

SATAKE CORPORATION



Satake has a global role in the creation of high quality foods

SATAKE CORPORATION

New Methods of Corn Degermination

A Presentation of The Satake Group

October 08, 2000

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New Methods of Corn Degermination

- How did Satake become interested in corn degermination?
 - Satake has always been involved in removing bran and germ from rice.
 - During the past few years, Satake has gained experience and knowledge in removing bran and germ from wheat.
 - Satake is looking for ways to apply this knowledge and experience to the processing of other grains.

New Methods of Corn Degermination

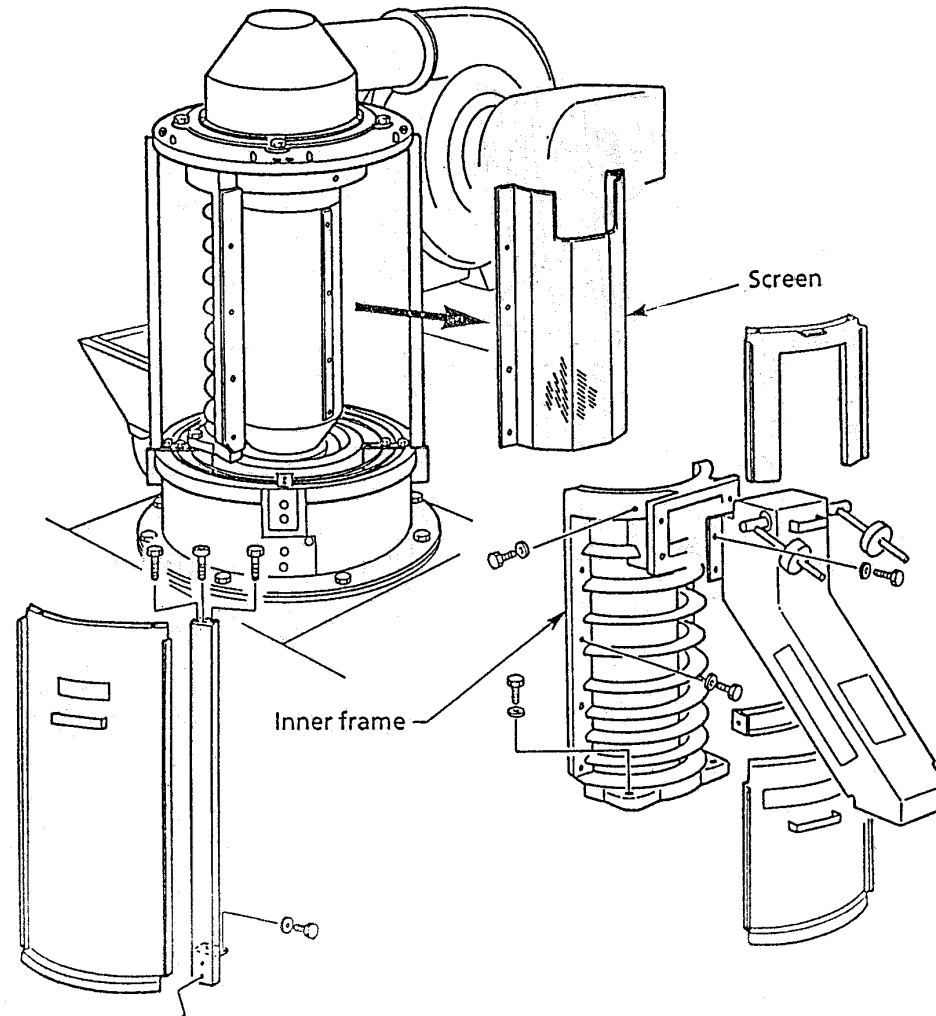
- What are Satake's goals in developing a new technology?
 - Increased yield
 - Improved product quality
 - A shorter or less costly process
 - Ability to market these improvements profitably

