

# PROCESS EQUIPMENT AND SOLUTIONS

## - Powder Technology

Machinery, equipment and process lines in the fields of liquid technology, powder technology and laboratory equipment. Our customers are found in most industrial sectors e.g. the chemical, pharmaceutical, mineral, metallurgy, food and plastics industries.



DRYING



DOSING AND FEEDING



MILLING



SCREENING



PNEUMATIC CONVEYING



PENDULUM BUCKET CONVEYORS



TUBE CHAIN CONVEYORS



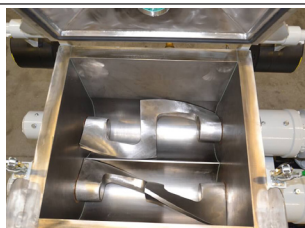
SCREW HEAT EXCHANGERS



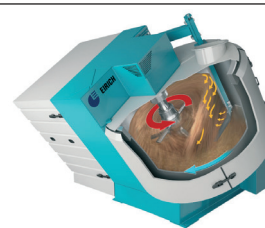
CONTAINMENT SOLUTIONS



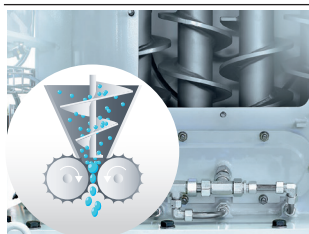
CONICAL MIXERS



Z-BLADE MIXER/KNEADER



MIXING/GRANULATION



COMPACTING/BRIQUETTING



PELLETIZING



WEIGHING



POWDER HANDLING SYSTEM



Roland Carlberg Processystem AB  
Gothenburg +46 31 85 04 60  
Uppsala +46 18 30 22 73



[www.rcprocess.se](http://www.rcprocess.se)



[www.lab.rcprocess.se](http://www.lab.rcprocess.se)



# A SELECTION OF OUR PARTNERS IN POWDER TECHNOLOGY



Fully automated powder handling systems. Pneumatic conveying, weighing, dosing, Big Bag discharge and filling, control screening, recipe handling and storage systems for bulk materials.



Screw conveyors and heating and cooling screws for drying, cooling and conditioning. Standardized and specialized designs for the food and pharmaceutical industry.



Intensive mixers for mixing, granulating and homogenizing of dry, moist or pasty materials. Complete plants incl. dosage and weighing. Mills for wet and dry grinding.



Aero mechanical conveyors for gentle transport of powders, granules and pellets. The conveyor can be configured with several inlets and outlets and residue-free emptying. High instantaneous transport capacity.



Vibrating tumbler screeners for powder and granules with the possibility of separation of up to seven fractions. Screeners for control screening and wet screening.



Mixing, drying, and agglomeration of powders, granulates and pastes. For batchwise and continuous processes. Flash drying and gentle mixing / drying in Nauta mixer.



Compaction of powdered materials. Grinding, ultra-fine grinding, crushing and size reduction of flakes, agglomerates and lumps into finer powders. Classifiers and Air classifiers for classification of materials.



Pendulum bucket conveyors for gentle transport of delicate powders, abrasive materials, granules, flakes and lumps. Several inlets and outlets are possible.



Machines and plants for pelleting, extrusion, grinding of biofuel, recycled materials such as plastic, paper, chemicals, etc. Belt driers and coolers.



A comprehensive range of crushers and mills for the crushing and grinding of coarse, lump-form products in the chemical, mineral, and metal industries, as well as related sectors.



Specialized in various types of ploughshare mixers used in production facilities where powders and granulates are processed. More than 25 years of experience in bulk material handling.



Continuous fluidised bed equipment for drying, granulation, agglomeration, spray granulation, coating, heat treatment and cooling. Also for laboratory batch processes.



Air classifiers and mills for fine grinding, from lab size up to production scale. Test center available.



Vacuum dryers and vacuum drying ovens. Drying cabinets with circulating hot air at atmospheric pressure.



Gravimetric and volumetric feeding. Mass flow meter and loss-in-weight system. Sieves, belt scales and vibration feeders. Weighing system with load cells. Pneumatic transport systems.



Z-blade mixers (Sigma) and Z-blade extruders for kneading, mixing and dispersing. Mixers in all sizes from smaller laboratory mixers to Z-blade mixer extruders with a capacity of up to 5000 liters.



Powder handling for drums, IBCs and bigbags. Filling, lifting, emptying and mixing. Patented system "Smartdock" for contamination-free transfer and handling of powder.



Tube chain conveyors for powders, granules, sludges, bulk materials, etc. For dry as well as moist and abrasive materials. Gentle and dust-tight transport with the possibility of several inlets and outlets.



Furnaces and industrial heat treatment systems for temperatures between 50-2000 ° C. Individual furnaces or complete plants including heat treatment processes under inert conditions.



Containment solutions such as isolators, contained weighing and dispensing systems, safe workstations with air curtain technology, laminar flow booths, LAF benches, cleanroom solutions etc.

