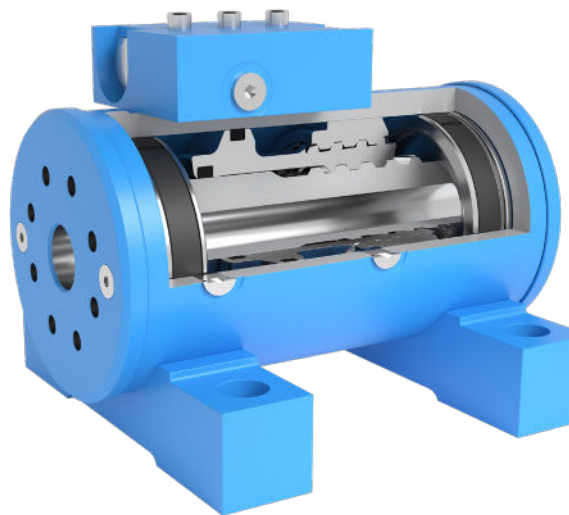




OILGEAR

HYDRAULIC ROTARY ACTUATORS

Mobile and Industrial
Applications



Using outside the box thinking to fit inside the box.

OILGEAR

HYDRAULIC ROTARY ACTUATORS

AUXILIARY POWER STAIR ACCESS FOR MINING TRUCK

SM45/82/150-Foot Mount



Challenge: The customer wanted a remote, hydraulically powered ladder capable of operating in an open pit environment.

Solution: OilGear Engineers were able to specify an off-the-shelf hydraulic power unit (HPU) with a standard, foot mount SM product and off-the-shelf valving.

Results: A timely design using off-the-shelf components that meet the cycle speeds and environmental constraints found in open pit mining on rugged, off-highway machines.

VALVE OPERATION

SM45/82/150-Front Flange



Challenge: Lower quantity, specific style actuators no longer supported by OEM.

Solution: Oilgear Engineers adapted off-the-shelf helical rotary actuators to be a drop-in replacement.

Results: Confidence in vendor capabilities in Engineering and Supply Chain management. Lower risk for downtime with stable supplier implemented.



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FEED MIXER | CHUTE OPERATION

SM-Foot Mount-Dual Spline Output



Challenge: The customer wanted a more modular solution that increased speed to disassemble and maintain versus the older, complicated linkage driven design.

Solution: OilGear Engineering provided a fast solution that could be field replaceable in a very short amount of time and reduced much unneeded complexity.

Results: Modular, field replaceable, and complexity reduction aided in speed to market with unique technology.



FORESTRY | SKID STEER WITH GRAPPLE

SM45/82/150-Rear Flange-Spline Output



Challenge: The customer wanted to distinguish itself from the market by offering a 'twist' function to unwedge chainsaws stuck in large sections or to relieve stress in large section cuts.

Solution: Using an existing design with very few modifications allowed the customer to create this function using a helical rotary actuator.

Results: Differentiating technology to aid the worker is a major benefit to the end user.

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AGRICULTURE APPLICATION | SPRAY BOOM ROTATION

SM45/82/150-Rear Flange



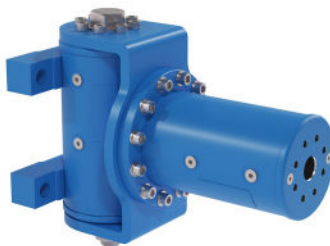
Challenge: Orchard spray device company wanted to structurally support a number of different spray nozzle configurations while simultaneously wanting to turn it over 120°.

Solution: Rear flange SM rotary actuators can support large axial and radial loads while simultaneously able to rotate the nozzles into different positions.

Results: With Oilgear Engineering guidance in incorporating positional encoders, the positions of the nozzles become push-button set and spray operations.

MINING APPLICATION | SHOTCRETE

SM-Foot mount + SM Rear Flange



Challenge: The customer wanted low complexity and tight dimensional constraints to create dual axis spray motions (*roll and yaw*).

Solution: Two SM products with coupled together made for a small foot print with high power density capable of making the spray motion at the end of an extended boom.

Results: Flexibility in spray patterns reduces work time and provides a more even coating.