www.alloysteel.com





Partner with African manufacturers to become globally competitive by providing reliable mechanical spares and services.

ISO 9001:2008



Contact Us

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Address

Baba Dogo Road, Ruaraka, Nairobi Monday to Friday 8:00 AM - 4:30 PM Saturday 8:00 AM - 1:00 PM



ABOUT US

East African Foundry Works (K) Ltd, located in Kenya, is an Iron foundry supplying customers across East Africa for over 50 years. Its sister company Alloy Steel Castings Ltd is a Steel Foundry focusing on manufacturing spare parts for various production plants.

Together these two companies are the backbone of manufacturing and exist to ensure that high performing production plants can do so with knowledge that their equipment can be maintained if the need so arises.

Our portfolio of customer is diverse across the East and Central African regions focusing on production plants that serve the Mining and Mineral extraction, Cement production, Road construction and Sugar extraction markets.

Mission

"Partner with manufacturers in Africa to become globally competitive by providing reliable mechanical spares and service.

Vision

Enable African Manufacturers to Operate Efficiently.

SAND CASTING

Sand casting is the basis of casting technology and has been common practice for thousands of years. It is the go-to metal casting process for flexibility in producing shaped parts weighing from a few grams to hundreds of tons.

The versatility and cost effectiveness of sand castings means it is a viable process even for low volumes because of low tooling costs. Almost all parts configurations made using another metal casting process can be reduced to a pattern and manufactured using the sand casting process. A pattern of the required finished product along with the metal delivery system, comprising gates and risers, is developed using either hardwood, urethane, metal, or foam.

Sand is then packed with a bonding agent around the pattern to give an imprint of the required casting shape. Molten liquid metal is poured into the remaining cavity which is left to cool allowing the metal to solidify. Once cooled, the metal cast is separated from the sand and the delivery system, leaving the desired part.

Internal passageways and cavities can be included in the sand casting by adding cores. This makes sand casting a popular choice for Crusher parts, Liner plates and pump and valve applications.

ASC produces sand castings up to 2.5 m linear with a shipped weight of up to 4,000 kg.



Materials

- Austenitic Stainless Steels
- Bronze
- Carbon Steel
- Copper Nickel
- Chromium Steel
- Duplex Stainless Steel
- Ductile Iron
- High Alloy Steel
- Low Alloy Steel
- Martensitic Stainless Steels
- Nickel
- Nickel-Chromium Iron
- Stainless Steel
- White Iron
- Heat resistant steel
- Austentic manganese steel -impact resistant
- Cast iron
- Phosphorus bronze
- Gun metal
- Aluminum

Capacity

 MAXIMUM LENGTH:

 2500 mm

 MAXIMUM WIDTH:

 1500 mm

 MAXIMUM HEIGHT:

 1100 mm

 MAXIMUM WEIGHT:

 4000 KG



CAPABILITIES



METALLURGY & ENGINEERING

Metallurgy involves the purification of metals and the formation of alloys, metals formed by combining two or more metallic elements to capture specific properties. ASC metallurgists help customers choose specific alloys to improve product performance, especially in high-heat, highwear, and high-corrosion environments.



METAL CASTING

Sand castings can be readily produced in nearly any ferrous or nonferrous alloy. ASC produces sand castings up to 2.5 m linear with a shipped weight of up to 4,000 kg.



HEAT TREATMENT

ASC has decades of experience in austenitizing, quenching, forced air cooling, tempering, and annealing over hundreds of alloy grades to meet customer specifications in East Africa.

We offer Oil, Water and Air quench at ASC located in Nairobi, Kenya offering services to East Africa and Europe. Our heat treatment capabilities are available up to 1,250 °C.

