CHALMERS & KUBECK, INC.

Chalmers & Kubeck, Inc., headquartered in Aston, PA, is one of the largest independently owned and operated service-oriented machine shops in the country. Since its founding in 1950 by Doug Chalmers & John Kubeck, C&K has grown to be a recognized leader in industrial maintenance, emergency repair, field service, large machining, gear manufacturing, and industrial products sales / service.

With our long history of providing quality and timely service to O.E.M.'s, Cement Plants, Aluminum / Steel Mills, Combustion / Hydro / Nuclear Power Generation, Oil Refineries, Plastic Extrusion, Pulp & Paper Mills, and Chemical / Pharmaceutical Companies, C&K has demonstrated that we have expert staff with efficient solutions to meet your needs. Our commitment to Quality & Service makes us the right choice for your actuators, bearing housings, blowers, centrifuges, compressors, engineered pumps, fabrications, fans, gear boxes, hydro turbines, steam turbines, thermal spray applications, and valves. We make it our business to ensure that your business is successful!



Quality Programs

- ISO 9001:2015 – Registered (NQA Certs. # 10818 & 10818/1)
- ASME Stamp “V” – Assembly of PRVs for Power Boilers (Cert. # 21441)
- ASME Stamp “UV” – Assembly of PRVs Unfired Vessels (Cert. # 21442)
- ASME Stamp “U” (Cert. # 20381) & “PP” (Cert. # 23389)
- National Board “R” (Cert. # 1388) & “TO” (Cert. # 68)
- National Board “VR” (Cert. # 49)
- National Board “NR” (including VR) Certificate of Authorization (Cert. # 105)
- 10CFR50 Appendix B/NQA-1 2008/09 Addendum

General Information

- Operation Hours: 2/10 Hour Shifts, 24HR Emergency Service
- Machining Capacity: 130 Machine Tools
- 22 Overhead Cranes with Capacity up to 50 Tons
- 24 HR Pick Up and Drop Off Available
- Floor Space for Large Parts / Projects
  - 150,000 sq. ft. – Aston, PA: Industrial Service Center
  - 27,000 sq. ft. – Aston, PA: Valve & Actuation Service Center
  - 55,000 sq. ft. – Beaver Falls, PA: Valve & Actuation and Industrial Service Center

Nuclear Quality Program

Our Aston, PA Service Centers have an established 10CFR50 Appendix B Nuclear Quality Program in compliance with NQA-1-2008/09. We offer uncompromising quality while bringing a value proposition to the nuclear industry with cost effective repair and refurbishment solutions.

- The C&K Engineered Pumps / Rotating Equipment Repair Department specializes in overhauling large circulating water pumps on time and within budget while also having the expertise to repair multi-stage and split-case pumps.
- The C&K Gear Department refurbishes critical gear drives and is proud to have solved an industry wide “pump” issue with Duke Energy. We now supply multiple nuclear utilities with precision ground gear sets for Westinghouse-Nuttall Charging Pump Drives. C&K has more than 15 years’ experience overhauling traveling water screens and upgrading components to increase meantime between service events.
- The C&K Valve & Actuation Division specializes in the economical repair of Limitorque actuators, large butterfly valves, safety-related rubber lined butterfly valves, triple offset butterfly valves, check valves, globe valves, relief valves, and stop check / non-return valves.

GEAR MANUFACTURING & REPAIR

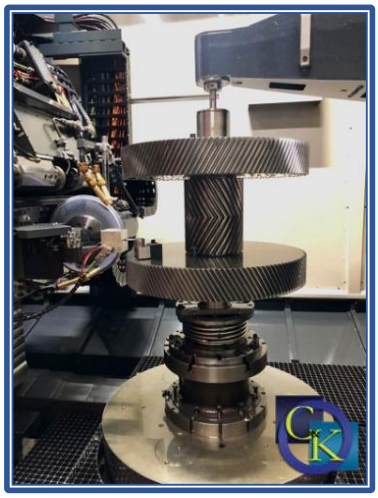
The Chalmers & Kubeck Gear Department offers comprehensive gearbox services for standard or rush turnaround. As an authorized repair center, we have specialized machine tools and a highly skilled team of engineers, mechanics, and machinists to get the job done efficiently. C&K excels in the repair of Nuclear Safety Related Charging Pump Drives, FLENDER Crushers /Extruders /Cooling Tower Drives, and SEW Eurodrive.