The Satake VBF10A Degermer

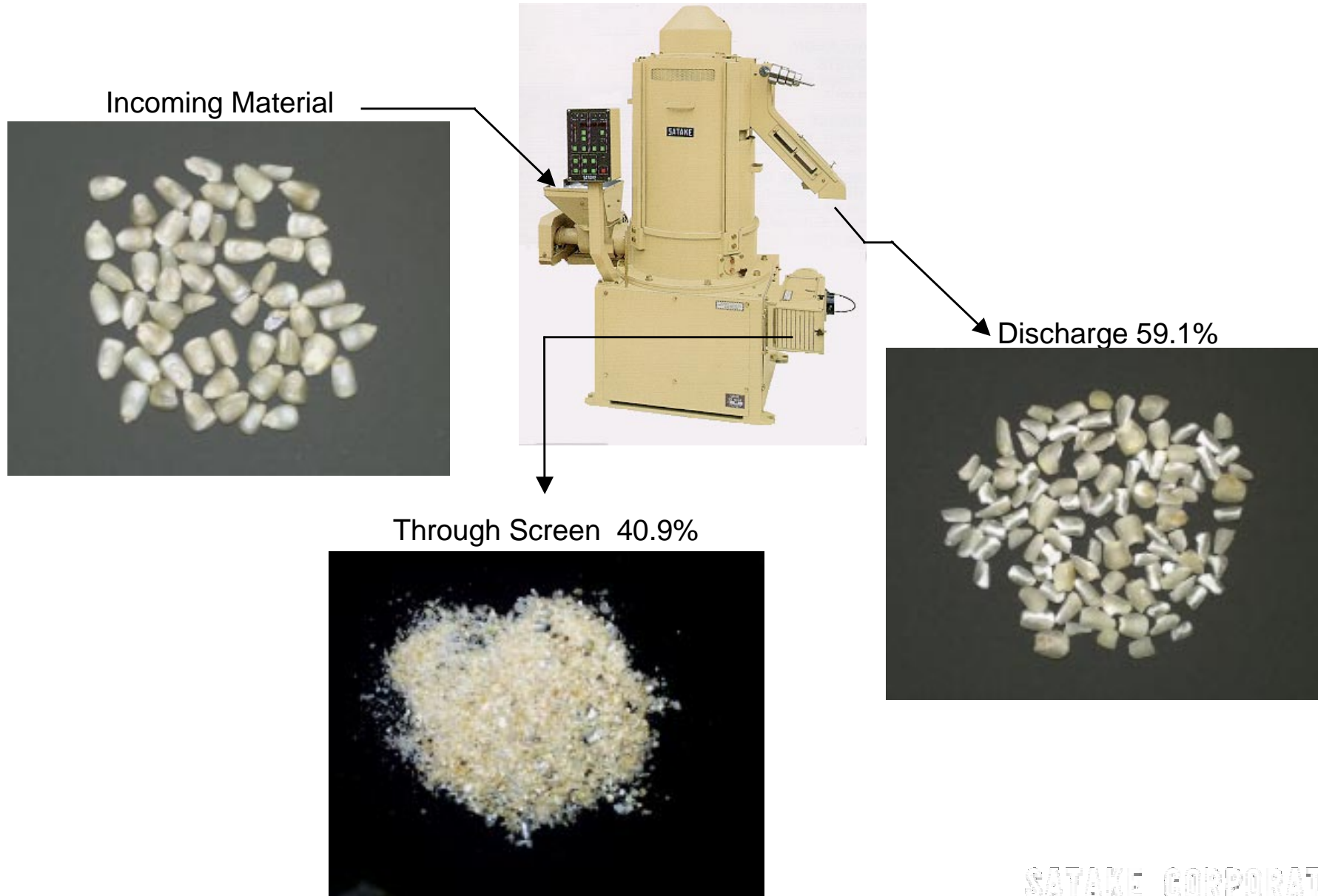


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