

Feed Centre Sieve MK II

Manual P/N 768 624 E
– English –

Keep for Future Reference



NORDSON (UK) LTD. • STOCKPORT



Order number

P/N = Order number for Nordson products

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Declaration of Conformity

98/37/EC

73/23/EEC

We,

Nordson (U.K.) Limited

of

**Ashurst Drive, Cheadle Heath, Stockport, Cheshire, SK3 0RY,
United Kingdom**

declare that under our sole responsibility for supply/manufacture of the product(s)

Product Name Feed Centre Sieve 300/450 MKII

Model Number(s) 736713, 736722

Product Options All

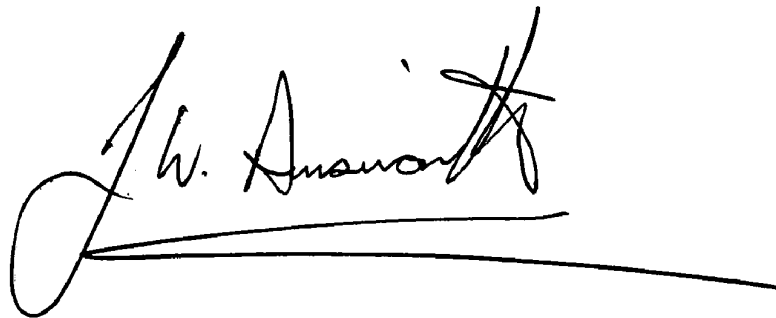
to which this declaration relates, is in conformity with the following standards and other normative documents

Safety BS EN 60204-1:1993
"Safety of Machinery – Electrical equipment of machines"

EN 60335:Part 1:1988
"Safety of household and similar electrical appliances"

BS EN 292:1991
"Safety of machinery – Basic concepts, general principles for design"

following the provisions of 98/37/EC and 73/23/EEC Directives

A handwritten signature in black ink, appearing to read 'J. Ainsworth', with a long horizontal line extending from the end of the signature.

Jim Ainsworth
General Manager

Nordson (U.K.) Ltd., 5 March 2002

NB ref EN45014 (BS7514)

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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.

Manufacturer of Equipment

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SK3 0RY

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

Nordson International

Europe

Country		Phone	Fax
Austria		43-1-707 5521	43-1-707 5517
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>	45-43-66 1133	45-43-66 1123
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>Düsseldorf - Nordson UV</i>	49-211-3613 169	49-211-3613 527
Italy		39-02-904 691	39-02-9078 2485
Netherlands		31-13-511 8700	31-13-511 3995
Norway	<i>Hot Melt</i>	47-23 03 6160	47-22 68 3636
	<i>Finishing</i>	47-22-65 6100	47-22-65 8858
Poland		48-22-836 4495	48-22-836 7042
Portugal		351-22-961 9400	351-22-961 9409
Russia		7-812-11 86 263	7-812-11 86 263
Slovak Republic		4205-4159 2411	4205-4124 4971
Spain		34-96-313 2090	34-96-313 2244
Sweden	<i>Hot Melt</i>	46-40-680 1700	46-40-932 882
	<i>Finishing</i>	46 (0) 303 66950	46 (0) 303 66959
Switzerland		41-61-411 3838	41-61-411 3818
United Kingdom	<i>Hot Melt</i>	44-1844-26 4500	44-1844-21 5358
	<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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Asia / Australia / Latin America

Pacific South Division, USA	1-440-988-9411	1-440-985-3710
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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	1-440-988 9411	1-440-985 1417
	Nordson UV	1-440-985 4592	1-440-985 4593

Section 1

Safety

Section 1

Safety

1. Introduction

Read and follow these safety instructions. Task and equipment specific warnings, cautions, and instructions are included in equipment documentation where appropriate.

Make sure all equipment documentation, including these instructions, is accessible to all persons operating or servicing equipment.

