

The Heart of the PeriTec

# DEBRANNING MACHINE

VCW3A / VCW5A / VCW10A



VCW5A

**SATAKE CORPORATION**

DEBRANNING MACHINE VCW

## DEBRANNING MACHINE

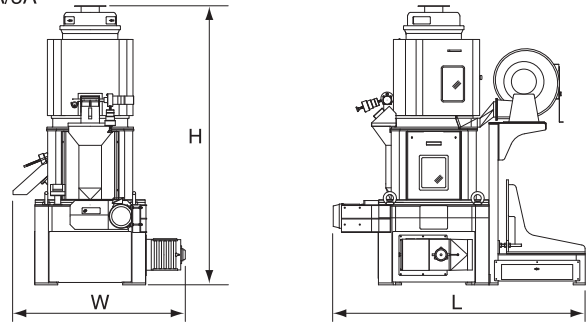
### Specifications

Model		VCW3A	VCW5A	VCW10A
Capacity(t/h)*1		2 - 3	4 - 5	5 - 10
Required Power (kW)	Motor	55-4P	90-4P	165-6P
	Fan	1.5-2P	1.5-2P	2.2-2P
	Screw Conveyor	1.5-4P	1.5-4P	1.5-4P
Air Volume(m³/min)		60	75	130
Static Pressure(Pa)		690	690	1,470

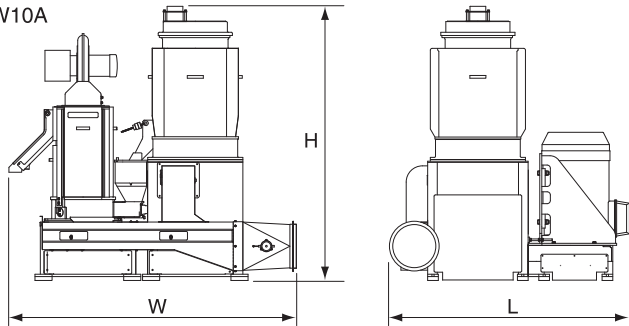
\*1 Input capacity for wheat. Dependant on wheat variety.

### Dimensions

VCW3A/5A



VCW10A



Model	W(mm)	L(mm)	H(mm)	Weight(kg)*1
VCW3A	1,406	2,096	2,320	1,500
VCW5A	1,484	2,147	2,589	1,800
VCW10A	2,688	2,245	2,564	3,500

\*1 Net weight without main motors.

All Satake products are the subject of continuous development and, as a result, their specification may change and differ in detail from those shown.

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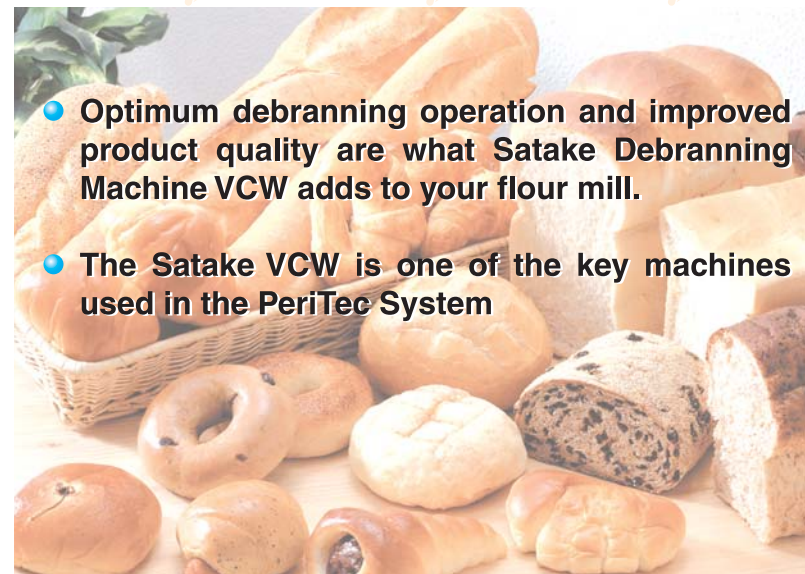
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SATAKE CORPORATION has  
obtained ISO 9001 and ISO  
14001 certification.  
These international standards  
for management systems  
ensure Satake will continue to  
provide high quality products  
and services.

