### Shredder & Yard

**SHREDDER FUNCTIONS**
- Shreds material at 160 tons per hour
- Separates ferrous and non-ferrous (copper, brass, aluminum and fluff)
- Produces 16,000 tons per month

**YARD OPERATIONS**
- Provides up to 2,000 tons per day
- Handles 900,000 tons per year of incoming scrap from trucks
- Supports baghouse operations

### Furnace (Eaf)

**CHARGING SEQUENCE**
- Infeed Conveyor
- Feed rolls
- Shredder "mill"
- Barge flow

**MELTING PROCESS**
- Scrap steel is melted in 4 ways:
  1. Gas energy
  2. "Hot heel" practice
  3. Electrical energy
  4. Chemical energy

### Ladle Metallurgical Station (Lms)

**LMS FUNCTIONS**
- Adds alloys to refine heats according to chemical specifications
- Establishes consistent temperature throughout the ladle
- "Stages" ladles between furnace and caster to aid in continuous billet flow

### Rolling Mill

**Bar gauge**
- Cameras and strobe lights measure finished bars as they go through the mill, allowing operations to monitor rolled bar.

**"Flying" shear**
- The flying shear cuts bars at speeds up to 3,000 feet per minute.

### Continuous Caster

**Ladle**
- Spray chamber
- Billet cutting torches
- Billet bay storage

**CASTER**
- Forms liquid steel into the melt shops finished product, billets
- Billets are square or rectangular solid steel from 4" square up to 6" x 10" and are torch cut to lengths from 30-45 ft.
- Billets are sent to the rolling mill or sold to customers who use them to forge products ranging from oil field equipment to hand tools

### Finishing & Transportation

**Cooling bed**
- The steel exits the mill onto a football field-sized cooling bed.
- The cooling bed holds bars until they cool sufficiently for shearing.
- The cold backshear blades cut downwards.

**Backshear & shipping**
- The backshear cuts bars to customer lengths.

**FINISHING**
- Shears and bends rebar for use in commercial and highway construction projects.
- Straightens angles.
- Loads CMC trucks, customer trucks, connected carriers and railcars.

**TRANSPORTATION**
- Arranges shipments of all finished products.