

380 Sieve

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–English–

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NORDSON CORPORATION • AMHERST, OHIO • USA



Order number

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DECLARATION of CONFORMITY

PRODUCT: 380 Sieve (Sieving Machine 380)

PRODUCT RANGE: All variants and models

Conformity has been verified following the provisions of the following directives:

EC Council Directive on Machinery 2006/42/EG in the version 2006/95/EG

STANDARDS USED TO VERIFY COMPLIANCE:

EN ISO 12100-1, EN ISO 12100-2, EN ISO 14121-1, EN 60 204-1, EN 1127-1, EN 12981

This product has been manufactured according to good engineering practice and conforms to the specified directives and standards described above.



Date: 29th October 2010

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Congratulations on the Purchase of Your Nordson Product

Nordson equipment is engineered and manufactured in accordance with strict specifications, using high quality components and state-of-the-art technologies that assure reliable, long-term performance. Your product was thoroughly tested for proper operation prior to shipment.

Before unpacking and installing your new equipment, please read this manual. It is your guide to safe installation, productive operation and effective maintenance. We recommend that you keep the manual available for future reference.

Your Safety is Important to Nordson

Carefully read the *Safety* section. Your product is designed for safe operation when used according to the published instructions. Potential hazards exist when operating instructions are not followed.

Contact

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For a list of local Nordson organisations, see *Nordson International*.

Nordson International

<http://www.nordson.com/Directory>

Europe

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Belgium		31-13-511 8700	31-13-511 3995
Czech Republic		4205-4159 2411	4205-4124 4971
Denmark	<i>Hot Melt</i>	45-43-66 0123	45-43-64 1101
	<i>Finishing</i>	45-43-200 300	45-43-430 359
Finland		358-9-530 8080	358-9-530 80850
France		33-1-6412 1400	33-1-6412 1401
Germany	<i>Erkrath</i>	49-211-92050	49-211-254 658
	<i>Lüneburg</i>	49-4131-8940	49-4131-894 149
	<i>Nordson UV</i>	49-211-9205528	49-211-9252148
	<i>EFD</i>	49-6238 920972	49-6238 920973
Italy		39-02-904 691	39-02-9078 2485
Netherlands		31-13-511 8700	31-13-511 3995
	<i>Hot Melt</i>	47-23 03 6160	47-23 68 3636
Poland		48-22-836 4495	48-22-836 7042
Portugal		351-22-961 9400	351-22-961 9409
Russia		7-812-718 62 63	7-812-718 62 63
Slovak Republic		4205-4159 2411	4205-4124 4971
Spain		34-96-313 2090	34-96-313 2244
Sweden		46-40-680 1700	46-40-932 882
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	<i>Finishing</i>	44-161-495 4200	44-161-428 6716
	<i>Nordson UV</i>	44-1753-558 000	44-1753-558 100

Distributors in Eastern & Southern Europe

DED, Germany	49-211-92050	49-211-254 658
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Outside Europe / Hors d'Europe / Fuera de Europa

- For your nearest Nordson office outside Europe, contact the Nordson offices below for detailed information.
- Pour toutes informations sur représentations de Nordson dans votre pays, veuillez contacter l'un de bureaux ci-dessous.
- Para obtener la dirección de la oficina correspondiente, por favor diríjase a unas de las oficinas principales que siguen abajo.

Contact Nordson	Phone	Fax
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Africa / Middle East

DED, Germany	49-211-92050	49-211-254 658
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Pacific South Division, USA	1-440-685-4797	–
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Japan

Japan	81-3-5762 2700	81-3-5762 2701
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North America

Canada		1-905-475 6730	1-905-475 8821
USA	Hot Melt	1-770-497 3400	1-770-497 3500
	Finishing	1-880-433 9319	1-888-229 4580
	Nordson UV	1-440-985 4592	1-440-985 4593

General Information

Thank you for choosing a 380 Sieve. To ensure safe and proper operation of the product, please read this manual thoroughly before using the product for the first time!

Please store this manual carefully.

