

Product Name :
Vacuum Meat Tumbler

Product Code :
MM-CHINA11002-0044



Description :

Vacuum Meat Tumbler

Technical Specification :

The Vacuum Meat Tumbler is an industrial-grade sealed rotating drum system that dramatically accelerates the absorption of curing brines, marinades, and seasoning solutions into whole-muscle and portioned meat products.

Operating under a controlled vacuum environment of -0.06 to -0.08 MPa, the machine exploits a fundamental physics principle: reduced atmospheric pressure causes the cellular pore structure within muscle tissue to physically expand.

When the vacuum is periodically released during programmed tumbling cycles, atmospheric pressure forces the surrounding brine solution deep into these expanded intercellular channels.

This vacuum-assisted mass transfer mechanism achieves in 4 to 8 hours what traditional static marination requires 24 to 48 hours to accomplish, while simultaneously extracting surface myosin proteins that create the essential tacky bind layer for sliced deli meat and reformed ham production.

Available in drum capacities from 500L to 3000L, with the (1500 Liter) serving as the industrial benchmark configuration.

Programmable PLC with up to 30 stored recipe cycles governing rotation speed, vacuum depth, tumble/rest intervals, and total cycle duration.

Achieves brine pickup rates of 25 to 40 percent by weight on standard chicken breast and pork loin, depending on injection levels and tumbling duration.

Drum Volume: 1500 Liters

Working Capacity (Meat Load): 600 - 750 kg per batch

Vacuum Depth: -0.06 to -0.08 MPa
Drum Rotation Speed: 4 - 12 RPM (VFD Controlled)
Drive Motor: 4.0 KW / 3-Phase
Vacuum Pump: 1.5 KW (Oil-Sealed Rotary Vane)
Internal Baffles: Helical Paddle Configuration
Drum Material: (Interior Mirror-Polished)
Cooling Jacket: Optional Glycol Circulation



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