

Figure 11.16 Belt crystallizer together with zone melting purifier. Reprinted by permission of Springer Nature from ref. 43, Copyright 2015.

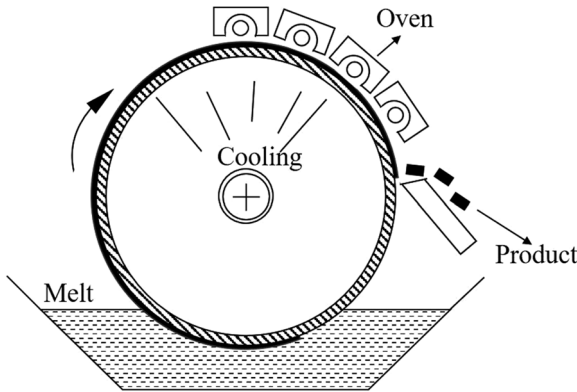


Figure 11.17 Drum crystallizer together with zone melting purifier. Reprinted by permission of Springer Nature from ref. 43, Copyright 2015.

bulk zone, which means that additional mixing techniques should be adopted for systems with small mass transfer coefficients, or slower moving speed of the oven or crystals should be used to guarantee the purity of product.

11.4.3 Other Crystallization Methods

11.4.3.1 *Pastille Crystallization Method*

The pastille crystallization method^{34,44} combines the suspension and solid layer melt crystallization methods. It includes a granulation process to make the melt droplets fully solidified on the subcooled belt and a purification process in countercurrent washing columns, as shown in Figure 11.18. In