Package contents

- bearing flange
- hopper, straight outlet (optional)
- hopper, bent outlet (optional)
- spacer
- lid
- sieve frame
- ultrasonic sieve (optional)
- vibrator motor
- supports
- vertical tensioners
- pressure screws
- shock mounts
- mounting parts
- technical manual

Safety Instructions

This manual contains general information on operation and commissioning of the unit as well as repair and maintenance instructions.

It also provides instructions on safe and reliable operation of the equipment.

This manual is essential to any guarantee claims and must be read and observed before starting up the equipment.

The following symbols must be observed at all times:



DANGER: This symbol indicates the risk of personal injury.



WARNING: This symbol indicates the risk of property and environmental damage.

Liability and Warranty

The sieving system is intended to be used only to sieve suitable material.

Any other use is considered to be unintended and can result in personal injury or property damage.

Nordson will not be liable for any damage or consequential damage resulting from unintended use, failure to observe the manual, interventions by the purchaser, structural modifications, force, overheating, overload, exposure to moisture, etc.

Nordson will not be liable for personal injury or property damage caused by unintended and/or improper handling of the equipment.

Quality Control

Your equipment has been carefully inspected, during and after production. Upon unpacking, please check the equipment carefully for transport damage.

Technical Data

Standard

- Electrical connection: 230 V~ 50 or 60 Hz, Pmax < 50W
- Total air consumption (compressed air):
< 0.5 MPa network pressure, < 1 Nm³/h

Permitted:

- Residual oil 0.13 mg/Nm³
- Residual water 1.3 g/Nm³
- Compressed air connection: Pnetwork = 0.6 MPa
- The capacity varies according to the powder quality, output quantity, mesh size, etc. (The average capacity of a 500 micrometer sieve, ø 400 mm, is 100 kg/h)

With Option Ultrasonic Sieve

- Generator: GM 2070-SB
- HF output: 60 W
- HF frequency: 20 kHz homogenous ultrasound wave
- Pmax < 50W

Commissioning

- Before unpacking and starting up the equipment, read this manual thoroughly and carefully follow all instructions.
- Store the manual such that it is easily accessibly to operating and maintenance personnel.
- Comply with all company safety instructions as well as applicable accident prevention and safety regulations.
- Operation and maintenance of the unit may be performed only by persons who are familiar with this manual and all applicable regulations regarding occupational safety and accident prevention.
- Install all electrical and pneumatic components as specified by legal and local regulations.
- The sieve should be mounted to a suitable frame.
- Do not smoke near the equipment.
- Wear certified respiratory protection, safety goggles and protective gloves.
- Protect components from damage, wear and inclement weather.
- Do not operate the unit in a damp, flammable or potentially explosive environment.
- The unit may only be operated indoors and must be protected from humidity and moisture.
- The sieve system may be used only in good condition and with original components from the manufacturer, and the instructions in the manual must be followed.
- Never use high-pressure compressed air to remove dust or powder from skin or clothing. High-pressure compressed air can penetrate the skin and cause serious injury or death.

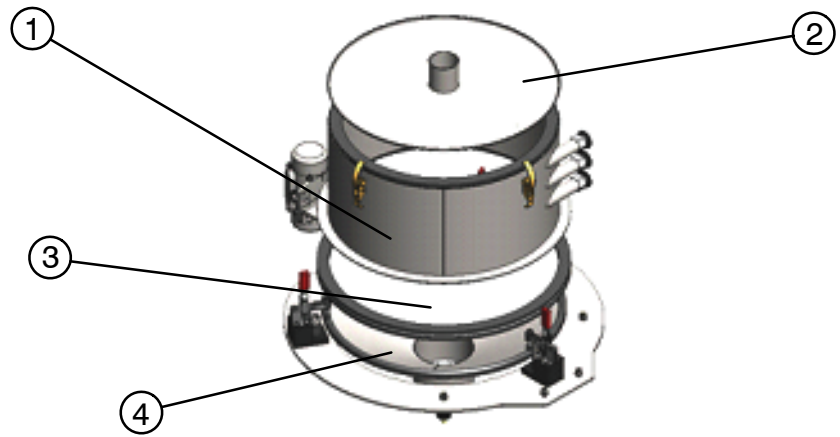
Preparatory Work

- The vent hose must be properly screwed onto the powder booth or filter.
- The system must be grounded.
- The controller must be secured or placed where it is resistant to sliding.
- When it is cleaned, the sieve should be positioned next to or in front of the powder booth / exhaust system so that dust is suctioned out.
- The machine includes one sieve.
- When different powders are used with the same sieve, differences in quality may result. The right sieve for each powder should be determined by trial and error. Consult the powder manufacturer if necessary.

