









# SHIP REPAIR SERVICES













# **A Reputation for Quality and Expertise**

BENDER CCP is a trusted ship repair service provider with locations close to the San Diego shipyards and up to the Pacific Northwest with teams dedicated to maritime repairs In-Place or in one of our facilities. We have the expertise and certifications required for Navy and commercial ship repair done on board or at our facilities. Our experienced team and mobile state- of-the-art equipment allows us to shorten the repair cycle with our ship repair capabilities and services. We are available to conduct on board assessments, develop repairs and overhaul plans. We offer cost-effective turn-key solutions that keep fleets running optimally.

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

We are an on-call emergent and planned maintenance repair company conducting large overhauls in our shops or any ship board locations.

#### **Capabilities include:**

- In-Place/Field Machining
- Shaft Repair and Inspections
- Welding and Fabrication
- Equipment and Component Overhauls

We stand behind our work offering the best warranties available in the industry.



USS Sampson, (DDG102) - BENDER CCP "Tiger" Team repaired and replaced 98 valves in Seattle, WA



USS Rushmore (LSD47) - BENDER CCP provided propulsion system overhaul in San Diego and Vernon, CA

# **Bender CCP and Unico Mechanical Ship Repair Capabilities**

## In-Place/Field Machining

- · Base and Foundation Machining
- Exchanger Machining
- · Line Boring
- Flange Facing
- Keyway Cutting
- Cylinder Boring & Honing
- Journal Repair

#### **Propulsion Systems Overhaul**

- Removal & Installation of Prop Blades & Hubs, Fairwater Covers, Control Rods, OD Boxes, Stern Tube Seals & Shafts
- Inspection, Repair and Overhaul
- · Shaft Sleeve Installation, Welding,
- Machining & Grinding
- Shaft GRP & Coatings Application

## **Thermal Spray**

Processes in which finely divided metallic or nonmetallic surfacing materials are deposited in a molten or semi-molten condition on a prepared substrate to form a spray deposit.

- · Part Repair and Restoration
- Wear and Corrosion resistance
- · Lower Total Cost than Replacement
- Downtime Reductions

#### **Welding and Fabrication**

- NAVSEA Approved Welding Procedures
- Complete Heat Exchanger Services
- ASME Pressure Vessels
- · Process Piping and Skid Mounted Systems





















Bender CCP has several lathes dedicated to the manufacturing, repair, and overhaul of propulsion shafting, ranging in capacity up to 130 tons and 84 feet between centers.

# **Bender CCP and Unico Mechanical Ship Repair Capabilities**

# **Reverse Engineering and Fabrication**

- Engineering design, drawings, and ability to manufacture parts and equipment no longer available from original manufacturer.
- CMM, FARO Laser, Faro Arm
- AutoCad & Solidworks Modeling
- Engineered Upgrades to OEM Designs

# **Equipment and Valve Overhauls**

Overall capabilities apply to:

- Valves
- Pumps
- Gearboxes
- · Bearing Manufacturing

# Piping, Pressure Vessels & Heat Exchangers

- Engineered to Specification
- Design and Fabrication
- Repairs & Re-certifications

#### **Rudder & Tiller Components**

- Removal & Installation
- Inspection & Testing
- New Manufacturing
- Reverse Engineering
- Shipboard Machining























# **CERTIFICATIONS & QUALIFICATIONS**

Quality Management System	<ul> <li>ISO 9001-2015 QMS Certified</li> <li>NAVSEA Standard Item 009-04 Compliant</li> <li>QMS Audit Compliant - Port of San Diego Ship Repair Association</li> </ul>
Safety Management System	OHSAS 18001 Compliant
Welding and NDT	<ul> <li>Level III Examiner oversight</li> <li>NAVSEA SWRMC approved IAW MIL-STD-248</li> <li>Qualified &amp; Certified American Welding Society (AWS), American Society of Mechanical Engineers (ASME), Boiler and Pressure Vessel Code (BPVC) and NAVSEA MIL-STD-248</li> <li>R, U, &amp; S Stamp Holder</li> </ul>
HVOF Thermal Spray	<ul> <li>NAVSEA Approved Facility and Procedures - MIL-STD -1687-A and MIL-STD-2138 for Thermal Spray Repairs and New Component manufacturing</li> <li>American Bureau of Shipping (ABS) Approved Facility and Procedures</li> </ul>
Ship Repair Association Corporate Member	<ul><li>Port of San Diego</li><li>Puget Sound</li></ul>
MSR Approved Vendor for:	<ul> <li>Austal</li> <li>BAE Systems San Diego Ship Repair</li> <li>Continental Maritime of San Diego</li> <li>General Dynamics NASSCO</li> <li>Marine Group Boat Works</li> <li>Pacific Ship Repair &amp; Fabrication</li> <li>Vigor Industrial</li> </ul>
The Society for Protective Coatings (SSPC)	<ul> <li>Corporate Member, Council of Facility Owners (CFO)</li> <li>NBPI Certified Coatings Inspector</li> </ul>
National Association Corrosion Engineer (NACE)	Level III Certified Coatings Inspector







# Providing Comprehensive Ship Repair Services for Navy, Coast Guard and Merchant Fleets Globally.







# **Partial List of Services:**

- Cavitation Repairs
- Dimensional Restorations
- In-place and Shop Machining
- Inspections & Measurement Services
- Machining and Grinding Services
- Parts Manufacturing

- Resurfacing of Worn Surfaces
- Rudder inspections, repairs, and overhauls
- Shafts & Propulsion Systems Repairs
- Thermal Spray Applications
- Valves, Pumps & Component Repairs
- Welding and Structural Fabrications



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