



up to **42** tons
per hour
RECORD PRODUCTIVITY

Figures are valid for wheat contaminated less than 1%
with well recognisable impurities with volume weight of
the material of 0,750 t/m³

SMART SORT A series

from 1 to 6 chutes

For those striving for
the best we developed
the SmartSort^A

The SmartSort^A is designed as a colour, size, and texture sorter for cleaning a wide range of bulk materials. The combination of innovations and modern components of the best quality, together with the long-term experience in optical sorting allowed us to create a new model of optical sorter capable of solving the most complicated sorting tasks with maximum efficiency.

SmartSort^A

DISTINCTIVE FEATURES



Control

The self-intuitive menu of the operator's panel with the userfriendly interface and a high degree of visualization simplifies and facilitates handling of the optical sorter. The machine startup is carried out by one touch.



Reconfiguration

Choosing the **SmartSort^A** one can always be sure that even when purchasing the machine of the minimum configuration it is possible at any moment upgrade it up to NIR, bi-chrome, or RGB camera configuration.

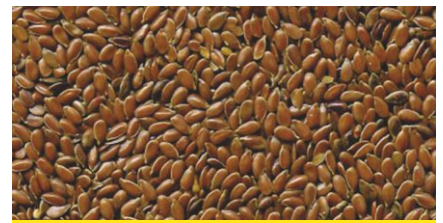
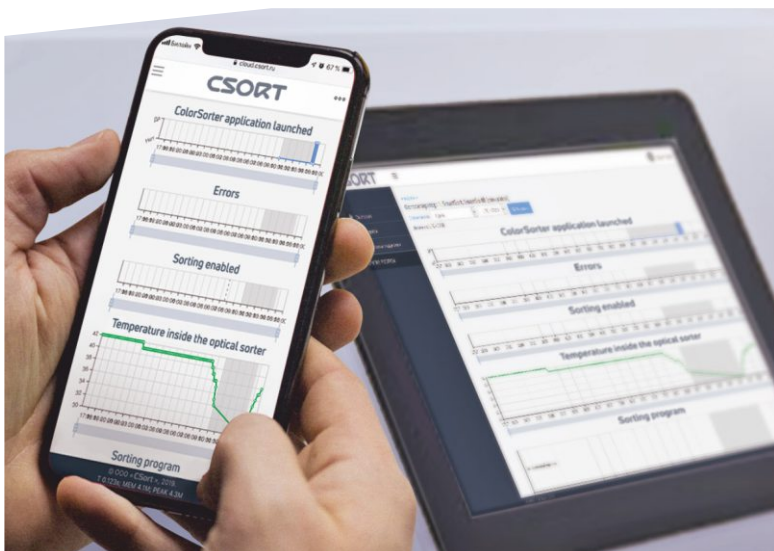
CSort Cloud — new operational capabilities

Csort Cloud — is a global online platform integrating system for color sorter monitoring by the CSort experts. The system controls the productivity of the production line, raw material quality, equipment downtime, and in-time software update. It allows to provide remote equipment maintenance anywhere.

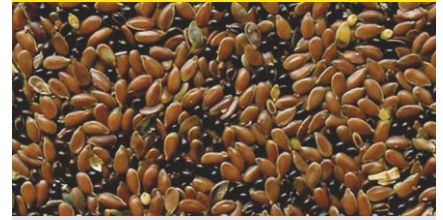
Statistics of different parameters is always available in the personal account of the online service to help the operator to control the machine and the whole production line where it is integrated.

CSort Cloud – less downtimes, more benefits for the user.

Option



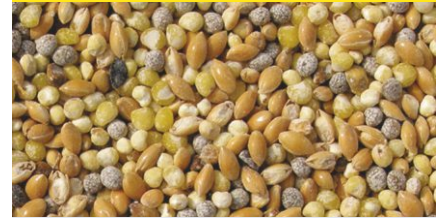
Accepted



Rejected



Accepted



Rejected



Accepted



Rejected



Accepted



Rejected



Accepted



Rejected



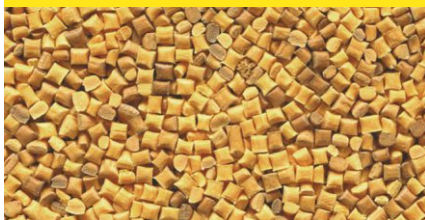
Accepted



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Accepted



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Accepted



Rejected



Industrial Light Signal

The **SmartSort^A** enables a quick visual tracing of the machine condition at a distance in three modes available: sorting, standby, error or emergency.



