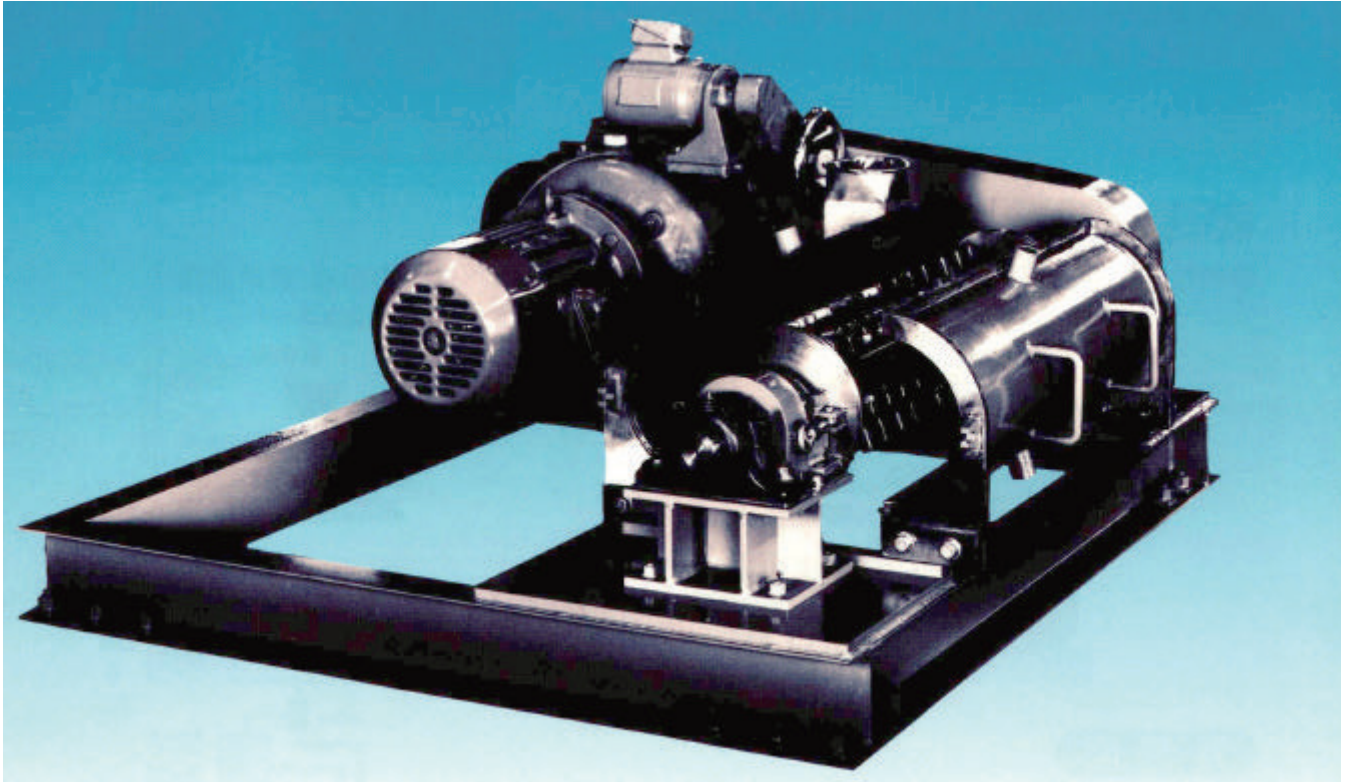


Turbulizer



General

Turbulizer utilizes a high speed rotor with adjustable angle paddles to create an intensive mixing and dispersing action in the cylindrical housing. A trip speed of the rotor is as high as 20-50m/sec. Turbulizer is also used for agglomerating solids, homogenizing, de-agglomerating; and for heating and reacting.

Turbulizer is a high capacity machine requiring minimal floor space or head room. Its self cleaning/emptying design leaves no material in machine. Turbulizer operates on low working volume and short residence time (2-30seconds), providing efficient use of installed horse power. The high speed paddle rotor insures a homogeneous, lump-free product.

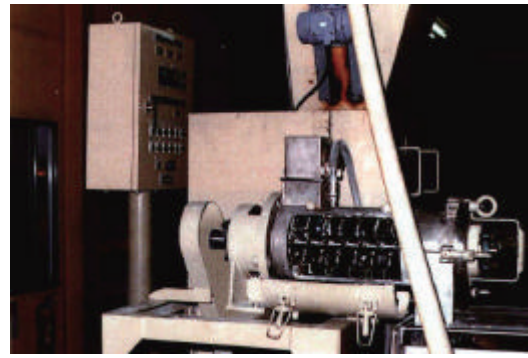
Slow rotation mixer does not fulfill mixing at a micro-scale. However, by impact of the high speed rotating paddles, micro scale mixing can be possible. So very often Turbulizer serves as a finishing mixer after the process with a slow rotation mixer. Because paddle angle is adjustable, residence time can be controlled at a wide range.

