ASGCO® Integrates Point Cloud Scanning Technology Into ASGCO® Conveyor Safety Product Installation at A Mid-West Coal Fired Power Plant.

Industry: Coal Fired Power Plant

Application: (3) Coal Handling Conveyors

Product: ASGCO® Point Cloud Scanning Services, ASGCO® Safe-Guard® Return Roller Guards, Return Roller Cages, and Flat Guard Panels.

Objective: Provide plant workers safety in the work place by the means of installing conveyor safe guard equipment. Although the plant does not fall under either MSHA or OSHA requirements, it strives for “best practice” that meets both regulations and ensures plant safety.

Challenge:
Due to fire prevention in coal handling facilities, the plant required a turn-key installation that did not require a “burn permit”, thus all safe guarding panel railing and hardware had to be bolted onto existing conveyor structures and bolt hole patterns. The project required a very strict pre-installation measurement tolerance, that provided precise, accurate coordinates. This need for accuracy was extremely important in the prefabricating of the safe guarding fastening system onto the existing conveyor structures (such as existing holes, detouring around piping conduit and emergency stops). The plant had very limited down time and called for quick and efficient installation turnaround time.

ASGCO® Point Cloud Scan

Safe-Guard® Flat Guard Installed on conveyor.

Recommendations:
ASGCO®’s services provided an onsite Point Cloud Scanning survey (two people @ 8 hours) for all (3) conveyors that required safe-guarding equipment. The ASGCO® Point Cloud scanning survey provided “as built” 3D imagery that enabled ASGCO® engineering to design and fabricate “bolt-up” safe-guard railings with precise accuracy, so that no onsite welding or cutting would be required. ASGCO®’s Safe-Guard® Modular Conveyor Flat Guard panels with “drop pin and wedge” design, would benefit in quick conveyor component access for plant personnel in preventive maintenance (PM) and future conveyor component installation works, while preventing workers from unauthorized access and away from moving parts and equipment.

Results:
ASGCO®’s installation crew of four (4) people, was able to install 690’ of guarding in three (3) days (12 hour shifts each day). No welding, cutting or grinding was required, due to the accuracy attained from the infield ASGCO® Point Cloud scanning 3D imagery. All components bolted-up without a hitch. The plant is now eager to proceed on four (4) more conveyors that need safe-guarding.