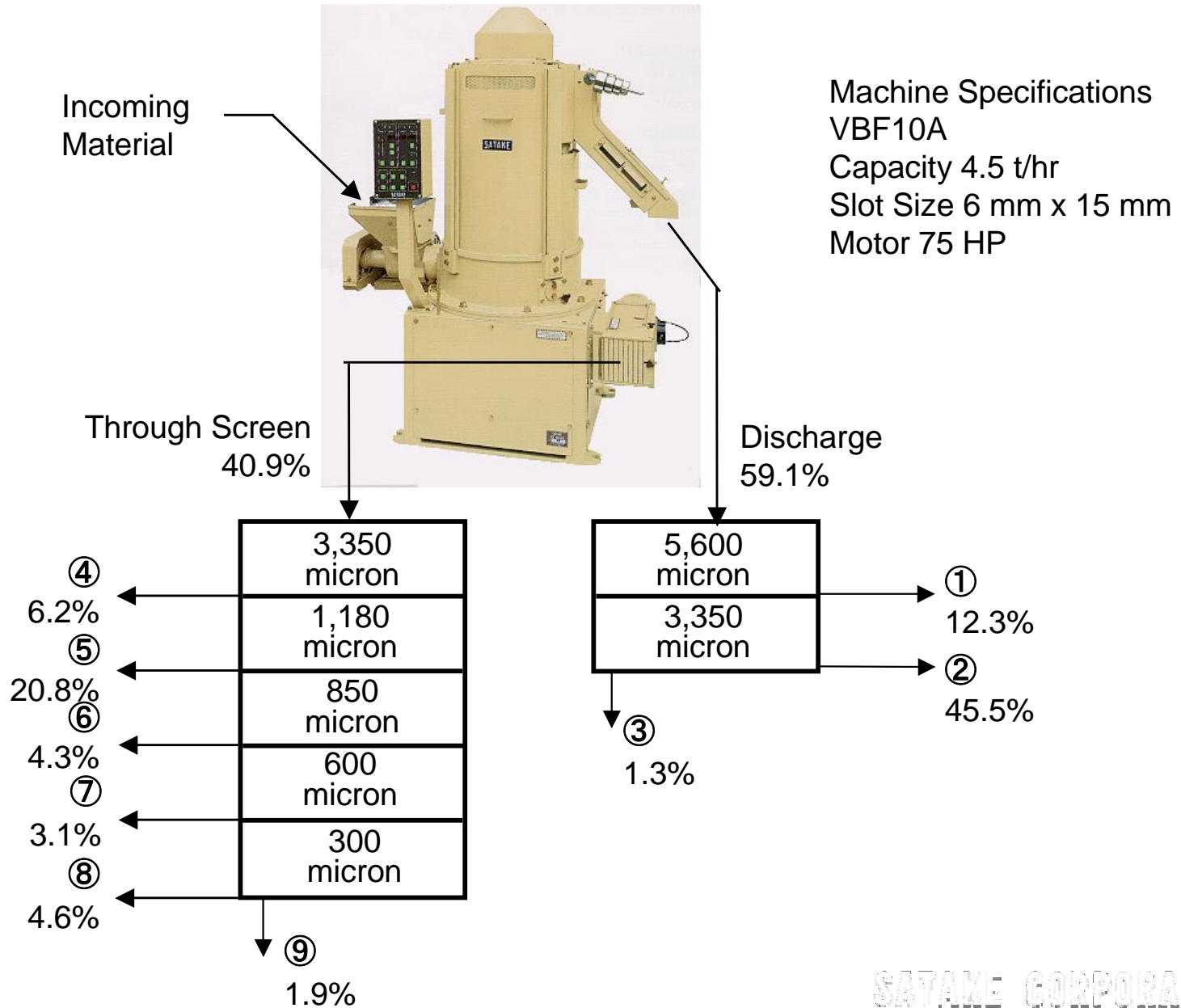
The Satake VBF10A Degermer



