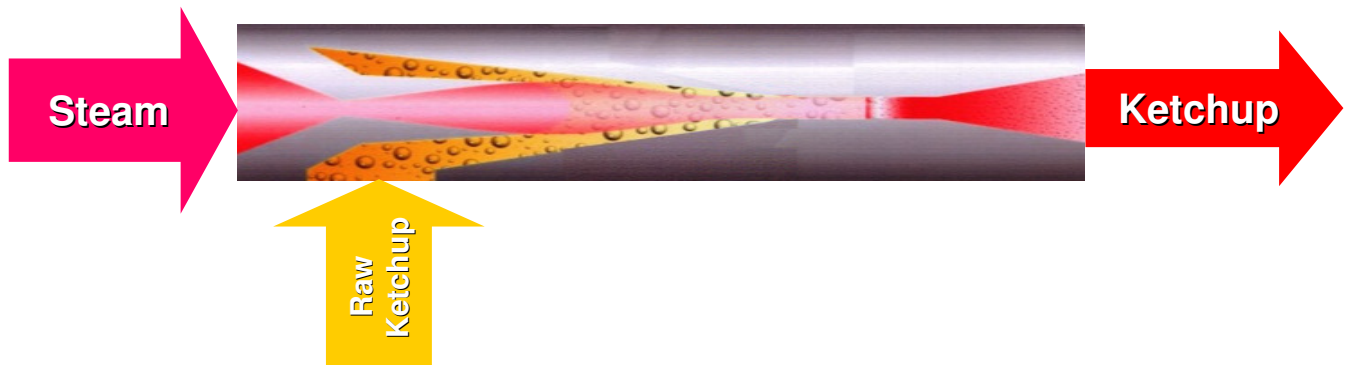


Ketchup In-Line Cooker

based on
MAKLAD's Direct-Steam / Supersonic Shockwave - Technology



The heart of this continuous Ketchup Cooker is the patented “**MAKLAD - Injector**”. It performs pasteurising and homogenising of the Ketchup-mixture by MAKLAD's Direct steam / supersonic shockwave technology in one process step. Next, the Ketchup moves through the dynamic tube-mixer to get a higher degree of homogenisation. After passing the heat-holding tube, the Ketchup is ready for packaging / bottling.

Technical Data:

- Capacity: 4000-8000 kg/h
- Temperature: up to 99 °C
- Steam Consumption:
 $m_{\text{Steam}}/m_{\text{Ketchup}}=1\%$ for every 5 °C-increase in temperature (Steam at 5bar and 150 °C)
- CIP-cleaning

Benefits:

- High flexibility-range for flow rate and temperature
- Plant space reduction up to 80%
- Energy savings up to 70%
- No vibrations
- Temperature control: ± 1 °C
- High Ketchup quality

