

HOSOKAWA MICRON EXTRUDOMIX



The Extrudomix is a unique, efficient method for the continuous or batch continuous, low pressure dry mixing of powder / powder batches; or the low pressure agglomeration of powders with small percentage level liquids to generate free flowing, dust free pellets and particles.

The Extrudomix has the ability to mix materials ranging from free flowing powders through to viscous pastes and plastic masses. The chamber design (especially in the Pharmaceutical application machines) is designed to promote free material transit with minimal product retention at the end of the processing cycle. Actual data will vary depending upon the application.

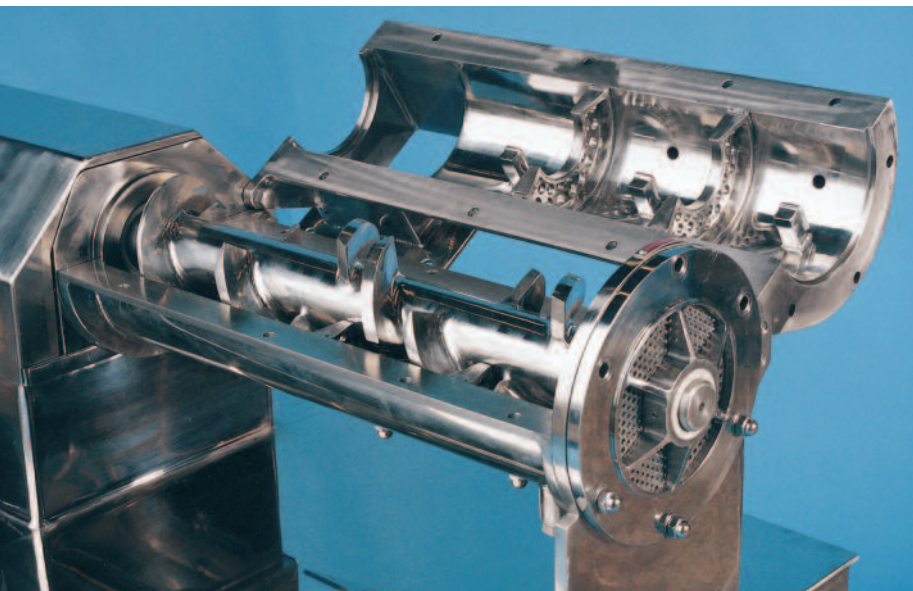
The Extrudomix features a single, horizontal processing shaft that carries radial, spiral positioned mixing flight segments to transport material through the processing chamber. To provide intense back-mixing and with plastic, stiff masses, to prevent rotation of the material mass, stationary anvil blocks are used attached to the chamber wall; additional internal mixing plates can be used to further increase the mixing effect.

Thus the effect of the unit is to give a continuous kneading, mulling and mixing action on materials ranging from

light and medium stiff pastes to relatively heavy plastic-like doughs and putty.

The processing chamber, and screw shaft as necessary, can be thermally regulated for simple product heating or cooling as required.

At the machine discharge is a perforated die plate used to retain material during processing, regulate the mixing action and depending on the application provide cylindrical pellets / granules of a specific diameter; a simple sweep-blade assembly can also be fitted to provide a uniform pellet length.



