SAAT TECHNOLOGE

Science of Seed Processing

INDENT CYLINDER SEPARATOR

ICS Series

INDENT CYLINDER SEPARATOR

Used for length grading of all granular materials, such as wheat, oat, maize, rice, fi ne seeds, lentils, sticks from sunflower or sugar beet, plastic particles, etc., as well as for the extraction of unwanted short or long admixtures.

Grading with Care.

Mechanical separation by indented cylinders is used for **grading** any granular material such as wheat, oats, fine seeds, lentils by length and for **separating seeds from stalks and other long or short straws.**
If your crops need special attention to separate foreign bodies at the cleaning stage of processing, Saat Technologe Indented Cylinders are the solution. They can be used alone or **set in series to accomplish different jobs** identifying different types of impurities

Principles of operation.

It consists of a horizontal rotating cylinder which has indents on the inside surface. Through the inlet housing, the granular material to be graded flows into the interior of the rotating cylinder. The grains that embed themselves into the indents, will be lifted, will fall into the trough (after a certain distance based on your parameters) and discharged by a conveying screw. The longer grains remain in the cylinder- shell and will be discharged separately. The size of grains can vary between 1.0 mm and 24 mm.

Construction and Function.

01. SHELL The inside cover is equipped with round or tear-drop shapes indents where kernel to be selected fi t precisely.

02. DESIGN The round, fully-closed housing is unique. Its design facilitates easy access to the cylinder segments. When the protective hood is opened, the machine is stopped automatically by a safety switch.

03. EXCHANGE OF SEGMENTS The cylinder shell is divided into several segments and provided with quick-release catches. This allows a simple and fast exchange of the grading segments. On request, the segments can be equipped with cleaning doors.

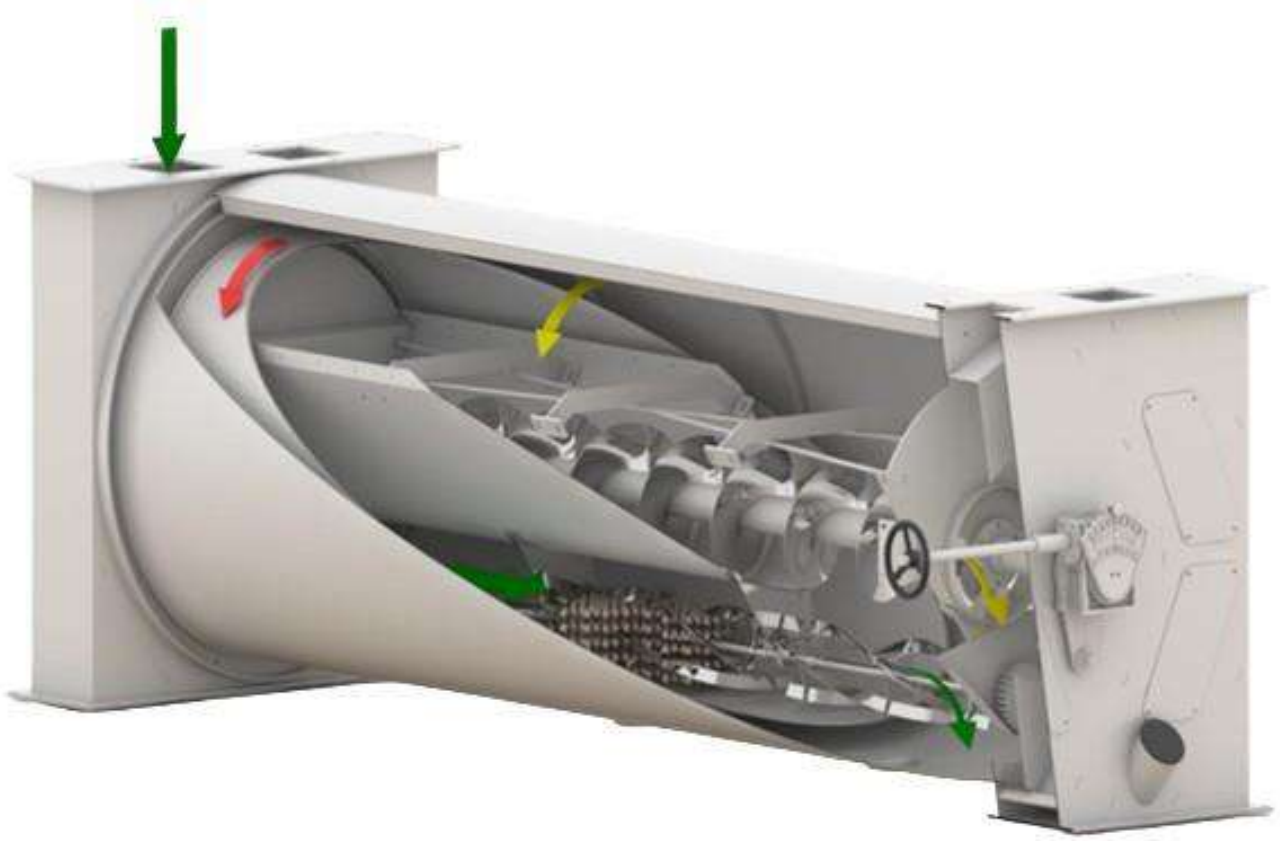
04. SHORT PRODUCT OUTLET The grains that embed themselves into the indents, will be lifted and after a certain distance (adjustable to suit) will fall out of the pockets under gravity into the trough.

