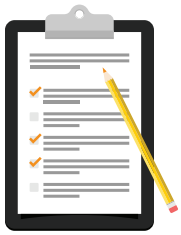
FDH INFRASTRUCTURE SERVICES
ENGINEERING INNOVATION

What Makes a Quality Tower Inspection?

EXPERIENCED TOWER INSPECTOR

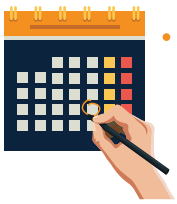
- 5+ years of active "on-the-tower" experience
- Physical agility to ascend/descend 2,000' towers
- Training, certifications, and credentials to climb[1]



CUSTOMER-CENTRIC REPORTING

- Tower inspection reports are engineering documents; must be clear, concise, complete
- Inspection reports must match the needs and expectations of tower owner
- Insurance companies/local jurisdictions can specify additional inspection/reporting requirements to protect tower assets, ensure public safety

REGULAR INSPECTION CYCLE



- Guyed Towers – every 3 years
  Self-Support & Monopole Towers – every 5 years[2]
- Benefits of regular inspections:
  - Reduced maintenance costs – by identifying/addressing problems early
  - Greater operational efficiency – by extending the lifespan of aging structures
  - Minimized risk – by preventive measures that avert tower failures and potential injuries/deaths to tower workers and general public

EXTREME SAFETY FOCUS

- Always strive for quality service in a timely manner, but never sacrifice safety
- Conduct thorough job hazard assessments before the climb; wear required personal protective equipment (PPE); possess credentials to climb, prevent falls, perform rescues
- Comply with OSHA requirements and related safety standards

Types of Tower Inspections

- **General Inspection:** high-level visual examination of structure to identify apparent degradations or damage
- **Condition Assessment:** more in-depth evaluation of structure and its components, including appurtenances (equipment); requires specialized training
- **Mappings (2 primary types):**
  - Tower Mapping – locates all appurtenances on tower
  - Structural Mapping – documents size and shape of structural members, gusset plate dimensions, tower geometry, and other critical components for structural analyses

Basic Components of a Tower Inspection

- Foundations and footings
- Structural condition: note deformities, cuts, warping, bending, corrosion
- Appurtenance attachment and integrity
- Safety components
- Structural verticality
- Connections, tight and secure
- Federal Aviation Administration (FAA) obstruction lighting, marking
- Grounding protection

Did You Know?

- FDH employees serve on the committees that develop the structural steel standards for the tower industry and play a leading role in tower workforce development and the promotion of safety best practices.
- FDH has been a NATE STAR Initiative member since the program's inception.[3]
- FDH innovations include the use of drones and custom software to capture and transfer tower data from the field to the inspection report.
- The company's cross-training of broadcast and telecommunications tower technicians provides exceptional breadth and depth of experience.

[1] Based on industry standards and regulations, as established by the Occupational Safety and Health Administration (OSHA), National Wireless Safety Alliance (NWSA), and others.

[2] Per requirements of the American National Standards Institute (ANSI), A10.48, Criteria for Safety Practices with the Construction, Demolition, Modification and Maintenance of Communications Structures; and Telecommunications Industry Association (TIA) 222 Revision H, Structural Standard for Antenna Supporting Structures, Antennas and Small Wind Turbine Support Structures.

[3] Participation in the National Association of Tower Erectors' NATE STAR Initiative is a strong indication of a company's safety commitment.

NATE STAR INITIATIVE
Safety • Training • Accountability • Reliability

Learn More About FDH's Tower Inspection Services

www.FDH-IS.com or email info@fdh-is.com