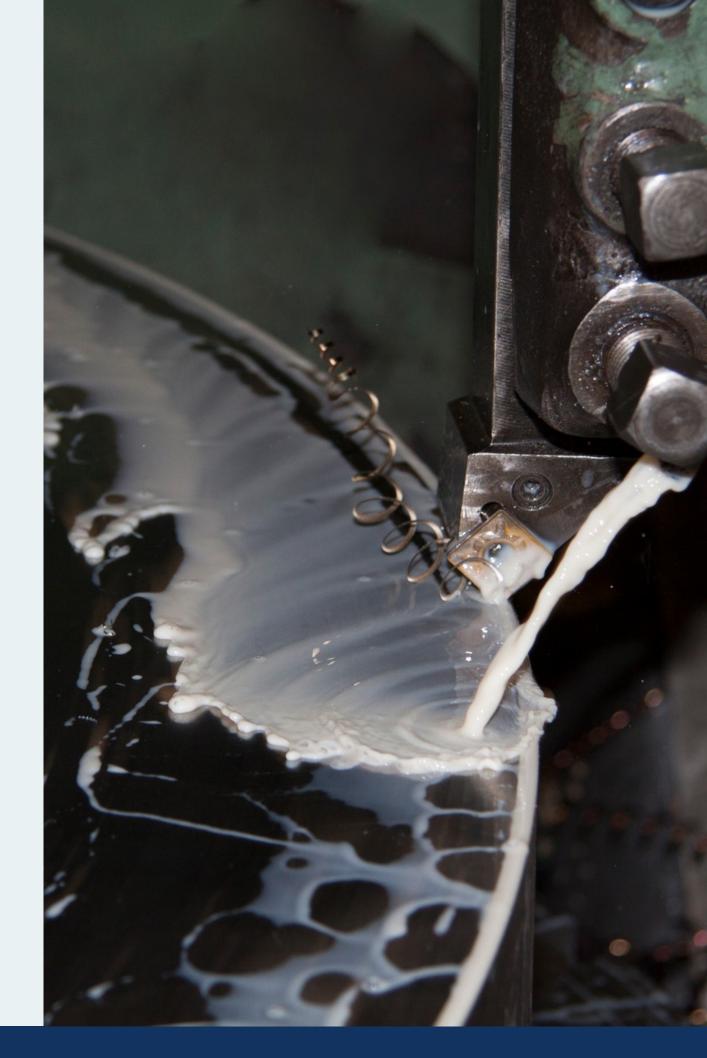
METAL MACHINING

ASC capabilities from turning to boring to drilling in rough machining and finish machining is up to 3,800 mm outer diameter (O.D) and up to 16MT.

We can bore non-ferrous centrifugal castings up to 1500 mm.

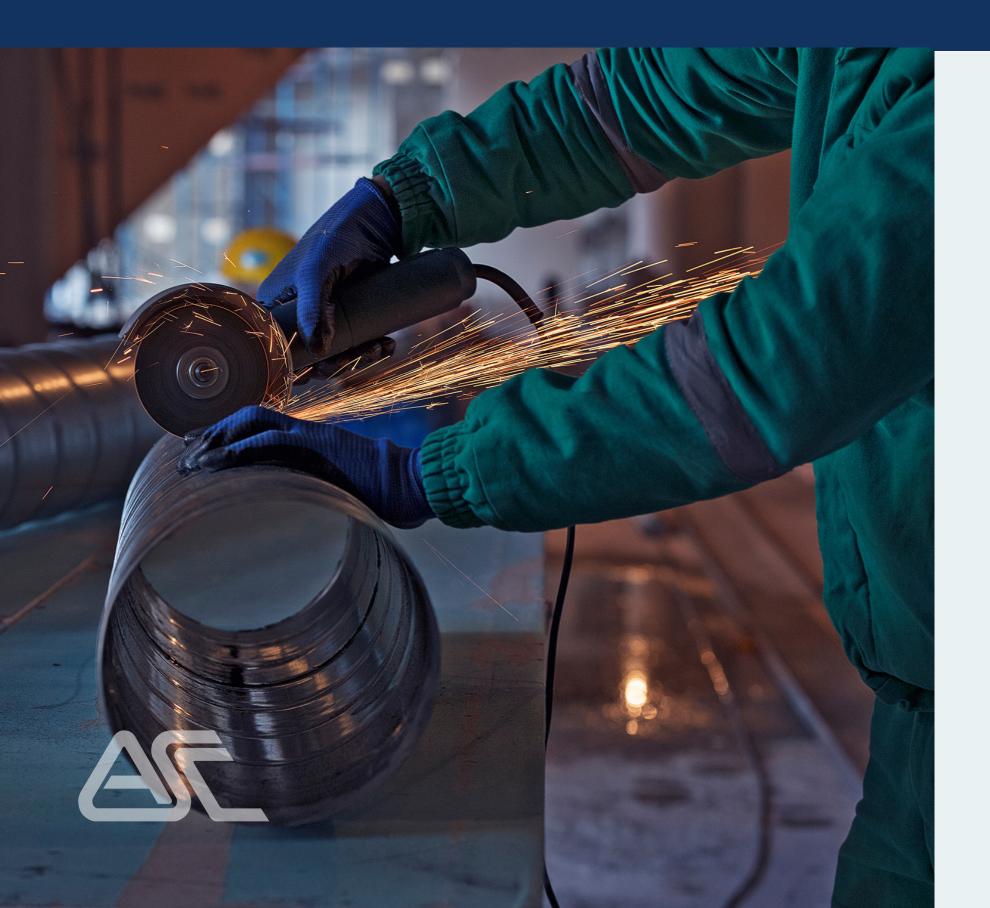
Machining Capabilities:

- Boring
- Drilling
- Honing
- Milling
- Grooving
- Polishing
- Shrink Fitting
- Slitting
- Slotting
- Tapping
- Threading
- Turning



METAL FABRICATION

Integrated services ASC offers from Metal Casting, Machining and fabrication enables us to specialize in high-volume fabrications.



Fabrication capabilities

- Arc Welding
- Mig Welding
- Braising
- Sheet Metal Cutting
- Sheet Metal Bending
- Profile Cutting
- Sheet Rolling

Metal Testing & Analysis

To ensure the safety and satisfaction of our customers and end users in highly demanding markets such as mining and mineral extraction, cement processing and sugar processing we manufacture products with the highest quality standards.

