

BRADKEN

MANUFACTURING FACILITIES



Atchison/St. Joseph – Single source supply: pattern, casting, machining and assembly



Large steel castings to 55,000 lbs. AOD capable



In house pattern construction, rigging and solidification modelling

Bradken – Atchison/St. Joseph

Known for their high quality production of steel castings in carbon, low alloy, armor, stainless, duplex and AOD melted steel; the Bradken – Atchison/St. Joseph facility has been manufacturing engineered steel castings for over 135 years. With a rich history of experience in the Industrial, Military, Locomotive Rail, Transit, Mining & Construction markets, Bradken – Atchison/St. Joseph possesses the experience and infrastructure to support the specification intensive markets.

Manufacturing Capabilities (Overview)

- Each Bradken business unit makes use of continuous improvement programs and maintains specialists at the business unit and corporate levels to drive improvements and efficiencies
- ISO 9001 certified world-class foundry
- Weight range: 200 to 55,000 lbs
- Patterns, castings, machining and sub-assembly
- First Article castings are supplied quickly using agile manufacturing technology, state-of-the-art CNC pattern making, solidification simulation, CNC machining and dynamic modelling
- Assisted engineering for fabrication to casting conversions and improved castability

Key Differentiators:

- AOD Capable: A full range of high, low alloy & stainless steel castings
- Jobbing & semi-production capable
- In house testing and X-Ray capabilities
- Solidification Modelling/Assisted Engineering
- Finish machining, testing & assembly

BRADKEN

MANUFACTURING FACILITIES



Locomotive undercarriages are a specialty of Bradken - Atchison/St. Joseph



Finish machining and value added painting/assembly at our St. Joseph integrated facility



Complex large industrial valves in specialty steel

Facility Information

In Business
Since 1872

Capabilities
Casting
Machine Shop
Fabrication
Assembly

Metals Cast
Cast Steels
Carbon Steels
500 to 55,000 lbs.
Corrosion Resistant Steels
500 to 25,000 lbs.

Low Alloy Steels
500 to 25,000 lbs.

Molding Process
Air-Set/Nobake
500 to 55,000 lbs.

Flask Sizes
Minimum 42" X 42"
Maximum 168" X 240"

Specialized Casting
Fabrication Capabilities
AOD Refining
Magmasoft
Solidification
Modelling

In House Heat Treating
Furnaces Multiple

Furnace Sizes
Minimum
125" X 194" X 96"
Maximum
180" X 312" X 96"

Type of Heat Treatment
Normalization

Stress Relieving
Quench and Temper
Weld Preheat
(5 additional furnaces)
Painting capabilities

Quality and Process Controls
Hardness
Dimensional Layout
Microstructure
Radiography
Charpy Impact Testing
Magnetic Particle Examination
Liquid Penetrant Examination
Chemical Analysis
Sand Control
Ultrasonic Examination
Mechanical Testing

Certified Welding Standards
ASME section IX

Maximum Lifting Capacity
65 Ton crane capacity

Turning - Vertical
CNC
Minimum OD 24"
Maximum OD 168"
Maximum Length 83"

Manual
Minimum OD 24"
Maximum OD 132"
Maximum Length 69"

Turning - Horizontal
CNC
Minimum OD 8"
Maximum OD 29"
Maximum Length 29"

Milling - Vertical
CNC
Maximum Length 265"
Maximum Width 118"
Maximum Height 65"
Maximum Part Weight
70,000 lbs.

Milling - Horizontal
CNC
Maximum Length 244"
Maximum Width 100"
Maximum Height 140"

Maximum Part Weight
70,000 lbs.

Manual
Maximum Length 240"
Maximum Width 100"
Maximum Height 144"
Maximum Part Weight
70,000 lbs.

Quality Assurance Program
ISO 9001
Other AAR, Military and Nuclear

For more information contact Bradken at EngProd@bradken.com

Bradken - Atchison/St. Joseph
400 S. 4th Street PO Box 188
Atchison, KS 66002
T +1 913 367 2121

Bradken
12200 N.W. Ambassador Drive
Suite 647, Kansas City, MO 64163
T +1 816 270 0700