

PERMIT REFERENCE: PPC 041  
Magnetto Topy Wheels (UK) Ltd

Pollution Prevention and Control Act 1999  
Pollution Prevention and Control (England and Wales)  
Regulations 2000 as amended

Process Address	Holbrook Lane Coventry CV6 4AA
Process Type	Coating of Metal and Plastic
Current Operator	Magnetto Topy Wheels (UK) Ltd
Previous Operator	N/a
Date of Application	1 <sup>st</sup> April 2004
Date Permit Issued	30 <sup>th</sup> November 2004

**POLLUTION PREVENTION & CONTROL ACT 1999  
POLLUTION PREVENTION & CONTROL (ENGLAND AND WALES)  
REGULATIONS 2000**

**DOCUMENT A : PERMIT**

**Magnetto Topy Wheels (UK) Ltd**

Reference Number **PPC/041**

Coventry City Council ("the Council") in accordance with Section 10(2) of the Pollution Prevention & Control (England and Wales) Regulations 2000 ("The Regulations"), hereby permits:

**Magnetto Topy Wheels (UK) Ltd**

Whose registered office is:

**Holbrook Lane  
Coventry  
CV6 4AA**

to operate a Part B installation involving a coating activity, as prescribed in Section 6.4 Part B of Schedule 1 to The Regulations, at:

**Magnetto Topy Wheels (UK) Ltd  
Holbrook Lane  
Coventry  
CV6 4AA**

The permit is subject to the conditions specified in this document consisting of 15 pages and comprising documents A, B and C, plans PPC/041/A, PPC/041/B and PPC/ 041/C and Appendix 1.



.....  
Alan Bennett, Head of Environmental Health  
A person authorised to sign on behalf of the Council

Dated .....30 November 2004.....

## **SCOPE**

The installation comprises not just any relevant unit carrying out a Part B activity listed in Schedule 1 to the Regulations, but also directly associated activities which have a technical connection with that activity and which could have an effect on pollution.

All pollutant concentrations shall be expressed at reference conditions of 273K and 101.3kPa, without correction for water vapour content.

Technical Guidance documents used in the preparation of this document:

- Secretary of States Guidance Note PG6/23(04) – The Coating of Metal and Plastic
- Secretary of State's Guidance – General Guidance Manual on Policy and Procedures for A2 and B installations. ISBN 0-85521-028-1

Date Annual Fee Required: 1st April of each financial year

Date For Full Compliance: Date permit issued

Permit Prepared By: Rachel King  
Permit Checked By: Susan Simmons

## **LEGISLATION**

1. Pollution Prevention and Control Act 1999.
2. Pollution Prevention and Control Regulations 2000 as amended, schedule 1 as amended

## **BRIEF DESCRIPTION OF THE INSTALLATION REGULATED BY THIS PERMIT**

Definitions referred to in this permit

- An **Activity** is an industrial activity forming part of an installation. Different types of activity are listed within Schedule 1 of the PPC Regulations and are broadly broken down into industrial sectors. Other “associated” activities may also form part of an installation.
- An **Installation** comprises not just any relevant unit carrying out a B activity listed within Schedule 1 to the PPC Regulations, but also directly associated activities which have a technical connection with a schedule 1 activity and which could have an effect on pollution.
- An **Operator** is the person (eg a company or individual) who has control over the operation of an installation.
- **Volatile organic compound (VOC)** shall mean any organic compound having at 293K a vapour pressure of 0.01 kPa or more, or having a corresponding volatility under the particular conditions of use.
- **Organic solvent** shall mean any VOC which is used alone or in combination with other agents, and without undergoing a chemical change, to dissolve raw materials, products or waste materials, or is used as a cleaning agent to dissolve contaminants, or as a dissolver, or as a dispersion medium, or as a viscosity adjuster, or as a surface tension adjuster, or a plasticiser, or as a preservative.
- **Stack** includes structures and openings of any kind from or through which substances may be emitted to air.
- **Duct** includes enclosed structures through which gaseous substances may be conveyed.
- **Process vent** includes open terminations of ducts.
- **Authorised Officer** shall mean an officer authorised to carry out duties under the Pollution Prevention and Control Act 1999 and subordinate regulations
- **Logbook** shall mean any electronic or paper means of storage of the required information as agreed by the regulator
- **Local Authority** shall mean Coventry City Council
- **"m"** means metre
- **"m/s"** means metres per second

The general location of the Authorised Process is shown on the attached plan PPC/041/A. The Installation boundary is marked in red on the attached plan PPC/ 041/B. The internal layout of the paint shop is shown on the attached plan PPC/ 041/C.

