Falk Professional Services Library

- **Reheat Furnaces**
  - Walking Beam Furnaces
  - Hearth Furnaces
  - Extractor Surveys
  - Color Mapping of inside hearth refractory elevations
  - Ramp survey

- **Roughing and Finishing Mills Operation**
  - Mill Post Liners – Backups, Bed Liners, Mae West
    - Mill Window Opening, Skew, Lean, Twist, Wear, Machining
  - Mill Shoes
  - Passline Elevations and Mill Centerline calculations and verification
  - Stretch Monitoring
  - Screw Downs / Worm Drives
  - Interstand Looper Roll position and alignment
  - Side Guides centerline
  - Roll Chock Impact Loading
  - Roll coolant spray headers installation and as-built
  - Sizing Press Rolls
  - Edger Rolls
  - Crop Shears
  - Leveling Systems

- **Table Roll surveys**
  - Delay / Transfer Table Rolls
  - Hot Run Out Table Rolls
  - Furnace Rolls
  - Passline Elevations, Lean, Skew and Wear – Color Graphing

- **Conveyor Systems**
  - Chain Conveyors
  - Walking Beam Conveyors
  - Scale Weighing Equipment

- **Quality Assurance and Quality Control - Sheet Inspection Equipment**
  - X-ray – C Frame Equipment elevation and alignment
  - Quality Defect Detection System Camera Passline Rolls and Equipment alignment
Plate Mill Operations – Falk Professional Services

- **Shape Roll – Alignment**
- **Roll Crown Calculations with Graphics**

- **Roll Shop**
  - Work Roll and Back Up Roll Chocks
  - Work Roll And Back Up Rolls
  - Roll Crown Calculation and Color Mapping Graphics
  - Roll Grinder Dynamic Operation alignment check

- **Overhead Crane System**
  - Rail Alignment Survey
  - Crane Bridge Square Check
  - Crane Bridge Beam Camber Check
  - Gearbox and Shaft Alignment Check
  - Building Column Plumb Measurement
  - Building Girder Beam Check
  - Building Structure Defect Scans

- **Mill Stand Main Drives**
  - Gearing
  - Gearboxes
  - Pinion Stands

- **Rotating Equipment**
  - Motors Shaft Alignment
  - Motor Base Survey - Rotor / Stator location verification
  - Generators
  - Pumps
  - Gearboxes

- **Horizontal and Vertical Control Establishment**
  - Passline Calculations and field verification
  - Centerline Calculations and field verification
  - Benchmark and Monument Control installation

- **3-D Volumetric**
  - Piping/Conduit/Ductwork As-built and Design
  - Structural Steel System Components
    - As-built and Design
    - Scan of Existing Conditions
    - Identify Maintenance and Repair Issues
• **Detailed Laser Scanner Work of Existing Conditions**
  o Equipment Removal
  o Equipment Installation
  o Equipment Clash Detection between component pieces
  o Large Crane Pick Placement and Movement
  o Operator Line of Sight Studies and Cube Maps Photos
  o Flume – New liner verification with clash detection

• **3rd Party Verification of Original Equipment Manufacturer and Rebuilt Equipment**