



INDUSTRIAL ACCESS



Classes of Chimney Inspections (Chimney & Stack)

It is recommended that a baseline Class II inspection be performed before an inspection program is implemented. A comprehensive inspection program can help ensure long-term structural integrity, minimize maintenance expenditure, and eliminate unplanned outages, resulting in significant cost savings. The scope and frequency of an inspection program will vary with a number of factors, such as age, outage schedule, initial operating conditions, changes in operating conditions, visible degradation, and the importance of the stack. Suggested intervals recommended in this packet are for guidance only and may need to be substantially reduced, depending on site conditions.

CLASS I

These inspections are routine inspections that should be performed at regular intervals of between 6 and 24 months. A Class I inspection is primarily a visual inspection. The exterior of the chimney should be visually inspected using binoculars or spotter scope from the ground or any vantage points such as building roofs catwalks and adjacent chimney ladders and platforms. Internal inspections can be completed using a camera.

CLASS II

Class II inspection should be performed at regular intervals in the range of 2 to 5 years and alternated with Class I inspections. A Class II inspection will be performed with the chimney off-line and will include all the work performed for the Class I inspection, plus a full-height interior inspection. Depending on the chimney condition and type, a Class II inspection may also include the following:

- Full or partial thickness core samples of concrete, brick or FRP for laboratory assessment of acid attack, material degradation, remaining strength and corrosion.
- Nondestructive assessment of thickness and weld condition on steel chimneys, flue and FRP Liners.
- Installing crack monitoring equipment on concrete or brick chimneys.
- Full height inspection of chimney exterior, particularly to provide direct access to normally inaccessible portions of the chimney, using multiple drops.

CLASS III

A Class III inspection is not routine. It is performed only when significant degradation of any structural component has occurred, as indicated by the result of a Class I or II inspections, or when the chimney has experienced an unusual event such as a natural disaster or explosion.