1.13 ROTARY SEED SEPARATOR SNS

SNS separator

The technological process of the **rotary seed separator** involves cleaning the seeds off light dirt in the air stream. Then the remaining load gets onto sieves. The first sieve with longitudinal openings separates seeds according to their thickness. Thus it sifts flat seeds and dirt, e.g. needles and heavy but small mineral dirt (e.g. sand). On the second sieve with circular openings seeds are sifted according to their width. At the end of the sieves large dirt falls out (husks, pebbles, cone pieces, needles, leafs). Cleaned seeds can be dimensionally calibrated thanks to application of two sieves that have different size of openings.

TECHNICAL PARAMETERS

Parameter	Unit	Value
Power supply		~1x230V/50Hz
Power requirement	W	230
Sieves revolutions	RPM	0-27*
Cylinder slope	°	0-6*
Air stream speed	m/s	0-4*
Container capacity	dm^3	40
Own weight	Kg	100
Height	mm	1880
Length	mm	2250
Width	mm	570
Sieves with round openings	mm	1,5; 3,0; 6,0

ROTARY SEED SEPARATOR SNS

SNS separator

1.13

The graded seeds may then be sorted using a pneumatic separator that separates seeds affected by insects, or these that are inanimate which have a lower density than the proper ones. This procedure brings most precise effects and is used in e.g. forest gene banks. Calibration is also used before seed encapsulation and sometimes before sowing to equalize germination. Precision seed drills require seeds prepared using such a treatment.
The cylinder revolutions should be adjusted to a given portion of seeds (species, moisture, size, wings, refinement) as the seeds bulk should slide on the surface of the sieves and in the upper area should not detach from the surface. This ensures the best quality and effectiveness of separation. The slope of cylinders can be adjusted from 0-6 degrees, while the operating slope should be in the range of 1-4 degrees.

Sieves used in the Rotary Seed Separator SNS

Theoretical openings		Tree species to chich sieves can be applied	Plate symbol according to PPHU "Perfpol"	**S** -standard
round	longitudinal			**O** - option
Ø mm	mm x mm			
1,50		alder	**Rv 1,6 - 2,5**	**S**
1,75		pine, spruce, larch	Rv 1,8 - 2,5	O
2,00		pine, spruce, larch	Rv 2 - 3	O
2,25		pine, spruce, larch	Rv 2,25 - 3,5	O
2,50		pine, spruce, larch, birch	Rv 2,5 - 3,6	O
2,75		pine, spruce, larch	Rv 2,8 - 4,5	O
3,00		pine, spruce, larch, alder	**Rv 3 - 5**	**S**
3,25		pine, spruce, larch	Rv 3,2 - 5	O
3,50		larch	Rv 3,5 - 5	O
6,00		fir tree	**Rv 6 - 9**	**S**
6,50		fir tree	Rv 6,5 - 9	O
7,00		fir tree	Rv 7 - 9	O
8,00		beechwood	Rv 8 - 10	O
	20 x 1,0	pine, spruce, larch	**Lv 1x15 - 6x20**	**S**
	20 x 1,5	pine, spruce, larch		
	20 x 2,0	pine, spruce, larch	**Lv 2,2x25 - 10x30**	**S**
	20 x 2,5	pine, spruce, larch, fir tree	Lv 2,5x25 - 10x30	O
	20 x 3,0	pine, spruce, larch	Lv 3x30 - 15x40	O
	20 x 4,0		Lv 4x25 - 16x30	O
	30 x 9,0	beech wood	**Lv 9x25 - 32x40**	**S**