



SHREDDER AREA IMPROVEMENT PROJECT

ALUMINUM RECYCLING FACILITY – MIDWEST USA

TOTAL INSTALLED COST \$7,000,000

PENTA provided detailed design and engineering services for a Shredder Area Improvement project at a major UBC recycling facility. This project focused on the installation of a Bale Breaker, Air Knife, Magnetic Separator, and required conveying and support equipment to eliminate bottlenecks and limitations in the front end of an existing scrap aluminum recycling process. Prior to this work, PENTA performed a Phase I Study to develop a project scope of work, total installed cost estimate and project schedule. This Phase I Study served as the basis for the actual project.

Our engineering scope of services included mechanical, electrical, controls (including overall controls integration), civil and structural design related to the process and associated utilities and facility.

To support the process equipment requirements, new Electrical and Hydraulic Rooms were added. Also, modifications to the existing building, equipment foundations and structures were necessary. A new pre-engineered building was installed to house the bulk of the new equipment.



In addition to engineering, PENTA also provided technical and purchasing support to develop technical specifications, submit requests for quotes, and to evaluate and recommend suppliers for all the equipment, as well as, for prime and specialty construction contracts.

PENTA also provided on site construction contract administration, responsible for the complete project installation, and start-up assistance. PENTA took the lead in permitting with both local and state authorities, and followed up to ensure the installation met the requirements of the authorities.