

# **Movable Support Platform For Powder Spray Booth (RO/RO)**

Manual P/N 768 335 C  
– English –

**Keep for Future Reference**



NORDSON (UK) LTD. • STOCKPORT



#### **Order number**

P/N = Order number for Nordson products

#### **Notice**

This is a Nordson Corporation publication which is protected by copyright. Original copyright date 2000.  
No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of Nordson Corporation. The information contained in this publication is subject to change without notice.

#### **Trademarks**

AccuJet, AquaGuard, Asymtek, Automove, Autotech, Blue Box, CF, Can Works, Century, Clean Coat, CleanSleeve, CleanSpray, ColorMax, Compumelt, Control Coat, Cross-Cut, Cyclo-Kinetic, Dispensejet, DispenseMate, Durafiber, Durasystem, Easy Coat, Easymove Plus, Econo-Coat, EPREG, ETI, Excel 2000, Flex-O-Coat, Flexi-Spray, Flow Sentry, Fluidmove, Fluidshooter, FoamMelt, FoamMix, Helix, Horizon, Hose Mole, Hot Shot, Hot Stitch, Isocoil, Isocore, Iso-Flo, KB30, Little Squirt, Magnastatic, MEG, Meltex, MicroSet, Millenium, Mini Squirt, Moist-Cure, MultiScan, Nordson, OmniScan, Opticoat, Package of Values, PluraFoam, Porous Coat, PowderGrid, Powderware, Pro-Flo, ProLink, PRX, RBX, Rhino, S. design stylized, SC5, SCF, Select Coat, Select Cure, Slaughterback, Smart-Coat, Spray Squirt, Spraymelt, Spectrum, Super Squirt, Sure-Bond, Sure Coat, System Sentry, Tela-Therm, Trends, Tribomatic, UniScan, UpTime, Versa-Coat, Versa-Screen, Versa-Spray, Watermark, When you expect more are registered trademarks – ® – of Nordson Corporation.

ATS, Auto-Flo, AutoScan, BetterBook, Chameleon, CanNeck, Check Mate, CPX, Control Weave, Controlled Fiberization, EasyClean, Ebraid, Eclipse, Equi=Bead, Fillmaster, FlexiCoat, Gluie, Ink-Dot, JR, Maxima, MicroFin, Minimeter, Mountaingate, Multifil, OptiMix, Pattern View, PluraMix, Primarc, Prism, Pro-Meter, Pro-Stream, Process Sentry, PurTech, Pulse Spray, Saturn, Seal Sentry, Select Charge, Select Series, Sensomatic, Shaftshield, Spectral, Spectrum, Sure Brand, Sure Coat, Swirl Coat, Vista, Walcom, 2 Rings (Design) are trademarks – ® – of Nordson Corporation.

Designations and trademarks stated in this document may be brands that, when used by third parties for their own purposes, could lead to violation of the owners' rights.

# 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** Movable Support Platform (RO/RO)

**Model Number(s)** N/A

**Product Options** All

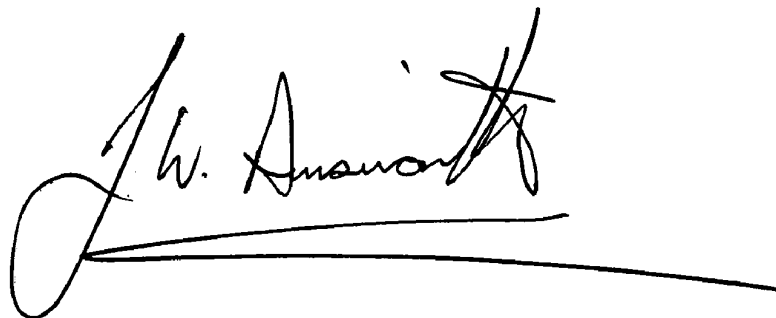
to which this declaration relates, is in conformity with the following standards and other normative documents

**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



Nordson (U.K.) Ltd., 25th January 2001

NB ref EN45014 (BS7514)



# Table of Contents

---

## ***Congratulations on the Purchase of Your Nordson Product***

---

---

## ***Nordson International***

---

---

## ***Section 1 Safety***

---

---

## ***Section 2 Description***

---

Your Safety is Important to Nordson .....	O-1
Manufacturer of Equipment .....	O-1
Europe .....	O-3
Distributors in Eastern & Southern Europe .....	O-3
Outside Europe / Hors d'Europe / Fuera de Europa .....	O-4
Africa / Middle East .....	O-4
Asia / Australia / Latin America .....	O-4
Japan .....	O-4
North America .....	O-4
1. Introduction .....	1-1
2. Qualified Personnel .....	1-1
3. Intended Use .....	1-1
4. Regulations and Approvals .....	1-1
5. Personal Safety .....	1-2
6. Fire Safety .....	1-3
7. Action in the Event of a Malfunction .....	1-4
8. Disposal .....	1-4
1. Intended Use .....	2-1
2. Features .....	2-2

