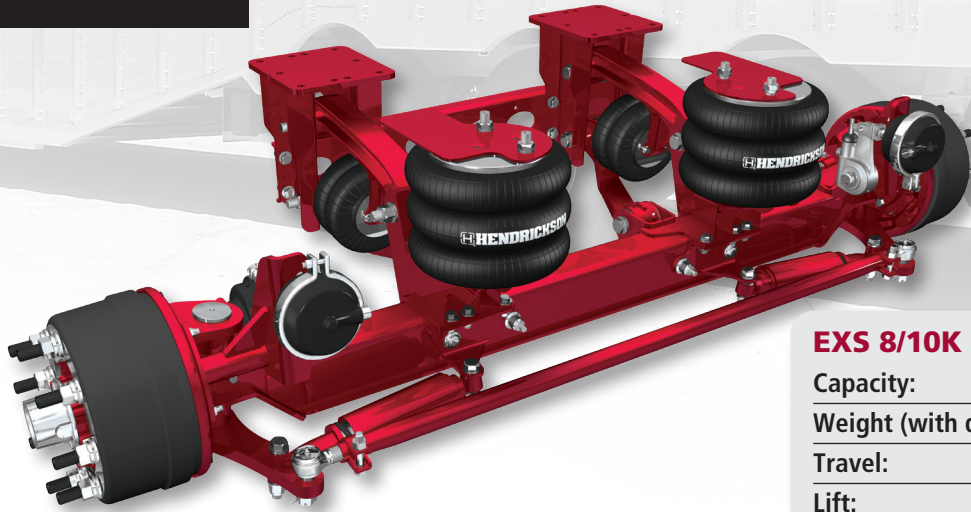
▲ This product is covered by at least one or more U.S. and/or foreign patents and/or pending U.S. and/or foreign patent applications. See Hendrickson for details.

### COMPOSILITE® EX Steerable Turning Angle



# COMPOSITE<sup>®</sup>

## EXS 8/10K



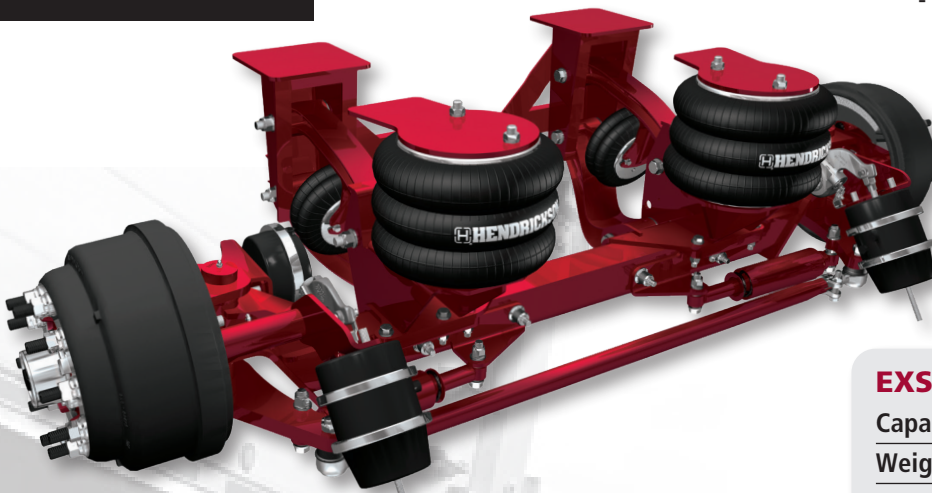
### EXS 8/10K Specifications

Capacity:	10,000 pounds
Weight (with drum brakes):	805 pounds
Travel:	13 inches
Lift:	Up to 10 inches
Wheel Cut:	31 degrees
Packaging Space:	22.1 inches

### EXS 8/10K Features

- Optimized package design
- Fabricated knuckle with 325 × 100 mm metric brake:
  - 325 × 100 mm metric brake for:
    - 8K: 6-hole H&D's for 17.5-inch wheel
    - 10K: 8-hole H&D's for 19.5-inch wheel

