Cleaners

NSD 1, 2 & 3



DENİS

General description

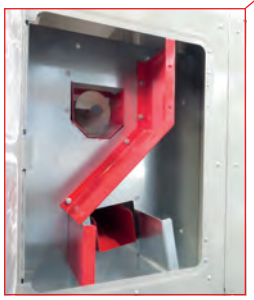
DENIS cleaners are the fruit of the knowledge and experience of Denis in this field. Robust, compact and reliable, they combine efficiency and easy use and benefit from innovations that considerably increase performance and versatility. Settings and access are favoured by an ergonomic design.



Window to see inside the cleaner



Aspiration setting controls



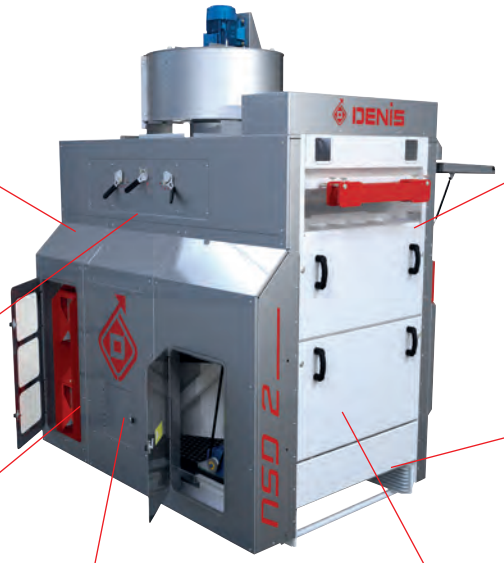
Window to see waste



Guard to check aspiration waste



Sliding door





Guards on jacks to check transmissions (NSD2)



Storage for 6 screens in front of the cleaner



Special tool for opening guards and unblocking the screens

The NSD provides the following advantages :

Efficient scalping / sorting through enchanced modularity
Thanks to identical and interchangeable screens (dimensions 0.80 x 1.00 m) the operator has a wide choice of perforations for each chosen type of work to be done.

Dust removal thanks to a double aspiration system
- Setting at the entry possible by way of a counterweight flap
- Outlet precision due to its long aspiration chimney
- Setting controls that ensure a good and balanced aspiration
- Effective double grain fall, avoiding crushing and unwanted air entry.

Strong cleaning properties thanks to an auto cleaning rubber ball system
No setting nor maintenance and particularly efficient due to the good distribution of balls in all cases.



Frame equiped with rubber ball

Characteristics

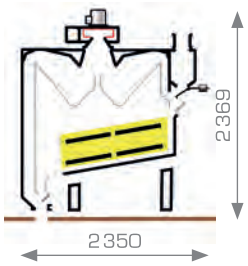
Cleaner	Power (kW)	Aspiration power (kW)	Empty weight (kg)	Air Capacity (m3/min)	Screen surface (m²)	Standard cleaning
NSD1	1.5	3.0	850	90	3.2	25t/h*
NSD2	1.5	4.0	1410	150	6.4	50t/h*
NSD3	5.5	4.0	3050	150	9.6	100t/h*

** Based on dry wheat SW : 0.75, humidity 16%. When important impurities rate (> 5%), it is compulsary to clean several times the grain to obtain good result.*

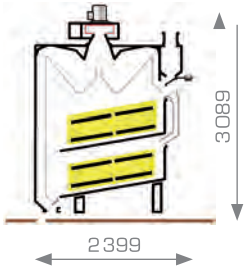


Uses

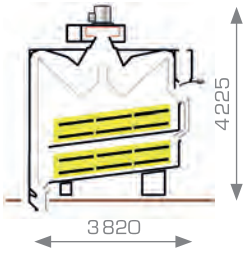




The **NSD1** with 1 screen housing box and two screen elements per level for a capacity of 25t/h*



The **NSD2** with two identical screen housing boxes and two screen elements per level, for a capacity of 50t/h*