ISO 9001 Certification  
(Quality Management Systems)

ISO 14001 Certification  
(Environmental Management Systems)

# DEBRANNING MACHINE



- Optimum debranning operation and improved product quality are what Satake Debranning Machine VCW adds to your flour mill.
- The Satake VCW is one of the key machines used in the PeriTec System



VCW10A

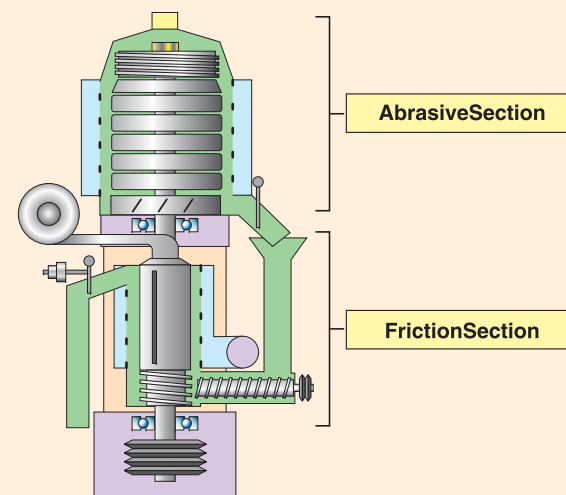
## Superior Designs

### Two-Stage Processing

The combination of abrasive and frictional actions provide even and precise removal of the outer layers from the wheat kernel.

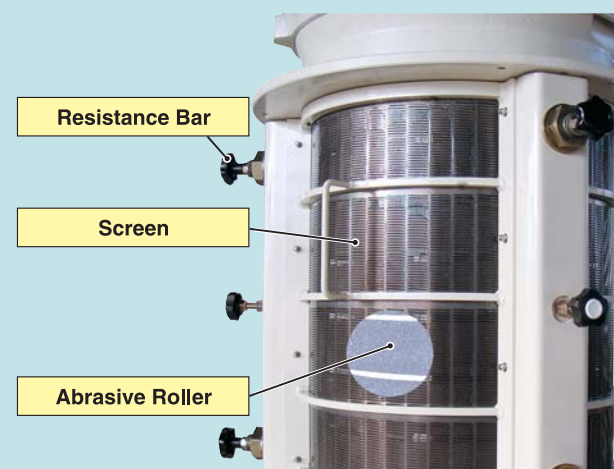
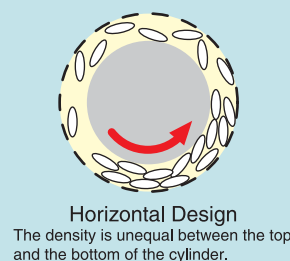
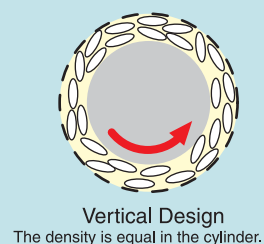
### Principle

Wheat is abraded between face of abrasive stones and slotted screens. Wheat is then sent to a friction section at the bottom of the machine to be polished by vertical agitator bars. Air is drawn through the machine to remove the abraded bran.



### Vertical Design

The vertical design exposes each grain a uniform pressure. Furthermore, the surface of the screen and emery are used fully in this vertical design, maximizing the efficiency.



This photograph is an image photograph.

## Higher Product Quality

Debranning, or removing the pericarp prior to the milling operation, improves the quality of the final product significantly.

### 1. Clean, hygienic flour

The VCW removes bacteria, molds and agrichemicals from the surface of the grains, leading to extremely clean and hygienic flour.

### 2. Less bran inclusion and specs

The removal of bran before milling significantly reduces bran specs, both for flour and semolina.

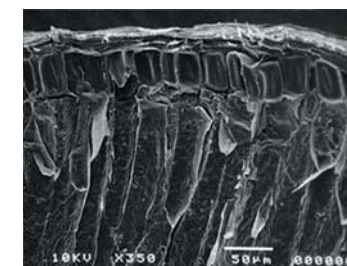
### 3. Brighter color of the flour

The flour produced using the PeriTec system is whiter in color. Similarly, for pasta, the PeriTec semolina has brighter appearance than that produced by conventional processes.

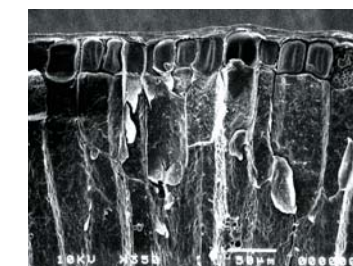
## Unmatched Precision

Applying the accumulated knowledge over a century of debranning rice, the Satake VCW removes the outer layers of wheat kernels to the desired degree.

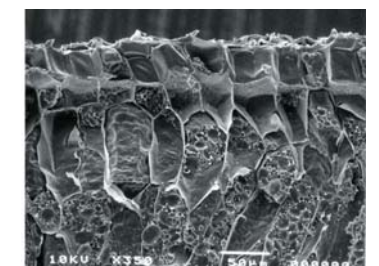
The following electro-microscope images show that the different layers on wheat surface can be removed separately by using the VCW.



2%debranned  
Pericarp removed



5%debranned  
Aleurone layer remaining



12%debranned  
Aleurone layer half abraded

## PeriTec System

The Satake PeriTec system consists of two stages - hydration and debranning - removing the pericarp before milling.

This process has three distinct advantages:

1. removal of harmful elements
2. better flour quality
3. shorter milling process and increase in mill capacity

### Hydration (Hydrator)



The moisture content of the wheat is controlled before debranning.

### Debranning (Debranning Machine)



The outer layer of wheatkernel is removed beforemilling.