

## PROJECT PROFILE: **MANUFACTURING EQUIPMENT**

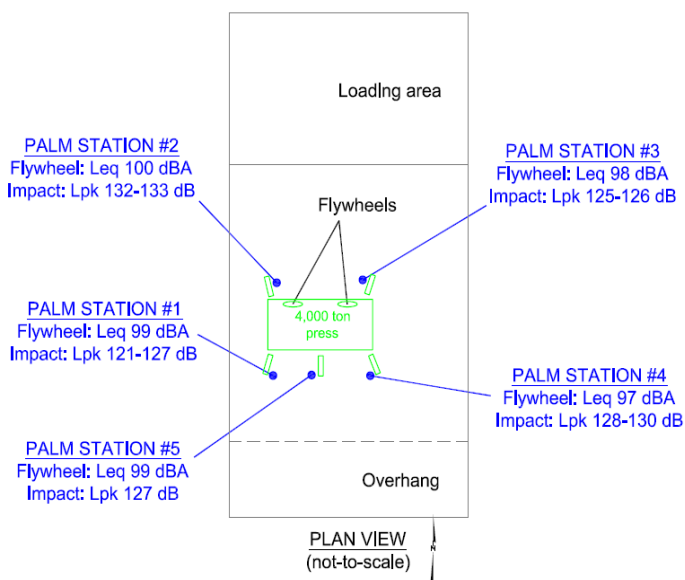


### **PROJECT:** BOBCAT MANUFACTURING PLANT Gwinner, North Dakota

Bobcat was concerned with noise level exposure of the 4,000-ton press operators. Big Sky Acoustics was hired to measure and analyze the noise levels and evaluate noise control options.

### **BSA's SERVICES AND SOLUTIONS:**

- ◆ Visited the plant, completed noise level measurements of the press operation, and made observations of the room finishes.
- ◆ Determined that the primary continuous noise sources were the flywheels located on the top of the press.
- ◆ Based on the extreme noise levels of the flywheels, provided Bobcat with a list of noise control material options, including acoustical ceiling treatment and an enclosure for the flywheels.
- ◆ Based on BSA's initial analysis, Bobcat worked with mechanical engineers and their architect to design an acoustical flywheel enclosure.
- ◆ BSA evaluated the engineering and architectural drawings and the product submittals, and predicted the noise reduction possible based on the enclosure design.



**BSA determined that by installing the enclosure the flywheel noise could be reduced to 81 to 84 dBA at the palm stations, which was half as loud at the operator positions than the before-enclosure conditions.**