---

**Section 3**  
**Installation**

---

1. Transport .....	3-1
2. Unpacking .....	3-1
3. Removing .....	3-1
4. Storage .....	3-1
5. Disposal .....	3-1
6. Setting Up the Unit .....	3-2
Site Preparation .....	3-2
7. Electrical .....	3-2

---

**Section 4**  
**Operation**

---

1. Operation .....	4-1
--------------------	-----

---

**Section 5**  
**Maintenance**

---

1. Routine Maintenance .....	5-1
2. Monthly Maintenance .....	5-1

---

**Section 6**  
**Parts**

---

1. Introduction .....	6-1
Using the Illustrated Parts List .....	6-1
2. Parts List .....	6-2

# 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***

---

Nordson (U.K.) Ltd.  
Ashurst Drive  
Cheadle Heath  
Stockport  
England  
SK3 0RY

Telephone: 0044 (0) 161-495-4200  
Fax: 0044 (0) 161-428-6716

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





# Nordson International

## Europe

Country		Phone	Fax
<b>Austria</b>		43-1-707 5521	43-1-707 5517
<b>Belgium</b>		31-13-511 8700	31-13-511 3995
<b>Czech Republic</b>		4205-4159 2411	4205-4124 4971
<b>Denmark</b>	<i>Hot Melt</i>	45-43-66 0123	45-43-64 1101
	<i>Finishing</i>	45-43-66 1133	45-43-66 1123
<b>Finland</b>		358-9-530 8080	358-9-530 80850
<b>France</b>		33-1-6412 1400	33-1-6412 1401
<b>Germany</b>	<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
<b>Italy</b>		39-02-904 691	39-02-9078 2485
<b>Netherlands</b>		31-13-511 8700	31-13-511 3995
<b>Norway</b>	<i>Hot Melt</i>	47-23 03 6160	47-22 68 3636
	<i>Finishing</i>	47-22-65 6100	47-22-65 8858
<b>Poland</b>		48-22-836 4495	48-22-836 7042
<b>Portugal</b>		351-22-961 9400	351-22-961 9409
<b>Russia</b>		7-812-11 86 263	7-812-11 86 263
<b>Slovak Republic</b>		4205-4159 2411	4205-4124 4971
<b>Spain</b>		34-96-313 2090	34-96-313 2244
<b>Sweden</b>	<i>Hot Melt</i>	46-40-680 1700	46-40-932 882
	<i>Finishing</i>	46 (0) 303 66950	46 (0) 303 66959
<b>Switzerland</b>		41-61-411 3838	41-61-411 3818
<b>United Kingdom</b>	<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

<b>DED, Germany</b>	49-211-92050	49-211-254 658
---------------------	--------------	----------------

**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
-----------------	-------	-----

**Africa / Middle East**

DED, Germany	49-211-92050	49-211-254 658
--------------	--------------	----------------

**Asia / Australia / Latin America**

Pacific South Division, USA	1-440-988-9411	1-440-985-3710
--------------------------------	----------------	----------------

**Japan**

Japan	81-3-5762 2700	81-3-5762 2701
-------	----------------	----------------

**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 Movable Support Platform (RO/RO) for a Nordson Powder Spray BoothPlatform is designed to move Nordson Powder Spray Systems from one fixed position to another. The positions are on-line (under the conveyor) and off-line (away from the conveyor where it can be maintained or cleaned down).