## Description of Installation

- The delivery and storage of paints, diluents and cleaning solvents in the paint store, and the Pigment and resin storage in the bulk storage tank.
- The Pretreatment of the wheels following the process of: knock off, Alkali Degreaser, second stage Alkali Degreaser, Rinse, cold water-rinse with Titanium Additive, Zinc Phosphating, rinse, chromate passivate, rinse and final rinse;
- The dip painting of the wheels with a water based primer paint in the Electrophoretic Primer Dip as shown on Plan PPC/041/C.
- The water spraying of wheels to remove excessive primer paint and to reduce the surface tension of the paint.
- The curing of primer paint in the ovens to a temperature range of 145°C to 240°C.
- The spraying of the wheels in the 2 Automatic Spray booths, as shown on the Plan numbered PPC/041/C, employing electrostatic techniques.
- The flash off and curing of paints in the curing ovens

**Table 1**

**List of Process Areas within the Installation and Associated Emission Points, Pollutants of Concern and Abatement Plant Required**

Row Number	Area/Machinery Identification	Pollutants Emitted	Emission Limit in Permit	Abatement Plant Required
1	Pre-treatment Line	None	None	None
2	Electrophoretic Dip Plant	VOC's	None	None
3	2 Curing Ovens	VOC's	1.3	None
4	2 X Automatic spray booths	Particulates VOC's	1.3	
6	Curing Ovens	VOC's	1.3	None
7	Incinerator	Carbon monoxide Nitrogen oxide	1.3	None

## **DOCUMENT B**

### **CONDITIONS**

**All conditions shall have immediate effect unless stated otherwise.**

#### **1.0 EMISSION LIMITS AND CONTROLS**

- 1.1 All emissions to air shall be free from offensive odour outside the process boundary, as perceived by the local Authority Inspector.
- 1.2 There shall be no emissions of particulate matter noticeable beyond the installation boundary.
- 1.3 The following emissions to atmosphere, expressed as fifteen-minute mean shall not be exceeded
- (a) Total organic compounds from the stacks serving the Automatic spraybooths, the curing ovens and the incinerator 50mg/m<sup>3</sup>.
  - (b) Nitrogen oxides and carbon monoxide from the stack serving the incinerator 100mg/m<sup>3</sup>.
  - (c) Total particulate matter from the stack serving the Automatic spraybooths 50mg/m<sup>3</sup>.
- 1.4 The introduction of dilution air to achieve the emission concentration limits in this authorisation is not permitted. Exhaust flow rates should be consistent with the efficient capture of emissions.

#### **2.0 MONITORING, SAMPLING AND MEASUREMENT OF EMISSIONS**

- 2.1 A visual assessment of particulate emissions from the spray booths and electrophoretic primer dip shall be carried out at least once a day from the installed steel stairway for access to the gallery along the east wall of the paint shop. This is marked X on plan PPC/41/B and C.
- 2.2 An olfactory assessment of emissions of volatile organic compounds shall be carried out at least once a day from the position referred to in condition 2.1.
- 2.3 Emissions from the incinerator stack shall be tested for volatile organic compounds, nitrogen oxides and carbon monoxide at least once every 12 months
- 2.4 Emissions from the automatic spray booths shall be tested for particulates and volatile organic compounds at least once every 12 months.

- 2.5 Emissions from the curing ovens shall be tested for volatile organic compounds at least once every 12 months.
- 2.6 The Authority shall be notified 7 days in advance of any periodic monitoring to demonstrate compliance with clause 1.3. This notification shall include the provisional date, and time of the monitoring, pollutants to be tested, and the method to be used
- 2.6 The results of the monitoring to demonstrate compliance with clause 1.3 shall be forwarded to this Local Authority within 8 weeks of the monitoring taking place.
- 2.7 The results of monitoring to comply with 2.1 and 2.2 shall be recorded in a log book. This shall include the date, time, wind strength and direction, the name of the observer and an assessment of the emissions. This log book shall be retained, on site, for a minimum of four years.
- 2.8 Any adverse results from the monitoring required in 2.1 and 2.2 shall be followed up immediately by the investigation of the cause of the emission and any corrective action taken, with this also being recorded in the log book.
- 2.9 A detailed record shall be kept of all organic solvents used in the prescribed processes. This shall include cleaning solvent usage, diluent solvent usage and solvents contained within coatings used. This inventory shall be forwarded to the local Authority at least once every 12 months and shall include a determination for the total organic solvent usage for that period.

