

FOCUS ON: HEAVY-DUTY LIFTS

Safe Operation of Heavy-Duty Vehicle Lifts





Peter Bowers

Peter Bowers, technical sales support manager for Stertil-Koni, spoke with *BUSRide Maintenance* about heavy-duty vehicle lifts – their safe operation, spec'ing the right lift, certification pitfalls, and future developments.

How should operators go about choosing the "right lift for the job?"

When it comes to choosing heavy-duty vehicle lifts for a maintenance shop, there are three essential considerations: the weight of vehicles

to be lifted, including auxiliary equipment; the types of services to be completed; and third-party certification.

From a broader perspective, high-performance lifts capable of lifting more than 16,001 pounds have become an essential tool in today's busy maintenance shops.

Why? In Stertil-Koni's case, they are durable, dependable and engineered for safety. Heavy-duty vehicle lifts help speed the maintenance process, dramatically minimize vehicle downtime, and provide a safe environment for the busy technician.

With multiple lift options available, it is important to take a closer look at the most popular types of vehicle lifts, so you can determine which are best suited for your needs.

First, there are **Mobile Column Lifts.** For shops that plan to go "green," Stertil-Koni offers the EARTHLIFT, featuring columns made from components that are 98 percent recyclable. These lifts also use biodegradable fluid and have an active energy retrieval system that delivers

35 percent more lifting cycles at maximum load. Mobile Column Lifts are versatile as they can lift everything from articulated buses, Class 8 trucks, forklifts and agricultural equipment to military, industrial and utility vehicles. Combined in sets – up to 32 columns – the lifting capacity dramatically multiplies to accommodate longer and heavier applications.

An inground option is the **piston lift**, a telescopic piston-style lift. They deliver wheels-free access to the vehicle. Piston lifts are manufactured in frame or cassette versions. For its part, Stertil-Koni offers a DIAMONDLIFT with lifting capacity of up to 35,000 pounds per piston, with models available in multiple configurations. The latest technologies deliver an optional continuous recess movable lifting unit that recesses below the floor level anywhere within the range of piston travel. This option accommodates low-clearance vehicles. This lift is used for Class 8 trucks, school, coach and transit buses, and heavyduty trucks such as snow plows, dump trucks, utility vehicles, waste product trucks and many others.

Next you have the **inground scissor lift**. The benefits of this lift are numerous: wheels-free lifting, ultra-shallow pit design ideal for retrofit into an existing workshop, and a free-standing console for quick service access as well as standard continuous recess for maximum flexibility. Scissor-style lifts engage the vehicle by its axles, offering wheels-free access for all types of repairs. In the example of Stertil-Koni's ECOLIFT, its electronically synchronized scissor lift can be used to service vehicles like articulated buses, fire and rescue vehicles, multiple-axle trucks, coach, school and transit buses, and more.

Then there is the **platform lift**, a vertical-rise platform that takes up less room than a parallelogram lift but is similar in that two independent

runways are synchronized. Platform lifts are available as surface or flushmounted; the latter offers a "clear floor" concept eliminating tripping hazards. Special anti-skid plates are available for runways to provide additional skid protection. The platform is best used for preventive maintenance, alignments and inspections. They're commonly used to service Class 8 trucks, heavy construction and agriculture vehicles and articulated buses.

Another choice is the four-post lift. These offer low drive on height and are ideal for vehicles with low ground clearance. They are easily



adjusted to suit the width of the vehicle, which makes them useful for a wide variety of commercial vehicles, including three-wheel forklift trucks, vans, articulated buses, construction trucks, utility vehicles and medium duty trucks up to huge tugs. They're used primarily for quick preventative maintenance and inspections.

Finally, a two-post lift features above-ground swing arms for lifting vehicles by frame contact. Capacities from Stertil-Koni range from 16,000 pounds to 30,000 pounds. This type of lift is ideal for general maintenance on medium-duty vehicles, notably large pickup trucks and utility vans.

What preliminary purchasing advice can you offer?