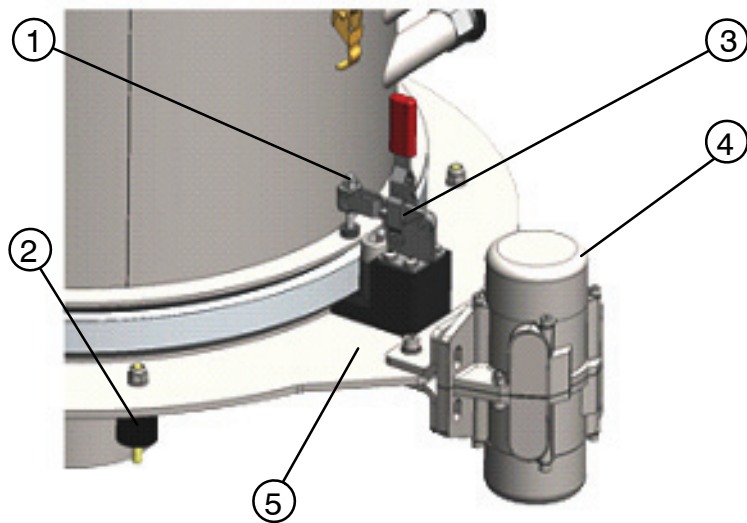
Maintenance

- Maintenance and inspection conditions must be complied with.
- Ensure that the unit has been disconnected from the power supply whenever it is opened and/or cleaned.
- Wear certified respiratory protection, goggles and protective gloves when performing maintenance, cleaning the equipment or any other handling.
- Use only original components from the manufacturer and follow the instructions for their use in the manual.
- Never use high-pressure compressed air to remove dust or powder from skin or clothing. High-pressure compressed air can penetrate the skin and cause serious injury or death.
- Do not smoke near the equipment.
- Comply with all company safety instructions as well as applicable accident prevention and safety regulations.

Components



- | | |
|---------------|-----------------|
| 1. Sieve body | 3. Sieve screen |
| 2. Sieve lid | 4. Sieve base |



- | | |
|-----------------------|-------------------|
| 1. Pressure screw | 4. Vibrator motor |
| 2. Shock mount | 5. Support |
| 3. Vertical tensioner | |

Description of Functions

System Control

The following functions must be controlled:

- Sieve controller

Operating Elements

Opening the Machine



WARNING: Do not open the lid during operation! This would cause powder loss.



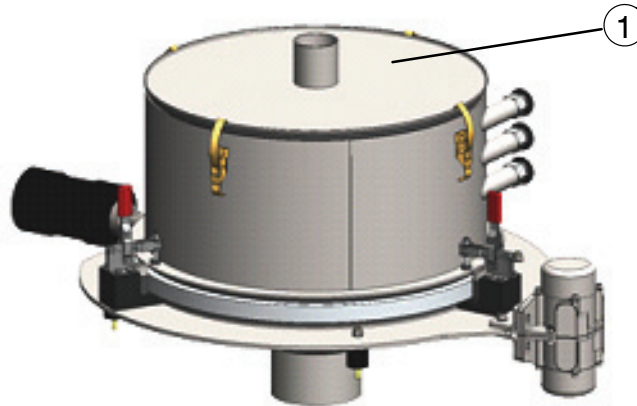
WARNING: When fastening the individual parts into place, verify that there is nothing in between. This could cause damage or injury from pinching and crushing!

Adapting Sieve Capacity to the Powder to be Sieved When Using Ultrasonic Sieve

If the ultrasonic settings are too high it can have the reverse effect and not sieve efficiently. Before beginning work, it is advisable to try out various settings and then check performance again after a while.