Block-modular Design

Universal frames of **SmartSort^A** optical sorter allow to set a different number of sorting sections: from 1 to 3, from 4 to 6. Its design allows increasing the production capacity on the basis of the available machine. That helps to save funds, as compared to the purchase of a new optical sorter, as well as to save the space and avoid dismantling the old equipment and purchasing additional handling units.



Automatic air reducer

The **SmartSort^A** can independently adjust the operating pressure of the pneumatic system in accordance with the values set in a sorting program. When going from one sorting program to the other, the pressure changes automatically.



Ejectors

The reliable and high-efficiency Italian ejectors secure over four billions operations. 4.5 mm width of the air nozzles provides efficient removal of gross and subtle blemishes with low air consumption.



Integration of technological process automation

After connection with the enterprise programmable logic controller, the machine is able to work without operator. To integrate the color sorter with the enterprise management system **SmartSort^A** is able to transfer information on power control, error warning, equipment availability, work of different sections, and also to receive signals of the management system. Smart Sort A can be featured with the level sensors to control the material in the operational hopper.



CCD-Cameras

The smart cameras of the machine are assembled exclusively from high-tech components supplied by **Kodak** and **Toshiba**. The highly sensitive CCD-matrixes of 2048 pixel resolution provide high image detail of a material sorted which guarantees precise analysis and top quality of a final product. Flexible setting system provides recognition 0.13 mm spots.



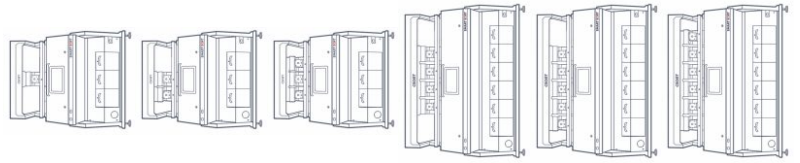
Reliability

For our equipment we select the best components of such brands as SMC, Mitsubishi, Festo, Matrix, Eles+Ganter and LAPP. CSort machines are manufactured at the company's factory using highprecision German equipment. Eurasian and European certificates of conformity confirm the compliance with the safety standards. We provide a 2 year warranty period and 10 year service life.



MODEL RANGE AND TECHNICAL CHARACTERISTICS

SmartSort^A



		SmartSort ^A 1	SmartSort ^A 2	SmartSort ^A 3	SmartSort ^A 4	SmartSort ^A 5	SmartSort ^A 6	
01	Number of channels	54	108	162	216	270	324	
02	Production capacity (for wheat), tons per hour*	7	14	21	28	35	42	
03	Cleanliness coefficient, %, min.*	99,9						
04	CCD-matrix resolution (per chute), pixel	2048						
05	Power supply voltage, V	230						
06	Power line frequency, Hz	50						
07	Nominal power, kW	0.6	0.8	1.0	2.7	3.0	3.3	
08	Air pressure, MPa	from 0.6 to 0.8						
09	Air purity according to GOST 17433, ISO 8573-1:	particles	1					
		humidity	4					
		oil	1					
10	Air consumption for the technical process (wheat), m ³ /h, max.*	40	80	120	160	200	240	
11	Maximum air consumption (at 0.6 MPa), m ³ /h	960						
12	Air consumption for the aspiration, m ³ /h, max.:	2400						
13	Dimensions, mm	Length	1510			2650		
		Width	1600					
		Height	2000					
14	Weight, kg, max.	550	600	650	1400	1450	1500	
15	Electric shock protection class according to GOST IEC 61140-2012	I						
16	Degree of protection provided by enclosures according to GOST 14254	IP54						
17	Ambient temperature, °C	from 5 to 40						
18	Relative air humidity at the temperature of 25 °C, %	от 20 до 80						
19	Noise level at the work site, dBA, max.	80						

* With the initial content of foreign materials of 2% or less and the volume weight of the product of 0.750 t/m³