



# Uniflow Length Grader

## INTRODUCTION

Satake Uniflows separate free flowing granular products on the basis of length differences. They are available in models ranging from a single cylinder to twelve cylinders and with either parallel or series flow patterns.

The smaller models are modular in construction, allowing stacking to achieve desired flow patterns. These models are also available with options which allow either rapid change or side removal of the cylinder shells.

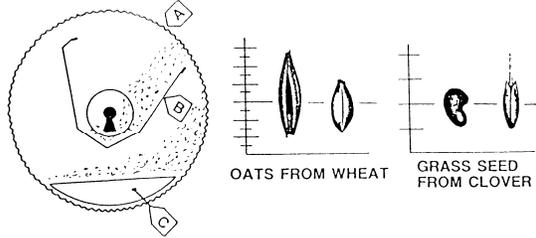


## DESIGN IMPROVEMENTS

- HIGH VISIBILITY END BOXES for greater operator convenience and more precise setting..
- HEAVY DUTY DRIVES for increased life.
- SPLIT CYLINDER OPTION for rapid cylinder change and thorough cleanout.
- QUICK CHANGE CYLINDER OPTION for rapid one man cylinder changing.
- FULLY RETRACTABLE WEIR PLATE to aid quick thorough cleanout.
- AUTOMATIC CHAIN TENSIONER



## PRINCIPLE OF OPERATION



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Using a cylinder with correct size indents (A) for the product to be cleaned, the operator has, at his fingertips, complete control of the degree of separation required. By means of a screw knob, the separating edge (B) of the trough can be raised or lowered to control the length of material picked up by the indents. The weir plate (C) is adjustable to hold material in the cylinder until separation is complete.

## QUICK CHANGE CYLINDER

Optionally available on the smaller models is a quick change cylinder mechanism. This utilises the standard type of cylinder shell but allows rapid removal and replacement of the shell through the discharge end of the machine. This option is especially useful where short batch runs are processed and thorough clean out is essential.

## CLEANOUT

In addition to the quick change and split cylinder shell options, cleanout on the standard models is improved by the use of a weir plate which can be moved entirely out of the product flow path. The trough in all models is fully invertible and, when re-locked, returns to its exact original setting.

**NOTE:** All Satake machines are the subject of a continuous development program and as a result, their specifications may change and differ in detail from those outlined in this data sheet.

UNIFLOW MODEL	OPERATIONAL MODE	CAPACITY (WHEAT)		APPROXIMATE DIMENSIONS (m)			MOTOR (kW)
		PF	SF	L	W	H	
TLGA-1P	PF only	5.0	-	2.9	0.8	0.8	0.5
TLGA-2H	PF only	10.0	-	2.9	1.3	0.8	0.75
TLGA-2V	PF or SF	10.0	5.0	3.0	0.7	2.0	0.75
TLGA-3H	PF only	15.0	-	2.9	2.1	0.8	1.0
TLGA-3V	PF or SFG	15.0	7.5	3.0	0.8	3.0	1.0
TLGA-21	SFG only	7.5	-	3.0	1.4	1.3	1.0
TLGA-2V2H	PF or SF	20.0	10.0	3.0	1.4	1.4	1.5
TLGA-3V2H	PF or SFG	30.0	15.0	3.0	1.4	1.9	3.0
TLGA-3V3H	PF or SFG	30.0	15.0	3.0	2.0	1.9	4.0
TLGA-2V4H	PF or SF	40.0	20.0	3.0	3.0	1.4	4.0
TLGA-3V4H	PF or SFG	60.0	30.0	3.0	3.1	2.0	4.0



## HIGH VISIBILITY OUTLET BOXES

All Satake Uniflows have full width inspection doors on the outlet boxes which extend down to well below trough level. This much improves the operator's ability to monitor the separation being made and gives improved visibility of the product flowing over the weir plate at the bottom of the cylinder.

## SIDE REMOVAL CYLINDER

This option utilises two piece split cylinder shells which can be unclamped and removed through the side of the machine. This gives more flexibility when planning-in the machine and also allows full access to the inside of the cylinder shell – a useful function if operating with products which cause a build up of bran or oil on the inside of the cylinder.

## CYLINDER RANGE

A full range of cylinders is available for fitting to Satake Uniflows. Pocket sizes range from 2/64" to 64/64" (nominal diameter). Satake in Sydney has facilities to test products for selection of cylinders for the separation required.

## OPERATIONAL MODES

### PARALLEL FLOW (PF)

Provides a single length separation at maximum capacity. Impurities may be either shorter or longer.

### SERIES FLOW (SF)

Allows both shorter and longer impurities to be separated in the one machine.

### SERIES FLOW GRADING (SFG)

Provides length grading of the cleaned product into two grades as well as removal of longer and shorter impurities.

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