## EXS 20K

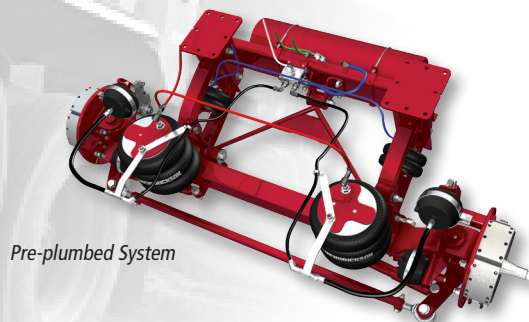


### EXS 20K Specifications

Capacity:	20,000 pounds
Weight (with drum brakes):	1,357 pounds
Travel:	12 inches
Lift:	Up to 9 inches
Wheel Cut:	25 degrees
Packaging Space:	26.5 inches

### EXS 20K Features

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



Pre-plumbed System

# Non-Steerable Lift Axle Suspension Systems

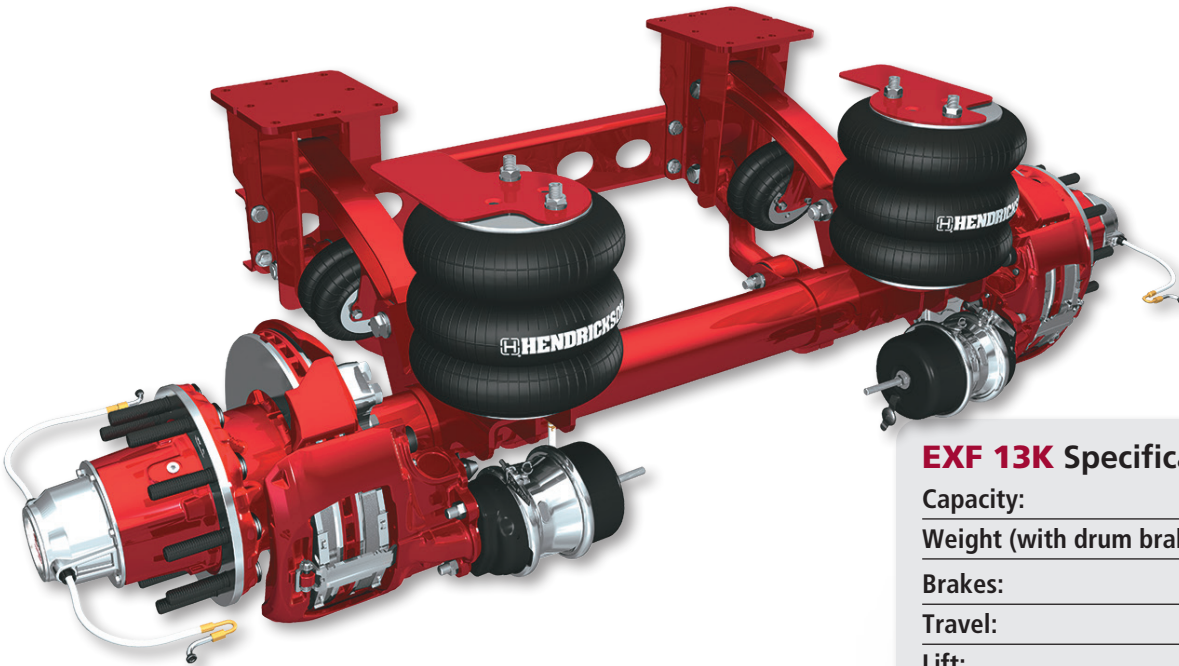
The non-steerable lift axle suspensions by Hendrickson also offer rugged reliability and durability. The COMPOSILITE® EX fixed series was built around a compact design with common components to the EX steerable line of lift axle suspensions for consistent features and use on the same vehicle. Hendrickson's TOUGHLIFT® platform of lift axle suspensions delivers a rugged round tube axle design to a wide range of trailer applications. Both product families complement the full line of non-steerable capacities ranging from 8,000 to 25,000 pounds.

The TOUGHLIFT FMW(B) 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® — similar to the HT™ and INTRAAX® bushing and alignment features.

## COMPOSILITE®

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

Hendrickson designed the COMPOSILITE® EXF fixed suspension with features and benefits of the steerable EXS steerable suspension system up to 13,500-pound capacity. The lightweight fabricated axle comes equipped with the EXS model's standard components, such as Hendrickson integrated 15 × 4-inch brake, zero-torsion bushings and identical air springs. A compact design helps improve 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:	13,500 pounds
Weight (with drum brakes):	894 pounds
Brakes:	15 × 4-inch
Travel:	13 inches
Lift:	Up to 10 inches
Packaging Space:	22.1 inches

# TOUGHLIFT®

## FM 20K-25K *(Weld-On or Bolt-On)*

Hendrickson's TOUGHLIFT® FMT non-steerable lift axle suspension system is engineered for rugged on- and off-highway applications accommodating the TRI-FUNCTIONAL® Bushing that helps 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 FM (W/B) applications are available in 5/8- or 3/4-inch axle wall thicknesses and capacities up to 25,000 pounds.

