

HPTM-EX

High Performance Tableting Machine



High-performance tableting machine with adjustable compression speed satisfying both of solubility and hardness

High solubility is what is wanted for orally-disintegrating tablets of drugs and moldings to be dissolved for use. However, there has been a problem with easily-soluble tablets that they are easy to break and difficult to maintain their hardness, which leads to difficulty in bringing the tablets into the following process after molding. HPTM-EX is a tableting machine to manufacture moldings with high porosity by compressing with low pressure in order to achieve fast solubility. Curing, which is the next process to apply hot moisture on surface of moldings and to dry them, can increase hardness of the products.

Moldings manufactured through curing treatment do not get broken in the downstream process.



High-performance tableting machine

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Although compression molding technologies for products with high hardness have been reported, there has been no report of technology of low pressure compression molding which is important to manufacture moldings satisfying both of easy solubility and firmness such as orally-disintegrating tablets soluble with saliva and foods with nutrient function claims which are supposed to be dissolved for use.

Qualicaps thought it necessary to provide individuals in a wide age range with groundbreaking moldings which are easy to eat and swallow, and have developed HPTM-EX, a new high-performance tableting machine, based on the manufacturing technologies in the field of machinery for pharmaceuticals where Qualicaps has long years of experience. The new machine will be useful in improving the convenience of your products.

Fast-dissolving and easy to handle

Compression pressure, speed and holding time can be freely adjusted at the time of molding powder into tablets, which enables manufacturing of ideal moldings emphasizing solubility. No additive or disintegrating agent is needed. Curing treatment in the next process applies hot moisture on surface of moldings, which realizes increase of hardness on the after they get dry, and maintains good solubility at the same time.

Efficient molding cycle

The additional of a second mold will further increase processing speed by allowing alternate compression molding and extraction under low-speed compression. The ascending tray makes the fall length short and prevents breakage of the solidified moldings. This mechanism makes HPTM-EX different from conventional tableting machines.

Uniform hardness and weight

Compression speed can be set in multiple stages, realizing uniformity in hardness and homogeneity in resistance to wall pressure. Automatic control is performed with adjustment based on conversion of pressure at the time of compression into weight.

Expansion into a wide range of application

HPTM-EX, which can manufacture ideal and softly-compressed moldings, can be utilized in a wide range of application such as manufacturing of powder moldings impossible with conventional tableting machines and orally-disintegrating tablets. Besides, since HPTM-EX does not employ a rotary system, manufactured moldings can be drawn from below. This means that large moldings can also be manufactured.

Advantages of the products manufactured with HPTM-EX

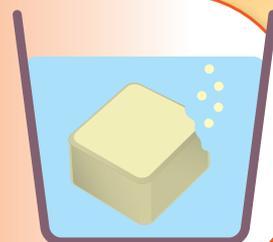
Applicable to orally-disintegrating tablets

Soluble even with saliva



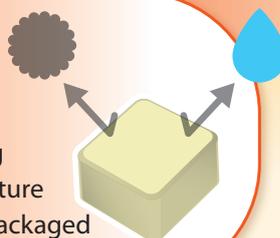
Easily soluble

Easy to dissolve in hot water or in the mouth



Fresh and hygienic

Convenient for carrying and blocked from moisture by being individually packaged

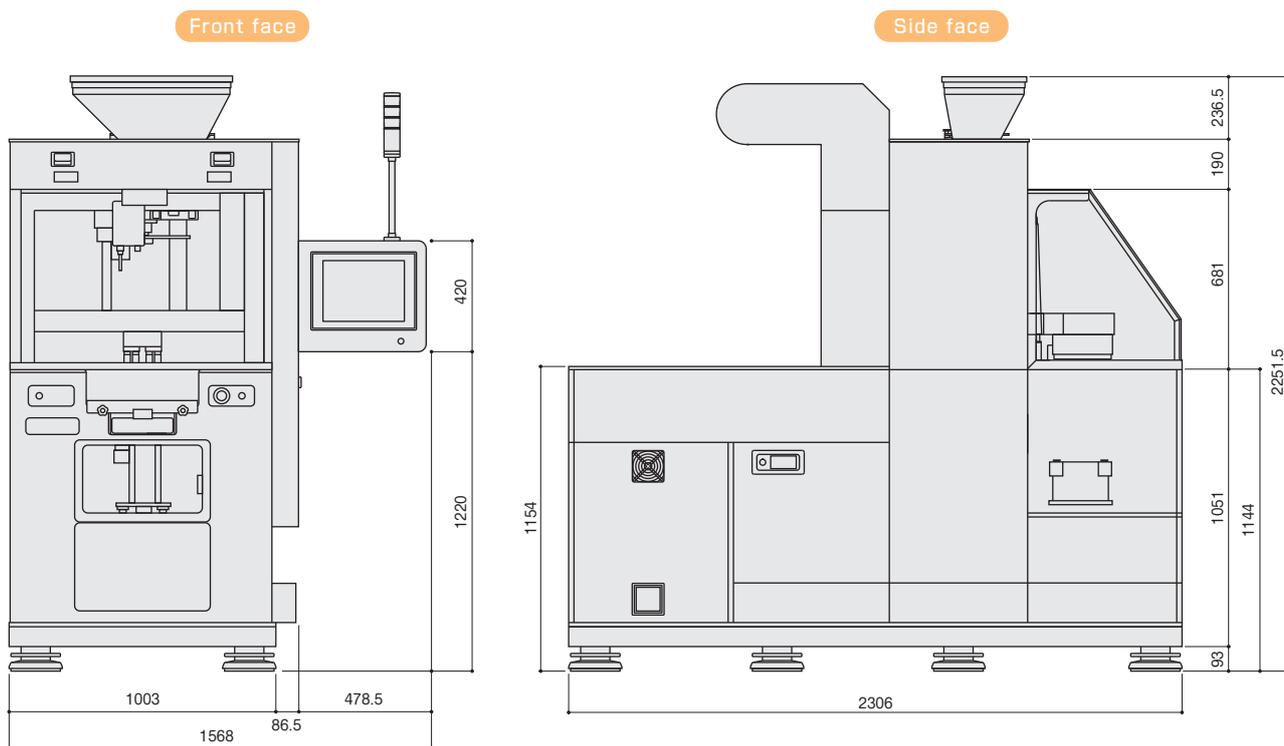


Specification

Name	High Performance Tableting Machine		
Model Number	HPTM-EX		
Production capacity	10,800 pcs/hour	(Conditions) Standard 8 seconds/cycle 24 pcs/cycle Allowable load 4,000 kg/cycle	
Electricity	3 phase 210 V ± 10% 100 A 50 Hz/60 Hz	for lower punch drive and control	
	2 lines 3 phase 210 V ± 10% 100 A 50 Hz/60 Hz	for upper punch drive	
Compressed air	0.5 MPa 0.8 Nm ³ /min		
Installation environment	Temperature 24 °C ± 3 °C		
	Humidity 40 ~ 50% RH		
Overall dimension	Main Unit (W×D×H)	1,003 × 2,306 × 2,251.5 (including hopper) mm	
	Conveyor Belt (W×H)	253 × 898 mm	
Weight	Main Unit	About 3,900 kg	
Others	Not included appearance and imprinting inspection		

※This specification might be changed without notification.

Overview (HPTM-EX) (mm)



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