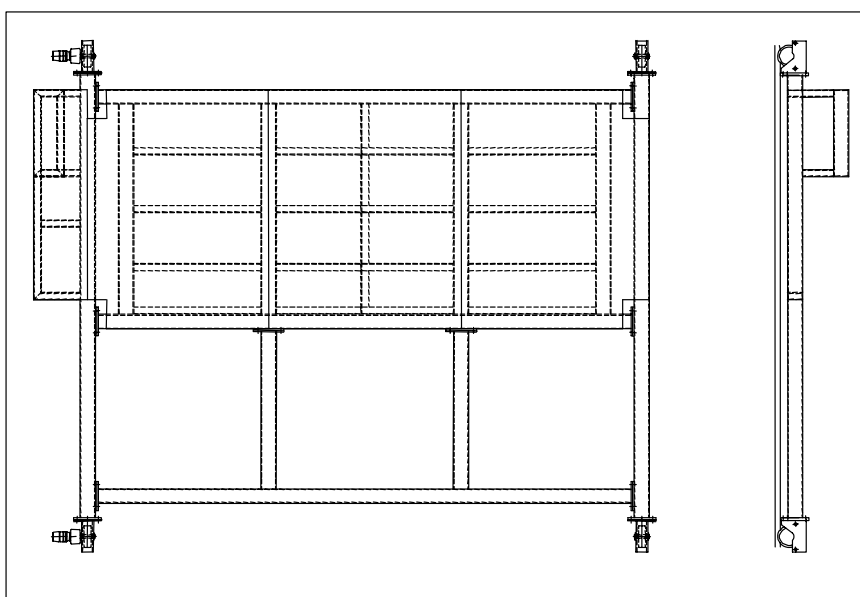


Fig. 2-1 Typical Example of a  
Movable Support Platform

---

## **2. Features**

---

- The RO/RO (Roll On/Roll Off) Platform has a minimum of four (4) wheels running on tracks bolted to the factory floor and may be rolled to and from the fixed position under the conveyor.
- Fixed end stops are provided, as are locking bolts to locate the booth accurately (Manual unpowered version only).
- For the motorised assembly the operator presses a push button on the control panel or pendant, the booth will move only whilst he presses the button.
- An audible/visual "device" indicates the booth is moving.
- On motorised versions, when the fixed position is reached, the booth will automatically stop via limit switches. Alternatively, the booth is pushed to its fixed position manually.
- The booth is erected on a space frame chassis covered with checker plate on which all the booth ancillaries are supported. This includes items such as the fan stand, booth controls, cyclones, powder feed centres, gun movers and gun control console.

## *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. Weights and dimensions vary with every system. Consult your General Arrangement drawings for details

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

---

### Site Preparation



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

**NOTE:** RO/RO Platforms are generally delivered in flat pack format for on-site assembly.

**NOTE:** Installation of the RO/RO Platform should not be undertaken without the presence of a Nordson representative or a suitably qualified person.

- The designated site should be level on which the RO/RO Platform is to be installed.
- Seal concrete floors with a suitable material to avoid dust. Other floor surfaces should be of a type that is easy to keep clean.
- Check for conveyor direction.
- Lay the tracks in the desired position then ensure they are level.
- Pin temporarily into place then assemble the RO/RO platform as per supplied drawing on top of the rails.
- Run the RO/RO Platform along the length of the tracks to make sure it achieves its two fixed positions.
- Recheck that the RO/RO Platform is level in both axis, shim up as required.
- Finally drill and secure tracks, limit switches and lock off bolts.

---

## 7. Electrical

---



**WARNING:** Allow only qualified personnel to perform electrical connections.

A single supply cable is required to the control panel. The supply should be fed from a suitable disconnect device. Introduce the cable into the panel using an IP6X cable gland. Ensure that all the electrical wires are suitably sized for the motor(s) loading and adequate fuse/circuit protection is provided at the source of supply.



## *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. Operation

---



**WARNING:** Always check that the area is clear of personnel before activating the RO/RO Platform as injuries could be incurred.

The manual RO/RO Platform is operated by releasing the locking bolts and manually pushing the booth to the on/off-line position. Remember to always relocate the locking bolts. Failure to do so could mean that the booth is out of line and could result in damage to the booth, conveyor or the parts being sprayed.

The powered RO/RO Platform is operated by a button on the control panel. This must be held until the booth reaches its maximum position, ie on/off-line, limit switches will ensure the maximum position cannot be crossed. Again it is imperative that full on/off-line is achieved, failure to do so could mean that the booth is out of line and could result in damage to the booth, conveyor or the parts being sprayed.

When the Powered RO/RO Platform is initially started up it will run slowly for three (3) seconds, as there is a soft start system built in. After three (3) seconds the speed will increase until it reaches the limit switches at the other end of its run, these will then slow the RO/RO Platform down. (This sequence will occur even if the RO/RO Platform is stopped mid way along its tracks).



## *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.

---

### **1. Routine Maintenance**

---

- Check rails for debris which could obstruct the RO/RO Platform wheels and prevent movement.
- Check for obstructions and mechanical trapping/crushing risks.

---

### **2. Monthly Maintenance**

---

- Check limit switches are functioning correctly.
- Check wheel bearings.
- Check motor brushes.





