





















## **A Reputation for Quality and Expertise**

As rehabilitation for the country's hydropower infrastructure drives refurbishment of aging equipment, we at Unico Mechanical and Bender CCP are proud to be one of the leading providers of comprehensive overhaul services for valves, turbines and other critical equipment for more than four decades. With facilities that easily handle even the largest overhauls and some of the most experienced technical specialists in the hydro industry, we offer cost-effective overhaul solutions that help keep operations running optimally.

#### **Large-Scale Complex Jobs Welcome**

Our customers include many of the top OEMs, hydropower stations and multi-national service companies who rely on us for:

- · Machining and grinding
- Thermal spray for resurfacing
- Welding and fabrication
- · Equipment overhauls

We stand behind our work offering the best warranties available in the industry on refurbished valves, turbines and other equipment.



We're known for the quality of our work and technical knowledge to turn even the largest overhaul projects around cost-effectively and efficiently to minimize customer downtime.



The technical expertise of our machinists, welders and other skilled employees allows us to bring more than four decades of experience to every job.

## **Capabilities Overview:**

#### **Machine Shop Locations in the Western Region**

Multiple large-capacity facilities, manual and CNC machining, bridge cranes and other equipment necessary to easily and safely handle over-size heavy hydro power components restoring them to OEM specifications.

#### **Thermal Spray**

Bender Thermal Spray is known for its ability to repair surfaces that have eroded, corroded or have degraded from mechanical wear. As part of our in house overhaul offering, our thermal spray can be used to restore surfaces to their original size or be upgraded with a long-lasting surface material that extends the life of critical equipment.

#### **Welding & Specialty Fabrication**

Our welding technicians are ASME and AWS certified to many procedures. With over four decades of hydropower experience, we are familiar with a variety of hydro components and weld repair processes. Certified Weld Inspectors and welding trucks can be deployed for planned or unplanned events.

#### **Overhauls for Valves and Turbines**

Our value is rooted in extensive knowledge that comes from working with hydropower station owners, contractors and OEMs on valve and turbine overhauls for decades. Our expertise with large turbine shut off valves (TSV), bypass valves, pressure relief valves (PRV) and butterfly valves is unmatched. We find that the larger the valve the greater the financial advantage exists for refurbishing it rather than buying new. If you are experiencing any problems, we can evaluate, maintain, repair, or refurbish them.

With access to equipment records and drawings we create an accurate like-for-like reconstruction even for 50+ year old valves. We are known for our ability to design and produce quality, durable replacement parts for valves and fabricated gates to OEM specifications.

#### Our knowledge base includes:

- · Hydraulic and electrical control systems
- In-house functional testing
- · Verification of standards and specification compliance
- High solids high build epoxy coating
- Hydro and leak testing just like when they left the factory













Providing comprehensive overhauls and rehabilitation services for the nation's leading OEMs and Hydropower Stations

# Partial List of Component Overhauls:

- Turbine Runners
- Turbine & Generator Shafts
- Linkage, Pins, Arms
- Gate Bushings
- Facing Plates
- Stationary Seal Rings
- Wicket Gates
- Head Covers
- Operating Rings
- Thrust Collars and Bearings
- Coupling Hardware
- Packing Boxes

### **Partial List of Services:**

- Machining and Grinding
- Thermal Spray surface restoration
- Welding
- Fabrication
- Cavitation repair
- Resurfacing of worn faces
- Dimensional restoration
- Parts manufacturing
- Geometric measurement
- Lubeless modifications
- Inspection
- Engineering



323-232-2371 benderccp.com



707-745-9970 unicomechanical.com