New Wienstroth Rotary Furnace to Increase Capacity in Heat Treat

If you've walked through Heat Treat recently, chances are good you've noticed the new silver furnace near the main entrance to the Press Room, opposite the Aichelin. Imported from Germany in January of this year, the Wienstroth furnace will be used primarily in processing sensor springs, which will bring relief to the overcapacity SFE furnace, as neither the Aichelin nor the Holcroft furnace are capable of running sensor springs. Production startup is expected to take place in July.

The Wienstroth is a three-station rotary hearth furnace system for carbonitriding and neutral hardening clutch, disc, TCC and DMFW parts. Simply stated, it hardens the steel, resulting in a stronger part than we could achieve otherwise. The entire furnace system is comprised of several distinct parts, including the furnace, the quench filtration and cooling system and three hydraulic quench presses. An important difference between the Wienstroth furnace and our other furnaces is that it uses an oil quench as opposed to air or water/polymer mixture. Oil quenching greatly reduces the cycle time in the furnace, an advantage over air quenching, while still being gentler on the parts than water quenching. Reduced cycle time means higher output, resulting in increased capacity.

Some other distinguishing features on the Wienstroth furnace include: more efficient burners, more accurate table position, a solid table with sectioned plates, and most notably, the servo-electrical drive systems for the hearth table, the hook and the press loading arms. These enhancements are actually based on improvements to our existing furnaces, and lend greater reliability to the furnace. This was also the first time we designed the controls for a European furnace. LuK Buehl designed the controls when we imported the Aichelin furnace, but this time around our own S.E. department accepted the challenge.

This investment project has been a collaborative effort between LuK Inc. and LuK Buehl, involving the departments of Heat Treat, Special Equipment, Sales and Purchasing. Project leader Mark Bricker in Heat Treat and S.E. Manager Torsten Koehler wish to express their appreciation to everyone in Buehl and Wooster who helped accomplish this project.