The Satake VBF10A Corn Degermer



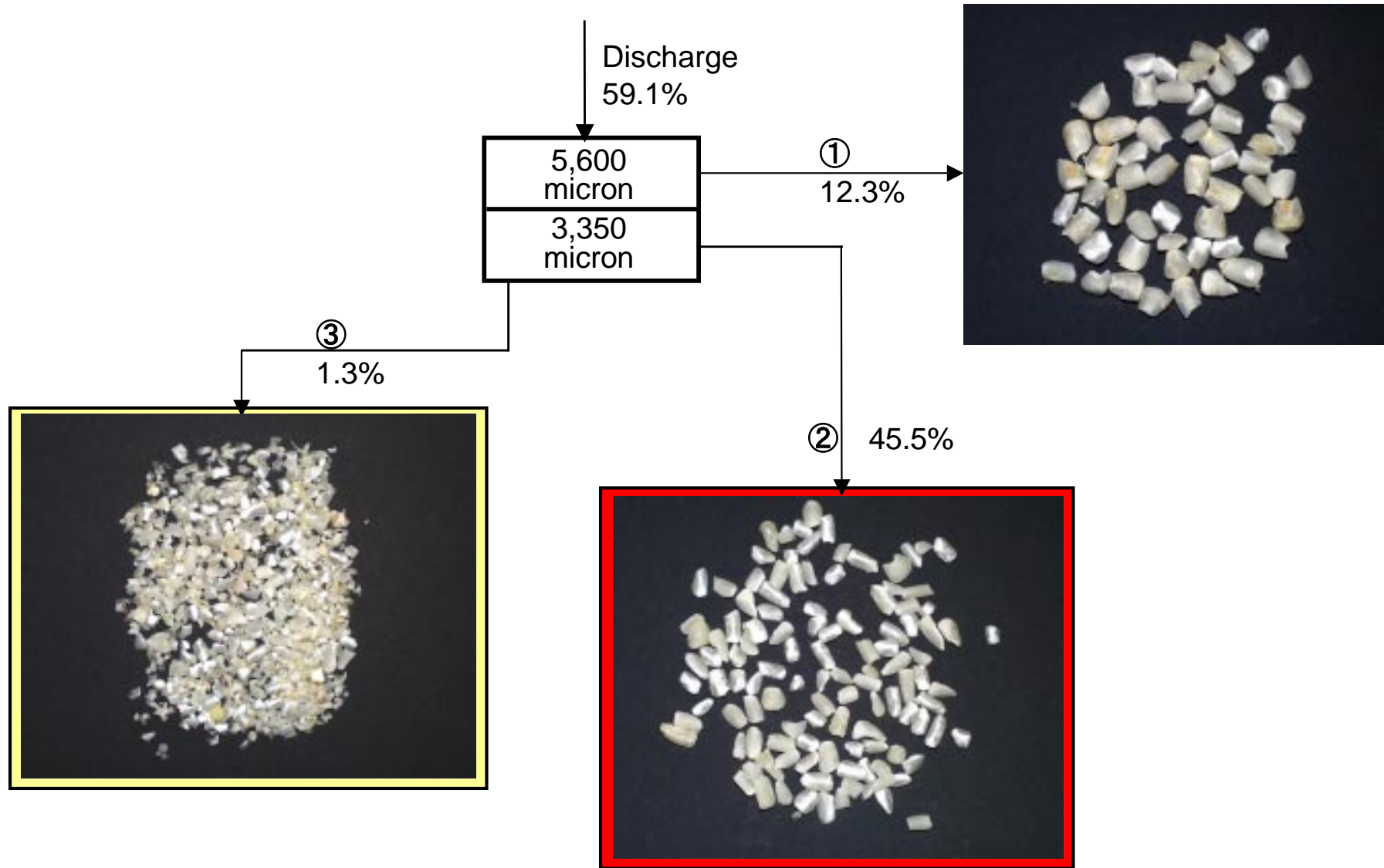
Flow Sheet of Corn Degermination



Discharge of VBF10A Degermer



Flow Sheet of Corn Degermination



Discharge of VBF10A Over 3350 Micron (45%)



Discharge of VBF10A Through 3350 Micron (1.3%)

