

Instead of promoting primary nucleation with an external field, secondary nucleation can also be induced by mechanical means. Milling has been demonstrated to be effective as an additional actuator for continuous crystallization.¹⁴³ Yang *et al.*¹⁴⁴ used wet milling as an actuator to manipulate the CSD in automated control loops. They used an FBRM probe to measure the CLD *in situ* and to control the particle count at a desired set point *via* a feedback control loop (*i.e.*, according to the so-called direct-nucleation control approach¹⁴⁵). They investigated two schemes (see Figure 4.8). In the first scheme, the wet mill

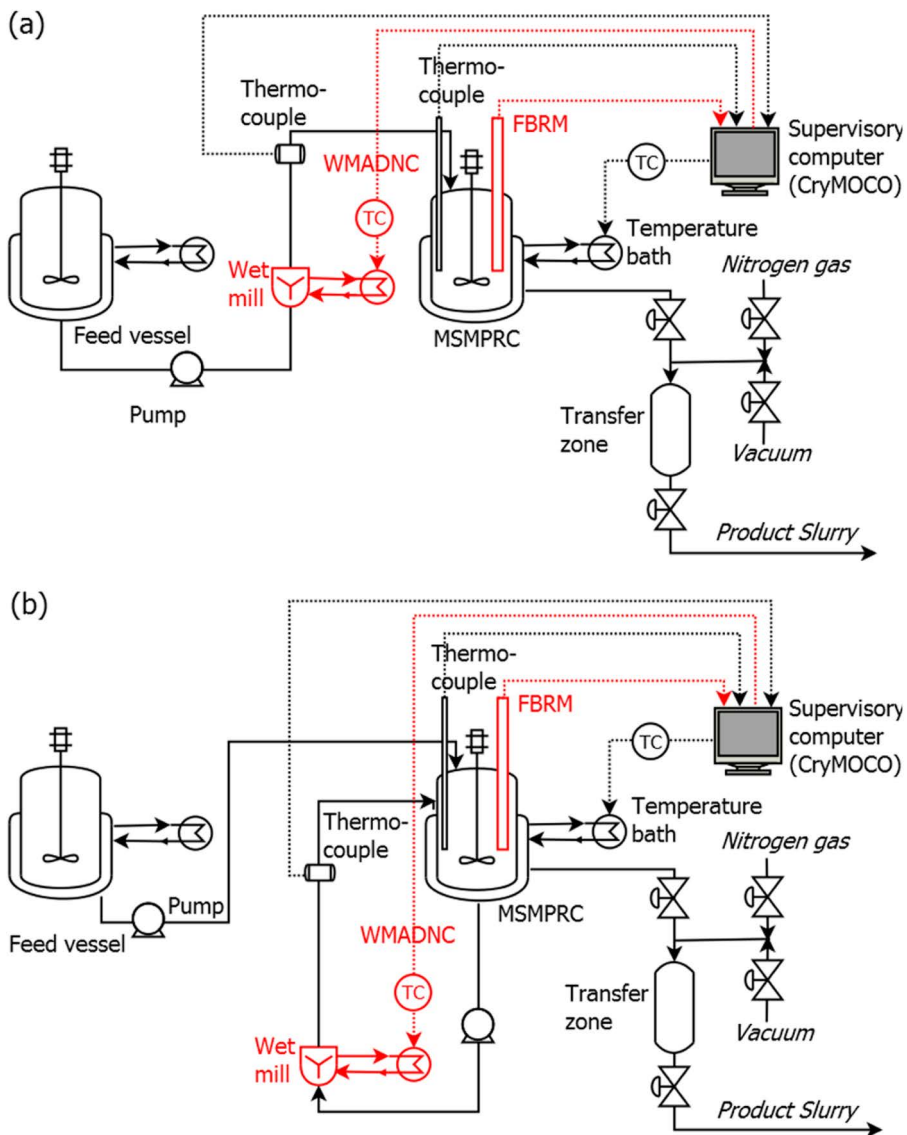


Figure 4.8 Experimental setups for wet milling-based DNC (a) process 1 and (b) process 2. Reproduced from ref. 144 with permission from American Chemical Society, Copyright 2016.