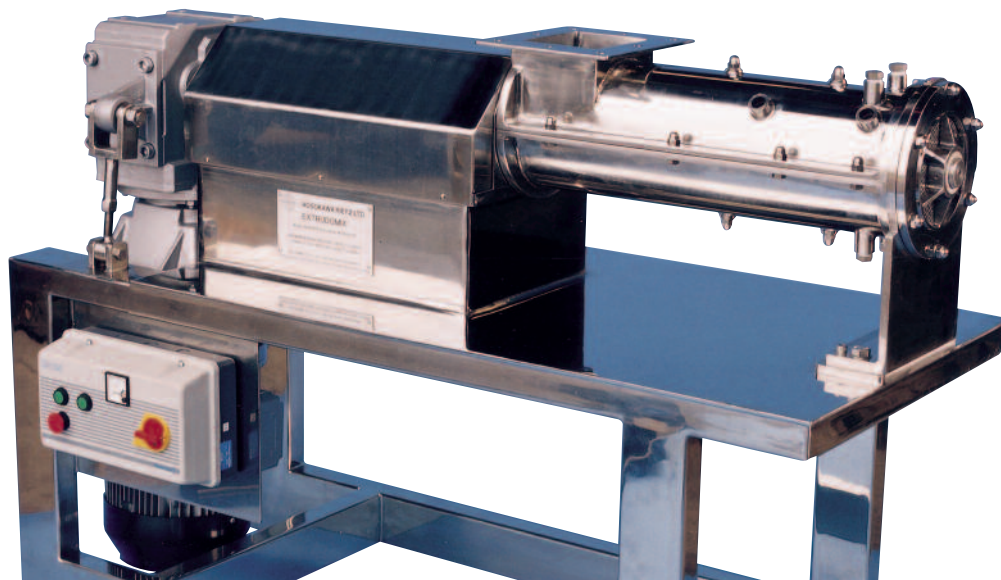
Unique in Design

The Micron Extrudomix for continuous mixing of solids and solids and liquids.

The Micron Extrudomix's efficient and adjustable shear input and heat transfer, available in the housing and rotor, makes applications very diverse.

One common application for the Micron Extrudomix is back mixing or simply forming wet cake products for drying efficiency.

A more specialized approach is in using the Micron Extrudomix as a product conditioner before spheronization and drying.

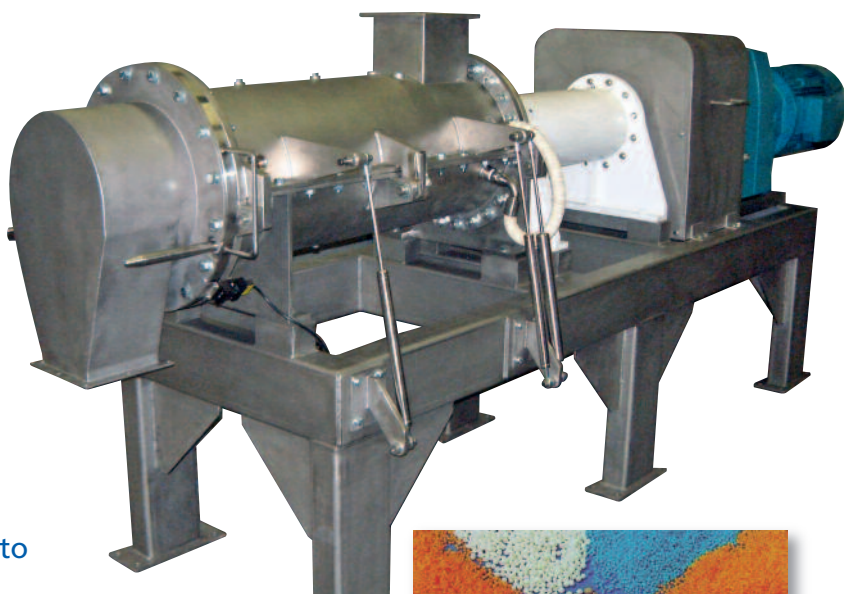


The Micron Extrudomix delivery programme can be a simple, stand-alone machine or complete with any necessary and integrated material feeding, liquid dosing, batch weighing, loss-in-weight control, instrumentation systems or control systems.

Mechanical Design Features

- The Micron Extrudomix is available in a wide variety of arrangements and sizes ranging from 50-600mm diameter rotors
- Units are provided with up to 150kW motors
- The shaft design isolates bearings from product (on smaller machines a fully cantilever design shaft is available)
- A shaft seal can provide for operation under pressure or vacuum
- The Micron Extrudomix can be furnished with jacketed housings and with hollow shafts for cooling or heating
- Integrated containment systems can be incorporated for low OEL products

Model No.	kW (Nominal)	Approx. Capacity kg/hr
EM 6-K5F424	7.5	340
EM 10-K5F431	15	680
EM 12-K9A336	55	1140
EM 15-K9A348	75	1820
EM 24-K9A368	150	4550



Typical Applications

- Mixing powders and binders continuously to reduce environmental problems
- Agglomerating powders with binders to improve flow characteristics for pharmaceutical applications
- Extrusion and forming of fresh yeast preceding fluid bed drying
- Mulling, mixing and extruding waste soap
- Agglomerating simple sugars to improve feed attributes for filling and tableting operations
- Continuously mixing and extruding caulking compounds
- Preforming of 'wet' products for consistent fluid bed drying
- Production of readily dispersible food ingredient granules



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