

Thermal Bubble and Stake Stations

for Stolle Beer-Beverage EOE Conversion Systems

Stolle Sidney has developed two additional thermal tooling stations to accompany the thermal score station for our beer-beverage easy open end conversion systems. The thermal bubble and stake stations make adjustments for the rivet formation and staking operations much easier and faster to accomplish.

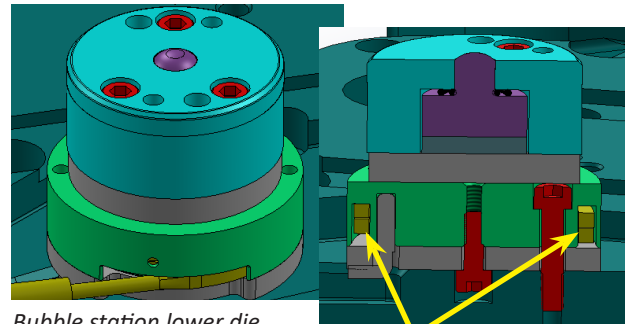
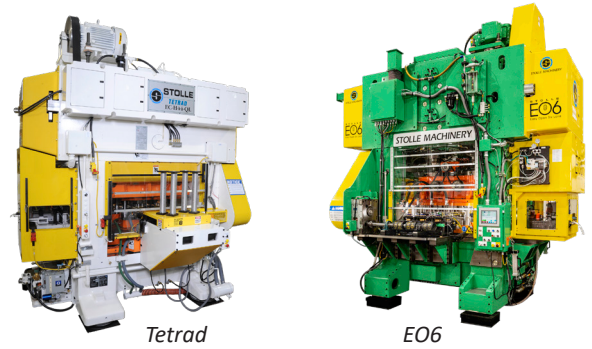
End progressions and finished ends from each lane are taken to the plant QC lab and measured to determine the height of the bubble and the stake rivet diameter. If adjustments are needed, the lower bubble station or upper stake station tools must be removed from the press, disassembled and thicker or thinner adjusting spacers are added to change the tooling height. After the tooling assemblies are re-installed, the conversion press is run and progression and finished ends are rechecked to verify that the bubble height and stake rivet diameter are in spec. This multi-step process must be repeated until the proper bubble height or rivet stake diameter is achieved, and then end production can be resumed.

The new thermal bubble and stake stations provide an adjustment method that is faster and easier, since the lower tooling heights can be adjusted from the HMI screen through heaters in the lower tooling spacers. The lower heaters can thermally change the height of the tooling in precision adjustments of 0.0001" up to 0.001" total. An RTD sensor (Resistance Temperature Detector) below the thermal adjustment spacer monitors the temperature of the spacer and provides feedback to the control system to ensure accurate and consistent adjustments, regardless of the ambient temperature around the conversion press.

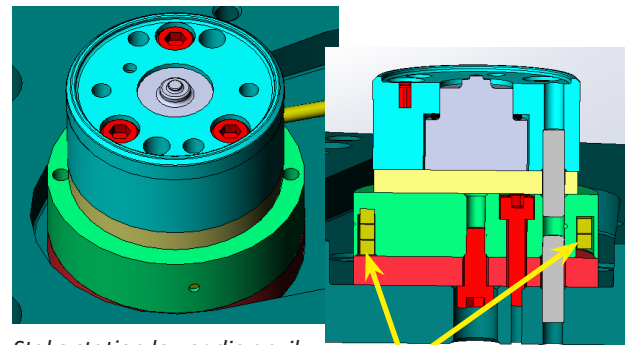
The benefits of installing thermal bubble and stake stations in your EOE conversion systems include the ability to adjust the tools *as production is being made*, much less system downtime and less intervention by plant personnel is required to make tooling adjustments to keep ends within specifications. One major can/end maker reported that in 2022 adding thermal tooling stations reduced their number of manual adjustments for setting product specification from 328 to 6 in the bubble station and from 433 to 2 in the stake station.

Thermal bubble and stake station lower tooling is available for Stolle Tetrad and EO6 beer-beverage end conversion systems (check with Stolle on availability for other conversion system designs), and can be installed along with control system updates by Stolle Global Field Service.

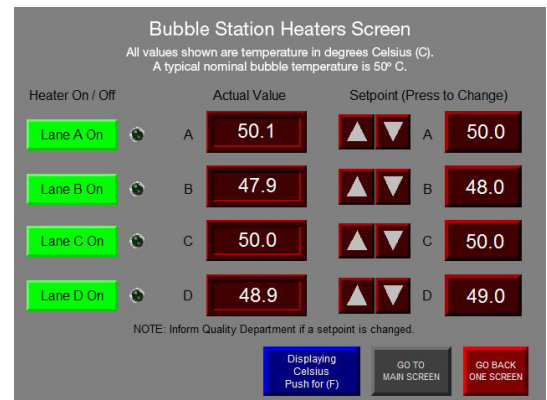
For more information about thermal bubble and stake stations for Stolle easy open end conversion systems, please contact Stolle Sidney: Jason Davidson at +937-497-5432 or jason.davidson@stollemachinery.com, or Craig McEldowney at +937-497-5406 or craig.mceldowney@stollemachinery.com.



Bubble station lower die (above) and cross-section showing heater in spacer (right)



Stake station lower die anvil (above) and cross-section showing heater in spacer (right)



Bubble station heaters screen on conversion system HMI control screen



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