Qualifications / Certifications
- ISO 9001:2015 Certified
- 10 CFR 50 Appendix B Nuclear Quality Program

Memberships
- Member of American Gear Manufactures Association (AGMA) – since 1989
- Seating on AGMA Tech Committee for Mill Gearing, and Marine Gearing
- Member of American Nuclear Society (ANS)

Capabilities
- Complete Repair of ALL Speed Reducers / Speed Increasers
- Gear Drive Upgrades & Replacement
- Custom Gear Manufacturing & Grinding to AGMA and DIN Standards
- Line Boring and Housing Modification
- In-House Balancing up to 5,000 lbs.
- In-House No-Load Spin Testing

Equipment
- Klingelnberg Gear Checker 1600 – Max Ø 63”
- HÖFLER RAPID 2000 Cylindrical Gear Grinder:
  - External: Spur, Helical, Double Helical
    - Max: 2,000mm (74.740”) O.D.
    - Max: 1,500mm (59”) Face Width
    - Max: 2,600mm (102.36”) Height
  - Internal Grinding: Spur, Helical





Gear Box Applications
- Speed Increaser
- Speed Reducer
- Extruder
- Pulp and Paper
- Crusher and Pulverizer
- Geared Compressors
- Atomizers
- Steel Mill, Metal Processing
- Crane Hoists

Turn-Key Field Services
- Field Repairs
- Alignment
- Installation
- Engineering & Technical Oversight

Preventative Maintenance
- Borescope Inspection Program
- DALOG - Condition Monitoring
- HYDAC - Filtration Systems
- Oil & Hydraulic Fluid Analysis
- Thermal Imaging

Authorized Service Partner
- FLENDER
- SEW Eurodrive

Gear Drives Serviced
(not an all-inclusive list)
- Amarillo
- Black Clawson
- Bliss
- Boston Gear
- Brevini
- Browning
- Chemineer
- Cleveland
- Cone Drive
- Danieli
- David Brown
- Delaval
- Dodge
- DO James
- Ecodyne
- Elliot
- Falk
- Farrell
- Foote Jones
- GE
- Hamilton
- Hansen
- Horsburgh & Scott
- IHI
- Krauss Maffei
- L&S
- Lightnin Mixers
- Link Belt
- Lufkin
- Marley
- Metso
- Mesta
- Morse
- Nord
- Nutall
- Philadelphia
- Prager
- Reintjes
- Renk
- SMS
- Santasalo
- Sterling
- Sumitomo
- Terry
- Twin Disc
- Western
- Westinghouse
- Wilson Machine
- Winsmith

CNC / PRODUCTION MACHINING

With our ISO 9001:2015 registration and 10CFR50 Appendix B / NQA-1 Nuclear Quality Program, C&K specializes in the manufacture and repair of high precision components that are medium to large in size for the DOD, O.E.M.s, Nuclear Utilities, Hydro Power Installations, Chemical / Petrochemical Plants, and other Heavy Industries. Whether your project is emergency service, a prototype, or production, we have the expertise you need.

Qualifications / Certifications

- ISO 9001:2015 Certified
- 10 CFR 50 Appendix B Nuclear Quality Program

Turning

- TITAN: Ø32' Max Swing (15.5' Table Dia.) 10' Under Rail
- KOBE: Ø87" Table, 120" Swing, 76" Under Rail
- OLYMPIA: Ø60" Table, 56" Under Rail
- HAWACHEON: 32" Dia. Max Capacity, 16' Between Centers
- SL-35: 12" Dia. Max Capacity, 60" Between Centers
- SL-25: 9" Dia. Max Capacity, 24" Between Centers

General Capabilities

- VBM Max Capacity: 32' Dia. X 10.5'H
- HBM Max Capacity: 13'H X 30'L
- AutoCad Cadcam (Unigraphics NX)
- FARO Inspection Arm & Laser Tracker
- 50 Ton Overhead Crane Capacity

