What Makes UMC Gearboxes Better?

Gear Technology – Material Matters. UMC uses the highest quality material and a precise combination of gear materials in conjunction with excellent gear lubrication and AGMA gear designs to provide the highest quality and most reliable line of gearboxes available. Our dynamometer testing illustrates that UMC gear designs meet and exceed the industry standard and outperform the life expectancy and wear rates of other gear manufacturers.

Overbuilt. Adds Cost. Not Value – UMC's approach of Value Engineering is to design and build a line of gearboxes tailored to handle various field conditions and always keep the costs at a reasonable level for the grower. Added material and using hardware that exceeds the most impossible situations is a recipe for building a more expensive and overdesigned gearbox. We believe in providing the grower with the right gearbox for their specific application.

Bigger is not always better – Destruction testing and maximum torque calculation are great statistics and make for impressive graphs, but why build to loads that the rest of the drivetrain can't produce? At UMC you are not given just two choices. At UMC you have over a dozen different models and ratios to meet your specific application. UMC gives you choices that maximize your operational budget.

Common Sense Solutions – UMC gearboxes are designed with the grower in mind and are value engineered to have features that make service, maintenance, and installation faster and easier reducing service and downtime. Features such as a positive wheel register; bull nose ribbed neck carriage bolts; a top oil fill provision; crop guard; an 11-bolt mounting pattern; and a dual input are examples of UMC providing common sense solutions.

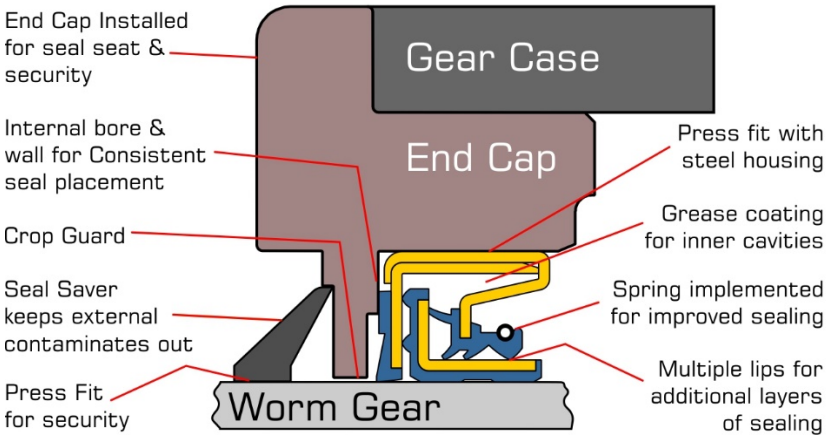
Gearbox Seals

The life blood of your gearbox is the oil. Any amount of leakage or contamination can have very damaging effects on the life of the gearbox. For this reason we use our exclusive **UMC Sealing System** to protect your gearbox and ensure for long trouble free operation.

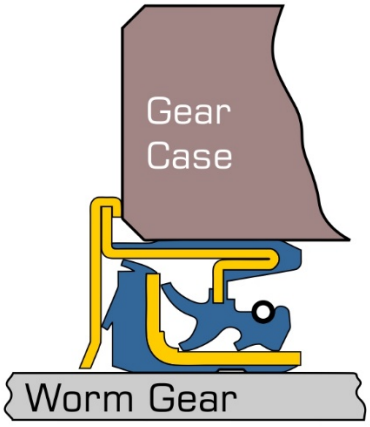
Gearboxes operate in some of the most extreme environments around the world. They are subject to extreme heat, extreme cold, and operate in all kinds of soils, from coarse sand to fine silt and clay.

Our sealing system is designed to keep the dirt out and the oil in. Compare our seal to the competitor's solution and decide for yourself which seal you want protecting your gearbox, for the years you will own it.