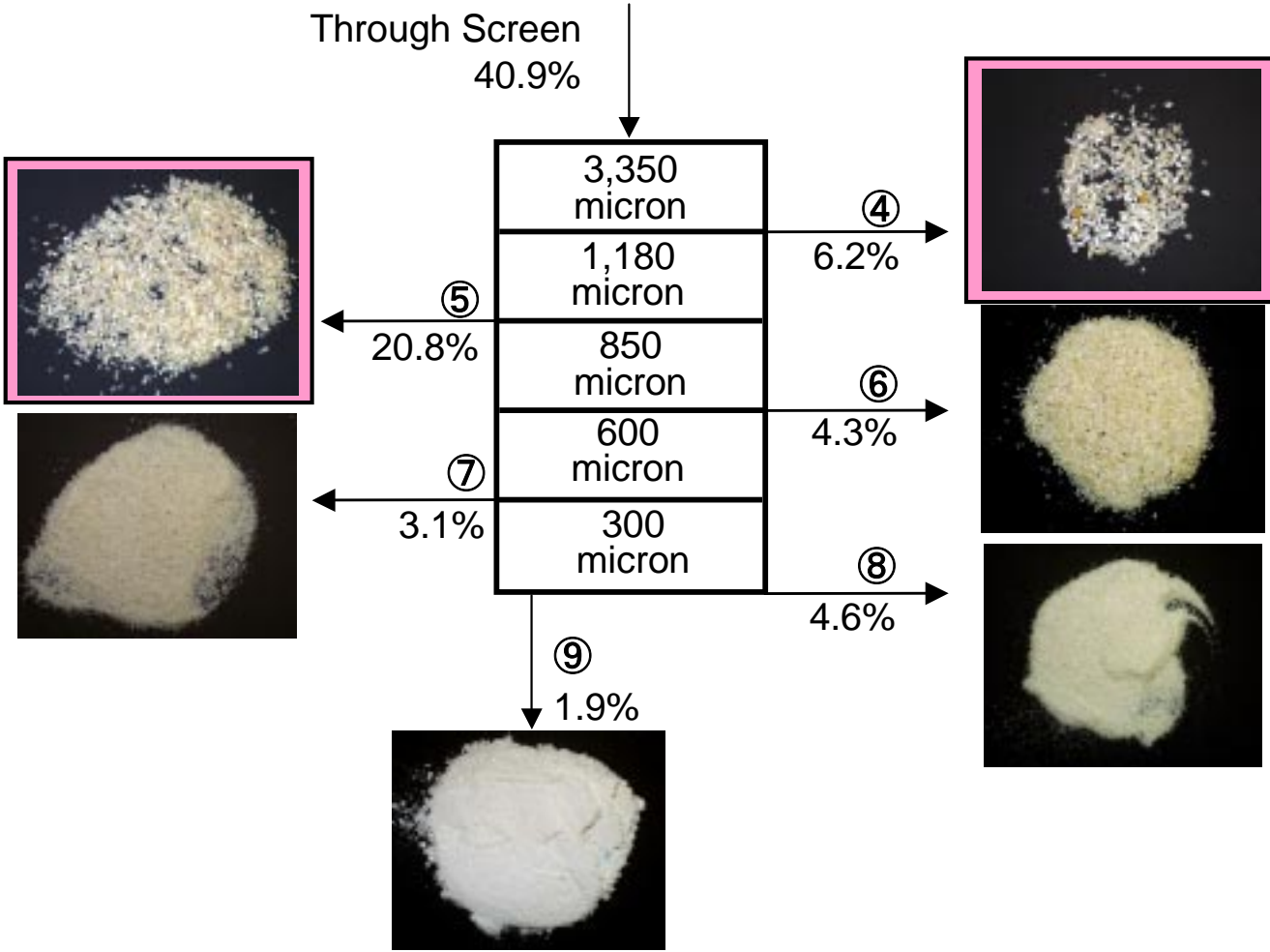


Product Exiting Through Screens



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Products Exiting Through Screens



Through Screens of VBF10A Over 3350 Micron (6.2%)



Through Screens of VBF10A Over 1180 Micron (20.8%)



Through Screens of VBF10A Over 600 Micron (7.4%)

