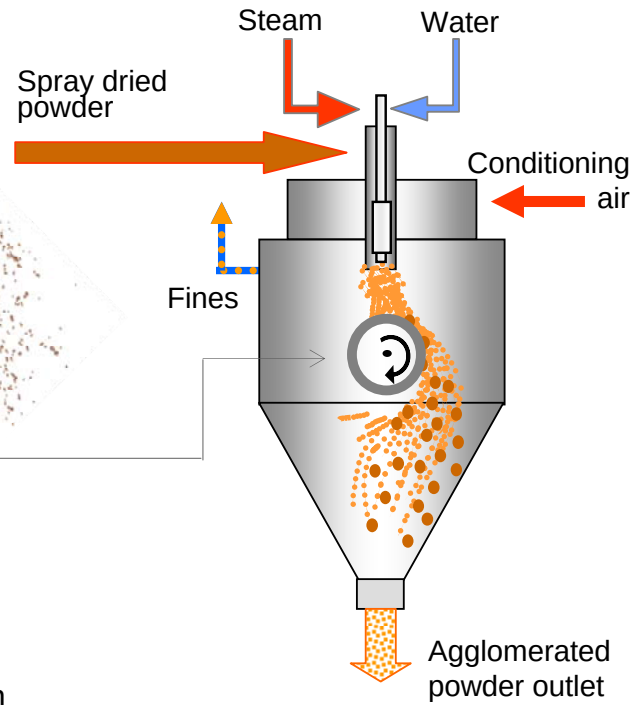
Process Engineering Division

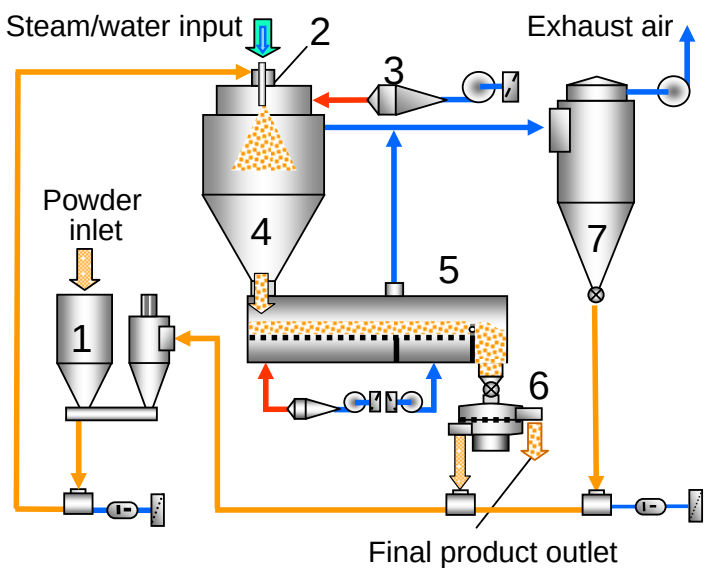
Niro

REWET AGGLOMERATOR™ - Type RWA



Patented drum agglomeration system

Rewet agglomeration chamber



1. Powder silo
2. Powder/steam mix
3. Conditioning air
4. Agglomeration chamber
5. VIBRO-FLUIDIZER®
6. Sieve
7. Bag filter

Standard size of RWA plants - Size: 50, 150, 300, 500, 1000, 1250
Corresponding output capacity, kg/h: 50, 150, 300, 500, 1000, 1250

Rewet agglomeration chamber

VIBRO-FLUIDIZER® and sieve

Different markets require different types of convenient soluble coffee.
To meet the demand for granulated, dust-free products, the powder is processed in a REWET AGGLOMERATOR™ (RWA).

Rewet Agglomeration involves dispersion of the fine spray dried powder (or powder mixes) in air, rewetting it by mixing it with a mist of water and vapour and finally a gentle impacting to form the right size of light, open and stable agglomerates with point-to-point contact. The agglomerates are then dried, cooled and classified to the desired Particle Size Distribution (PSD). Fines and broken-up oversize material are internally processed.

Material handling during the agglomeration process itself is specially controlled according to desired properties of the end-product.
The Niro RWA presents the advantage that the spray dried product does not have to be mixed prior to agglomeration, but can be processed directly from the spray dryer.
The final agglomerated product is instant and free-flowing. A Particle Size Distribution (PSD) in the 250 to 1250 micron range is possible. .

GEA Process Engineering Division
Niro A/S

Niro A/S . Gladsaxevej 305 . PO Box 45 .
DK-2860 Soeborg . Denmark .
Tel +45 3954 5454 . Fax +45 3954 5800
E-mail: food.dairy@niro.dk .
Web-site: www.niro.com

BU138/GB 09/06