Milling

- PEGARD: 138"x138" Rotary Table, X Travel: 360" (30 Ft.) / Y Travel: 156" (13 Ft.)
- TITAN Mill: 80"x98" Rotary Table, X Travel: 360" (30 Ft.) / Y Travel: 98" (8.16 Ft.)
- SACEM: 98"x 98" Rotary Table, X Travel: 154" (12.83 Ft.) / Y Travel: 115" (9.58 Ft.)
- SNK: 63"x86.5" Rotary Table, X Travel: 137.8" (11.48 Ft.) / Y Travel: 99" (8.25 Ft.)
- MV65: X Travel: 64" / Y Travel: 25"
- KITAMURA – 24.8"x24.8" Rotary Table, X Travel: 39.4" / Y Travel: 31.5", Pallet Changer





ENGINEERED PUMPS

Chalmers & Kubeck has been delivering high-quality pump overhauls to the commercial power, chemical, and refining industries for over six decades; we are your trusted maintenance partner providing installation, field repairs, and turnkey overhauls. The C&K Engineered Pump Department specializes in refurbishing nuclear circulating water pumps and is dedicated to extending pump service life.

Qualifications / Certifications
- ISO 9001:2015 Certified
- 10 CFR 50 Appendix B Nuclear Quality Program

Pump Services
- Field Repair
- Installation
- Multistage Pump Maintenance
- Turn-Key Overhauls

Capabilities
- Dynamic Balancing
- Hydrostatic Testing
- Hydraulic Vertical Assembly Pit/Lift
- Machining and Fabrication
- Precision Manufacturing for all Pump Components
- Pressure Testing
- Pump Engineering Services

Extend Life of Pumps
- Erosion & Corrosion Resistant Coatings
- Composite Bearing Solutions

Restoration Services (O.E.M. Standards)
- Pump Case & Casting Repair
- Restoration of Pump Components Fit and Function Regardless of Age or Brand
- Reverse Engineering of Components
- In-House Code Welding & Fabrication
- In-House Thermal Spray Department
  - Metal Stitching
  - Dimensional Restoration and Surface Upgrades for Shafts and Rotating Elements



Pump Types
- Horizontal (Single & Multi-Stage)
  - Barrel Type
  - Between Bearing, Horizontal Split
  - Between Bearing, Radial Split
  - Overhung
  - Stacked Diffuser
- Vertical (Single & Multi-Stage)
  - Circulating
  - In-Line
  - Sump / Submersible
  - Turbine

Applications
- API Pipelines
- API Refinery Process
- Boiler Circulator Pumps
- Boiler Feed Pumps
- Condenser Circulator Pumps
- Cooling Tower Pumps (Vertical and Horizontal)
- Vacuum Pumps
- Vertical Condensate Pumps

Manufacturers
- Allis Chalmers
- Bingham
- Byron Jackson
- CH Wheeler
- Delaval
- Durco
- Floway
- Flowserve
- Foster Wheeler
- Gallagher
- Gallagher Ash
- Goulds
- Hazelton
- I.D.P
- Ingersoll-Rand
- Johnston
- Moyno Pacific
- Sier Bath
- Sultzer
- Union
- Viking
- Warman
- Weir
- Westinghouse
- Wilson-Snyder
- Worthington



MAINTENANCE MACHINING & ROTATING EQUIPMENT REPAIR

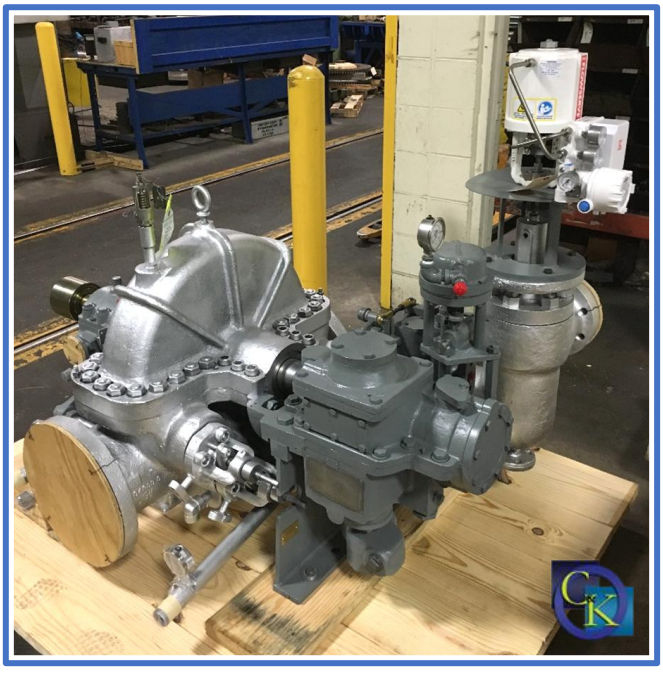
At Chalmers & Kubeck, we have extensive experience with maintenance, repair, and overhaul of rotating and reciprocating equipment. Our skilled technicians are trained in non-destructive disassembly, inspection, and refurbishment. With our two-shift operation, field support crew, and one-stop-shop setup, we excel at Emergency Service and getting your equipment back up and running.

