

## Commercial Property Insurance Compliance

**Problem:** An insurance carrier for a local titanium foundry performed an onsite audit at the facility and made several recommendations to reduce risks to equipment which may occur from fire or other natural hazards. One of those findings was to protect a large press, which was critical to production, from a fire hazard. In the event of fire, there was the potential for burning oil from the hydraulic room to get under the press through the press basement and critically damage the press.

**Solution:** Project Technologies and Services provided the customer with a design solution which would contain the oil and sprinkler water to the hydraulic room, preventing it from getting outside of the room and to the press. The design met the insurance carrier's design requirements, allowing the manufacturer to implement the solution.



*Press hydraulic room*

PTS first obtained the FM Global report and associated facility drawings. An onsite visit was conducted to review the area, identify undocumented features, and begin formulating a solution.

During the visit, several site conditions were discovered which presented challenges. First, there was a large trench which carried the hydraulics & pneumatic piping from the hydraulic room to the press basement, as well as conduits carrying control wiring which needed to be sealed. Additionally, a dike needed to be designed to fit the complex configuration of the room around interior walls, floor plates leading to the basement, as well as interior and exterior doors.

PTS worked closely with FM Global to clarify their specific requirements, then developed a design. The design included a 6-inch-high concrete dike, which tied into different existing building structures at floor level. The dike also tied into the trench dike wall. Specific design considerations were needed for the piping and conduits, which ran through the trench wall to account for vibrations, oil contamination, and fire event temperatures.

The customer was given the FM Global approved set of drawings and implemented the solution.