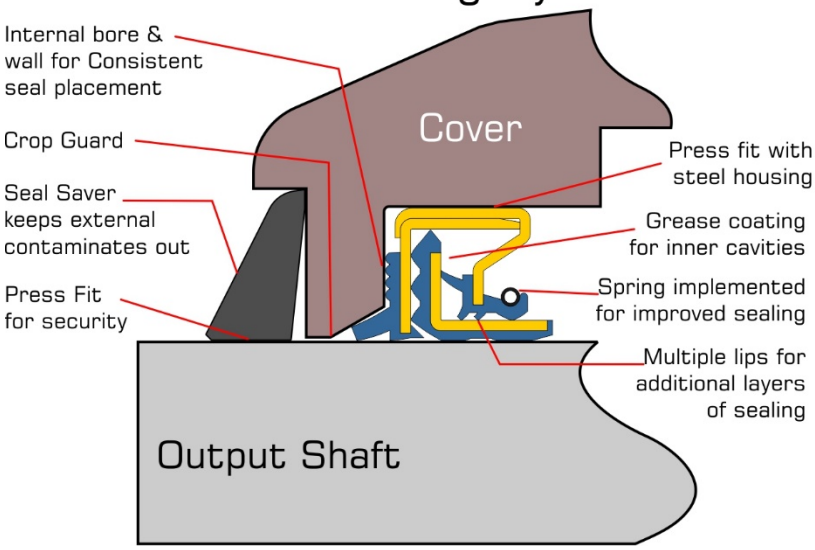
UMC Sealing System



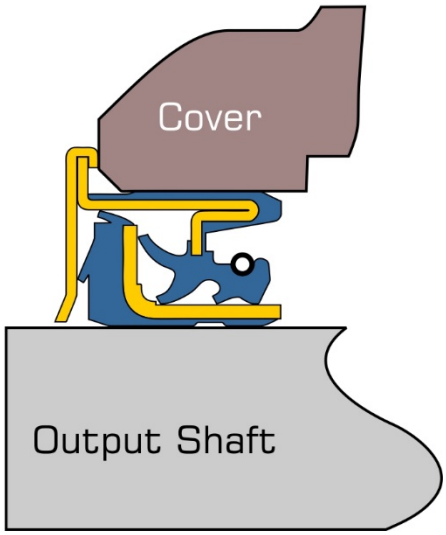
Other Brands Seal



UMC Sealing System



Other Brands Seal

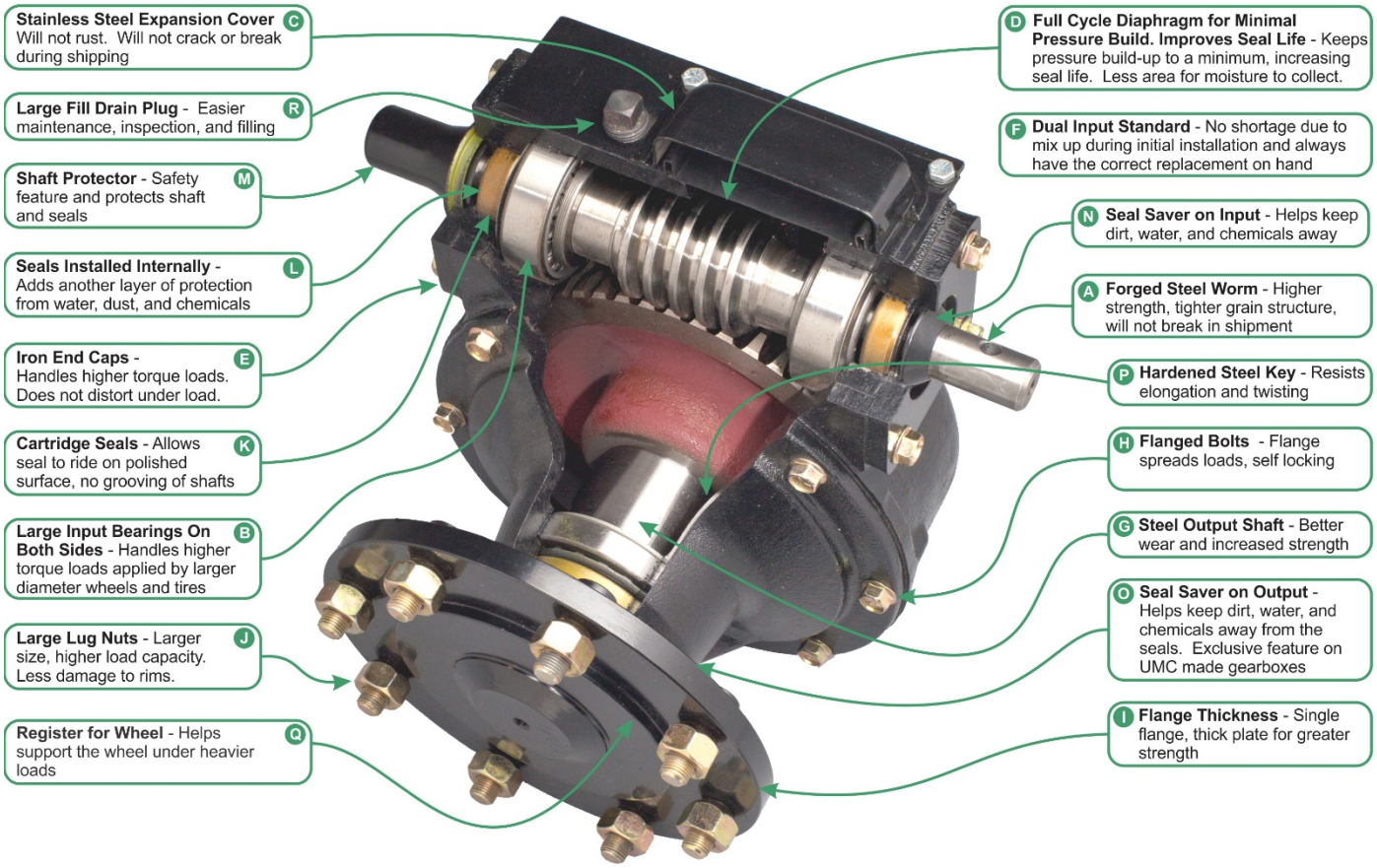


UMC

UNIVERSAL MOTION COMPONENTS

Listen. Innovate. Adapt.

740 Series Gearbox Product Features



	FEATURES	BENEFITS	OTHER BRANDS
A	Forged steel worm	Higher strength, tighter grain structure, will not break in shipment.	Ductile iron
B	Large input bearing on both sides	Handles higher torque loads applied by larger diameter wheels and tires.	Small bearing / pre 1990 design or one small bearing and one large bearing.
C	Stainless Steel Expansion Cover	Will not rust. Will not crack or break during shipping.	Aluminum
D	Full cycle diaphragm for minimal pressure build. Improves seal life.	Keeps pressure build-up to a minimum, increasing seal life. Less area for moisture to collect.	Rely on dead air space. Creates 3 to 5 times the pressure rating of the seals.
E	Iron end caps	Handles higher torque loads. Does not distort under load.	Aluminum or a combination of iron and aluminum.
F	Dual Input Standard	No shortage due to mix up during initial installation and always have the correct replacement on hand.	Could be an additional charge when ordering on new equipment.
G	Steel output shaft	Better wear and increased strength.	Ductile iron
H	Flanged bolts	Flange spreads loads, self-locking.	No flange, no locking provision.
I	Flange thickness	Single flange thick plate or single piece forging.	Two piece
J	Large lug nuts	Larger size, higher load capacity.	Smaller size can tear through rim.
K	Cartridge Seals	Allows seal to ride on polished surface, no grooving of shafts.	Seals ride on porous ductile iron.
L	Seals installed internally	Protects seals from water, dust, and chemicals.	Exposed to the elements.
M	Shaft protector	Safety feature and protects shaft and seals.	None included or not dual input.
N	Seal saver on input	Helps keep dirt, water, and chemicals away from the seals.	Not available by all manufacturers.
O	Seal saver on output	Helps keep dirt, water, and chemicals away from the seals. Exclusive feature on UMC made gearboxes.	Exclusive to UMC.
P	Hardened Steel Key	Resists elongation and twisting.	Non heat-treated keys.
Q	Resister for wheel	Helps support the wheel under heavier loads.	Non-existent on some.
R	Large fill drain plug	Easier maintenance, inspection, and filling.	Remove expansion chamber to fill or pour through internal canal.