### FM (W/B) Specifications

Capacity:	Up to 25,000 pounds
Weight (with drum brakes):	1,125 pounds
Travel:	9.5 inches
Lift:	6.5 inches
Axle Type:	5-inch round
Packaging Space:	26.0 inches



## Specifications

### STEERABLE Lift Axle Specifications

BRAND	MODEL	MAXIMUM CAPACITY (lbs.)	APPLICATION WEIGHT (lbs.)		RIDE HEIGHTS (inches)
			DRUM BRAKE	AIR DISC BRAKE	
COMPOSILITE®	EXS (W/B)8	8,000	805	N/A	12.5 - 21.5
	EXS (W/B)10	10,000	805	N/A	12.5 - 21.5
	EXS (W/B)13	13,500	913	940	8.5 - 21.5
	EXS (W/B)20	20,000	1,357	1,442	9.5 - 18.5

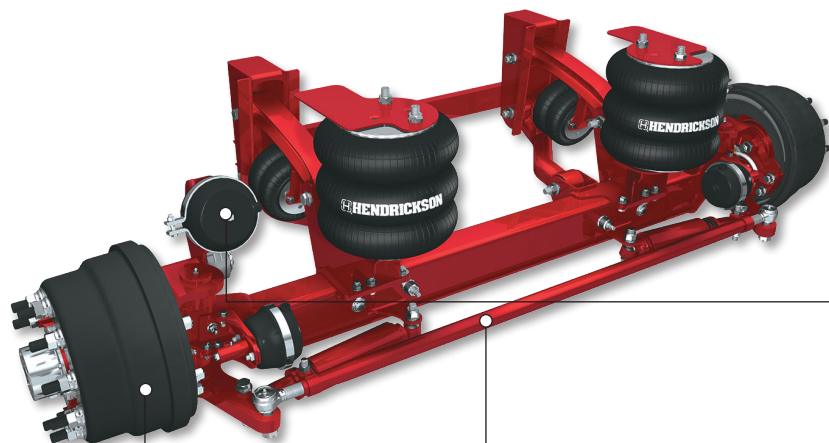
### NON-STEERABLE Lift Axle Specifications

BRAND	MODEL	MAXIMUM CAPACITY (lbs.)	APPLICATION WEIGHT (lbs.)		RIDE HEIGHTS (inches)
			DRUM BRAKE	AIR DISC BRAKE	
COMPOSILITE	EXF (W/B)13	13,500	894	930	8.5 - 21.5
TOUGHLIFT	FM (W/B)20	20,000	1,125	1,185	9.0 - 17.0

W - Weld-On frame attachment  
B - Bolt-On frame attachment

## Value-Added Features / Options

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



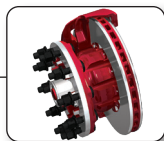
### Steerable Weld-On Model

### Lock Straight

- 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 applications with extremely demanding brake usage — provides consistent performance during extended braking application cycles such as long descending grades

### Pre-Plumbed System

Integrated air system reduces installation time through pre-located air tank, hoses and valves

### TIREMAAX® PRO or CP plus the HXL packages (Available on COMPOSITITE® EXF or EXS and TOUGHLIFT® FM)



### Inset Lower Beams

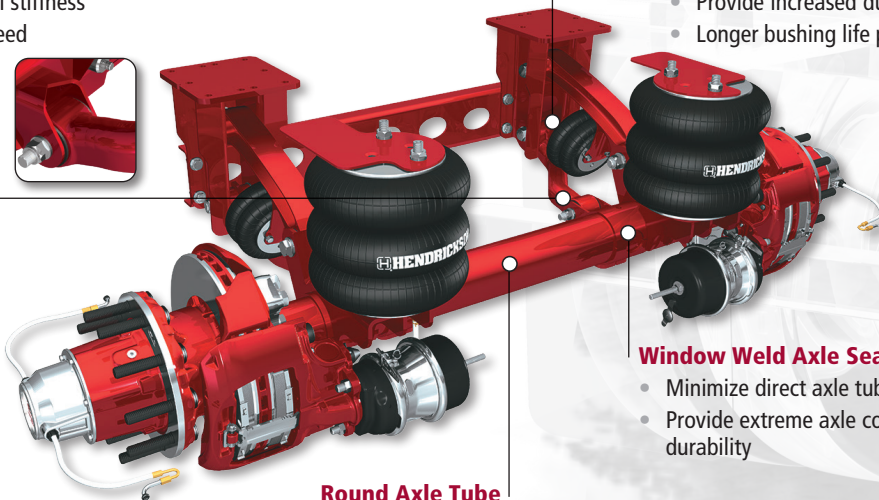
- Optimized lateral stiffness
- Eliminates the need for V-rod option