## *Section 6*

---

# ***Parts***

---



## Section 6

# 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 six-digit 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
—	000 000	Assembly	1	
1	000 000	• Subassembly	2	A
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. Parts List

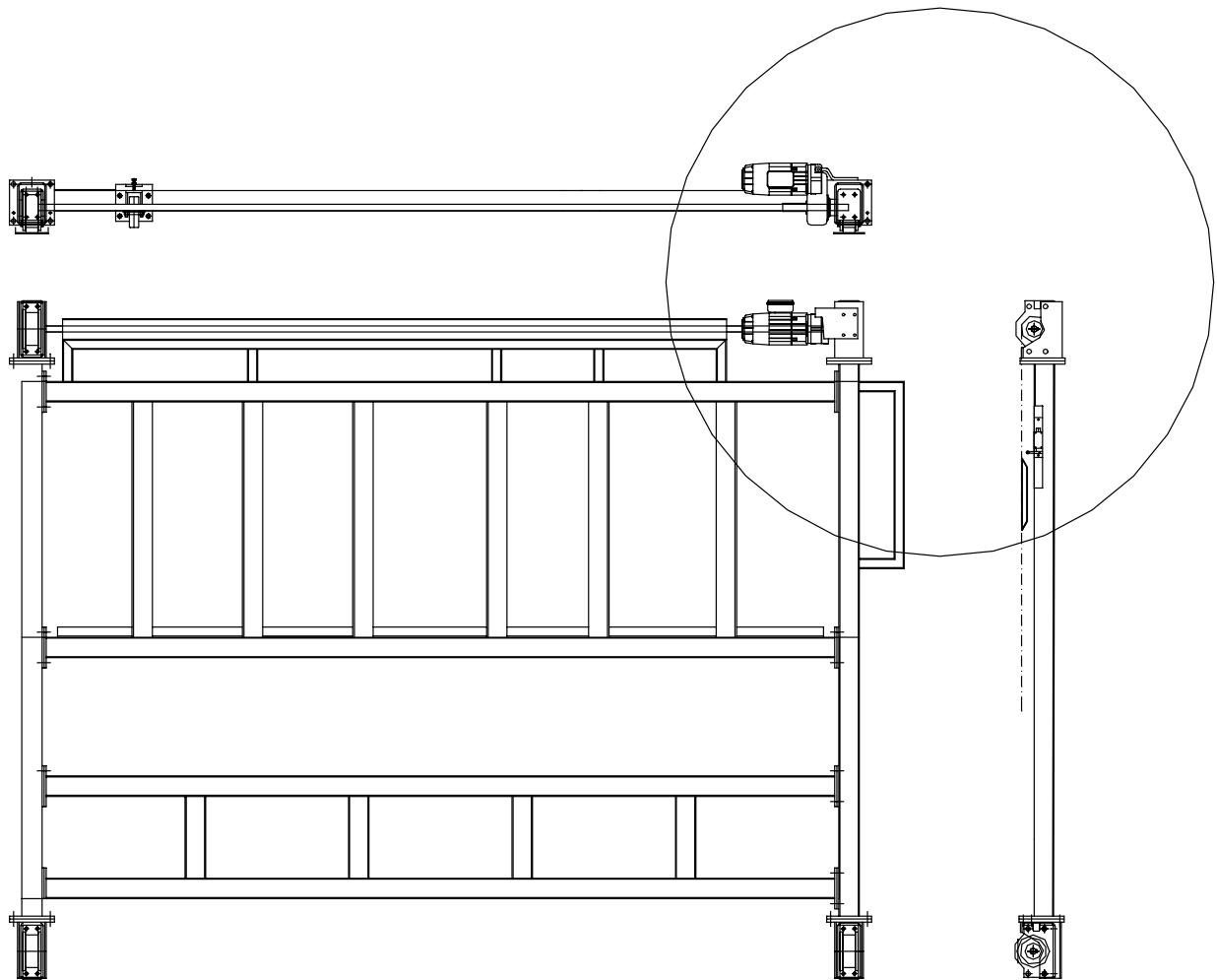
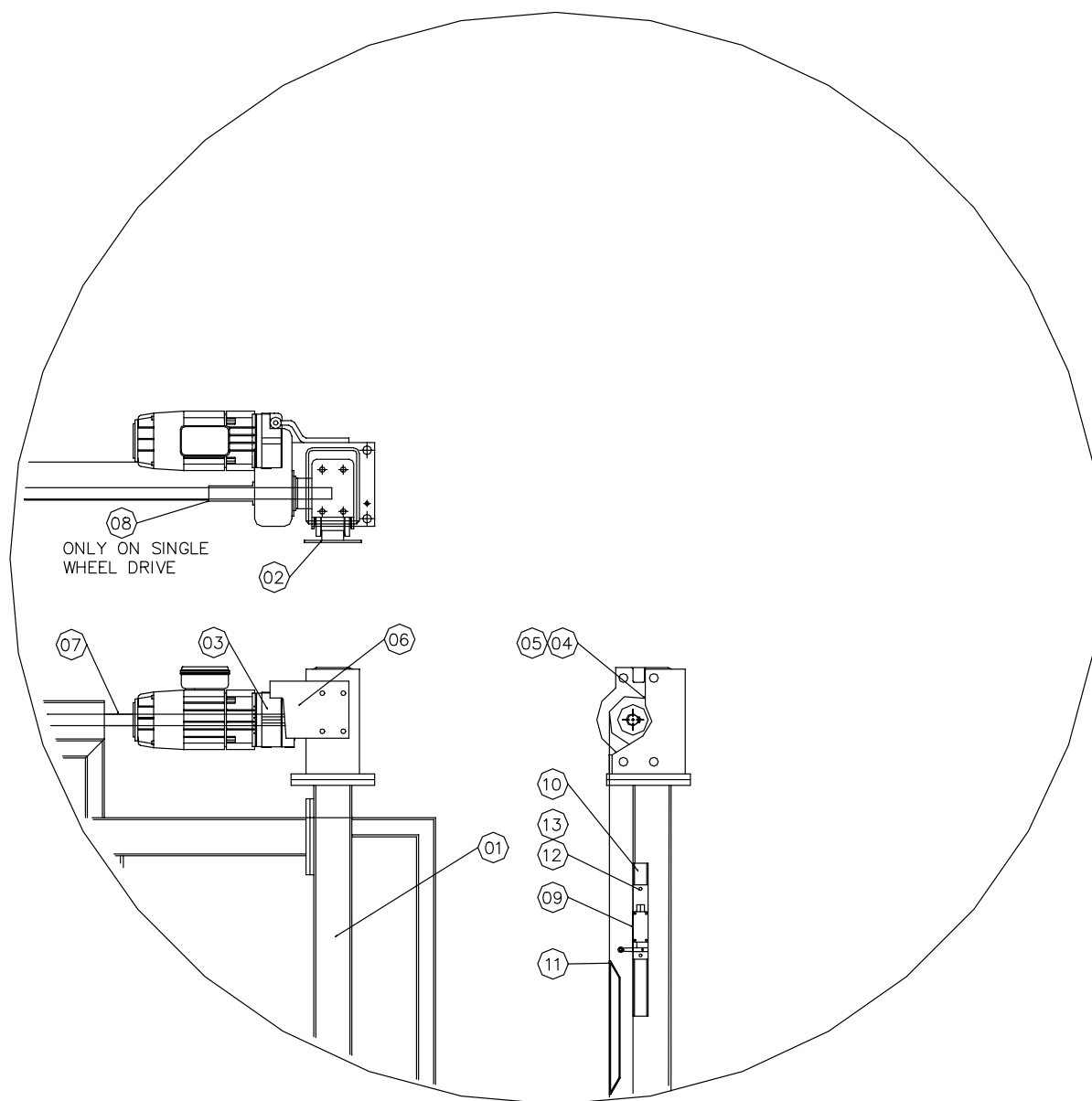


