Tempering and Moulding Process Flow

1. After the chocolate has completed the refining process, it is stored in moulding storage tanks.
2. From the moulding storage tank, the product is pumped into an intermediate holding tank called a pre-temper tank.
3. Next, the product is pumped from the pre-temper tank through a tempering unit to start the tempering (crystallization) process.
4. The tempered product is then sent to the depositor, where it is moulded into the correct product shape (e.g., drops, chunks or bars) onto a steel belt or into a mould.
5. The product is then allowed to cool in the cooling tunnel for a set amount of time, before being sent to final packaging.
6. Any product that is not sent to the depositor continues to a decrystallizer to melt the crystals down and then flows back to the Pre-Temper Tank for reuse.

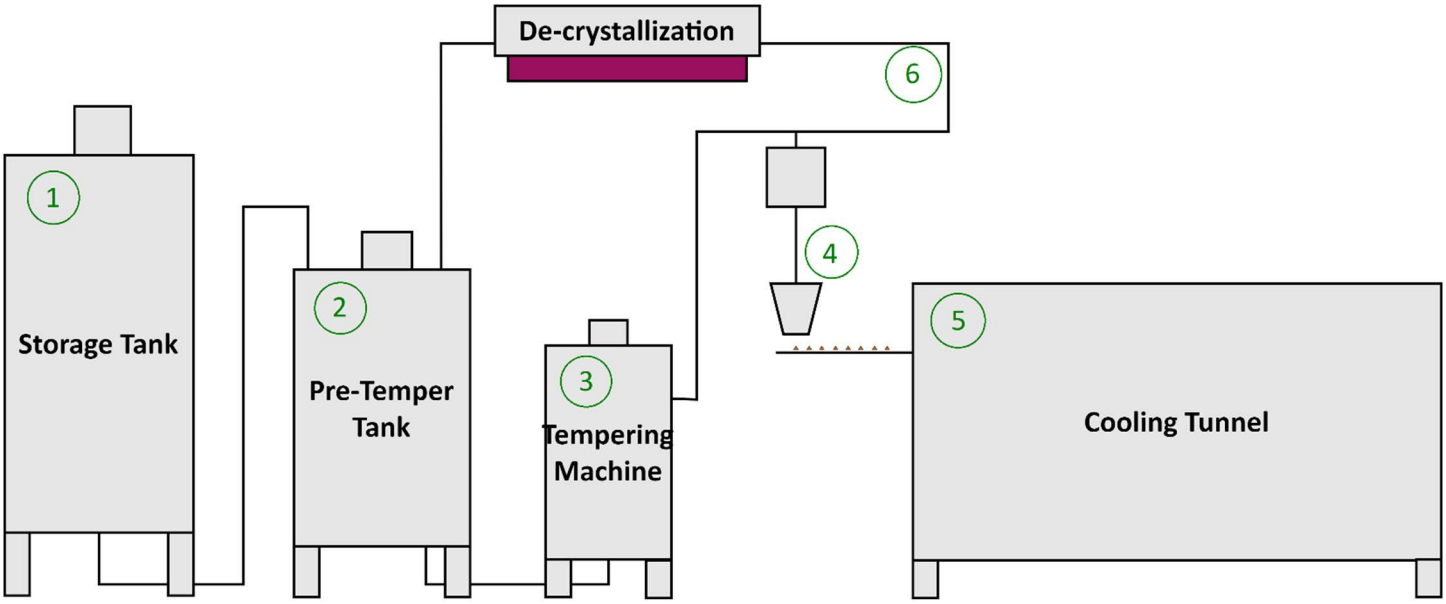

Figure 1. A diagram of the tempering and moulding process flow.

Moulding Lines

A moulding line is a grouping of all the parts of the tempering and moulding process: tempering machine, depositor, and cooling tunnel. Each facility has several moulding lines, and each line typically specializes in certain types of moulding. You will learn to operate each of these lines.

Feed Pump Speed

The feed pump sends the tempered chocolate from the tempering unit to the depositor. The pump speed should be fast enough to make sure that the hopper of the depositor stays full, with a minimum amount of chocolate being sent to the decrystallization unit.