When you are ready to purchase a heavy-duty vehicle lift, research is key. It is important to know your fleet, particularly the sizes and weights of the vehicles. You need to know your building where you are going to install the lift, including the foundation, soil condition and the height of the ceilings. It is also a good idea to review lifts that meet your specific fleet's needs, and if the lift is Automotive Lift Institute (ALI) certified. Stertil-Koni is an active member of ALI, which since its inception in 1945, has been a fiercely independent third-party industry watchdog that actively promotes the safe design, construction, installation, inspection and use of automotive lifting products. Lift purchasers can view a directory of certified lifts on the ALI website: www.autolift.org. I also suggest buyers investigate the manufacturers and lifts they're interested in. Most of all, become an informed consumer. Purchasing heavy-duty vehicle lifts is a considerable and significant investment. Take time and choose wisely.

Operators know lift certification is important - but what common pitfalls should they look out for?

As I mentioned previously, ALI is the lone nationally recognized standard for vehicle lifts. The ALI gold label is your only guarantee that a lift has been independently proven to meet industry standards. Besides knowing that your lift carries the ALI gold label, technicians should always keep the lift manufacturer operator manual accessible when questions arise. Certification of the lift is significant, but knowledge about the lift is key. Operators should understand how to properly operate the lift and perform inspections of the lift before each shift. They should not use any lift that appears to be damaged or deformed. Also, knowing the vehicle manufacturer's recommended lifting points is important so that you can always engage the lift at

> those points. Other common pitfalls can be not setting the lift into the mechanical locks, and shifting in the center of gravity of the vehicle if heavy subcomponents are removed.

What preventative maintenance steps do you consider critical for safe lift operation?

Stertil-Koni lifts feature reliable hydraulic technology that requires little or minimal maintenance - typically for mobile column lifts, a yearly inspection and an oil change every two years is recommended. Other heavy-duty vehicle lifts have their own maintenance requirements, including inspecting the lifts' moving regularly and regular oil changes using the manufacturer's required oil type.

What factors (safety, technological, etc.) are driving innovation in lift manufacturing?

Driving Stertil-Koni's approach is recognizing the push for increased safety in the workplace, the fast-paced transformation of how today's vehicles are built and advancing new lifting systems technologies to keep pace. Safety in the workshop has always been at the forefront of maintenance facilities operations and in the heavyduty vehicle lift industry. Stertil-Koni lifts come standard with safe mechanical locking systems, maximum strength high tensile DOMEX steel manufacturing, overload protection and synchronization. Stertil-Koni is also dedicated to embracing green technologies as more companies as well as municipal and state entities are building ecologically sustainable facilities.

What is the biggest development on the horizon related to heavy-duty vehicle lifts?

Fleet managers will have more data, information and feedback from products due to high-tech advances. Feedback will become routine on lifting procedures, preventative maintenance schedules and time lines, as well as allowing technicians to know exactly what the lift's requirements are.

How will it affect our readers' operations?

Advances in lift technology will facilitate increased data and deliver more information and real-time data directly to the facility manager, technician and operators. For example, shop mangers could request a feedback report to check on technicians to see if they are following safety precautions and keeping pace with maintaining equipment. Further, increased knowledge will lead to greater assessment of both personnel and lifting systems -thus, contributing to better decision making about fleet operations and practices. BRM

Advanced Touch Screen Console Delivers Real-time Data on Stertil-Koni HD Vehicle Lifts

STEVENSVILLE, MD October 1, 2018 - Today's modern heavy duty vehicle lifts can streamline operations in virtually any bus maintenance shop and take efficient and safe servicing to new heights. But, what if you went a step further, adding cutting edge technology to increase productivity and provide real time feedback with the tap of a finger?



The ebright Smart Control System on Mobile Column Lift

The ebright Smart Control System

has the familiar intuitive features of

a smartphone or a tablet directly on

ebright

That would be remarkable.

Precisely. Heavy duty vehicle lift leader Stertil-Koni brings the very best in engineering, digital control and continuous operator feedback to heavy duty (HD) fleet maintenance shops across North America with its advanced touch screen full color console, the ebright Smart Control System, now available standard on the company's most popular heavy duty vehicle lifting systems.

First deployed on Stertil-Koni's wireless Mobile Column Lifts in 2015, and subsequently, in 2017 on the

company's cabled Mobile Column Lifts, the ebright Smart Control System provides instinctual ease-of-use with maximum visual information about the entire lifting process.