2. Qualified Personnel

Equipment owners are responsible for making sure that Nordson equipment is installed, operated, and serviced by qualified personnel. Qualified personnel are those employees or contractors who are trained to safely perform their assigned tasks. They are familiar with all relevant safety rules and regulations and are physically capable of performing their assigned tasks.

3. Intended Use

Use of Nordson equipment in ways other than those described in the documentation supplied with the equipment may result in injury to persons or damage to property.

Some examples of unintended use of equipment include

- using incompatible materials
- making unauthorized modifications
- removing or bypassing safety guards or interlocks
- using incompatible or damaged parts
- using unapproved auxiliary equipment
- operating equipment in excess of maximum ratings

4. Regulations and Approvals

Make sure all equipment is rated and approved for the environment in which it is used. Any approvals obtained for Nordson equipment will be voided if instructions for installation, operation, and service are not followed.

5. Personal Safety

To prevent injury follow these instructions.

- Do not operate or service equipment unless you are qualified.
- Do not operate equipment unless safety guards, doors, or covers are intact and automatic interlocks are operating properly. Do not bypass or disarm any safety devices.
- Keep clear of moving equipment. Before adjusting or servicing any moving equipment, shut off the power supply and wait until the equipment comes to a complete stop. Lock out power and secure the equipment to prevent unexpected movement.
- Relieve (bleed off) hydraulic and pneumatic pressure before adjusting or servicing pressurized systems or components. Disconnect, lock out, and tag switches before servicing electrical equipment.
- While operating manual electrostatic spray guns, make sure you are grounded. Wear electrically conductive gloves or a grounding strap connected to the gun handle or other true earth ground. Do not wear or carry metallic objects such as jewelry or tools.
- If you receive even a slight electrical shock, shut down all electrical or electrostatic equipment immediately. Do not restart the equipment until the problem has been identified and corrected.
- Obtain and read Material Safety Data Sheets (MSDS) for all materials used. Follow the manufacturer's instructions for safe handling and use of materials, and use recommended personal protection devices.
- To prevent injury, be aware of less-obvious dangers in the workplace that often cannot be completely eliminated, such as hot surfaces, sharp edges, energized electrical circuits, and moving parts that cannot be enclosed or otherwise guarded for practical reasons.

6. Fire Safety

To avoid a fire or explosion, follow these instructions.

- Ground all conductive equipment in the spray area. Check equipment and workpiece grounding devices regularly. Resistance to ground must not exceed one mega-ohm.
- Shut down all equipment immediately if you notice static sparking or arcing. Do not restart the equipment until the cause has been identified and corrected.
- Do not smoke, weld, grind, or use open flames where flammable materials are being used or stored.
- Provide adequate ventilation to prevent dangerous concentrations of volatile materials or vapors. Refer to local codes or your material MSDS for guidance.
- Do not disconnect live electrical circuits while working with flammable materials. Shut off power at a disconnect switch first to prevent sparking.
- Know where emergency stop buttons, shutoff valves, and fire extinguishers are located. If a fire starts in a spray booth, immediately shut off the spray system and exhaust fans.
- Shut off electrostatic power and ground the charging system before adjusting, cleaning, or repairing electrostatic equipment.
- Clean, maintain, test, and repair equipment according to the instructions in your equipment documentation.
- Use only replacement parts that are designed for use with original equipment. Contact your Nordson representative for parts information and advice.

**7. *Action in the Event of a
Malfunction***

If a system or any equipment in a system malfunctions, shut off the system immediately and perform the following steps:

- Disconnect and lock out electrical power. Close pneumatic shutoff valves and relieve pressures.
- Identify the reason for the malfunction and correct it before restarting the equipment.

8. *Disposal*

Dispose of equipment and materials used in operation and servicing according to local codes.

Section 2

Description

Section 2

Description

1. *Intended Use*

The Feed Centre Sieve is designed to sieve organic powder paint, accepting feeds from either virgin or recovered powder sources.