Capabilities

- Balancing: up to 5000lbs (in House)
- Blanchard Grinding:
  - ≤ 42” - Aston, PA
  - ≤ 96” - Beaver Falls, PA
- HBM: Line Boring w/ 71” x 63” Rotary Table
- Lathe: 30’ Long x 91.5” Swing
- VBM Max Capacity: 14’ Diameter x 14’ High
- Reverse Engineering & Parts Manufacturing
- FARO Inspection Arm
- FARO Laser Tracker
- 50 Ton Overhead Crane Capacity

Equipment Serviced

- Bearing Housings
- Blowers
- Centrifuges
- Compressors
- Conveyors
- Engineered Pumps
- Industrial Fans
- Turbines (Elliott, Murray, Terry)
- Vacuum Pumps



Machining & Field Services Department

- Bearing Journal Sleeve Repair
- Equipment Modification
  - Boring
  - Counter Boring
  - Facing
  - Drilling
  - Tapping
- Field Balancing
- Flange Facing: 120” (Rental Equipment)
- Heat Exchanger Repair
- In-Line Boring: up to 50” Dia.
- Pump Barrel Gasket Surface Restoration
- Key-Way Milling
  - Relocating
  - Enlarging
  - Repair
- Laser Alignments
- Laser Tracker Services
- Machine Base Milling: 48”x120”
- Metal Stitching
- Milling Heat Exchanger Division Plates
- Pipe Cutting: up to 16” Dia.
- Pump Case & Casting Repair
- Self-Contained Mobile Machining Trailers
- Stud Removal and Tapping: up to 5”
- Technical Support & Oversight
- Valve Seat Repairs
  - Hard Face Removal
  - Weld Build Up
- Welding & Weld Preparation



THERMAL SPRAY & GRINDING

The Chalmers & Kubeck Thermal Spray Department applies surface coatings to restore / upgrade components without metallurgically altering or distorting the base metal. Renew and upgrade versus scrapping worn out or damaged parts. Fast turnaround available – often same day service. Whether you need dimensional restoration or a solution to mitigate wear, erosion, or corrosion, we'll help you increase the service life of your problem parts.

Applications

- Cast Iron Repair
- Hard Chrome Alternative
- Hydraulic Rams
- Roll Resurfacing
- Rotating Equipment
  - Shafts & Sleeves
  - Bearing Journals & Seal Areas
  - Housing & Stuffing Box Bores
  - Case & Wear Rings
  - Blowers, Fans, and Impellers
- Valves
  - Gates, Seats, Stem & Trim Sets
  - Spring Aluminizing

Capabilities

- Atmospheric Plasma Spray (Non-Transferred Arc)
- Twin Wire Electric Arc Spray
- High Velocity Oxygen Fuel (HVOF)
- HVOF Fused Coatings
- Grinding
  - Blanchard
  - Cylindrical – OD & ID
  - Vertical - ID
  - Surface
- Honing – ID & OD
- Super Finishing

