



New Bi-Directional BladeSeal Dual The Future of Kaplan Blade Trunnion Seals for Hydro Electric Turbines

BladeSeal Dual is a high-performance lip seal specifically designed for heavy-duty oscillating and rotary sealing applications in the world of hydropower. BladeSeal Dual keeps the hydraulic lubricants in the turbine protecting the hub against water, particle or sediment ingress. Lubricants in, water out.

BladeSeal Dual is a robust one piece bi-directional seal designed with dual profiled lip sections of Acrylonitrile Butadiene Rubber (NBR) elastomer. The dual sealing lips on each end of the element are fully molded to the center section of our fabric reinforced NBR composite forming the single unitized bi-directional seal unit.

Our specialty blended NBR Nitrile has been formulated to withstand the attacks posed by most lubricating media used in hydro units while providing excellent resistance to the wide array of elements found in today's water supplies. BladeSeal Dual will remain fully functional in all temperature ranges encountered by Kaplan turbines.

The fabric reinforced NBR center section works as the anti-extrusion element for BladeSeal Dual. The strong woven fabric is more than tough enough to eliminate stretching and bunching during shaft rotation.

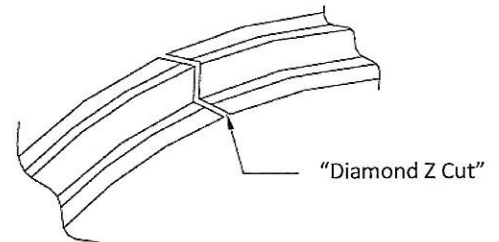
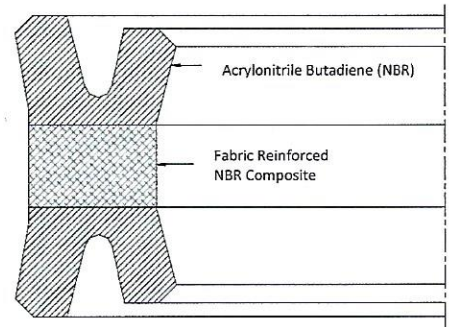
BladeSeal Dual is custom designed and manufactured to your actual hardware dimensions. BladeSeal Dual is offered in endless form for new equipment or in split form for much improved replacement seals in existing equipment.

BladeSeal Dual when ordered in Split form comes with the Diamond Z cut along with an internal alignment tab to insure perfect lip alignment.

Blade removal is not required for installation. The unique one piece design allows the seal to remain flexible enough to manipulate as needed during installation and makes it virtually impossible to accidentally twist the seal while working into a blind housing. Multiple element seals are notorious for roll over and twisting during installation in the field.

BladeSeal Dual's unique design provides positive load pressure maintaining sealing integrity even in older equipment suffering from blade droop. BladeSeal Dual is designed to float within the housing rather than be under harsh and sometimes too much compression. This allows the sealing lips to perform without the excessive frictional drag and associated wear of compression style seals. The deep pocket design and unsurpassed material memory characteristics work in concert to maintain seal integrity as the equipment ages and the blades experience gravitational sag due to worn bushings.

We've taken many years of experience and built this knowledge into BladeSeal Dual. We believe it to be the Best of the Best!



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