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EFFICIENT ENERGY – HOLD BLANCHING PROCESS



- No nutrient losses
- No overcooking of product
- 100% cooked without losses

Visit our web-site: www.jarwo.nl



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Blanching method comparisons

Blanching - energy penetration to the center core of any product is a function of temperature and time. The shorter this duration in the heat medium, the better the retention of color, solids and nutrients as the leaching action is reduced accordingly.

Pure steam blanchers and hot water blanchers by necessity keep the product in the heat medium until such time as the desired center core temperature is achieved. This is not an efficient usage of steam, as it ignores the time factor in heat penetration, and overcooks the outer surface of the product.

The energy-hold system introduces only sufficient steam as is necessary to the surface of the product in the energy section. This surface heat is then allowed to equilibrate throughout the product in the hold section thus raising the center core temperature up to the blanch level desired without the addition of any more steam.

The advantages of the energy-hold system compared to hot water blanchers are as follows:

- Reduction in effluent
- Lower steam consumption
- Less cooling costs
- Better color retention
- No nutrient losses
- No overcooking of product
- No water consumption

The very short exposure to heat in the system leads to noticeable improvement in color, solids and nutrient retention, particularly when compared with hot water blanchers. The improvement in product appearance can only be beneficial to the industry, and eventually be reflected in consumer demand.

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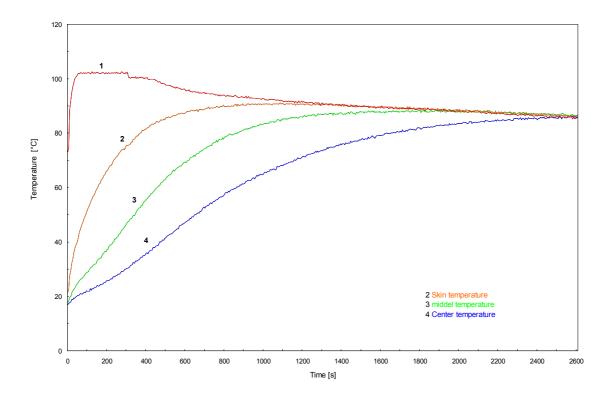


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Performance specifications

The following curve shows an example of the heat penetration in a potato.



It should be noted that the energy-hold blancher only exposes the product to steam for approximately 4 ½ minutes in the heat chamber followed by 35 minutes in the hold chamber to achieve a center core temperature of approximately 85°C.

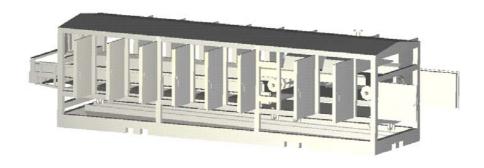
The same principle applies to kernel corn, vegetables and fruit and reflects in_substantial steam savings with a corresponding reduction in effluent.



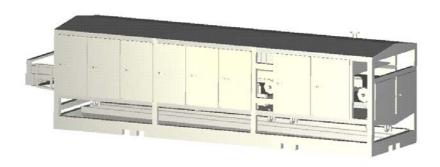
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Energy-Hold blancher characteristics



- Large access doors.
- Easy to clean and maintain.
- Comprehensive steam control system.
- Independent AC variable speed drives.
- Process time read out in seconds.
- Steam manifolds easily removed.
- Inner hoods pivot for cleaning.



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