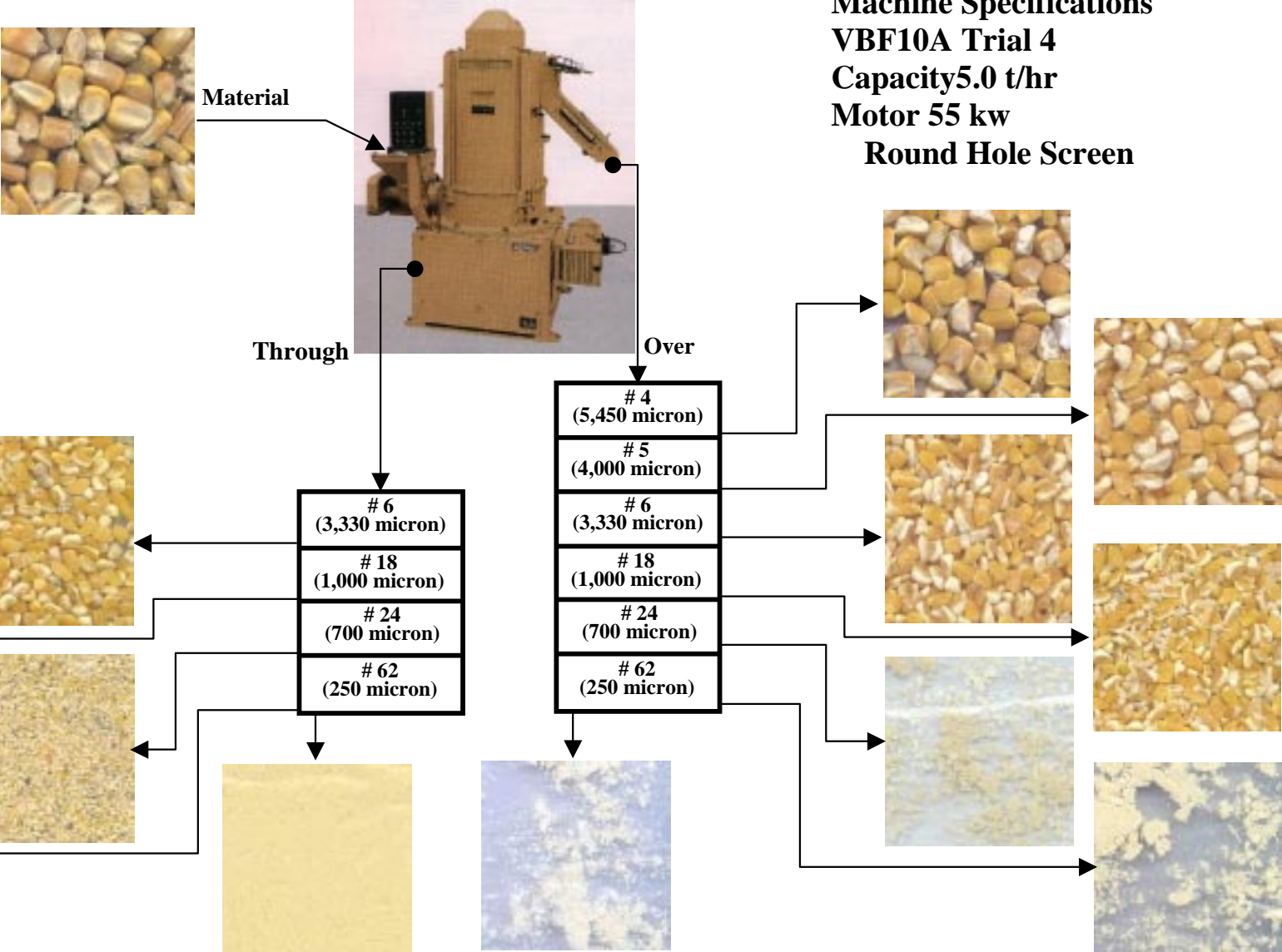


Fine Grits and Flour Through Screens of VBF10A (6.5%)

