Facility managers rely on all types of scissor lift tables -- mobile and stationary, manual and powered -- to increase productivity and complete essential material handling tasks while meeting the ergonomic needs of the workforce. A wide range of industries depend on these machines for vital work functions including:

- Creating ergonomic, variable-height workstations
- Safer, more efficient palletizing
- Vertical positioning of heavy loads
- Transfer of raw materials into manufacturing machinery
- Transporting heavy equipment
- Eliminating bending and lifting motions associated with musculoskeletal fatigue and injury
- Enhancing productivity during work tasks

Any workplace that requires lifting, moving or palletizing can benefit from quality lift tables. While thousands of businesses rely on scissor lift tables on an everyday basis, this paper here we will analyze the potential applications in five major industries: material handling and storage, manufacturing, office management, automotive repair, and retail.

By positioning work and assisting with transportation of heavy materials, lift tables provide reliably quick returns on investment and immediate productivity increases. They also have direct ergonomic benefits, which further enhance their long-term values.

The independently powered drive wheels are also designed for simple repairs. To replace damaged components, service technicians only need to remove four bolts and two hydraulic fittings. This modular design allows technicians to replace the entire floor drive unit in about an hour -- less than a quarter of the replacement time required by single-actuated drive axle designs.

### Ergonomic Material Handling Tasks With Lift Tables

Overexertion injuries due to "lifting, pushing, pulling, holding, carrying or throwing" cost industries 15.1 billion dollars in 2012, according to the Liberty Mutual 2014 Workplace Safety Index. Similarly, trade journal Modern Materials Handling reports that 60 percent of all recordable lost-time injuries resulted from manual material handling tasks. Management teams have an obligation to prevent injury to workers -- from both an ethical and a financial standpoint.

Ergonomics experts say that overexertion can be reduced by keeping work tasks within the worker's "golden zone" -- the area employees can reach without lifting their arms above their shoulders or reaching below their waists. Keeping work inside the golden zone allows workers to move comfortably and naturally, significantly lowering the risk of musculoskeletal fatigue and injury.

The concept of the golden zone highlights an ergonomic challenge that scissor lift tables are uniquely equipped to solve: different workers require different table heights. With the adjustable height of a lift table, workers of all body types can safely share a single workstation.

Mobile lift tables provide an additional ergonomic benefit by allowing staff to transport heavy goods and equipment without risking back injury or muscular strain. Considering the high price of worker’s compensation, productivity loss and training costs for new staff, preventing a single serious injury can provide an instant return on investment for lift tables in any work environment. This becomes more clear when analyzing applications for individual industries.
1. **Scissor Lift Tables for Material Handling and Storage**

Warehouses and distribution centers can see immediate benefits from the use of scissor lift tables. Pallet loading is an essential task in the warehousing industry, workers need to move heavy loads every day. Scissor lift tables improve efficiency and safety in material handling tasks such as:

- Load Lifting
- Ergonomic Work Positioning
- Order Picking
- Palletizing
- Unloading Pallets

Self-leveling lift tables keep work positioned at a uniform height as layers are added or removed, and they make ideal pallet positioners. When combined with a turntable, self-leveling lift tables allow workers to remain in place while building loads, with 360 degrees of access inside the golden zone. Turntable lifts can allow for immediate gains in productivity by properly positioning SKUs without requiring repetitive bending at the waist (a leading cause of workplace back injuries).

BHS Scissor Lift Tables feature a range of tabletop surfaces to facilitate load management. Roller attachments seamlessly integrate with stationary conveyor systems, while ball transfer beds keep loads moving easily across the surface of the lift table. This enhances workflow substantially and can even cut the number of required shifts in some larger facilities.

Dual scissor legs provide even more range of height, and are indispensable in transferring loads on the dock or mezzanines up to 6 feet off the ground level. BHS Powered Mobile Lift Tables allow workers to move loads of over a thousand pounds onto and off of these elevated work areas, significantly reducing risk of injury.

2. **Lift Tables in the Manufacturing Industry**

With a wide range of adjustable heights, mobile lift tables are perfect for feeding raw materials into manufacturing equipment. Stationary scissor lift tables are ideal for assembly lines, where they can assist with lifting heavy components and establish an ergonomic work space that is tailored to each worker.

Roller bed surfaces can be particularly useful in manufacturing applications that work with large quantities of metal or other heavy raw materials. Industry publication Material Handling and Logistics describes a metalworking assembly line that saved 35 percent in labor costs by implementing a system of lift tables with roller beds.

