

WEDGEROCK

PLANETARY GEARS

When Performance and Quality Matter



PRODUCTION



TRANSMISSION



WATER



POWER



MILITARY



Challenge WEDGEROCK with your application...we haven't found a torque, thrust or environment we can't handle.



wedgerock.com | info@wedgerock.com



Conventional Worm Gear:

- Minimal Tooth Contact
- Sliding Sacrificial Action
- Typically - 65% Work Lost to Friction
- Self-Locking Function Inherent in Efficiency Loss;
Less Than 35% Efficient

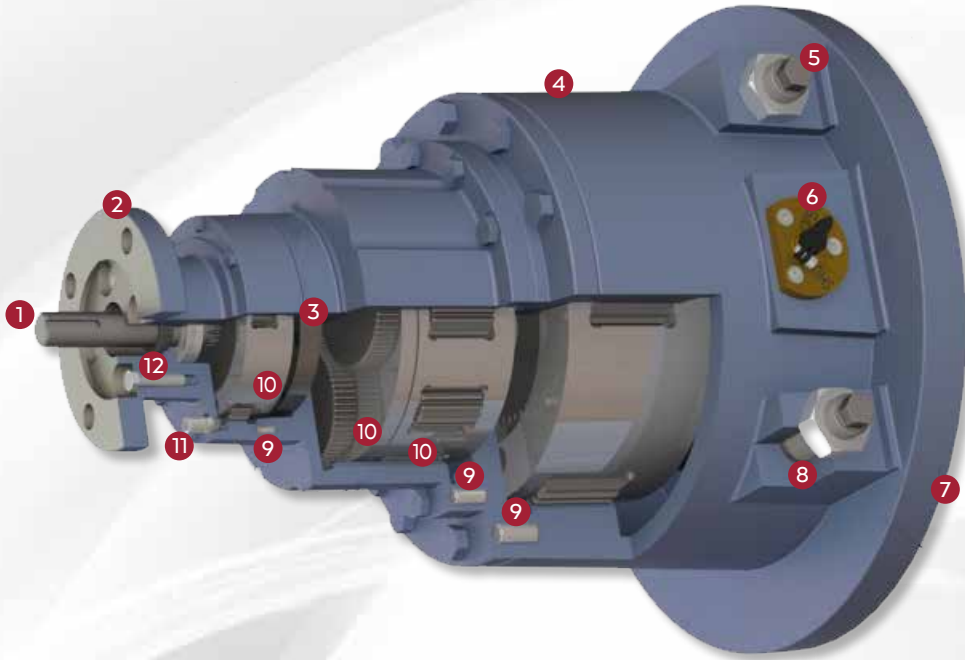


WEDGEROCK Planetary Gear:

- Rolling Action
- Numerous Teeth in Contact
- Self-Centering Gear Carriage, Evenly Distributes
Contact Stress
- Efficiencies - 97%
- Extended, More Predictable Cycle Life
- Typically Reduces Work by 60% Over Worm Gear

Performance Comparison to Standard Worm Gear

Valve Size [in]	Torque w/ SF [in-Lbs.]	Handwheel Diameter [in]	Break Rim Pull [Lbs.]	Turns to Close		Reduction in Turns
				Conventional Worm Gear	WEDGEROCK Planetary Gear	WEDGEROCK Planetary Gear
24	180,000	36	< 80	154	29	5.3 X
30	325,000	36		226	56	4.0 X
36	475,000	36		305	84	3.6 X



- | | |
|------------------------------------|------------------------------|
| 1. Corrosion Resistant Input Shaft | 7. Machined For Direct Mount |
| 2. Manual or Motorized | 8. O-Ring Sealed Stop Bolts |
| 3. Self-Locking Feature | 9. Seal |
| 4. Ductile Iron Housing | 10. Planetary Auxiliary |
| 5. Adjustable Stops 80° to 100° | 11. Pressure Relief Standard |
| 6. Visual Position Indication | 12. Redundant Dynamic Seals |

Benefits Of WEDGEROCK Planetary

- Compact
- Efficiency - Most Configurations > 90%
- Fewer Turns to Close/Lower Input Torque
- External Anti-Back Drive - Configurable to Application
- Designed For Submerged Service - Surpasses IP68
- Nearly Zero Backlash For High Resolution Control
- Quarter Turn - Multi-Turn - Rising Stem

Standard Gear Operators from 5,000 in-lbs. to 16,000,000 in-lbs.

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OUR MISSION

WEDGEROCK provides performance engineered actuation solutions for demanding applications.

ABOUT WEDGEROCK



The WEDGEROCK name and logo symbolize the elegance of a simple and effective design and the grit, focus and determination required to make things happen – the work required to get big things moving. Pragmatism and hard work are central to our culture and reflected in everything we do.

Don't let our dirty hands and old school approach fool you. WEDGEROCK brings industry leading innovation to your engineered projects in standard lead times.

With a focused approach, WEDGEROCK provides solutions for the most demanding torque and thrust application. Whether you need to operate valves thousands of meters below the ocean surface, or a purpose designed gear operator for your valve line, give us a call or drop an email to get the partnership started.



[207] 793.2289

34 Business Park Road | Limerick, Maine 04048 USA

wedgerock.com | info@wedgerock.com