Fig. 6-1 Typical RO/RO Platform



**Fig. 6-2** *Powered RO/RO Platform  
Components in Detail*

**2. Parts List***(contd.)*

Item	Part	Description	Quantity Motorised	Quantity Manual
1	–	RO/RO Framework	1	1
2	–	Angle Track Runners	–	AR
	–	Flat Track Runners	AR	–
3	766 913	Geared Braked Motor, Demag	2	–
	766 986	Geared Braked Motor, c/w Wheel Block, Donati	2	–
4	766 914	Wheel Block, 125mm Dia, Demag	4	–
	766 987	Wheel Block, 125mm Dia, Donati	4	–
	–	Wheel Block, Varley WSU-6RBM25	–	4
5	766 915	End Connector, Demag	4	–
	766 988	End Connector, Donati	4	–
6	766 916	Torque Arm, Demag	2	–
7	766 917	Driveshaft, Demag	2	–
8	766 918	Shaft Protector, Demag	2	–
9	766 591	Switch, Limit Roller Level	4	–
10	766 919	Switch, Limit, Mounting Bracket	2	–
11	766 920	Plate, Striker, Limit Switch	2	–
12	766 921	Plate, Retaining, Limit Switch	4	–
13	766 922	Switch, Limit, Mounting Plate	4	–
AR: As Required				