Aspiration

If using as a standalone unit then the vent hose must be connected to a suitable location on the booth system. This may sometimes require a vent assist. (P/N: 736484)



1. Vent connection

Operation



WARNING: Ultrasonic sieving, optional:
Continuously purge the ultrasonic transducer with compressed air during operation. Otherwise there is a risk of overheating and component failure.

Changing the Sieve



WARNING: De-energize the system and confirm that no voltage is being supplied (e.g. separate fuse or main switch). Secure the system from being switched on again.

If the sieve is changed or it is removed from the machine for cleaning, follow these steps:

- Allow the system to come to a complete stop
- Optional: Detach the plug from the ultrasonic transducer
- Release the locks that hold the spacer in place and lift off the top part of the sieving machine
- Carefully lift out the sieve
- Put the sieve down and (optional) detach the ultrasonic transducer from the sieve using an open-jawed wrench, size 17.

Reverse the steps to install the sieve again. The optional ultrasonic transducer must be tightened with the open-jawed wrench.



WARNING: Ultrasonic sieving, optional:

It is imperative when reassembling that the titanium thread on the ultrasonic transducer and the thread bore in the sieve frame are free of dirt.

Changing Paint and Cleaning

- Switch off the system and place a container under the sieving machine to collect powder residue.
- After a brief pause, knock the powder out and into the container.
- Remove the powder by applying compressed air or a vacuum.
- Polish with a soft rag when the powder contains wax.
- To return the system to the initial state, verify that there is no more powder in the system.
- Then switch on the system again.



DANGER: When using compressed air to clean, ensure there is adequate exhaust to suction off the powder; otherwise there is a risk of overheating and component failure.



DANGER: Do not clean under running water – risk of death! Use only a rag dampened with a permitted cleaning agent. Solvents are not allowed!

Maintenance



WARNING: Maintenance may be conducted on this unit only when it is in a "safe state". This means that the unit is deenergized and depressurized. Maintenance work may be performed only by trained, experienced personnel and should occur in a suitable location outside of the hazardous area.

Maintenance Intervals

The system should be inspected regularly to check for component wear.

Check at least once every week.

The positions listed below should also be checked at the stated intervals.

The stated maintenance intervals should be reviewed regularly and, if necessary, modified to suit the specific requirements.

Maintenance Intervals Table

Part number	Designation	Spare Part
Seals	Check for wear, damage, pollution	Visual inspection (daily)
Sieve screen	Check for wear, damage	Visual inspection (daily)
Hose connection	Check for wear	Check (daily)

Wearing and Spare Parts

Part number	Designation
768475	SIEVE,380,U/SONIC 224 MICRON,STRAIGHT,W/CONTROL
768476	SIEVE,380,U/SONIC 224 MICRON,BENT,W/CONTROL
768477	SIEVE,380,500 MICRON, STRAIGHT OUTLET
768478	SIEVE,380,500 MICRON, BENT OUTLET
768479	STAND,380 SIEVE,STAND ALONE
768480	BASE,380 SIEVE,STRAIGHT OUTLET
768482	SCREEN,380 SIEVE,300 MICRON
768483	SCREEN,380 SIEVE,400 MICRON
768484	SCREEN,380 SIEVE,500 MICRON
768487	ULTRASONIC CONTROL & TRANSDUCER,380
768488	SCREEN,380 SIEVE,400 MICRON ULTRASONIC
768489	SCREEN,380 SIEVE,224 MICRON ULTRASONIC
768490	SCREEN,380 SIEVE,160 MICRON ULTRASONIC
768491	EVALUATION BOX,380 SIEVE,EXTERNAL SIGNAL
768496	FASTENER,380 SIEVE LID
769097	VIBRATOR,ATEX,240 VAC,CAPACITOR INLINE

- Spare parts and wearing parts that are not inspected with the system can lead to malfunctioning.
- Use only original parts from Nordson as replacements.



WARNING: The installation of unapproved components as well as modifications and changes that have not been approved can compromise safety and limit the warranty.