05. LONG PRODUCT OUTLET Kernels longer than the indent diameter will immediately slide out and remain on the inside surface of the indent cover, so to be discharged into the outlet housing.

06. TROUGH SEALING All separator types are sealed between the trough and the cylinder shell. This prevents unwanted grains from getting into the trough and ensures even more precise grain separation.

07. DRIVES No chain drives, belt drives or gearwheel drives are used in our grain separators, which guarantees considerably smoother operation. We only use top-of-the-line geared motors. Adjustable speed is offered as an option.

08. CHECKING THE SEPARATION Two large inspection windows on the outlet side enable the operator to check the correct setting of the separator during operation, with no risk of accident.



OPTIONAL EQUIPMENT

PNEUMATIC CLEANING A compressed-air cleaning system which ensures faster emptying of the pockets and prevents a decline in the separator's output is available on request.

CYLINDER INCLINATION We supply adjustable inclination packages (0°-3°) or fixed inclination packages. This further optimises the separation results.

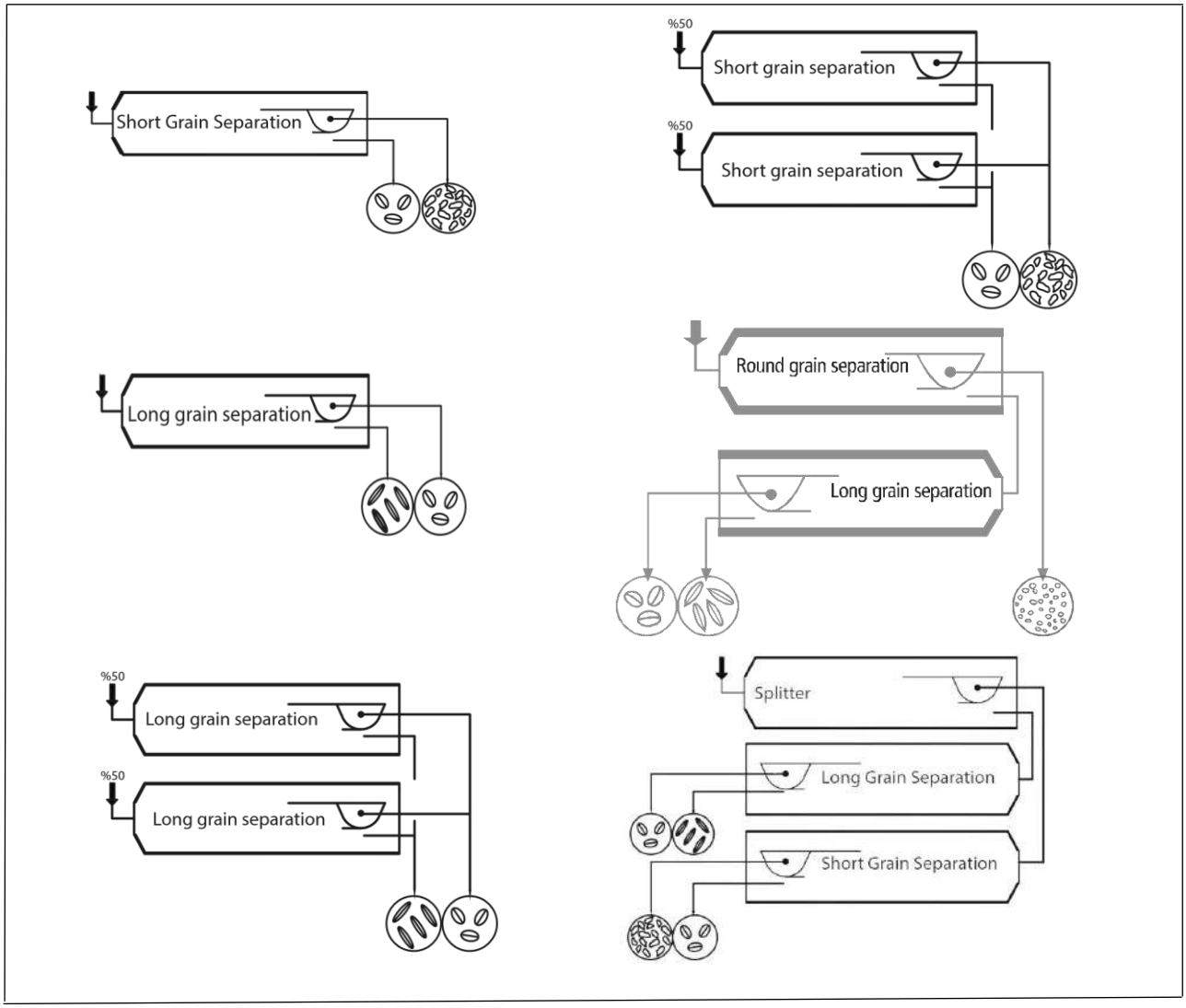
STIRRING DEVICE For heavily flowing products such as grass seeds or rice, we recommend the installation of our stirring device, which significantly increases the efficiency and output of the separator.