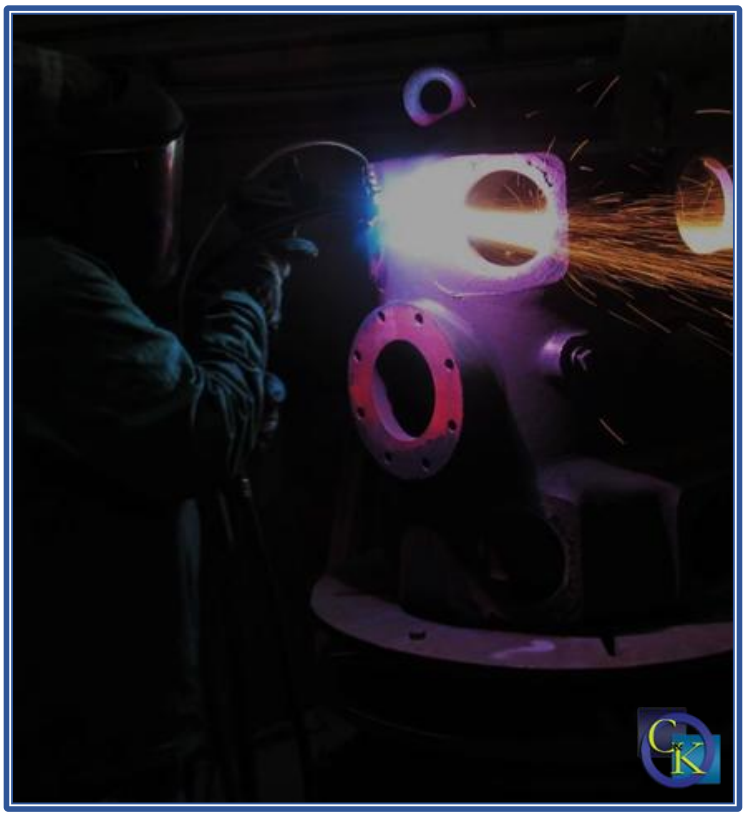
Common Coatings

- Carbides: Tungsten & Chrome Carbides
- Ceramics: Aluminum & Chromium Oxides
- Metals & Metal Alloys
  - Aluminum / Aluminum Bronze, Babbitt, Brass, Mild Steel, Molybdenum, Nickel Alloys, Stainless Steel
- Virtually any Commercially Available Coating can be Applied per Customer Specifications

Praxair JP-8000 High Pressure / HP HVOF

- Constant Process Monitoring
- Closed Loop Mass Flow Controls
- Particle Velocities > Gas Fueled HVOF Devices
- Coatings with Micro Hardness > Other HVOF Processes
- Extremely High Coating Density increases Wear and Corrosion Resistance vs. Other HVOF Processes





WELDING & FABRICATION

The Chalmers & Kubeck Welding and Fabrication Department offers exemplary service in all aspects of metal fabrication, complex weldments, and emergency repair. A sampling of the items we manufacture and/or repair includes blowers & fans, channel boxes & heat exchangers, fixtures, and pressure vessels.

Qualifications / Certifications

- ISO 9001:2015 Certified
- 10 CFR 50 Appendix B Nuclear Quality Program
- ASME Sec. IX Certified Welders
- ASME U (Pressure Vessel)
- ASME PP (Pressure Piping)
- ASME B31.1 (Power Piping)
- ASME B31.3 (Process Piping)
- National Board R (Repair)
- National Board NR (Nuclear Repair)
- Welding to ABS (American Bureau of Shipping) and API (American Petroleum Institute) standards

Capabilities

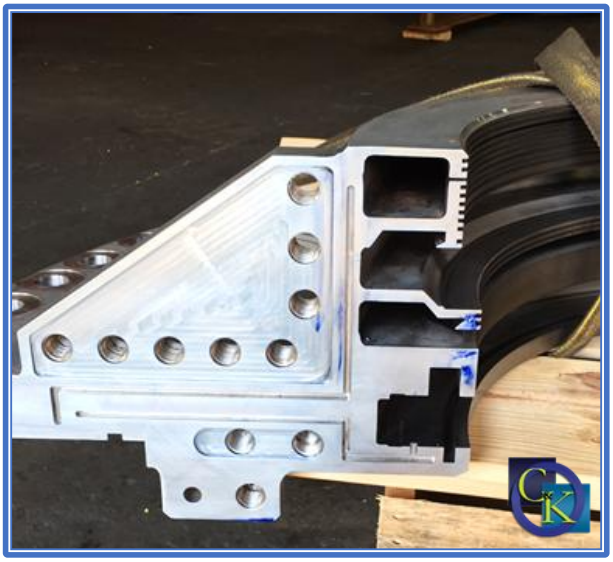
- Roll up to ½" X 8' Plate
- Shear up to ½" A36 Plate
- 225 Ton, 12' Press Brake
- Plasma and Acetylene Cutting
- Hydrostatic Pressure Testing
- Pressure Vessels and Piping
- 5-Axis Water Jet: 8'2" x 13' x 12"

