Innovative technologies for the granulating and tableting of nutraceuticals

The Romaco portfolio covers the entire process chain for the development, manufacture and packaging of nutraceuticals. Its latest technologies, the KTP 1X R&D tablet press from Romaco Kilian and the multipurpose VENTILUS® Lab fluid bed processor from Romaco Innojet, are ideal for algae products such as spirulina and other superfoods.

These natural food supplements are processed without any chemical additives and with no added preservatives. In addition to equipment for the R&D sector, the one stop solutions provider also offers a wide range of machines for medium and high volume production. Moreover, nutraceutical manufacturers benefit from product development support, product analysis, process optimization and machine training in Romaco’s six processing and packaging laboratories.

VENTILUS® Lab fluid bed processor

Designed for laboratory-scale applications, the VENTILUS® Lab is used for granulating, drying and coating particle sizes from 10 µm to 2 mm to produce batches from 0.7 to 7.0 liters in size. The processing efficiency inside the cylindrical product container allows up to 25 percent shorter batch processing times and hence a much lower power consumption. The ORBITER® booster plate ensures homogeneous flow conditions and extremely gentle intermixing of the materials. Combined with the ROTOJET® Central Bottom Spray Nozzle it forms a unique functional unit enabling simple scale-up. The innovative fluid bed components enable the product movement inside the process container to be accurately controlled. The targeted reduction in spray liquid and power consumption reduces the carbon dioxide emissions from fluid bed processes. Furthermore, the rotating SEPAJET® filter system minimizes product loss by preventing any particles retained by the filter from being discharged from the process.

KTP 1X R&D tablet press 2.0

The single-stroke press is the newest generation of Romaco Kilian’s tablet presses for laboratory use and serves as an all-in-one instrument for R&D activities. It presses mono-layer, bi-layer and triple-layer tablets as well as tab-in-tab formats, with compression forces of up to 80 kN and a maximum output of 1800 tablets per hour. The KTP 1X is not only versatile, but also efficient: Various tableting parameters can be automatically determined and its smart measurement system swiftly evaluates huge amounts of data. Its capability of simulating any standard rotary press facilitates scale-up trials and its technology supports process optimization through detailed troubleshooting. The machine’s extremely good rigidity provides a more precise measuring, which goes hand in hand with extremely low product consumption – in other words cost-efficiency and sustainability. And finally, it ships with a data module that gives users access to raw measurement data worldwide at any time, even when the machine is not in operation.