It is manufactured to work in conjunction with a Powder Feed Centre.

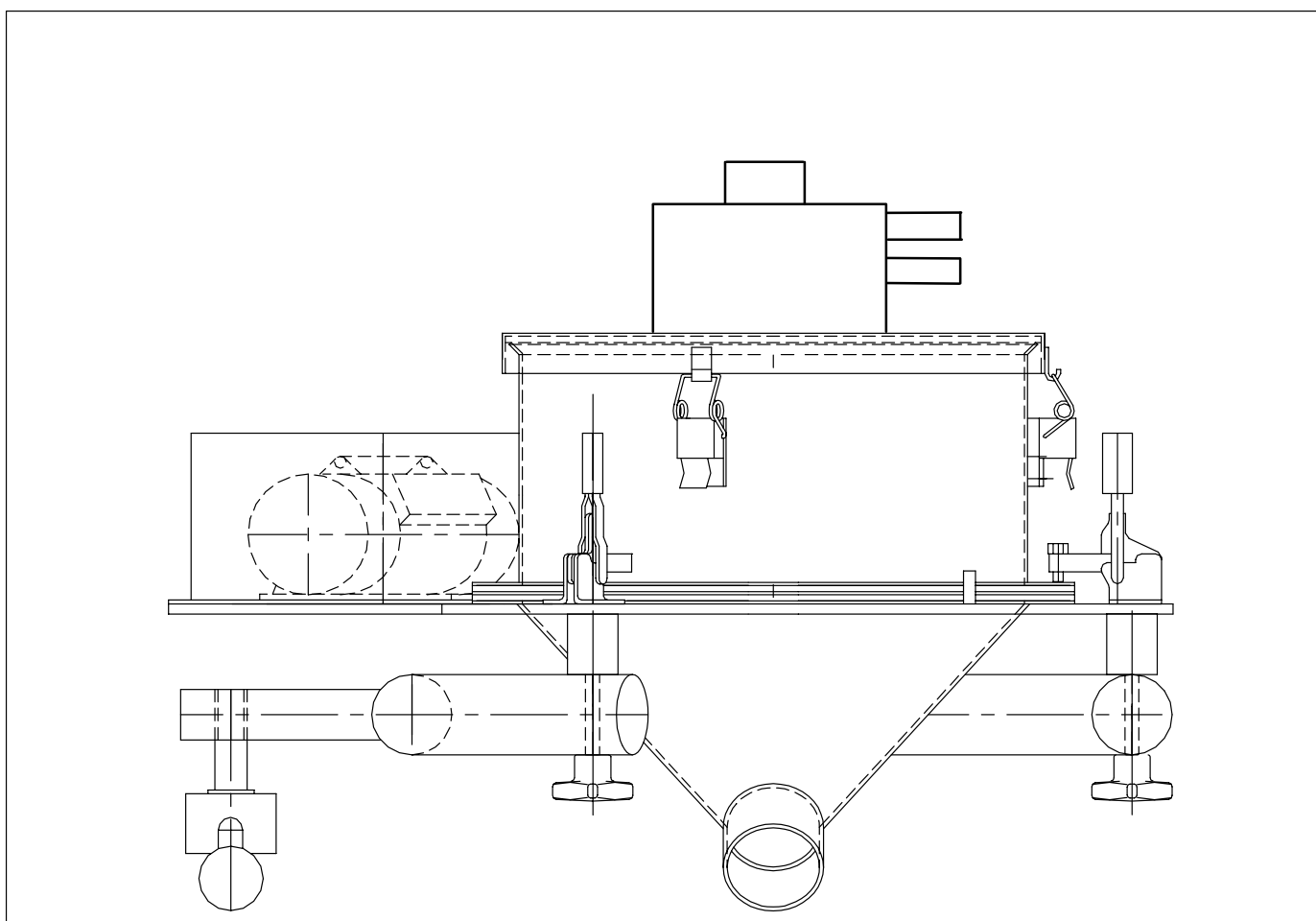


Fig. 2-1 Typical Feed Centre Sieve

2. Features

The Feed Centre Sieve is used as part of a powder recycling system to separate powder particles by size through a screening process. Particles passing through the screen are deposited into a powder box for reuse.