Features

- **Continuous Mixing**
Even with the inequality of the feed material, by strong agitation with the paddles Turbulizer will produce uniform mixture.
- **De-Agglomeration**
The high speed paddles disintegrate agglomerates or lumps, powdery product discharge is assured. Best suitable for cake mix application where mixing of wheat flour and shortening(fat) is done.
- **Liquid Addition**
Add very little quantity of liquid into the powder evenly or add large quantity to make slurry material.
- **Jacket**
With the jacket, heating/cooling during operation is possible.
- **Flexible Adjustment**
With the change of paddle angle, clearance, rotation speed, Turbulizer can be adapted to wide applications.

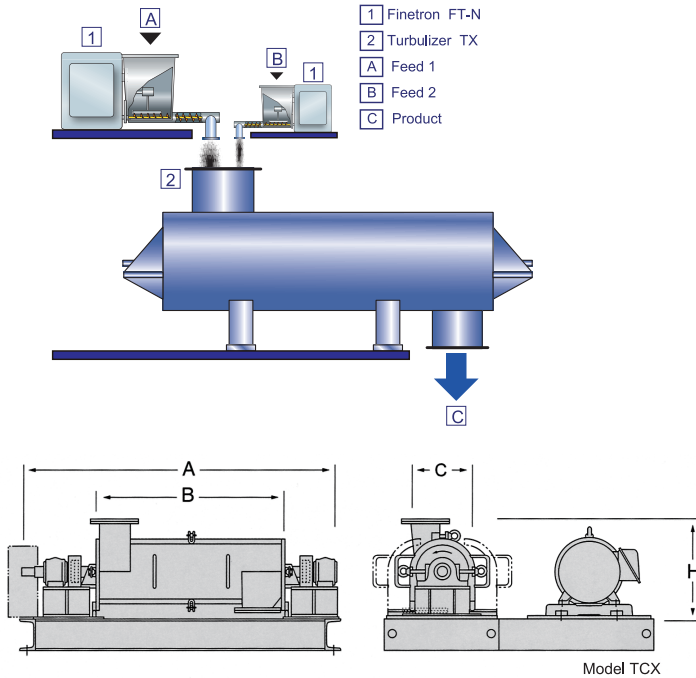
Application

Mixing, disintegration, liquid addition, coloring, dispersion, heating and cooling for :
 Biscuit, bread, cake mix (dispersion of shortening) ,
 Gluten(dispersion of syrup), seasonal spice mixes,
 noddles, feed, starch, pharmaceuticals, dyestuff,
 pigment, cosmetics, CMC, Limestone(Stearic acid coating), titanium dioxides, rubber latex, plastics

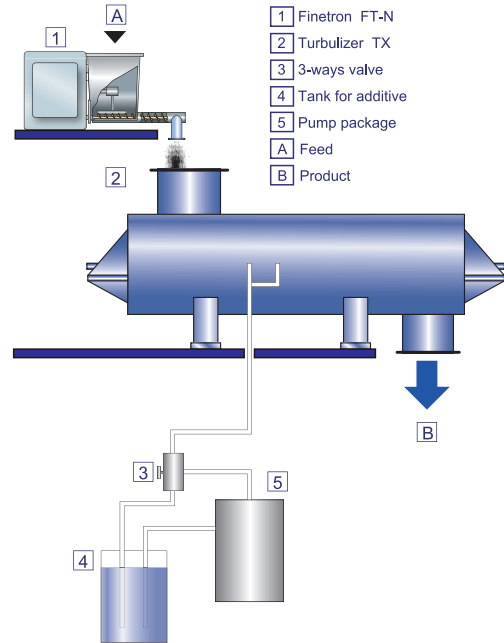


FLOW CHART

Continuous mixing of powdery/granular materials



Liquid addition, kneading to powder/granular materials (Turbo Conditioner)



Specification

Model	TX- or TCX*	8	14	20	30
Motor	Min. (kW)	3.7	7.5	18.5	22
	Max. (kW)	15	30	45	75
Rotor speed	Min. (rpm)	1000	600	400	265
	Max. (rpm)	3000	2000	1300	900
Capacity	(t/h)	0.7~0.9	3	6	11
Dimensions	A (mm)	~1310	~1790	~2200	~2900
	B (mm)	740	1070	1350	1600
	C (mm)	200	350	500	750
	H (mm)	380	540	840	1200

Note : * TX : One side door, TCX : Clam shell design



Process Technologies for Tomorrow

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