

Retort control

Retorting destroys organisms which generate spoilage spores and harmful bacteria such as salmonella, botulism and thermophiles. Close control of the retort process is necessary to ensure optimum product quality. Overcooking canned food adversely affects both taste and appearance, while undercooking can result in spoilage.

To prevent overcooking and minimise retort production time, the product needs to be cooled as rapidly as possible.

During the retort process, there is a risk that some cans will distort if immediately exposed to atmospheric pressure after being cooked due to their size and internal pressure. To avoid this, these cans must be pressure cooled before the retort pressure is reduced back to atmospheric levels. This is achieved by circulating cool water through the retort while maintaining the cooking pressure in the retort.

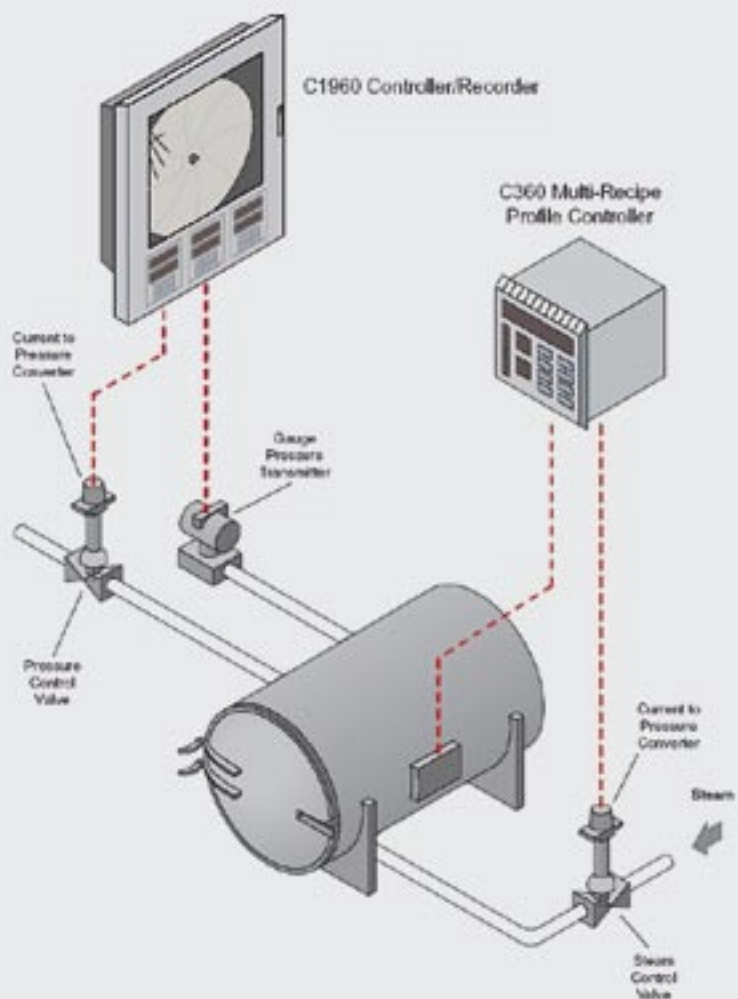
The retort control system can be divided into three key groups of components:

1. Temperature control system used to control product temperature during the cooking period
2. Cycle control components used to control on/off types of functions and timing portions of the cycle
3. Pressure control to maintain cook pressure during the pressure cool period

How can ABB help?

ABB supplies a range of instrumentation equipment suitable for retort control applications, including:

- Paper chart recorders
- Videographic data recorders
- Controllers
- Pressure transmitters
- I to P converters
- Valve positioners and actuators
- Temperature probes
- Temperature transmitters



Retort Control in the Food Industry
using the C1960