### Zero-Torsion Rubber Bushings

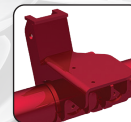
- Provide increased durability and bushing life
- Longer bushing life promotes less downtime

### Non-Steerable Bolt-On Model



### Window Weld Axle Seat Wraps

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



### Round Axle Tube

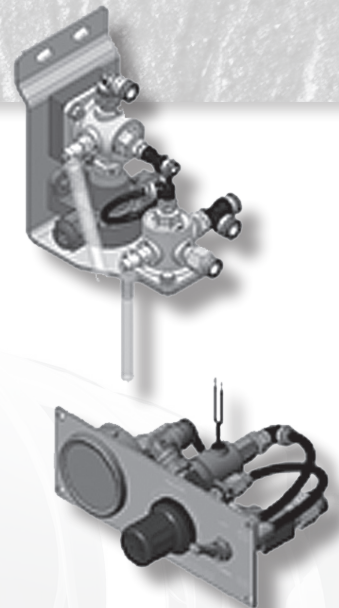
- All axles are mechanically straightened to help ensure proper tire wear
- Multiple spindles and wheel-end options offered
- Track length options made easier



## Air Control Systems — Lift Axles

### AVAILABLE MODELS

LIFT AXLE APPLICATION		INSIDE-MOUNTED	OUTSIDE-MOUNTED (COMPOSITE)	OUTSIDE-MOUNTED (STAINLESS)
	Non-Steerable	LC-NSI	LC-UCO	LC-USO
	Steerable	LC-SSI		
	Reverse Lift and Lock	LC-LSI	LC-LCO	LC-LSO
	Reverse Down and Lock	LC-RSI	LC-RCO	LC-RSO
	Reverse Caster	LC-ASI	LC-ACO	LC-ASO

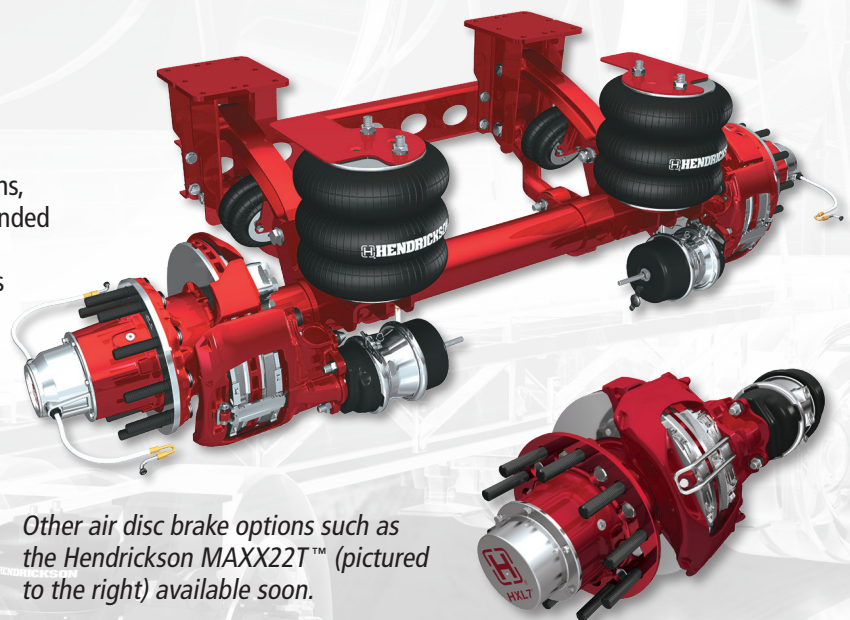


## Air Disc Brakes

### Versatile Braking Application

Designed for extremely demanding brake usage applications, air disc brakes 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 the competitive edge fleets expect from Hendrickson.

