

WELDING



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HARSH DEBRIS/
LITTLE
MAINTENANCE



SMOOTH
MOTION



LONG
LIFE



MULTI-AXIS
CAPABILITIES

Bishop-Wisecarver® is a leader in guided motion for welding and plasma cutter automation in construction machinery, the automotive industry, and beyond.

Whether you require long linear motion for a CNC plasma cutter, rotary motion for orbital welding, or heavy duty robotic transfer units, Bishop-Wisecarver can help you meet your specific application needs. Our solutions are designed to provide durability and smooth motion despite the high temperatures and molten metal debris experienced by welding machinery.

SMOOTH MOTION IN HARSH & EXTREME WELDING ENVIRONMENTS

At the core of our systems and actuators is **DualVee Motion Technology®**.

High Temperature DualVee® wheels can operate in temperatures up to 500° F (260° C).

Additionally, as vee guide wheels run on their matching track, the angled profiles wipe away weld spatter, dust, and other debris. This self-cleaning action keeps the motion extremely smooth and prevents buildups that could lead to motion system failure.

High load and moment capacity options allow smooth guided motion of entire machine subassemblies and industrial welding [robots](#).

LONG LASTING MOTION SYSTEMS

Importantly, Bishop-Wisecarver systems inherently provide **long life** with **low maintenance**. See how our DualVee® wheel and track systems outlast and outperform the competition in [this whitepaper](#):

LINEAR, ROTARY & GANTRY SOLUTIONS DESIGNED FOR EASE OF INSTALLATION



Our linear vee track comes in base lengths up to 22 ft. (~6.7 m) and can be joined end-to-end to create long systems with ease (and without the cost of precision alignment and machining).



For rotary motion, vee guide rings and ring segments provide internal diameters upwards of 4.6 ft (1400 mm). Integrated gear drive racks are optional.



Take the guesswork out of creating a gantry or multi-axis system – simply connect LoPro® Linear Actuators with a [Gantry Kit](#).

Additionally, vee guide wheels easily and smoothly traverse small gaps in linear or rotary track. For example, in an orbital welding application, this means that ring segments for guiding the weld head can be separated to fit over a pipe.

The wheels and track can also be fully disengaged from each other as needed (e.g. to remove a weld head assembly for maintenance).

GET THE RIGHT SOLUTION FOR YOUR WELDING APPLICATION

Our expert [Application Engineers](#) can help you design a motion system that meets all your application requirements - using standard or fully custom solutions.

Check out our [product selector](#) to learn more about the Bishop-Wisecarver products that fit your needs or our [CAD downloads](#) to see our products in your design!

PERCENT OF WHEELS WITHOUT FAILURE VS. DISTANCE