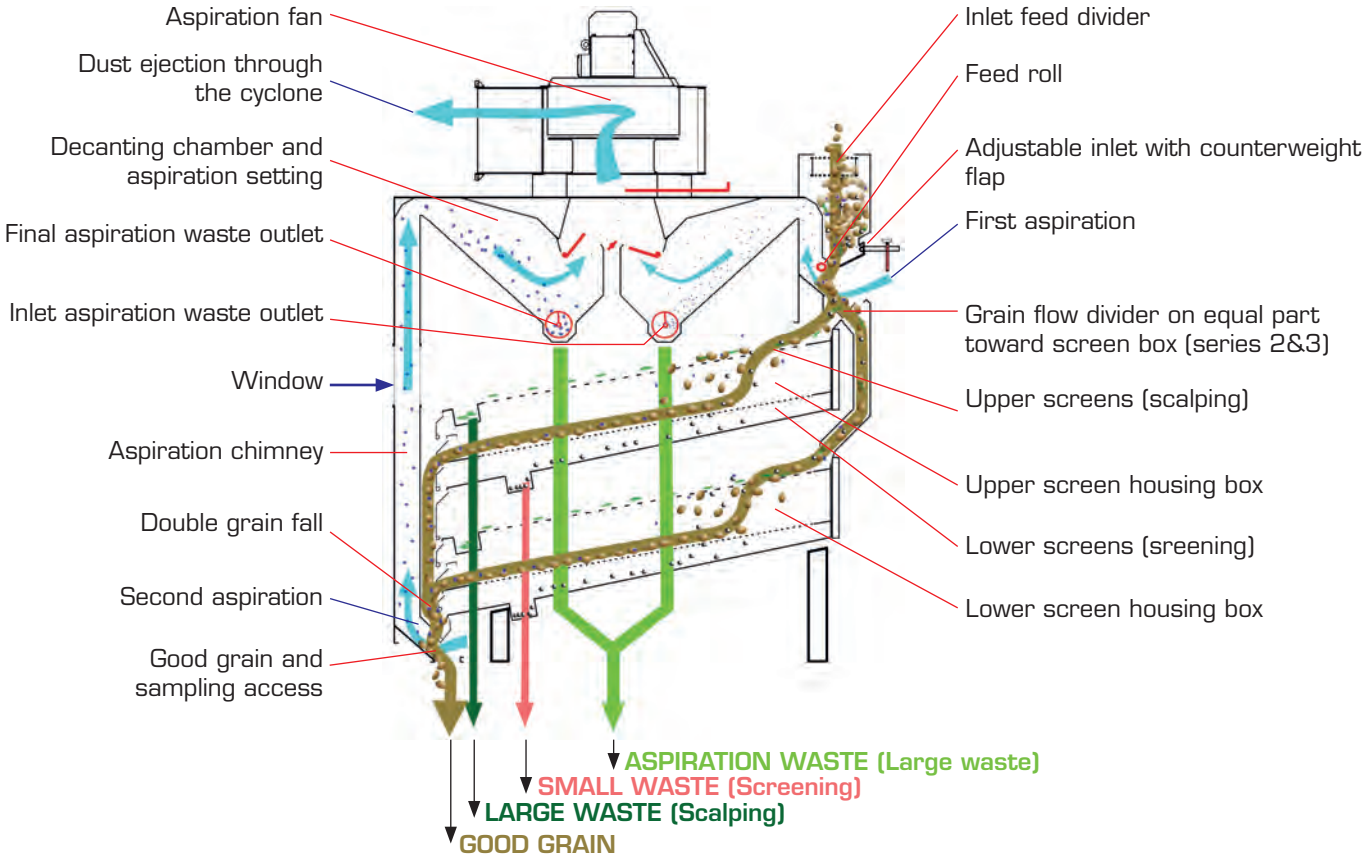


The **NSD3** with two identical screen housing boxes and three screen elements per level for a capacity of 100t/h*.

** Based on dry wheat SW : 0.75, humidity : 16%*

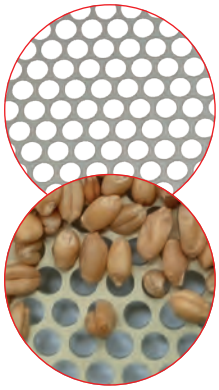
CLEANING

In the screen housing box, each screen level has a specific role: the upper level takes out the large waste (scalping) and the lower level the small waste (screening).





Examples of screen elements for products :