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



*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 trust in Hendrickson for innovative trailer airlift suspension technology. For many years, the Hendrickson lift axle suspensions' increasing popularity has proven to handle the rigors of severe trailer applications. COMPOSILITE and TOUGHLIFT lift axle platforms bring a wide breadth of features to meet your hauling challenges. You have the choice of various ride height ranges for light- or extreme-duty applications, as well as single or dual tire accommodation for maximum capacity range and turning radius or wheel cut.

In demanding trailer lift axle applications, Hendrickson helps to increase your payload, protect your cargo and keep your equipment operating at peak efficiency.

**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.**

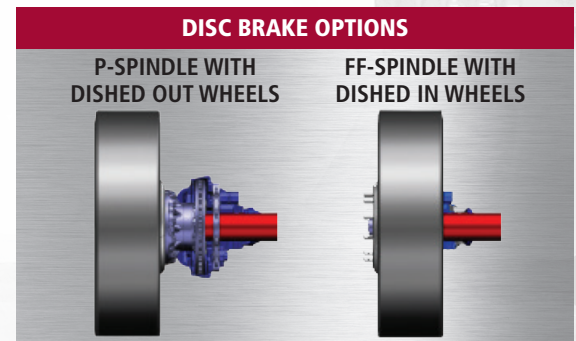
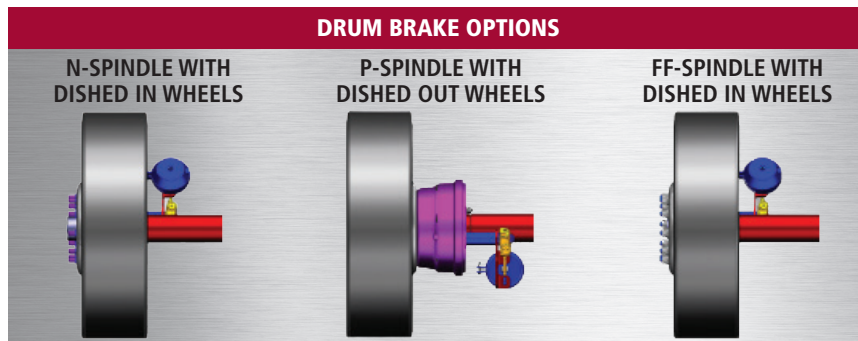
Hendrickson's COMPOSILITE® EX lift axles offer brake and wheel-end options that match the INTRAAX family of trailer axles. You can now have the equivalent Hendrickson TIREMAAX®, HXL and Hendrickson MAXX22T™ air disc brakes packages across all trailer positions.

## COMPOSILITE® EXF Wheel-End Options

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

## COMPOSILITE® EXS Wheel-End Options

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



## 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!

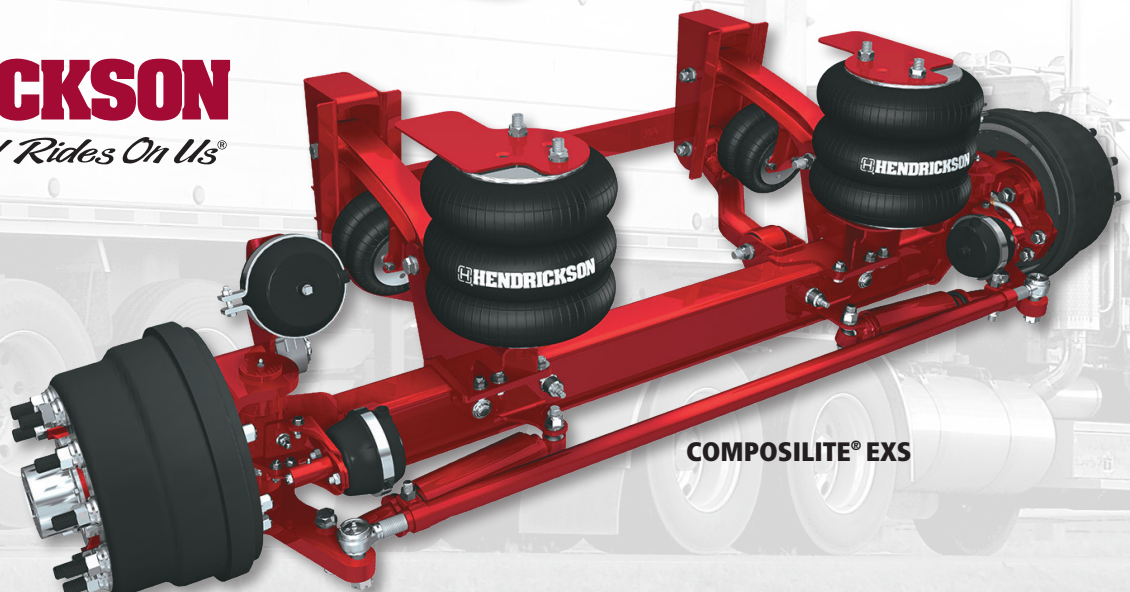
Hendrickson offers a wide variety of lift axles for today's market, meeting the requirements of many applications. Our technical support team is dedicated to help you find the lift axle suspension system that best fits your needs.

