



Our New Bi-Directional BladeSeal Twin Sealing System The Future of Kaplan Blade Trunnion Seals for Hydro Electric Turbines

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

The BladeSeal Twin is a robust seal with profiled lip sections of Acrylonitrile Butadiene Rubber (NBR) elastomer fully molded to the base section of our fabric reinforced NBR composite forming the single unitized seal component. BladeSeal Twin is designed to be installed in a Back-to-Back configuration together with a second mirror image BladeSeal Twin component. Together, these components provide a system of positive sealing in both directions with the strength and stability needed within the hardware cavity.

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. The BladeSeal Twin sealing system will remain fully functional in all temperature ranges encountered by Kaplan turbines.

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

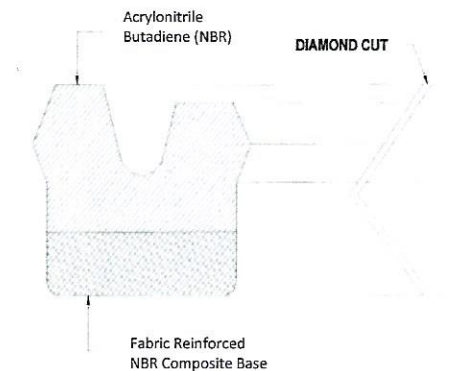
BladeSeal Twin is custom designed and manufactured to your actual hardware dimensions. BladeSeal Twin is offered in endless form for new equipment or in split form for much improved replacement sealing system in existing equipment.

When ordered in Split form, BladeSeal Twin components come 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 two piece design allows for the mirror image seal components to remain flexible enough to manipulate as needed during installation. The fabric reinforced NBR composite base provides enough rigidity to prevent accidental twisting while working into a blind housing.

BladeSeal Twin's unique design provides positive load pressure maintaining sealing integrity even in older equipment suffering from blade droop. The BladeSeal Twin system 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 the BladeSeal Twin System. We believe it to be the Best of the Best in the multiple component blade seal world!



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