Screens with perforations Round holes

	Screen elements of NSD1 *			
Grain	**Upper**		**Lower**	
Oats	4,00x20	3,75x20	*1,75x20*	*Ø 3*
Wheat	4,50x20	4,00x20	*2,10x20*	*Ø 3*
Wheat seeds	4,00x20	3,75x20	*2,65x20*	*Ø 4*
Rape seeds	Ø 3,5	Ø 3	*Not perforated*	*Ø 1,6*
Faba bean	Ø 14	Ø 12	*Ø 6*	*4,50x20*
Lentils	Ø 6	Ø 5,5	*Ø 3,5*	*1,75x20*
Corn	Ø 14	Ø12	*Ø 5,5*	*Ø 6*
Barley	4,50x20	4,00x20	*2,10x20*	*Ø 3*
Peas	Ø 11	Ø 10	*4,50x20*	*Ø 5,5*
Soya	Ø 10	Ø 9	*4,50x20*	*Ø 4*
Sunflower	Ø 12	Ø 11	*Ø4*	*2,10x20*
Triticale	4,50x20	4,00x20	*2,10x20*	*Ø 3*
Mixed crops	**Upper**		**Lower**	
Wheat/Faba beans	Ø 6	Ø 5,5	*2,10 x 20*	*Ø 3*
Barley / Peas	Ø 6	Ø 5,5	*2,10 x 20*	*Ø 3*

** NSD2 needs double screens quantity compared with NSD1.*
** NSD3 needs triple screens quantity compared with NSD1.*



Screens with perforations Oblong holes

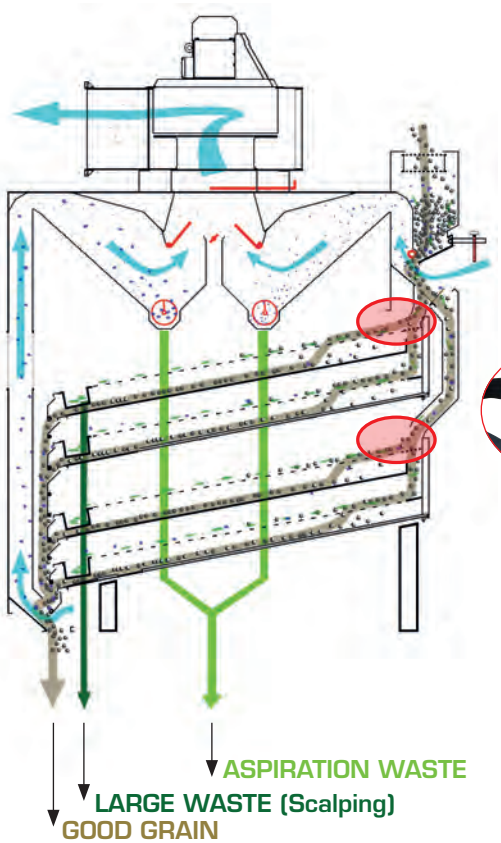
Options

SCALPING

For receiving or cleaning rape seed, when scalping is sufficient, we can use all the screens for scalping by doubling the effective surface.

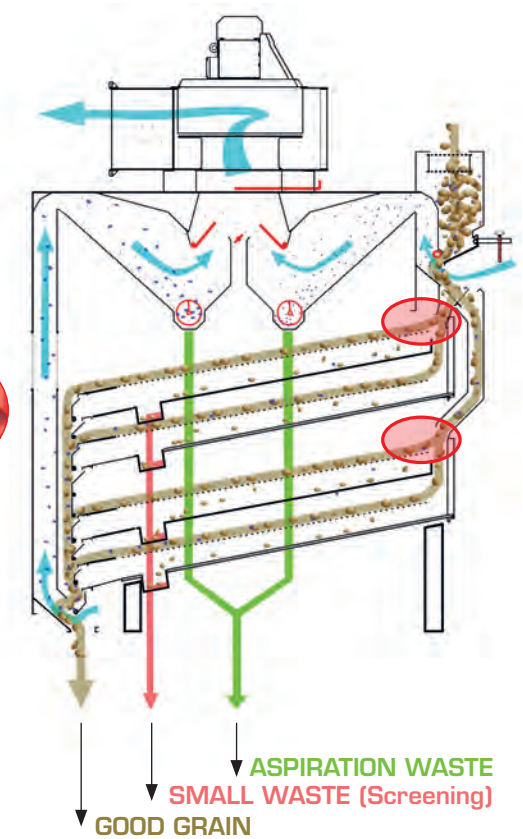
SCREENING

On calibrated barley, when screening is sufficient, we can use all the screens for screening by doubling the effective surface.





Shim for flow division



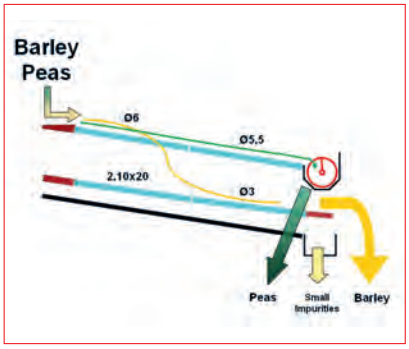


Specific equipment for organic cultures (mixed crops)

DENIS has developped NSD1 & NSD2 range to sort mixed crops found in organic cultures. An evacuation screw is used at the outlet at the end of the first screen (scalping). These new cleaners NSD1 & NSD2 uphold their efficiency, especially in terms of the capacity rates.