Features include:

- Quick and easy colour change.
- Stainless steel for easy maintenance and cleaning.
- Electrical vibrator reducing air consumption and noise level.
- Simple and rugged design.

Section 3

Installation

Section 3

Installation



WARNING: Allow only qualified personnel to perform the following tasks. Observe and follow the safety instructions in this document and all other related documentation.

1. Transport

Transport the unit so as to avoid damage. Do not throw the unit. Use suitable packaging materials and sturdy cartons. See *Specifications* section for dimensions and weight.

Protect the unit from exposure to humidity, dust and vibrations.

2. Unpacking

Carefully unpack the unit to avoid damaging it. Check for damage caused during transport.

Save packing materials for possible later use. Otherwise recycle or dispose of properly according to local regulations.

3. Removing

Switch off the mains supply, then disconnect all electrical connections from the unit.

4. Storage

Pack the unit in suitable packing materials and sturdy cartons. Protect from humidity, dust and large temperature fluctuations (condensation).

5. Disposal

Dispose of properly according to local regulations.

6. Setting Up the Unit



WARNING: Allow only qualified personnel to perform the installation. Observe safety instructions.

The sieve is generally supplied fully assembled.

Place the sieve body into the feed centre, and secure with lever bolt fixing supplied.



WARNING: It is only necessary to exert sufficient pressure with the clamps to hold the sieve lid and base in place. Ensure that the tension is set to avoid distorting the lid and body.

Place the powder box/hopper underneath the outlet of the sieve,

Powder feeds from the recovery system are connect via a powder inlet tube connected to the mini-cyclone. Ensure all unused cyclone inlets are fitted with the blanking caps provided (where applicable).

7. Electrical



WARNING: Allow only qualified personnel to perform electrical connections. Observe the safety instructions.

The main supply for the Feed Centre Sieve should be connected directly to the powderfeed centre control panel. see Powder Feed Centre manual for more details

The electrical supply for the Feed Centre Sieve is interlocked with the powder recovery system such that the sieve can only operate when the powder recovery system is operational.

Section 4

Operation

Section 4 Operation



WARNING: Allow only qualified personnel to perform the following tasks. Observe and follow the safety instructions in this document and all other related documentation.

1. *Daily Operation*

1. To start the sieve vibrator, with the main supply energized, ensure that the sieve is vibrating.
2. Transfer powder into the sieve, refer to the Powder Feed Centre manual for information on setting up the powder system.
3. When adding virgin powder to the system the ratio of virgin powder to recycled powder can be adjusted by controlling the amount of powder derived from each source.
4. To switch off the sieve, first turn off the powder transfer systems and then switch off the supply to the vibrator motor. This is automatic through the Powder Feed Centre control panel

Section 5

Maintenance

Section 5 Maintenance



WARNING: Allow only qualified personnel to perform the following tasks. Observe and follow the safety instructions in this document and all other related documentation.



WARNING: Breathing in certain airborne dusts (including finishing powders) may be hazardous to health. Ask the powder manufacturer for a Material Safety Data Sheet (MSDS) for information. Use appropriate respiratory protection.



WARNING: The unit must be isolated from the electrical supply.

1. Daily Maintenance

- Check all fasteners are secure.
- Disassemble sieve and clean mesh at least once every 4 (four) hours

2. Monthly Maintenance

- Check tension on all clamps and tighten or replace where necessary.
- Check operation of vibrator.
- Check all seals, replace where necessary.