Processes

- Brazing & Soldering
- Shielded Metal Arc Welding (SMAW) "Stick"
- Gas Metal Arc Welding (GMAW) also known as Metal Inert Gas (MIG) Welding
- Gas Tungsten Arc Welding (GTAW) also known as Tungsten Inert Gas (TIG) Welding
- Flux-Cored Arc Welding (FCAW)
- Riveting and Metal Stitching

Materials (not all inclusive)

- Alloy Steels: *e.g.* 4140
- Aluminum
- Bronze Alloys
- Carbon Steels: *e.g.* A-36, SA-516 70
- Castings / Cast Iron
- Chrome-Moly
- HASTELLOY®
- HY-80 & HY-100
- Inconel
- Monel
- Nickel Alloys
- Stainless Steel – All Stainless
- STELLITE® 6 & 21
- Titanium – Various Grades





ASME SETTING THE STANDARD | API American Petroleum Institute | ABS | NB® | R® | NR® | ASME U | ASME PP

VALVE, ACTUATOR & INDUSTRIAL PRODUCTS

Chalmers & Kubeck is a Certified Consolidated Assembler and our Valve & Actuation Technicians are factory trained and certified to provide unparalled service. We specialize in outage support and exel at field trouble-shooting, actuator refurbishment, preventative maintenance, Electronic Valve Testing (EVT), turnkey overhauls, and valve testing & certifiction. The C&K Technicians are highly skilled and are experienced with servicing a wide array of actuators, control valves, line valves, and Safety / Pressure Relief Valves.

National Board (NB) Certificates of Authorization
- **"VR"** - V, UV & NV
- **"NR"** - Class 2 & 3
- **"T/O"** - Test Only

ASME & NB Certificates of Authorization
- **"V"** - Section I: Boiler SVs
- **"UV"**- Section VIII & XIII: Pressure Vessel RVs

Factory Authorized Service & Support
- BVT Sweden: Steam Conditioning Valves
- Clark Reliance / Jerguson / Jacoby-Tarbox
- Consolidated (Dresser) Valves: Green Tag Center
- DURCO® Valves: Black Tie+ Service Center
- HP VALVES: Parts, Rebuilds & Field Service
- Key Valve Technologies (KVT)
- Limitorque Actuators: Blue Ribbon Service Center
- VELAN Valves

Field Services
- Trouble-Shooting, Calibration, Repairs, and PM Programs: Actuators, Gate, Globe, Check, Control and Safety / Pressure Relief Valves
- Turn-Key Outage Services
- Mobile Machine Shop Trailers
- Plant Surveys
- Electronic Valve Testing (EVT)

Limitorque Actuation Center
- Modification & Complete Valve Adaption
- Calibration
- Local Engineering and Application Support
- Preventative Maintenance Programs

ValvKeep / VK Viewer
- 24/7 Free Centralized Database
- Quick Access to Critical Valve Data
- Manage Inventory, Parts, & Spares
- Identify Trends in Valve Maintenance & Operation

Testing Facility
- Steam Testing: Up to 1,500 PSI
- Air Testing: Up to 3,000 PSI
- Hydrostatic Testing: Up to 20,000 PSI

Authorized Dealer / Stocking Distributor
- Clark Reliance®: Boiler Level Indication & Trim
- Consolidated: Safety & Pressure Relief Valves
- Cornerstone Valve: "Zero-Leakage" Ball Valves
- HP VALVES: Authorized Dealer
- Jacoby Tarbox®: Eductors, Hygienics, Sight Glass
- Jerguson®: Level Gauges & Switches
- Limitorque Actuators: East Coast Master Distributor
- VELAN: Power Market Parts & Valves

Other Actuators & Control Valves Serviced
- AUMA®
- EIM
- Masoneilan
- Bettis
- Fisher™
- Rotorq®

Other Valves Serviced and Supported
- Anderson Greenwood
- Atwood & Morrill®
- Conbraco
- DONGEUN Valve
- Edward
- GROTH
- Kunkle
- Pratt®
- Shand & Jurs
- Apollo
- Cla-Val
- Crosby
- Farris
- Flowsafe
- HJ Valve
- LESER
- Protectoseal
- TRICENTRIC©





Visit us on the web at www.CandK.com or call (610) 494-4300 for more information