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 Table Rolls
  - Hot Run Out Table Rolls
  - Furnace Rolls
  - Passline Elevations, Lean, Skew and Wear – Color Graphing

- **Coiler Area**
  - Alignment of coiler pinch rolls / Pinch Roll Pockets
  - Mandrels

- **Conveyor Systems**
  - Chain Conveyors
  - Walking Beam Conveyors
  - Scale Weighing Equipment
  - Automatic Banding Equipment
  - Coil Marking equipment
• **Hot Sheet Mill Finishing and Shipping**
  - Side Trimming – Trimmer knives
  - Slitting
  - Passline and Centerline determination and verification
  - Tension Reel Alignment
  - Dynamic Survey of mandrel

• **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
  - Shape Roll – Alignment
  - Roll Crown Calculations with Graphics
  - Wrap Angle Calculations

• **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**
  - Equipment Removal
  - Equipment Installation
  - Equipment Clash Detection between component pieces
  - Large Crane Pick Placement and Movement
  - Operator Line of Sight Studies and Cube Maps Photos
  - Flume – New liner verification with clash detection

• **Dynamic Coiler Mandrel Survey**
• **3rd Party Verification of Original Equipment Manufacturer and Rebuilt Equipment**