SINCE 2080

INDENT CYLINDER SEPARATOR
ICS Series

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Used for length grading of all granular materials, such as wheat, oats, maize, rice, fine seeds, lentils, sticks from sunflower or sugar beet, plastic particles, etc., and for extracting unwanted short or long admixtures.

Grading with Care.

Mechanical separation using indented cylinders is employed for grading granular materials, such as wheat, oats, fine seeds, and lentils, by length, and for **separating seeds from stalks and other long or short straws.**
If your crops require special attention to remove foreign bodies during 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** by identifying various types of impurities.

Principles of operation.

It consists of a horizontal, rotating cylinder with indents on its 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 indents where the kernel to be selected fits 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 automatically stops due to a safety switch.

03. **EXCHANGE OF SEGMENTS** The cylinder shell is divided into several segments and provided with quick-release catches. This allows a fast and straightforward 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.

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OPTIONAL EQUIPMENT

PNEUMATIC CLEANING A compressed-air cleaning system that 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 optimizes the separation results.

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

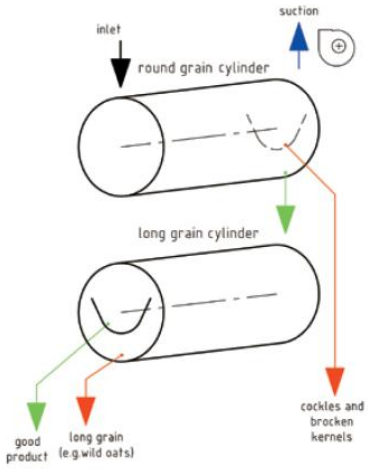
WEAR RESISTANT LINING. For processing particularly abrasive products, we can line neuralgic parts inside the machine with an exchangeable wear-resistant covering.

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

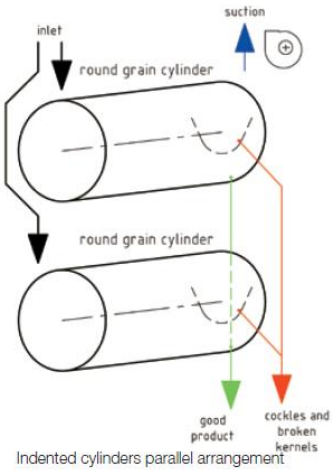
AUTOMATIC TROUGH ADJUSTMENT The trough regulation system can be equipped with adjusting motors.

