

# ASA-1C

## Diamond color sorting machine ASA-1C

New product

Diamonds sorting machine ASA-1C is designed for automatic diamonds classification by color and its sorting in 12 groups.

### Operation

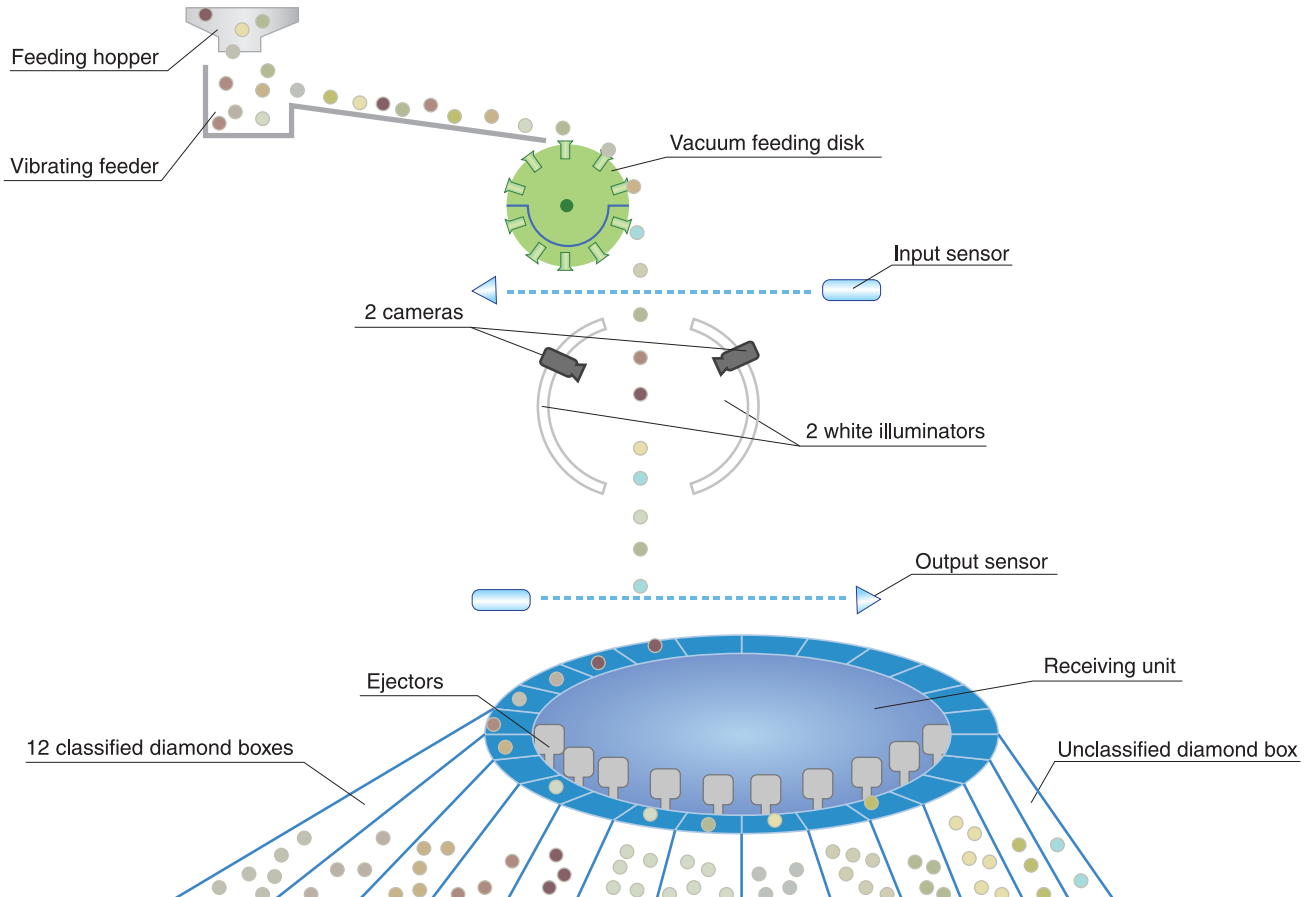
Diamonds automatically come one by one from the feeding bin to the detection zone. Two cameras take and transmit diamond projections to the software, which generates crystal model by color, defines its color and assign each crystal to a certain group. Then, the diamond comes into a cell of receiving drum where it is ejected to the corresponding concentrate box.



### Technical data

Size fraction, mm	-4,5+1,8
Size variations for each size fraction, mm	0,3
Sorting rate, particles per second, not less	5
Number of groups of diamonds after sorting:	
- classified diamonds	12
- unclassified diamonds	1
Sorting accuracy: after sorting each classified group of diamonds contains:	
- assigned type of stones, not less than 90%	90
- another type of stone, not more than 10%	10
	(including >90% of diamonds from neighbor groups)
Accuracy of mechanical extraction of diamonds, %	99
Compressed air consumption (0.4 MPa), l/min	not more than 200
Overall dimensions (LxWxH), mm	1200x900x1500
Net weight, kg	225
Power consumption, VA (single phase main, 220 V/50 Hz)	500

## Principal Process Diagram



## Software operation

### SORTING BY COLOR

1BRN	2BRN	3BRN	4BRN	5BRN	1CLR	2CLR	3CLR	4CLR	5CLR	CAPE	YELL