Troubleshooting

Section 6

Troubleshooting



WARNING: Allow only qualified personnel to perform the following tasks. Observe and follow the safety instructions in this document and all other related documentation.

1. *Important Hints for Troubleshooting*

The following tables provide general information for the troubleshooting of basic problems. Sometimes more detailed information, circuit diagrams or measuring devices are also needed for troubleshooting.

It must be noted that a fault can occur for several reasons. It is advisable to check all possible causes for a given fault. Obvious causes of malfunction such as broken wires, missing fasteners etc, should be noted during visual inspections and corrected immediately.

The unit does not contain any user serviceable parts, any parts that fail must be replaced by approved parts available from Nordson.

2. Table of Troubleshooting

Problem	Possible Cause	Corrective Action
Vibrator fails to run	No power Vibrator failed.	Check power supply Check cable Replace vibrator
Powder build up on sieve mesh	Mesh not cleaned at frequent enough intervals Mesh size too small for powder Rate of powder supply too high	Clean mesh at more frequent intervals Increase the mesh size Reduce the rate of powder supply
Powder in hopper contaminated	Sieve mesh damaged Sieve mesh not thoroughly cleaned before refitting	Replace sieve mesh Ensure mesh is clean and is inserted with same face uppermost
Excessive noise in operation	Lid or base insecure	Check and re-tighten fixings
Powder leaks from lid or base	Seals damaged Lid clamps too tight, lid distorted	Replace seals Reduce tension on clamps and replace lid seal

Section 7

Parts

Section 7

Parts

1. Introduction

To order parts, call the Nordson Customer Service Center or your local Nordson representative. Use this five-column parts list, and the accompanying illustration, to describe and locate parts correctly.

Using the Illustrated Parts List

Numbers in the Item column correspond to numbers that identify parts in illustrations following each parts list. The code NS (not shown) indicates that a listed part is not illustrated. A dash (—) is used when the part number applies to all parts in the illustration.

The number in the Part column is the Nordson Corporation part number. A series of dashes in this column (-----) means the part cannot be ordered separately.

The Description column gives the part name, as well as its dimensions and other characteristics when appropriate. Indentions show the relationships between assemblies, subassemblies, and parts.

Item	Part	Description	Quantity	Note
—	000 0000	Assembly	1	A
1	000 000	• Subassembly	2	
2	000 000	• • Part	1	

- If you order the assembly, items 1 and 2 will be included.
- If you order item 1, item 2 will be included.
- If you order item 2, you will receive item 2 only.

The number in the Quantity column is the quantity required per unit, assembly, or subassembly. The code AR (As Required) is used if the part number is a bulk item ordered in quantities or if the quantity per assembly depends on the product version or model.

Letters in the Note column refer to notes at the end of each parts list. Notes contain important information about usage and ordering. Special attention should be given to notes.

