Responsive, Innovative Solutions For The Steel Industry

Four generations of family ownership have been the key to our success for over 100 years. Our dedicated machinists and engineers at Atlas Machine & Supply, Inc. are the force behind our standard of excellence in service and quality. Your confidence in us is our top priority. Our commitment to meeting your needs is evident in our fully-equipped machine shop, with over 100,000 square feet of floor space and crane capacities of up to 40 tons. With a wide array of capabilities under one roof, we are prepared to meet the most challenging problems and provide solutions with fast, effective service.

**OUR SERVICES FOR THE STEEL INDUSTRY INCLUDE:**

- Repair and re-engineering of equipment to extend life
- Machining new parts / Reverse-engineering OEM parts
- Thermal spray coatings
- Weld claddings and fabrication
- Metrology and alignment

**SOLUTIONS BY AREA:**

**Coke plant:**
- Repair of processing & handling equipment
- Heavy weld fabrications
- Laser tracker alignment and surveying

**Blast furnace and EAF:**
- Electrode arm, ladle & rocker/tilt repair
- Rocker/tilt mechanism repairs
- Scrap processing equipment repair & rebuild
- Alignment

**Continuous caster:**
- New caster rollers
- Segment frame & slab grinder repair / modification
- Mold and roller line alignment

**Hot mill:**
- New roll fabrication
- Weld cladding: pinch, wrapper, table, edger, and deflector rolls
- Bearing journal repair
- Mill stand alignment
- Large hydraulic cylinder repair
- Side guide, threading table & spray header repair
- Annealing and pickling lines:
  - Rolls: manufacture, repair, refurbish and carbide coatings
  - Bridle rolls, brush backup rolls, accumulator rolls
  - Shear grinding (including Miebach welders)
  - Clamping table repair
  - Side trimmer rebuilding and blade sharpening
  - Refurbish: bending, leveler, and flattener cassettes
  - Expanding mandrels

**Cold mill:**
- Mill drive shaft repairs
- Work roll drive shaft, journal repair
- Flying shear repairs
- New and repaired expanding mandrels
- Shear and roll grinding

**Galvanizing Lines:**
- Thermal spray coating and repair for bridle, sink, stabilizer, furnace & accumulator rolls
- Make and refurbish furnace rolls
- Pot arms, cradles, and bearing holders
- Air knife, expanding mandrel fabrication and repair
- Centrifugally cast roll fabrication and repair
- Shear grinding

**RESPONSIVE SERVICES:**

Atlas is leading the industry with innovative solutions on-site and in our machine shop. Each year thousands of companies around the world trust Atlas with the maintenance of their critical plant equipment. Our state-of-the-art machine shop, and experienced field machining team make Atlas the number one resource for any modern industrial machining challenge. Our services include:

- On-site machining and welding with advanced technologies
- Laser tracker alignment and surveying
- Crane wheel, gearbox, large pump & hydraulic cylinder repair
- Zinc and CGL pot roll coatings
- Reverse-engineering and CAD
- Alternatives to OEM supply
FURNACE ROLL RELIABILITY

FURNACE ROLL MANUFACTURING
Atlas is the one-stop shop for furnace rolls. Our capabilities include:
- Source casting from qualified suppliers
- Performing all welding in-house to a qualified procedure
- Qualifying rolls for service through advanced inspection methods
- Thermal Spray coatings

FURNACE ROLL REFURBISHMENT:
- Advanced inspections find problems before a roll is put in service
- CNC welding for consistent-inclusion free welding
- Qualified weld procedures for Mo-RE1, HN, HF, HK-40 and many others
- All machining performed in house
- Cutting-edge heat treating of used rolls to restore weldability

GET TO KNOW US - BEFORE YOU NEED US!
Contact us today to learn how our long list of solutions can be applied to your challenges. 1.855.GO.ATLAS (462.8527) 24/7 service
CASE STUDIES IN INDUSTRIAL STEEL SOLUTIONS:

CGL POT ROLLS
A Midwest steel customer was looking to increase the campaign lives of their rolls that were limited by zinc attack to the roll bodies.

Atlas re-machined the roll faces and applied a series of coatings to prevent the attack of zinc to the roll body. Campaign life of their rolls was more than doubled.

CPL PINCH ROLLS
A customer sent us a pinch roll that was removed from service after breaking a journal. It also had deep wear in its face.

Atlas weld-spliced a new end onto the pinch roll, repaired surface wear using martensitic stainless weld overlay, applied an HVOF carbide coating to roll face to increase resistance to wear/corrosion, and finished the roll to drawing specifications.

PICKLE TUNNEL ROLLS
A high-alloy stainless steel pickling tunnel, can only be sourced from Sweden in a full mill run. Lead times and cost are unfavorable for the mill in sourcing new rolls.

Atlas worked with our suppliers to develop a repair process using a matched electrode. We provided a roll with similar performance, lower cost, less inventory, and faster delivery.

RM EDGER LINER REPAIR
Years of corrosion and thermal cycling in the mill stand can wear out lower liner seats, leaving insufficient datum surface on which to mount.

Atlas uses our laser tracker to create a reference of the top liner seats and can mill the lower liner seats on-site to match, bringing the mill stand back into alignment.