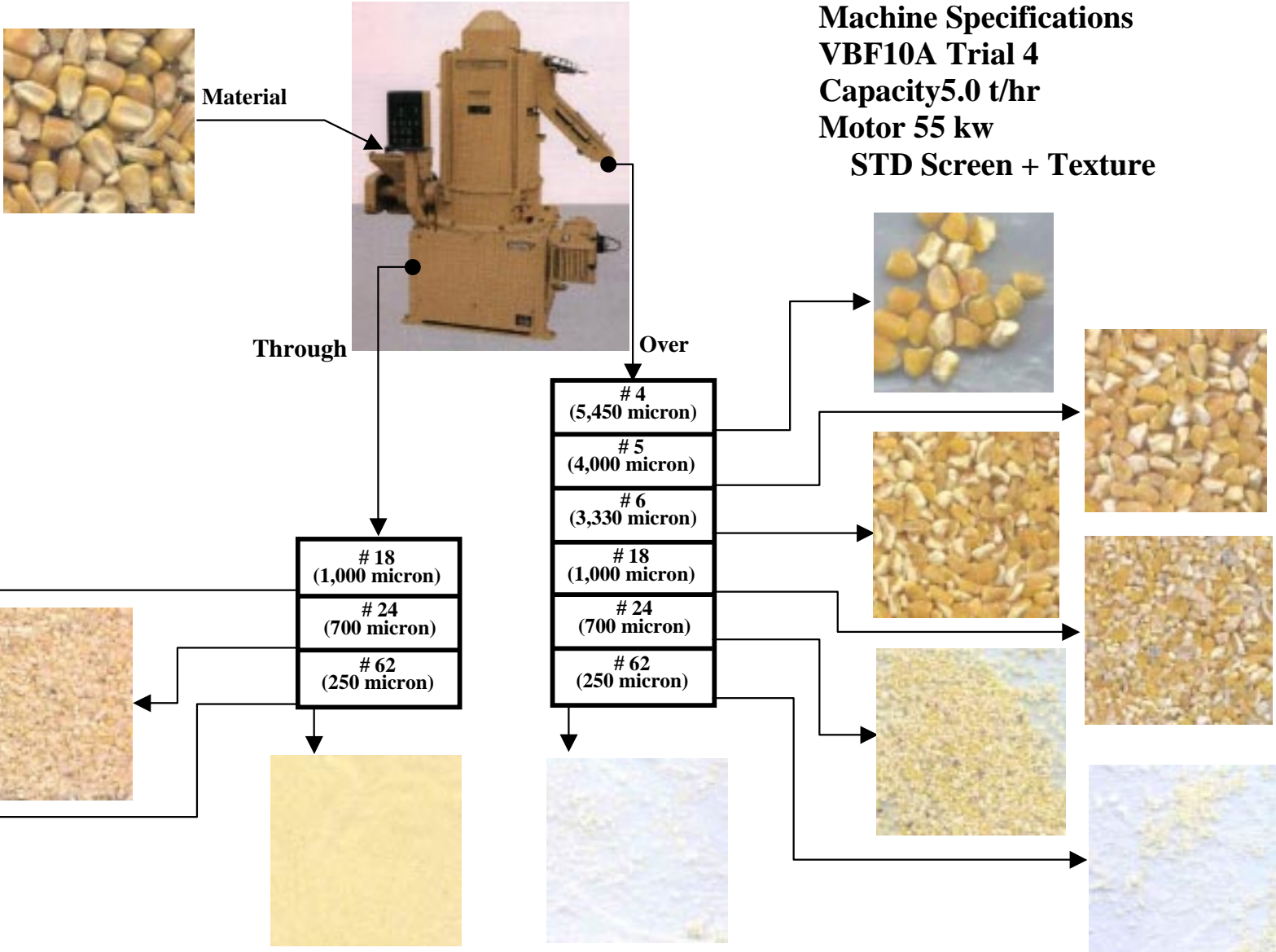


Process Samples of Satake Maize Degermer




























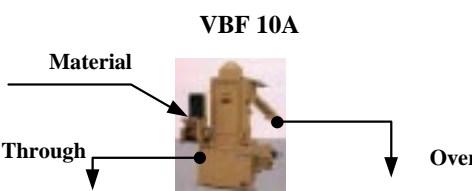




Machine Specifications
VBF10A Trial 4
Capacity 5.0 t/hr
Motor 55 kw
Round Hole Screen









