Save money - monitor the little things

<u>Print</u>

(10) » Pyrometers » How to buy a screw - part III » **Save money - monitor the little things** Save money - monitor the little things Vol. 22 #1, May 1995

There are many areas that can influence profitability of your operation. In other articles we have reviewed many of the major cost savings approaches. However, there are many "little things" that can be changed to increase to the plus side of the bottom line. Following are a few suggestions. Hopefully these will be idea generators for you to take a fresh look at the little things.

Costly down time. Monitor and record in detail start up, changeover, and other down time. Many companies have no idea how costly these areas are to the bottom line profitably. The key word is record - don't rely on gut feel or a foreman's opinion.

Use timing devices. Companies that don't operate around the clock can save production time by installing timing devices that automatically turn extruder barrel heaters on hours before operators arrive. This gives the machine time to heat up, and operators don't have to stand around for a couple of hours wasting time.

Insulate barrels. Most extruder housings are insulated. But if yours isn't, you could be spending too much for heat. It is easy to install insulation and aluminum foil on the inside of the housing cover. This will also make working conditions more comfortable for operators.

Check and clean screws. Many converters run the same materials around the clock. Occasionally the finished product may exhibit dirt or foreign material, even if high-grade raw materials are being run. Small areas of contamination are costly, and they are not always caught by operators or inspectors (a quality issue). A troubleshooter from a major extruder manufacturer pointed out to me that "dead" or dirty material can accumulate around the keyed end of the screw. This dirt can come off on the product as it exits the die. Not only must the screw be cleaned, but also the area where the keyed end ties into the drive.

Check product length. My company made pipe in coils of 100 and 300 ft. Once in awhile we measured a competitor's product, and more than once we found coils that were short by 2 to 3 ft! This is one crooked way of saving money - but don't push your luck.

Control product quality. Often managers or "caretakers" of the extrusion lines are in the woods and can't see the trees as extra costs pile up. Dimensions of the product are critical and should be under control. Material costs are high. Quality control is a major area that must not be overlooked - a subject I won't expand on now. Your head would spin if you knew of the multitude of extruded products of inferior quality that are shipped to the distributor or user before their flaws are noticed!

Save material that leaks from the die clamp. Prevent spillage. Don't give material away by not maintaining tight tolerances on thickness, diameter, length, and so forth.

Maintenance issues. Burned material resulting from unchecked heater bands leads to uneven barrel temperature profiles. Consider a closed-loop water system for cooling. Establish a preventive maintenance program to eliminate costly downtime. Your extruder manufacturer will give you its recommended maintenance program.

- D. Biklen

See also:

- Defining screw performance
- Screw cleaning
- Screw maintenance
- Temperature control
- Water cooling extruders

Return to Consultants' Corner