

# SUPPLIERS' TIPS

What are some maintenance steps for keeping my weighing and batching system operating efficiently?

There are a few important maintenance steps that you can take to ensure your weighing and batching system is working properly:

**1. Proper training.** The first and probably most important step to keeping your weighing and batching system running efficiently with regard to maintenance is ensuring that your maintenance technicians are adequately trained on how your weighing and batching equipment operates. They should eventually know this equipment inside and out, backwards and forwards; enabling them to notice right away when a machine is malfunctioning or in need of attention.

When purchasing new weighing and batching equipment, best practice is to bring in a technician from the equipment manufacturer to train your operations and maintenance staff on how to use and maintain the unit. It's also good practice to keep operation and service manuals readily available as staff members are becoming familiar with a new piece of equipment.

**2. Regular inspections.** Maintenance technicians should perform regular inspections of the weighing and batching equipment to monitor how well the unit is performing and to keep tabs on items that need to be replaced periodically, such as gaskets. For example, a bin lid lock that isn't locking properly should be addressed to prevent issues that could affect the quality of the ingredients stored inside of the bins. Also, make sure that the scale has free movement. The scale linkages should be checked for excessive wear and any worn parts should be replaced. This is especially true of a scale hopper that might see quite a lot of shock during the loading process. Material buildup on the linkages can also affect the scale's ability to move freely and weigh accurately, so linkages should be cleaned when the scale is cleaned. If the material that builds up on the linkages is corrosive, then there is risk for premature failure of the scale linkage.

Consult the service manuals of your weighing and batching equipment to determine how often you need to perform inspections on your unit. Based on these inspections, a preventive maintenance plan can be created and carried out.

**3. Preventive maintenance.** Another key to efficiency is avoiding unwanted downtime due to equipment malfunction. It's crucial to perform preventive maintenance on your weighing and batching equipment, per the manufacturer's recommendation. This maintenance generally takes place every 6 months during a scheduled plant shutdown. Taking the time to properly inspect and maintain your weighing and batching system will ensure that your processing line runs efficiently and will cut down on unexpected and costly downtime due to equipment breakdown.

Jessica Stank, marketing director, APEC, 616-374-1000

I recommend the following steps to maintain weighing and batching efficiency:

1. Ensure that all load cells are undamaged and free of dirt and debris.

2. Calibrate load cells every 6 months through the HMI as outlined in the system's manual by adding, reading, and removing test weights.

3. Ensure that the equipment frame is free of dust and debris, and that pallets, crating, or other materials aren't leaning against the equipment. Also check for frayed wires, which can also cause faulty scale readings.

David Boger, vice president – global business development, Flexicon, 888-353-9426

Equipment suppliers are a valuable source of information about equipment and processes. In light of this, each month we ask suppliers a question of concern to our readers. Answers reflect the suppliers' general expertise and don't promote the suppliers' equipment. If you have a question you'd like suppliers to answer, send it to Kayla Carrigan, Associate Editor, *Powder and Bulk Engineering*, 1155 Northland Drive, St. Paul, MN 55120; fax 651-287-5650 (kcarrigan@cscpub.com).