

(b)

Figure 2.10 Time-dependent mean particle size in Fe-10 vol-% NbC mixture during mechanical alloying in the attritor (a) Carbonyl powder (b) Water atomised powder

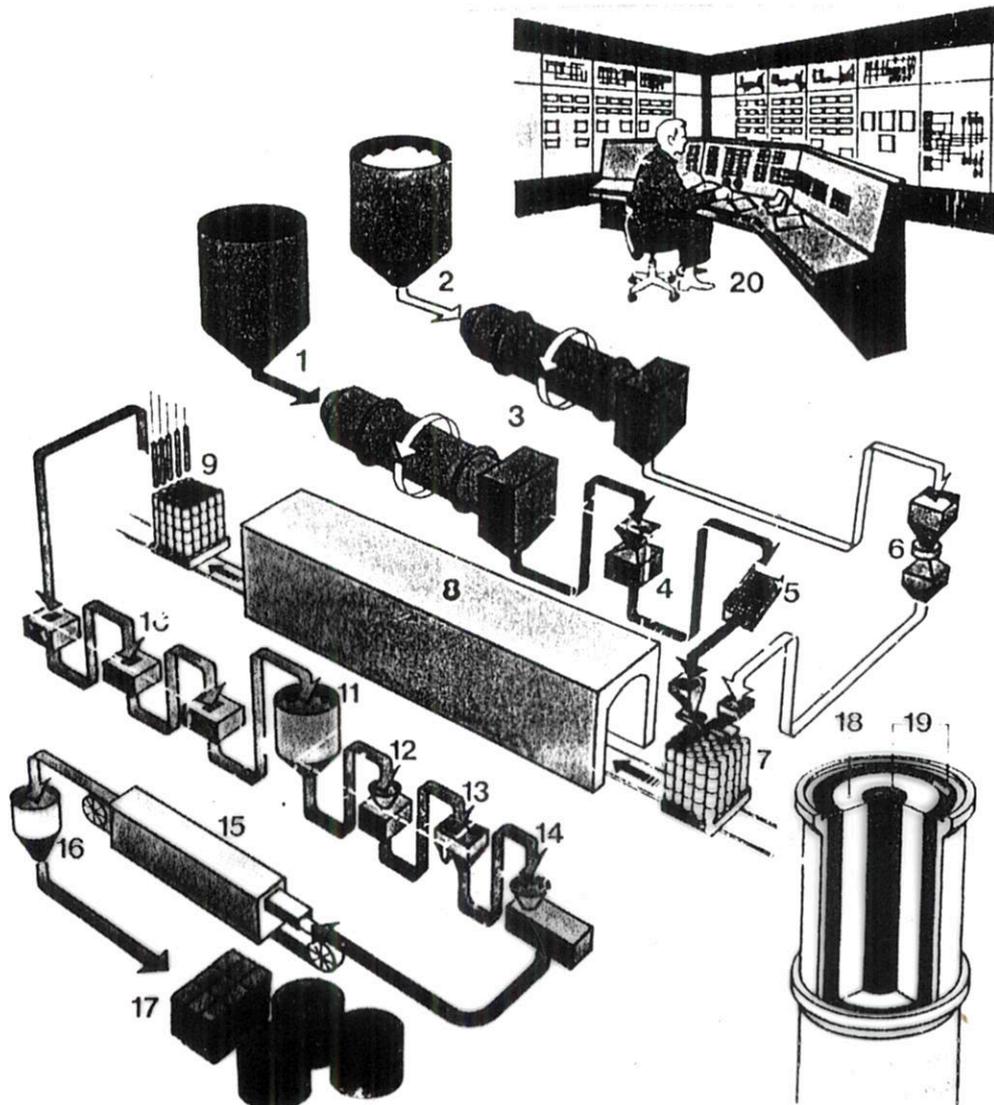


Figure 2.22 Sponge iron and iron powder production in Höganäs

1. Reduction mix of coke breeze and limestone; 2. Iron ore; 3. Drying; 4. Crushing; 5. Screening; 6. Magnetic separation; 7. Charging in ceramic tubes; 8. Reduction in tunnelkilns, approximately 1200°C; 9. Discharging; 10. Coarse crushing; 11. Storage in silos; 12. Crushing; 13. Magnetic separation; 14. Grinding and screening; 15. Annealing in belt furnace, approximately 800–900°C; 16. Equalizing; 17. Automatic packing of pressing powder, welding powder and cutting powder; 18. Iron ore; 19. Reduction mix; 20. Control room