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

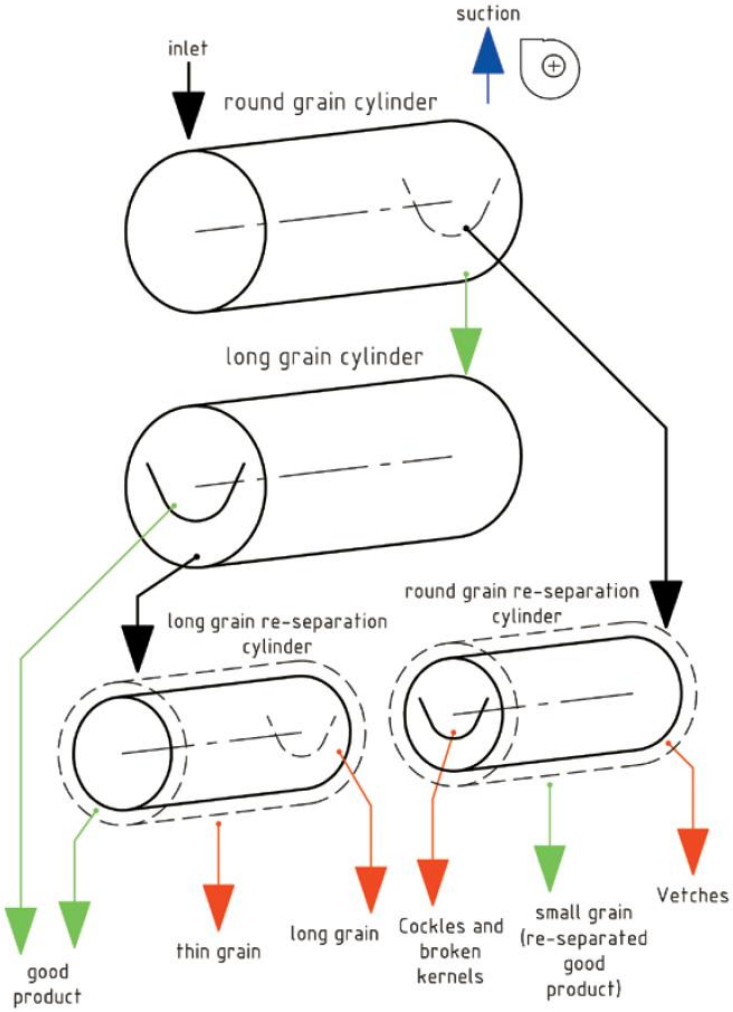
TYPICAL FLOW CHARTS



Indented cylinders in series arrangement



Indented cylinders parallel arrangement



Indented cylinder battery for flour mills

TECHNICAL DATA	Type INDENT CYLINDER SHORT SEPARATOR									
	ICSS1010	ICSS2010	ICSS3010	ICSS4010	ICSS5010	ICSS6010	ICSS8010	ICSS10010	ICSS12010	ICSS16010
Capacity t/h										
Wheat	1,0	2,0	3,0	4,0	5,0	6,0	8,0	10,0	12,0	16,0
Barley	0,8	1,6	2,4	3,2	4,0	4,8	6,4	8,0	9,6	12,8
Rice (white)	0,4	0,8	1,2	1,6	2,0	2,4	3,2	4,0	4,8	6,4
Motor (standard) Kw	0,37	0,55	1,1	1,1	1,1	1,1	3,0	3,0	3,0	4,0
Air Requirement m^3/min	6	7	9	9	9	9	12	12	12	12
Cylinder dim. Mm										
ø	400	400	600	600	600	600	900	900	900	900
Length	1000	2000	1500	2000	2500	3000	2000	2500	3000	4000
Dimensions mm										
Length	1760	2840	2545	3045	3545	4045	3320	3820	4325	5325
Width	640	640	860	860	860	860	1202	1202	1202	1202
Height	620	620	870	870	870	870	1240	1240	1240	1240
Net Weight kg	270	370	510	582	620	750	990	1120	1245	1315

TECHNICAL DATA	Type INDENT CYLINDER LONG SEPARATOR									
	ICLS1010	ICLS2010	ICLS3010	ICLS4010	ICLS5010	ICLS6010	ICLS8010	ICLS10010	ICLS12010	ICLS16010
Capacity t/h										
Wheat	1,0	2,0	3,0	4,0	5,0	6,0	8,0	10,0	12,0	16,0
Barley	0,8	1,6	2,4	3,2	4,0	4,8	6,4	8,0	9,6	12,8
Rice (white)	0,4	0,8	1,2	1,6	2,0	2,4	3,2	4,0	4,8	6,4
Motor (standard) kW	0,37	0,55	1,1	1,1	1,1	1,1	3,0	3,0	3,0	4,0
Air Requirement m^3/min	6	7	9	9	9	9	12	12	12	12
Cylinder dim. Mm										
ø	400	400	600	600	600	600	900	900	900	900
Length	1000	2000	1500	2000	2500	3000	2000	2500	3000	4000
Dimensions mm										
Length	1760	2840	2545	3045	3545	4045	3320	3820	4325	5325
Width	640	640	860	860	860	860	1202	1202	1202	1202
Height	620	620	870	870	870	870	1240	1240	1240	1240
Net Weight kg	270	370	510	582	620	750	990	1120	1245	1315

TECHNICAL DATA	Type INDENT CYLINDER SHORT & LONG SEPARATOR									
ICSLS	1020	2020	3020	4020	5020	6020	8020	10020	S2020	16020
Capacity t/h										
Wheat	1,0	2,0	3,0	4,0	5,0	6,0	8,0	10,0	12,0	16,0
Barley	0,8	1,6	2,4	3,2	4,0	4,8	6,4	8,0	9,6	12,8
Rice (white)	0,4	0,8	1,2	1,6	2,0	2,4	3,2	4,0	4,8	6,4
Motor (standard) kW	2x0,37	2x0,55	2x1,1	2x1,1	2x1,1	2x1,1	2x3,0	2x3,0	2x3,0	2x4,0
Air Requirement m^3/min	6	7	9	9	9	9	12	12	12	12
Cylinder dim. Mm										
ø	400	400	600	600	600	600	900	900	900	900
Length	1000	2000	1500	2000	2500	3000	2000	2500	3000	4000
Dimensions mm										
Length	2107	3145	2905	3405	3905	4445	3765	4265	4765	5775
Width	640	640	860	860	860	860	1202	1202	1202	1205
Height	1240	1240	1740	1740	1740	1740	2480	2480	2480	2480
Net Weight kg	540	740	1020	1170	1240	1500	1980	2240	2490	2630

TECHNICAL DATA	Type INDENT CYLINDER DIVIDER & SHORT & LONG SEPARATOR									
ICDSLS	1030	2030	3030	4030	5030	6030	8030	10030	12030	16030
Motor (standard) kW	3x0,25	3x0,55	3x1,1	3x1,1	3x1,1	3x1,1	3x3,0	3x3,0	3x3,0	3x4,0
Air Requirement m^3/min	12	14	18	18	18	18	24	24	24	24
Cylinder dim. mm										
ø	400	400	600	600	600	600	900	900	900	900
Length	1000	2000	1500	2000	2500	3000	2000	2500	3000	4000
Dimensions mm										
Length	2107	3145	2905	3405	3905	4405	3765	4765	4765	5775
Width	640	640	860	860	860	860	1202	1202	1202	1205
Height	1860	1860	2610	2610	2610	2610	3720	3720	3720	3715
Net Weight kg	810	1110	1530	1760	1860	2250	2970	3360	3735	3945