The ebright Smart Control system console is above ground on inground lifts such as DIAMONDLIFT and ECOLIFT, making it safer and extremely accessible

Stertil-Koni President Dr. Jean DellAmore noted, "We are pleased to offer this advanced technology on Mobile Column Lifts and inground lifting systems: the ECOLIFT scissor lift, and this debuting vear the telescopic piston

DIAMONDLIFT. The ebright Smart Control System provides the familiar intuitive features of a smartphone or a tablet directly to the operating panel of the lift."

What is this cutting-edge technology? The ebright Smart Control System is an extension of the concept of human-machine-interface (HMI), providing superior control of the lift in a recognizable electronic notepad-style delivery system with:

- Intuitive controls with actual data about the lift in action
- Tracking of specific operations and information codes
- Relevant information available at a glance

Added Matthias Lennemann, Stertil-Koni heavy-duty inground lifts sales manager, "On inground lifts, the ebright Smart Control System console is above ground, making it even more safe and accessible. Plus, ebright tracks specific operations and data while the lift is in motion. As a result, maintenance personnel can see in real time how the lift is operating, observe warning alerts and monitor the lift's motor run timer. It's a great way to efficiently track the equipment and the use of maintenance dollars more effectively."

Additional information viewable on the ebright Smart Control System will:

- Provide an access code required for operating
- Display an orange light on the primary Mobile Column Lift screen to indicate it is performing operations, while secondary lifts' screens are "grayed-out"
- Show actual lifting height
- Provide a view of the lift going up and down
- Display maximum programmable lifting height
- Alert operator with a "maximum" height indicator when the lift has reached its top height.
- Forewarn the operator when battery recharging is necessary
- Indicate the frequency used

Here's a summation of Stertil-Koni products with the ebright Smart Control System:

- ECOLIFT: Industry's original ultra-shallow, full-rise axle-engaging inground scissor lift is available in 2, 3 or 4- scissor configurations with a capacity of 30,000 lbs. per scissor and 120,000 lbs. in the 4-scissor configuration. ECOLIFT's installation depth is extremely shallow (34") and there are no lift components embedded in concrete, saving installation time and money.
- DIAMONDLIFT: Inground, telescopic piston lift, available in "cassette" and "frame" versions. DIAMONDLIFT's capacity is up to 35,000 lbs. per column. Models available in 2-, 3-, and 4- piston configurations.
- Mobile Column Lift: Most popular, cost-effective and versatile HD vehicle lift on the market. Capacities from 14,000 lbs. - 40,000 lbs. per column. Moreover, these lifts are portable - a single technician can easily place four, six, eight or more (up to 32) in a set. Stertil-Koni's "green" EARTHLIFT features mobile columns made from

98% recyclable components and uses biodegradable fluid with an Active Energy Retrieval System delivering 35% more lifting cycles at maximum load.

In conclusion, Dr. DellAmore noted, "Speed, efficiency, and safety are essential to achieving top performance in today's heavyduty vehicle maintenance shops. EARTHLIFT, have intuitive controls with actual The ebright Smart Control System data about the lift in action.



Stertil-Koni's ebright Smart Control System on Mobile Column Lifts, including the "green"

has become an absolutely essential piece of technology for facility managers and technicians tasked with keeping a broad range of different vehicles well serviced and up and running."

Videos:

1. ebright Smart Control System 2. 2017 DIAMONDLIFT enhanced 3. ECOLIFT

About Stertil-Koni

Stertil-Koni is the market leader in heavy duty vehicle lifts, notably bus lifts and truck lifts, and proudly serves municipalities, state agencies, school bus fleets, major corporations, the U.S. Military and more. Stertil-Koni's breadth of products meets all ranges of lifting needs and includes portable lifts such as mobile column lifts, 2-post, 4-post, inground piston lifts, platform lifts, and its axle-engaging, inground, scissor lift configuration, ECOLIFT. The company's innovative, inground telescopic piston DIAMONDLIFT is now available with an optional Continuous Recess system, ideal for low clearance vehicles. Stertil-Koni USA is headquartered in Stevensville, Maryland with production facilities in Europe, The Netherlands, and in Streator, IL.

Contact: Paul Feldman, Paul.Feldman@Stertil-Koni.com, 410-643-9001



Now with Continuous Recess!

The DIAMOND LIFT

Ideal for Low Ground Clearance Vehicles

Optimum flexibility, productivity and durability in heavy-duty lifting

Capacity up to 105,000 lbs. in a 3-piston configuration