WEAR RESISTANT LINING For processing particularly abrasive products we can line neuralgic parts inside the machine with an exchangeable wear-resistant covering.

ADJUSTABLE SPEED Geared motors are available with mechanical or electronic speed control.

AUTOMATIC TROUGH ADJUSTMENT The trough regulation system can be equipped with adjusting motors.

SPLITTING FEATURE By splitting the grain flow we are able to achieve an outstanding max output of 45 t/h with our separator type IC SPLITTER & SHORT & LONG SEPARATOR 16010.



ICS			1010	2010	3010	4010	5010	6010	8010	10010	12010	16010
Dimensions	Length	mm	1850	2850	2545	3045	3545	4045	3320	3825	4325	5325
	Width	mm	640	640	860	860	860	860	1202	1202	1202	1202
	Height	mm	620	620	870	870	870	870	1240	1240	1240	1240
Cylinder dimension	Diameter	mm	400	400	600	600	600	600	900	900	900	900
	Length	mm	1000	2000	1500	2000	2500	3000	2000	2500	3000	4000
Technical data	Motor Capacity	Kw	0.37	0.55	1.1	1.1	1.1	1.1	3	3	3	4
	Air Requirement	m^3/min	6	7	9	9	9	9	12	12	12	12
Capacity	Wheat	t/h	1	2	3	4	5	6	8	10	12	16
	Barley	t/h	0.8	1.6	2.4	3.2	4	4.8	6.4	8	9.6	12.8
	Rice (Paddy)	t/h	0.4	0.8	1.2	1.6	2	2.4	3.2	4	4.8	6.4
	Sugar beet seed	t/h	0.3	0.6	1	1.3	1.6	1.9	2.6	3.2	3.8	4.4
	Sunflowers (unhulled)	t/h	0.3	0.6	1	1.3	1.6	1.9	2.6	3.2	3.8	5
	Alfalfa	t/h	0.2	0.4	0.6	0.8	1	1.2	1.6	2	2.4	3.2