2. Feed Centre Sieve Assembly

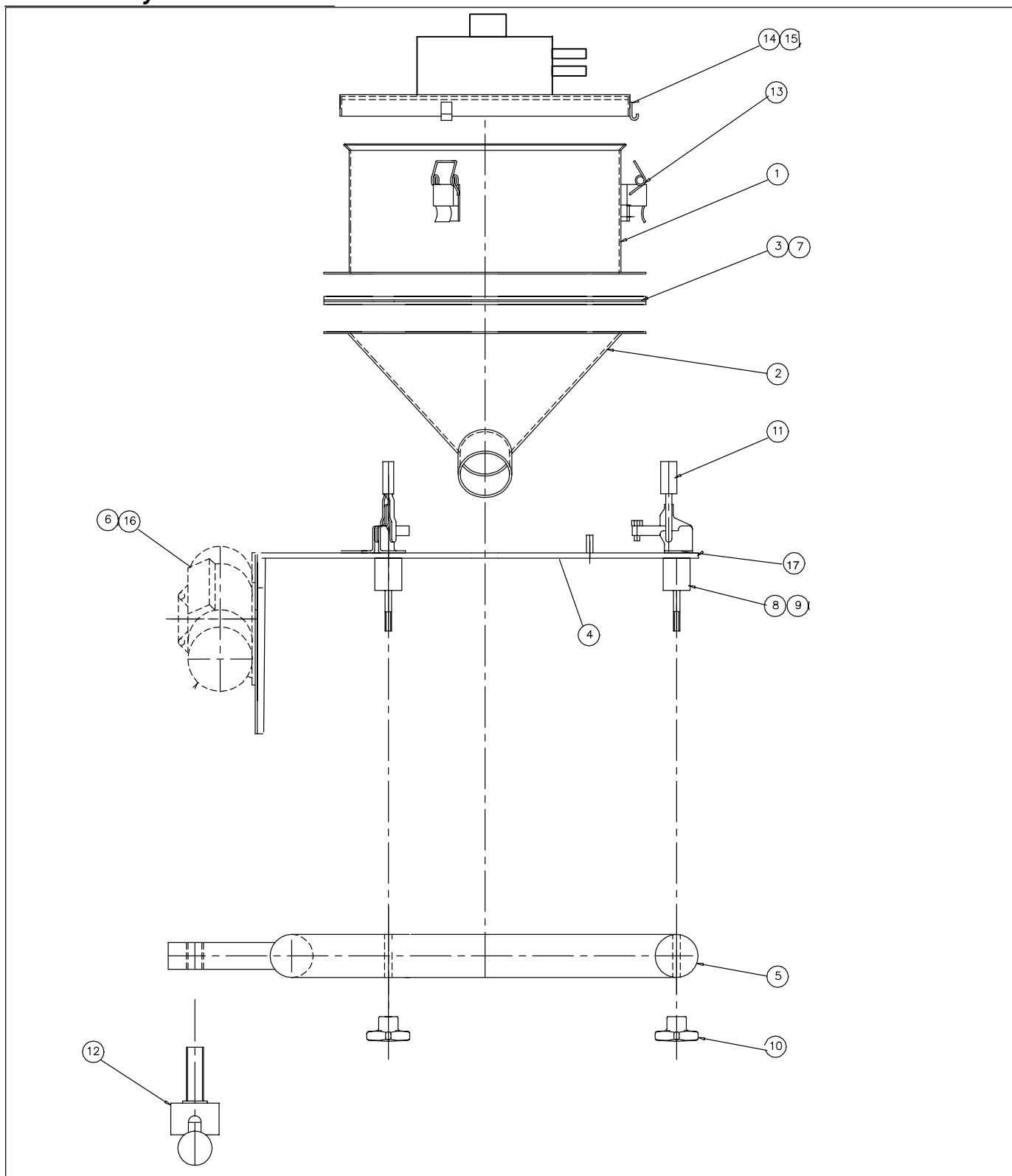


Fig. 7-1 Feed Centre Sieve Assembly

300mm Sieve Assembly

Item	Part	Description	Quantity	Note
–	736 713	Feed Centre Sieve Assembly 300 MK II	AR	
1	736 714	• Sieve Body	1	
2	736 715	• Sieve Base	1	
3	393 126	• Sieve Screen 1000 micron	1	A
	393 127	• Sieve Screen 720 micron	1	
	765 846	• Sieve Screen 500 micron	1	
	765 761	• Sieve Screen 360 micron	1	
	765 759	• Sieve Screen 245 micron	1	
4	736 716	• Sieve Support Plate	1	
5	736 717	• Sieve Support Steelwork	1	
6	769 057	• Electric Vibrator	1	
7	765 847	• Gasket 300 O/D x 250 I/D x 3 Thk (screen)	2	
8	765 880	• A.V. Mount C25/30–M6–43	4	
9	765 750	• A.V. Stud	4	
10	769 510	• M6 Starknob	4	
11	736 734	• Overcentre Clamp, 300	4	
	736 735	• Foot, Overcentre Clamp, 300	4	
12	765 883	• Berger Lever	1	
13	765 741	• Catch	4	
14	768 585	• Sieve Lid, 1 Inlet Mini Cyclone	1	
	768 566	• Sieve Lid, 2 Inlet Mini Cyclone	1	
	768 811	• Sieve Lid, 3 Inlet Mini Cyclone	1	
15	765 885	• Gasket 266 O/D x 230 I/D x 3 Thk (lid)	1	
16	767 995	• Vibrator Cover	1	B
17	769 830	• Spacer, Clamp, 300	4	
NS	768 826	• Adaptor Male, 3/4BSP Female • Sieve Mini Cyclone	AR	C
NS	768 827	• Coupling Female, 3/4 Hose Tail • Transfer Hose connector	AR	C
NS	768 825	• Adaptor Male, 3/4BSP Male • Purge Manifold	AR	C

NOTE A: Standard Sieve Size Fitted

B: Not Fitted as Standard, Optional Extra

C: Quantity dependent on number of cyclone inlets

AR: As Required

NS: Not Shown

Feed Centre Sieve Assembly

(contd.)

450mm Sieve Assembly

Item	Part	Description	Quantity	Note
–	736 722	Feed Centre Sieve Assembly 450 MK II	AR	
1	736 723	• Sieve Body	1	
2	736 724	• Sieve Base	1	
