

Objectives

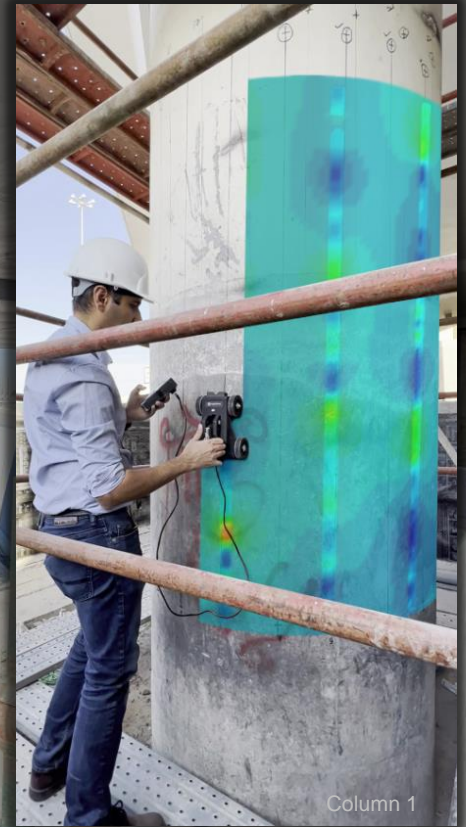
- Used InspectTerra's iCamm non-destructive testing (NDT) tool to evaluate and map corrosion of steel reinforcement in concrete columns
- Scanned the vertical reinforcement in a total of eight highway overpass support columns (lower sections only)

Column Properties

- Diameter: 132 cm
- Reinforcement:
 - Vertical: 22 no. 28 rebars distributed circumferentially
 - Horizontal: Spiral no. 10 rebar @ 6 cm pitch
 - Cover depth: 5 cm

Highlights

- Inspected the eight columns in approximately 4 hours
- **Quantified** the degree of corrosion (i.e., cross-sectional loss of steel reinforcement) in each column
- Excellent correlation of iCamm results with visual observations of the concrete condition (e.g., cracking and spalling)



Scanning the vertical reinforcement using the iCamm inspection tool

Photo of Column 5 with spalled concrete



Example iCamm Results: Column 5

Contour plot of reinforcement cross-section loss

