

Confined Space Inspection and Cleaning at a Thermal Power Plant in Solapur, Maharashtra

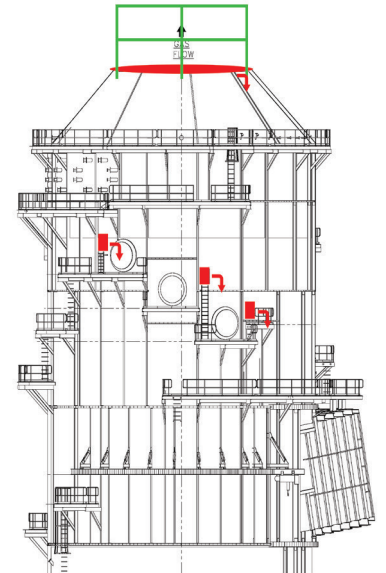
Date of Inspection: October, 2022

Specialty Products and Services (SPS) conducted an extensive inspection followed by a cleanup at a Thermal Power Plant located in the Solapur district of Maharashtra. The purpose of the inspection was to assess the damage caused by a fire outbreak in the absorber area which is connected to a chimney and develop a strategy for fire debris removal.

Inspection Findings

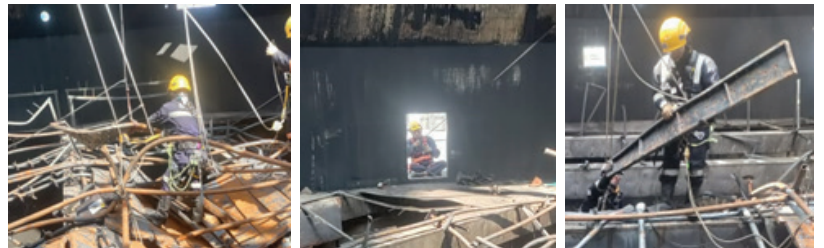
Upon thorough examination, the SPS team observed significant damage to the absorber (used for flue gas desulfurisation) connected to the chimney due to the fire outbreak. The intense heat caused cables, structural elements, and pipes to burn, leading to their entanglement within the absorber. Consequently, a substantial amount of debris had accumulated throughout the affected area. The absorber had a maximum diameter of 18.6m and a height of 37.9m.

Unfortunately, there was no available rigging point for rope access technicians to enter the structure. To address this issue, the team fabricated and erected a structure above the absorber (marked in green in the image). This approach allowed for the necessary approach to assess the structure's strength and ensure a safe working condition to inspect the scope of debris removal.



Solution Implementation

Following the inspection findings, the SPS team evolved a cleaning process using Rope Access techniques which proved to be the most effective, efficient and safe method for working in the confined and hard to access area.



(Actual pictures from the site)

The plan involved entering the absorber from the top and using overhead mounted pulleys to remove the initial debris layers, it became feasible thereafter to remove the rest of the debris from side access doors (marked in red in the image). A team of 15 skilled technicians with specialised equipment undertook the job of debris removal from the damaged section of the chimney. The cleanup, which required complex workflows, was completed within 10 days.

Recognition by the Customer

'We express our appreciation for the exceptional performance demonstrated by the SPS team during the repair process. We acknowledge the team's competence and commitment to delivering superior results.'