3	393 131	• Sieve Screen 1000 micron	1	A
	393 132	• Sieve Screen 720 micron	1	
	765 763	• Sieve Screen 500 micron	1	
	765 762	• Sieve Screen 360 micron	1	
	765 760	• Sieve Screen 245 micron	1	
4	736 725	• Sieve Support Plate	1	
5	736 726	• Sieve Support Steelwork	1	
6	769 057	• Electric Vibrator	1	
7	765 785	• Gasket 450 O/D x 400 I/D x 3 Thk (screen)	2	
8	765 880	• A.V. Mount C25/30–M6–43	4	
9	765 750	• A.V. Stud	4	
10	769 510	• M6 Starknob	4	
11	736 736	• Over Centre Clamp, 450	4	
	736 737	• Foot, Over Centre Clamp, 450	4	
12	765 883	• Berger Lever	1	
13	765 741	• Catch	4	
14	736 730	• Sieve Lid, 1 Inlet Mini Cyclone	1	
	736 731	• Sieve Lid, 2 Inlet Mini Cyclone	1	
	736 732	• Sieve Lid, 3 Inlet Mini Cyclone	1	
15	765 785	• Gasket 455 O/D x 400 I/D x 3 Thk (lid)	1	
16	767 995	• Vibrator Cover	1	B
17	736 738	• Spacer, Clamp, 450	4	
NS	768 826	• Adaptor Male, 3/4BSP Female • Sieve Mini Cyclone	AR	C
NS	768 827	• Coupling Female, 3/4 Hose Tail • Transfer Hose connector	AR	C
NS	768 825	• Adaptor Male, 3/4BSP Male • Purge Manifold	AR	C

NOTE A: Standard Sieve Size Fitted

B: Not Fitted as Standard, Optional Extra

C: Quantity dependent on number of cyclone inlets

AR: As Required

NS: Not Shown

Specifications

Section 8 Specifications

1. Dimensions and Weights

Sieve Size	300mm dia	450mm dia
Part No	736713	736722
Overall Height (mm)	600	690
Overall Width (mm)	450	720
Overall Length (mm)	500	750
Weight (kg)	12.5	18

2. Noise

Less than 78 db(A). Measured at a distance of 1 m from the surface of the unit.

3. Electrical

Sieve Size	300mm dia	450mm dia
Part No	736713	736722
Electrical Connection	1-Phase + E	1-Phase + E
KW Rating	0.2	0.2