Example with NSD 1

In the below example, peas are mixed to barley. Peas are evacuated thanks to a screw towards the outlet at the upper screens end (scalping) and barley goes through good grain outlet.





Side outlet at screen end on the NSD1

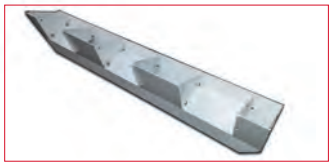


View of to see the outlet equipped with a screw

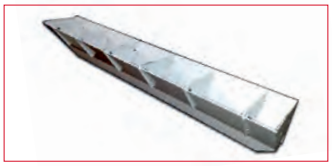
Example with NSD2

Adjustable divider (in option) to feed only one screen box for small quantities of product and little capacities.

This allows to reduce the quantity of screens



Divider for feeding two screen boxes (standard)

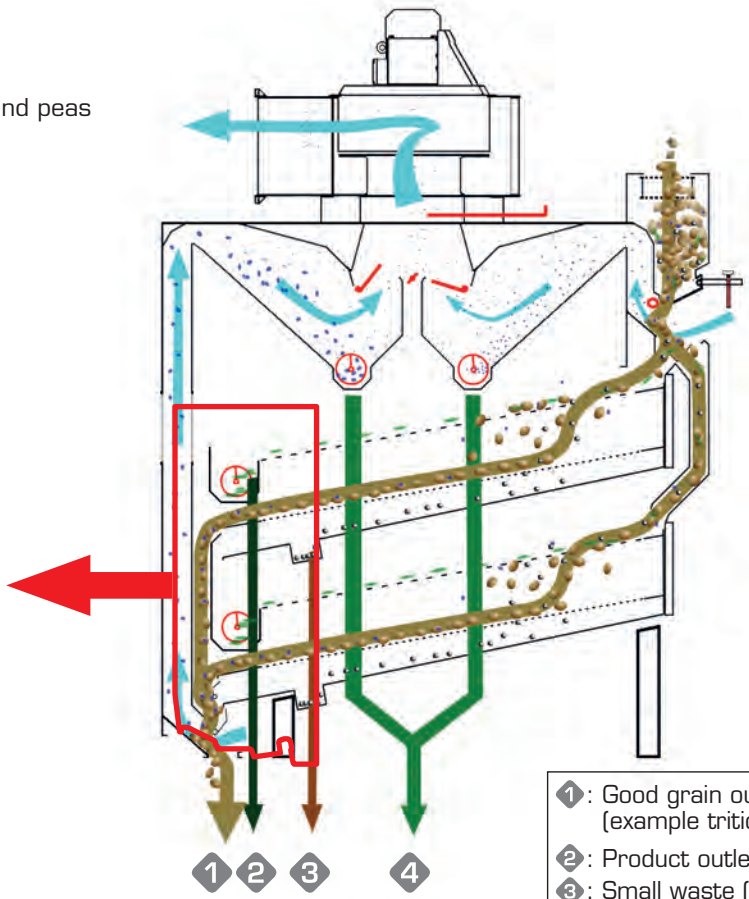


Divider for feeding one screen box

Example of mixing triticale and peas



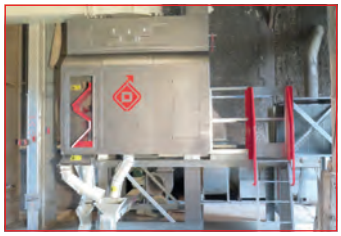
Outlets ② *and* ③



① : Good grain outlet /product **A** (example triticale)
② : Product outlet B (example peas)
③ : Small waste (screening)
④ : Aspiration waste (aspiration)









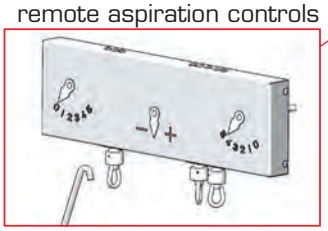


Setting controls on cleaner





Cleaner on frame with remote aspiration controls



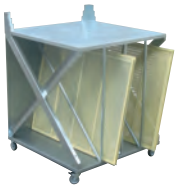


Cleaner on frame equipped with a platform



Cleaner on frame with a platform and screen storage table (in option)





Screen stocking table

CE

All our equipment and instrumentations meet with the standards for safety.

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