

molex

AERO-MOTIVE BALANCERS

Molex provides a low-cost way to achieve best-in-class ergonomics and long-life cycles in general industrial applications.

BUSINESS CHALLENGE

Cumbersome manual welding guns pose a major ergonomics challenge for body-in-white manufacturing.

While robotic welding machines are now prevalent in North America and Western Europe, manual welding guns are still heavily relied upon throughout Asia, South America and Eastern Europe. Because they are roughly one-fifth the cost of robotic welding guns and offer significant advantages in terms of flexible manufacturing, manual welding guns will continue to be a key tool for automotive body-in-white.

With manual welding guns typically weighing between 60 and 92kg, they can pose a major challenge when it comes to operator fatigue and workplace injuries. Even light loads can lead to repetitive motion injuries and back injuries, eventually leading to lost productivity time and increased workers' compensation claims and higher insurance premiums.

Musculoskeletal disorders (MSDs), such as sprains or strains resulting from overexertion in lifting, accounted for 31 percent (356,910 cases) of the total cases for all workers in 2015, according to the U.S. Department of Labor's Bureau of Labor Statistics. The economic impact of occupational MSDs has been estimated to cost upwards of \$20 billion in workers' compensation and as much as \$80 billion in indirect costs annually. Businesses have responded to this threat to their bottom line by seeking ways to reduce or eliminate injuries caused by commonly repetitive tasks found in industrial general assembly environments.

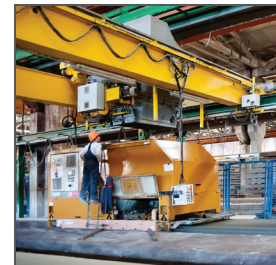
SOLUTION

A cost-effective approach to reducing operator fatigue and achieving constant, reliable and long-lasting performance.

With its line of Aero-Motive balancers, well-known for best in class Ergonomics and Safety Features, Molex makes it possible for manual welding guns and other assembly tools handled by operators to feel nearly weightless. By not exposing workers to the strain of lifting, operator fatigue and instances of common injuries are greatly reduced and productivity and efficiency improvements result.

This low-cost approach to best-in-class ergonomics fits virtually any industrial work space and is designed with multiple integrated safety features. An automatic safety lock secures the load in place in the event that a unit loses tension or a power spring breaks, and a manual safety lock facilitates quick and safe tool changeovers without the risk of cable fly-back to the operator. Their ease of use and trouble-free maintenance have made Aero-Motive balancers a favorite for automotive OEM maintenance departments for more than 50 years.

For superior durability in rugged, abusive heavy-duty industrial environments, Aero-Motive balancers are designed with thick gravity die-casted aluminum housings. Both the cable and cable drum are coated with high-performance WearGuard epoxy coating to protect against premature Cable and Drum wear-and-tear, and a unique roller cable guide eliminates cable greasing while prolonging the life cycle for the cable assembly. Aero-Motive power springs are well-known in the industry for providing best in class Ergonomics and are built for long-lasting reliability, ultimately resulting in less downtime and customer cost savings.





KEY BENEFITS

Increase productivity and efficiencies without sacrificing safety

- Provides best in class ergonomics by making tools feel nearly weightless
- Automatic safety lock secures load in place if unit tension drops
- Manual safety lock facilitates quick and safe tool changeovers
- Thick high-pressure castings are built to survive abuses of heavy-duty industrial applications
- WearGuard epoxy eliminates greasing of cables and extends drum and cable life cycles

To learn more www.molex.com/aeromotive

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