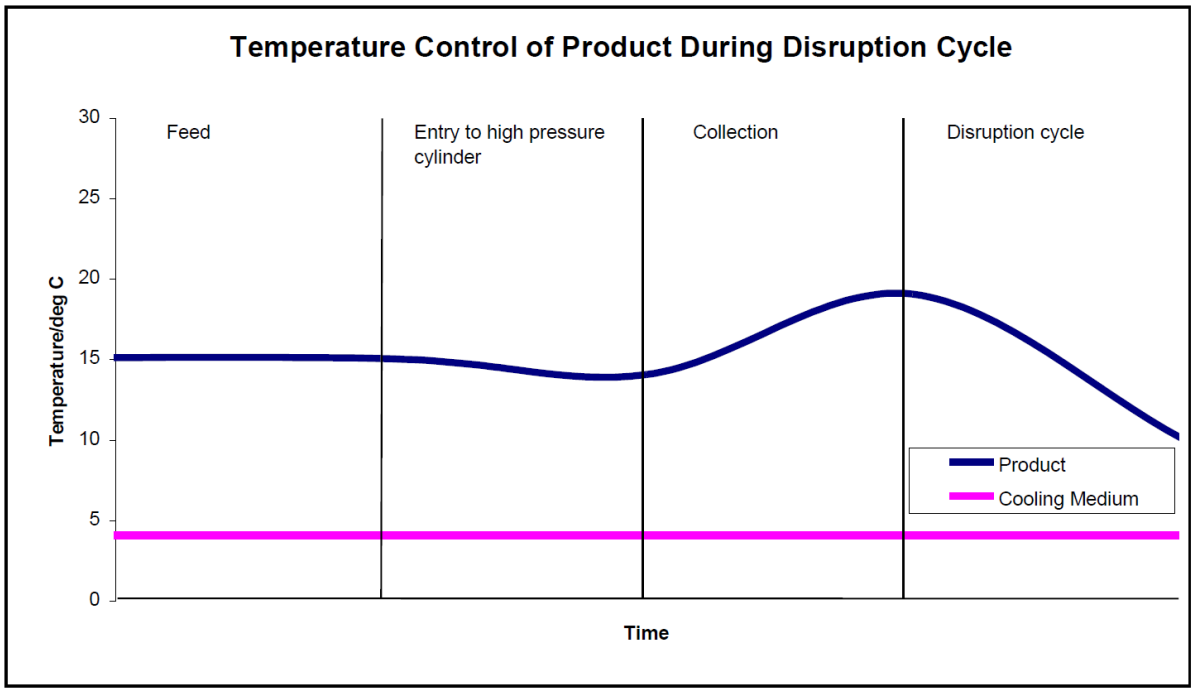
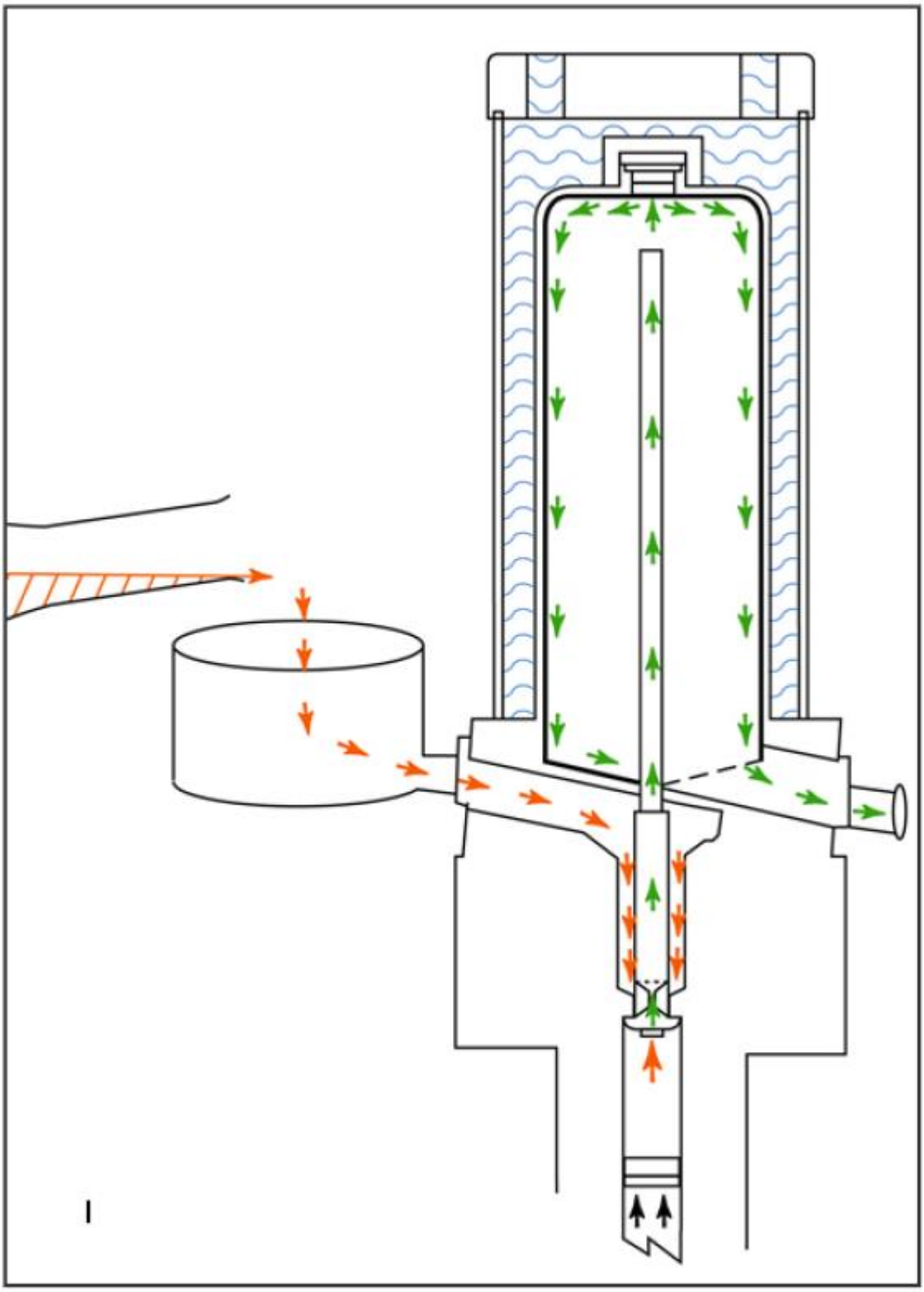
TEMPERATURE CONTROL OF PRODUCT

CONTINUOUS PROCESSING TS SERIES, B AND C SERIES

The disruption head and cooling arrangement are identical for all continuous processing cell disrupters. The cooling head is designed to accept pressures up to 100 psi (7 bar) and flows up to 20 L/min. It can be used with any suitable cooling fluid ranging from tap water to chilled water, glycol or even liquid nitrogen.
Some indication is given below of cooling rates achieved under various conditions. The actual cooling flow requirement depends upon disruption pressure, product flow rates, maximum permissible product temperature, cooling flow rates and the temperature differential that can be maintained between the product and the cooling medium. Provision is not normally made to control the cooling system automatically as most users are content to limit the maximum temperature.

BATCH QUANTITIES ONE SHOT MODEL AND ONE-SHOT HEAD ADAPTOR

In the One-Shot Model and the One Shot Head the energy is still retained in the jet of disrupted fluid and dissipated as heat into the cup. This component has sufficient heat capacity to control the temperature of the disrupted sample and can be pre-cooled and/or cooled in a refrigerator between repeated use if required. Two cups are provided with the One-Shot Model and One Shot Head and extra cups can be purchased so that in extreme cases it is possible to keep spare cups cooled to use alternately.