

Model HRS-1 Feed Hopper

Part 108 530B



NORDSON CORPORATION • AMHERST, OHIO • USA

Nordson Corporation welcomes requests for information, comments and inquiries about its products.

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MODEL HRS-1 FEED HOPPER

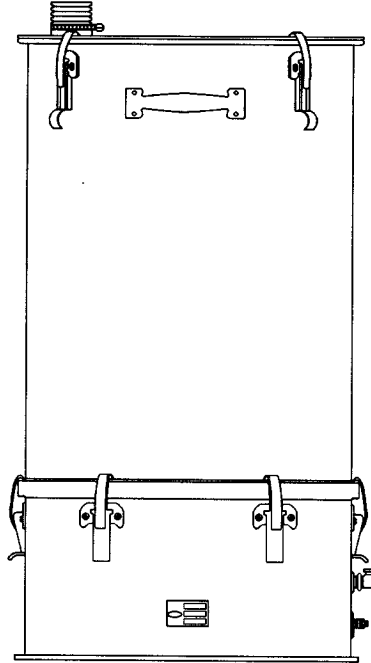


Figure 1 — Model HRS-1 Feed Hopper

INTRODUCTION

Refer to Figure 1. The NORDSON® HRS-1 Feed Hopper stores and fluidizes powder coatings. The main components of the hopper are the lid, body, fluidizing plate and fluidizing drum. The powder is delivered to an electrostatic spray gun through an attached 100 PLUS™ Powder Pump. The powder pump is not included and must be ordered separately. The air to powder ratio and fluidizing material sent to the spray gun is controlled by an external control unit.

INSTALLATION

Refer to Figure 2 for component location. Installation procedures are provided in the following steps:

1. Connect the main air supply line to the $\frac{3}{8}$ x $\frac{1}{4}$ NPT elbow fitting located on the hopper fluidizing drum.

2. Install hose clamp onto adapter.
3. Connect flexible hose to adapter. Tighten hose clamp securely.



CAUTION: Flexible hose must be vented or connected to booth collector before operating hopper.

4. Connect flexible hose to a vent or booth collector.
5. Connect ground wire to the hopper ground stud.
6. Connect the ground clamp to a true earth ground point.

POWDER PUMP INSTALLATION

A 100 Plus Powder Pump must be installed before operating the hopper. Refer to the powder pump manual for installation procedures.

FILLING HOPPER

The following steps provide procedures for filling the hopper:

1. Unlatch tension latches securing lid to hopper.

NOTE: Overfilling the hopper may effect hopper performance.

2. Fill hopper $\frac{1}{2}$ full with powder coating material. This leaves room for expansion caused by powder fluidization.
3. Install hopper lid and secure tension latches.

OPERATION

The hopper does not contain any controls. Refer to the applicable control module manual for operating procedures. The following steps should be performed before operating the hopper:

1. Ensure all tension latches are properly secured.
2. Ensure air lines to powder pump are properly installed. Refer to powder pump manual for procedures.



WARNING: Electrical sparks discharged from ungrounded conductive objects may start fires or cause explosions.

3. Ensure hopper is properly grounded.

Fluidizing Air Pressure

Typical fluidizing air pressure for operation is:

5-15 psi (0.4-1.0 kg/cm²)

4.0 scfm (1.89 l/sec.)

Note: The powder in the hopper appears to increase in volume and "boil" gently when the air pressure is properly adjusted.

TECHNICAL DATA

Height:

32 in. (813 mm)

Diameter:

18 in. (457 mm)

Weight:

21 lbs. (9.5 kg)

Capacity - Static:

50 lbs. (23kg)

Fluidizing Air Requirements:

5-15 psi (0.4 - 1.0 kg/cm²)

4.0 scfm (1.89 l/sec.)

MODEL HRS-1 FEED HOPPER PARTS LIST

INTRODUCTION

The parts list provides information for ordering parts for the HRS-1 Feed Hopper. Refer to Figure 2 for location of parts. The following paragraphs provide information for using the parts list.

The number in the **Ref.** column indicates the number assigned to the part in the illustration preceding the list. A dash or the code NS (Not Shown) is used for parts that are not shown in the illustration.

A letter in the **Note** column refers to a note below the parts list which gives additional information concerning that part. Special attention should be given to noted parts.

The six digit number in the **Part No.** column is the Nordson part number assigned to that particular part. A series of dashes in this column means that the part cannot be ordered separately; it can only be obtained as part of the assembly or subassembly of which it is a component.

The **Description** column gives the official Nordson name of the part, together with its dimensions and other physical properties where appropriate, and is the name that should be used when ordering replacement parts. Indented parts are components of assemblies and/or subassemblies. For example:

Ref.	Note	Part No.	Description	Qty.
1		000 000	Top Level Assembly	1
2	A	000 000	. Assembly or Part	2
3		000 000	. . Subassembly or Part	1

If you order item 1, items 2 & 3 will be included.

If you order item 2, item 3 will be included.

If you order item 3, you will receive item 3 only.

The number in the **QTY.** column is the quantity required per unit or assembly. When the quantity is not applicable, a dash will appear in the column. An "ASR" in the QTY. column means that the quantity required per installation should be ordered.

Refer to Figure 2.

Note: Names of parts included in an assembly are indented after each assembly or subassembly.

Ref.	Note	Part No.	Description	Qty.
—		104 174	Hopper, Round, Stainless Steel	1
1		104 177	• Lid, Hopper	1
2		104 165	• Latch, Tension	10
3		104 166	• Body, Hopper	1
4		104 179	• Drum, Fluidizing, Hopper	1
5		972 183	• Elbow, $\frac{3}{8}$ x $\frac{1}{4}$ NPT	1
6		983 021	• Washer, Flat, 0.203 x 0.406 x 0.040	1
7		983 120	• Washer, Lock, Split, #10, Ni. Pl.	4
8		984 129	• Nut, Hex, Mach, #10-32, Brass	2
9		241 343	• Tag, Warning	1
10		984 499	• Nut, Lock, Self-Seal	12
11		981 729	• Screw, Pan Head, #10-32 x 0.38	12
12		981 170	• Scr, Trs, Unslotted, #10-32 x 0.375	8
13		104 181	• Gasket, U-Channel	1
14		104 168	• Plate, Fluidizing, 16.188 Dia.	1
15		973 562	• Bushing, Pipe, Hyd, $\frac{3}{8}$ x $\frac{1}{4}$ x $\frac{1}{4}$ Zn.	1
16		984 120	• Nut, Hex, Mach, #10-32, Steel, Zn. Pl.	8
17		981 168	• Screw, Pan Head, #10-32 x 0.750, Sl., Br.	1
18		242 402	• Hose, Flexible, 10 Ft	1
19		970 966	• Clamp, Hose	1
20		240 674	• Tag, Ground	1
NS		240 976	• Clamp, Ground, W/Wire	1