In this example, roller conveyor tabletops on lift tables allow a single worker to transport lengths of steel -- some weighing up to 1500 pounds -- from multiple tiers of shelving into machines, saving time and reducing muscle strain.

3. **Applications of Lift Tables in Offices**

A rugged scissor lift table with a weight limit of 4,000 - 6000 pounds might not seem like a standard tool for the office, but for many applications, the benefits in lift power and portability make these adjustable-height surfaces a vital part of operations.

Businesses require heavy, awkward equipment for a variety of office tasks. Mounting such equipment on a mobile lift table is an easy way to provide portability for flexible use. Mobile lift tables are particularly useful for machinery that needs to travel to various parts of the office, such as hard drive degaussers, AV equipment and bulky computers.

Lift tables also have a place in office maintenance rooms and janitorial storage areas, providing easier access to products and equipment with the ergonomic benefits discussed above.

4. **Using Scissor Lift Tables to Simplify Automotive Repair Tasks**

Automotive repair shops frequently handle heavy and unwieldy car parts. Mobile scissor lift tables allow safe transportation of components with vertical positioning for a range of access.

With the extra height gains of dual scissor legs, BHS Powered Mobile Lift Tables can extend up to 75”, providing reliable undercarriage access from pits or beneath lifted vehicles. An accordion skirt guard is recommended for automotive applications; this durable shield protects the lift.
mechanism from dirt and engine fluids. Scissor lift tables should also have closed hydraulic circuits and features to protect against sudden drops; BHS tables feature adjustable lowering speed valves and LED displays, which track the capacity of the sealed 12 volt batteries.

5. Scissor Lift Tables in the Retail Industry

There were over 3.6 million retail establishments in the United States in 2012, and sales from these and online merchants accounted for 27 percent of the total US GDP the following year. With the growth of electronic commerce driving material handling demands for retailers, the safe and efficient order picking provided by mobile lift tables is more important than ever.

Online sellers rely on warehouses and distribution centers, but brick-and-mortar retail locations can also benefit from the ergonomic material handling benefits made possible by scissor lift tables. BHS Lift tables lower product handling costs by reducing employee injuries and promoting efficient inventory management, with a range of options that are ideally suited to retail applications:

- An available loading ramp creates smooth floor-level access to the lift bed, for ergonomic placement of retail units.
- A variety of table sizes match location-specific requirements.
- In addition to incorporating the toughest materials in the industry -- including heavy-duty braided wire hydraulic lines, hardened chrome piston rods and formed steel construction -- BHS Scissor Lift Tables offer more safety precautions than competitors. Along with velocity fuse protection from in the event of accidental hydraulic damage, thermal overload switches prevent mechanical mishaps in virtually any scenario.
- BHS Mobile Lift Tables include an ergonomically angled handle for smooth, comfortable travel. These heavy-duty travelling lifts are ideal for stocking shelves, even with heavy products like building materials.
- Powered models are contain reliable Sealed Extended Life “Maintenance Free” Batteries, which is ideal for retail outlets that typically do not keep mechanical maintenance teams on staff.

Choosing Appropriate Lift Tables for Every Industry

BHS Scissor Lift Tables feature a range of options and benefits to match any application. Powered stationary lifts can handle loads up to 6,000 pounds, with a variety of lift bed attachments including turntables, roller conveyors and ball transfer table tops.

BHS Mobile Lift Tables offer a similar set of features, along with strong push bars, rugged steel cam rollers and durable, corrosion-resistant urethane casters designed for heavy loads. These flexible multi-height surfaces provide ergonomic material handling solutions for all industries. In fact, the trade association MHI says that material handling systems are used in every type of enterprise, from aerospace to construction to pharmaceuticals.

BHS Scissor Lift Tables can help to meet material handling needs in all of these industries and more, creating instant value with reliable safety features and ergonomic designs.

References

http://www.mhi.org/fundamentals/material-handling
http://mhinews.com/workforce-solutions/mhm_imp_6240
http://www.mmh.com/article/ergonomic_lift_tables_carry_heavy_equipment
http://www.mmh.com/article/equipment_101_palletizing_equipment/
http://www.mmh.com/article/ergonomics_finding_and_maintaining_the_golden_zone
http://selectusa.commerce.gov/industry-snapshots/retail-services-industry-united-states.html