Process Samples of Satake Maize Degermer



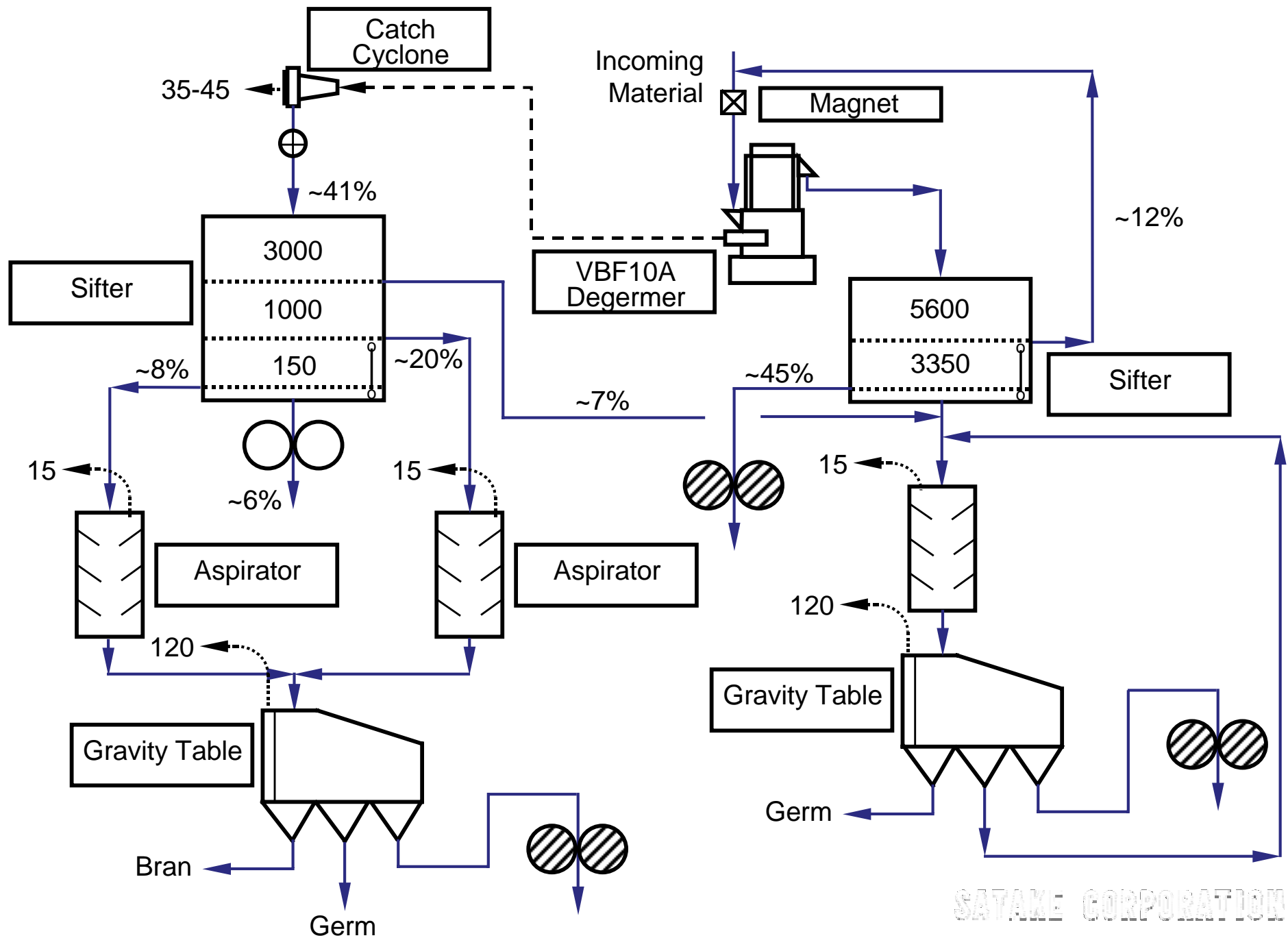
Sifted Samples from Degermer

Material	Process	# 4 Over (5,450 micron)	# 5 Over (4,000 micron)	# 6 Over (3,330 micron)	# 18 Over (1,000 micron)	# 24 Over (700 micron)	# 62 Over (250 micron)	# 62 Through (250 micron)	
	EXISTNG								
	VBF10A (Trial 4) Round Hole Screen (4mm)	Over							
		Through							
VBF10A (Trial 5) STD Screen + Texture	Over								
	Through	 <p style="text-align: center;">VBF 10A</p>							

Sample Comparison

	# 5 Over (4,000 micron)	# 6 Over (3,330 micron)	# 18 Over (1,000 micron)
EXISTING Decorticator			
SATAKE Maize Degermer VBF 10A			

Flow Sheet for Corn Degermination Process



New Methods of Corn Degermination

- What are the benefits of this new system?
 - The production of larger quantities of pure endosperm shifts the mechanical requirements from purification to reduction.
 - Since reduction is typically more efficient than purification, increases in yield can be expected.
 - The process can be shortened, particularly in the area of purification.
 - Greater profitability can be offered to the miller.