Customer Service  
**1.800.660.2829**



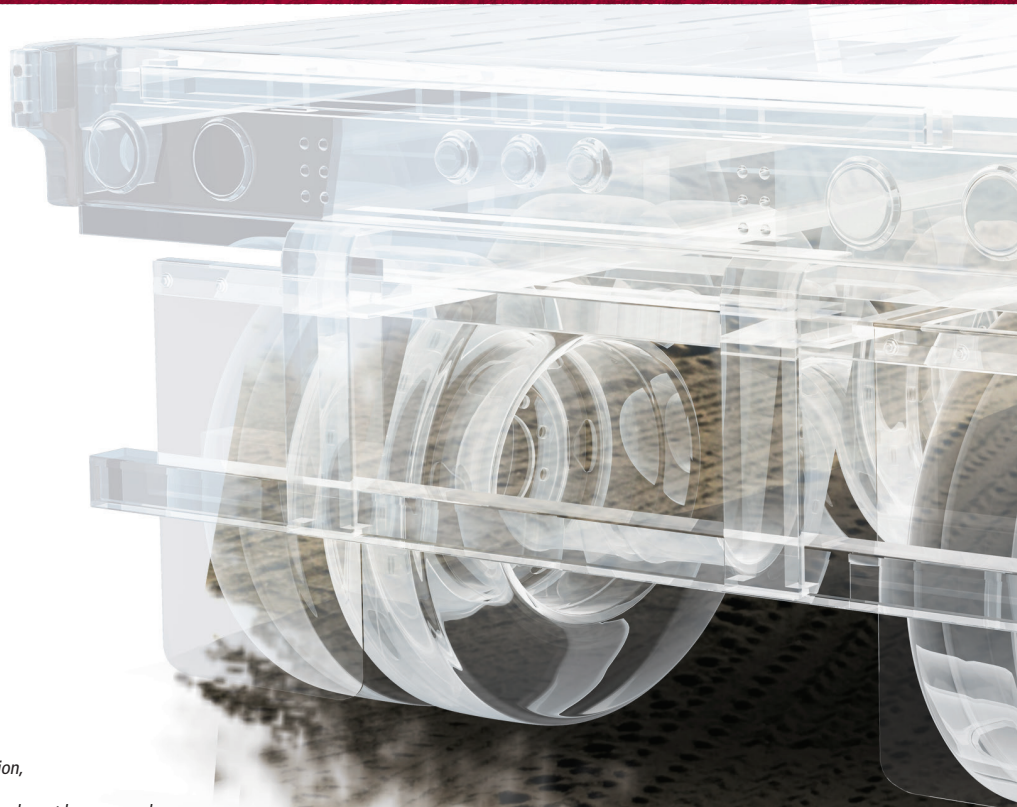
TOUGHLIFT®

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



COMPOSITITE® EXS

# AUXILIARY TRAILER



Auxiliary Axle Systems  
is TS-16949 Registered

*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](http://www.hendrickson-intl.com)

H770 Rev D 03-21

© 2015 - 2021 Hendrickson USA, L.L.C. All Rights Reserved. All trademarks shown are owned by Hendrickson USA, L.L.C., or one of its affiliates, in one or more countries, except for MAXX2T, which is owned by WABCO. Information contained in this literature was accurate at the time of publication. Product changes may have been made after the copyright date that are not reflected.

**SPECIALTY PRODUCTS -  
AUXILIARY AXLE SYSTEMS**  
277 North High Street  
Hebron, OH 43025 USA  
800.660.2829  
740.929.5600 • Fax 740.929.5601

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