Mechanical Testing

- Tensile testing (ambient and elevated temperatures)
- Impact testing / Charpy
- Brinell & Rockwell hardness testing
- Stress rupture

Chemical Analysis

- Carbon sulfur
 determinator
- Chemical analysis using optical emission spectrometers
- Phase examination

Dimensional Testing

- Visual inspection
- Standard metrology with standards traceable to NIST
- Coordinatemeasurement machine (CMM)

Non-Destructive Testing

- Fluorescent penetrant inspection (FPI) / liquid penetrant inspection (LPI)
- Magnetic particle inspection
- Positive material identification
- Ultrasonic test
- Pressure test

INDUSTRIES SERVED

Regular industry specific products that we have produced at Alloy Steel Castings Itd.

Mining and Minerals

- Split Blocks
- Fasteners
- Liner Wear Plates / Thrust Plates / Jaw Plates
- Hammers
- Door Liners / Hopper Liners/ Bowl Liners
- Steam Tubes
- Grinding Media Balls
- Jaw, Cone, Impact, Gyratory Crusher Parts

- Material Conveyor Component Spares
- Burner Tips
- Bushings
- Cooler Grates
- Grate Bars
- Iron Ore Feeder Rolls
- Kiln Nose Rings



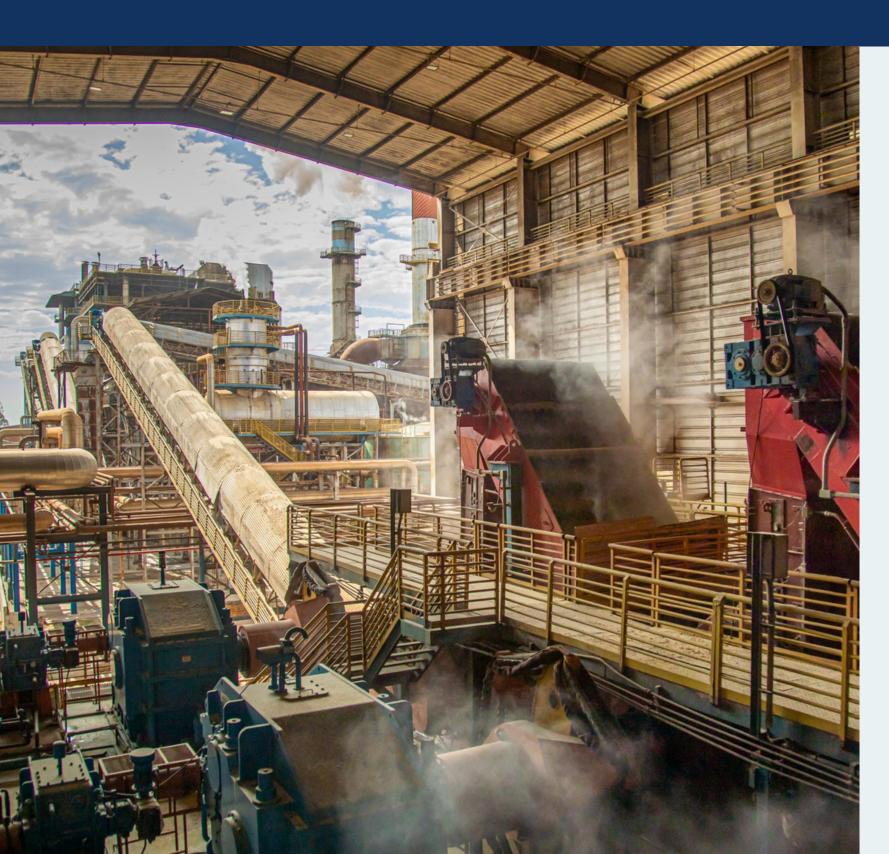
Cement Processing

- Split Blocks
- Fasteners
- Liner Wear Plates / Thrust Plates / Jaw Plates
- Hammers
- Door Liners / Hopper Liners/ Bowl Liners
- Steam Tubes

- Material Conveyor Component Spares
- Burner Tips
- Bushings
- Cooler Grates
- Grate Bars
- Iron Ore Feeder Rolls

- Grinding Media Balls
- Jaw, Cone, Impact, Gyratory Crusher Parts

• Kiln Nose Rings



Sugar Processing

- Trash plates / Scrapper plates
- Mill Pinions/ Mill Side Caps
- Crystallizer Worm Wheel and Worm Shafts
- Cane knives and Holders
- Crane wheels
- Mill Drive Bearing Housing with Liners
- Hubs, Hitches and Housings
- Bagasse Carrier Slates
- Bushing

Process Equipment

Component castings as per customer requirements:

- Shafts, Fasteners
- Blank Castings
- Bevel Gears, Pinion Gears, Crown Gears
- Helical Gears, Spiral Gears, Herringbone Gears
- Pump Impellers
- Valve Bodies
- Housings





Quarry & Construction

- Fixed Jaw Plates
- Swing Jaw Plates
- Toggle Plate
- Side Frame or Plates
- Hammers
- Blow Bars
- Impeller Bar

- Repulsion Plate
- Cone
- Mantle
- Bronze Gyratory Crusher Thrust Plates
- Manhole Covers