### **3.0 OPERATIONAL CONTROLS**

- 3.1 The cleaning of spray guns and other equipment shall only be carried out in the automatic flushing systems.
- 3.2 The mixing of paint shall only be carried out in the area marked paint mixing room.
- 3.3 The application equipment for all coatings using electrostatic application shall be capable of achieving transfer efficiency of solids of at least 65%.
- 3.4 Spray gun testing, following cleaning shall only be carried out in the spray booths. This shall only be undertaken while the spray booths are in proper working order.
- 3.5 The Primer Paint Dip Tanks No. 1 shall have the capacity to hold 24,000 litres of paint and No. 2 shall have the capacity to hold 17,000 litres of paint.
- 3.6 The Paint Dip Tank No. 1 when being emptied shall be pumped into the holding tank No. 1 with a capacity of 36,000 litres. When the Paint

Dip Tank No. 2 is being emptied it shall be pumped into holding Tank No. 2 which has a holding capacity of 36,000 litres. At no time shall Dip Tanks No. 1 and No. 2 be emptied at the same time into Holding Tanks 1 or 2.

- 3.7 All full, partially full and nominally empty containers which hold or have held materials which contain organic solvents must be stored in the paint mixing room and have lidded containers or must be stored in a covered skip.
- 3.8 Waste solvents and other liquid wastes containing VOC's shall be recycled using the distillation plant located in the paint shop adjacent to the spray booths.

#### **4.0 STACKS, DUCTS AND PROCESS VENTS**

- 4.1 Emissions from the electrophoretic Primer Dip only be emitted via the 6m stack. The height of the final discharge point shall be 3m above the roof ridge.
- 4.2 Emissions from the spraying of coatings in the Automatic spray booths shall only be emitted to atmosphere via the electropaint water back filtration system. The height of the final discharge point shall be 3m above the roof ridge.
- 4.3 Emissions from the flashing off or curing of the Primer and Top coatings shall only be emitted to air via the incinerator.
- 4.4 All the exhaust gases from the curing ovens shall be directed through the incinerator.

#### **5.0 GENERAL OPERATIONS**

- 5.1 Staff at all levels shall receive the necessary training and instruction in their duties relating to control of the activities and emissions to air. Records shall be kept which details all relevant training provided to staff, and these records shall be kept for a minimum of 2 years.
- 5.2 Any malfunction of plant or spillage of solvent based materials shall be remedied as soon as possible and process operations altered whilst the necessary work is undertaken.
- 5.3 Any incident likely to give rise to adverse atmospheric emissions or emissions that may have an impact on the local community shall be notified to the local authority immediately, and the details of incident including remedial action taken recorded in the process log book.
- 5.4 The operator shall make available on demand and without charge any of the records required to be kept by this permit.



5.5 If there is any intention to change any aspect of the prescribed installation from the description contained in the beginning of this permit, or any other aspect which may affect the substances or concentration or amount of substances being emitted to atmosphere, the operator shall notify the regulator of the proposed changes at least 4 weeks in advance before the changes take place.

**6.0 COMPLIANCE WITH SOLVENT EMISSIONS REGULATIONS**

6.1 The operator shall identify products or materials that are/contain risk phrased substances/materials R45, R46, R49, R60 and R61 and formulate and implement a timetable to replace, control and limit designated risk phrase materials as soon as possible, as defined and agreed by the Local Authority.

6.2 The operator shall demonstrate compliance with the Solvent Emissions (England & Wales) Regulations 2004 by one of the following methods:

1) By 31<sup>st</sup> October 2007 achieve the following VOC emission limits expressed as total excluding particulate matter over a 30 minute mean:

Release Point	Emission Limit
Waste gases from oxidation plant	50 mg/Nm <sup>3</sup>
Waste gases from turbines reciprocating engines or boilers used as abatement plant	150 mg/Nm <sup>3</sup> till 2013 50 mg/Nm <sup>3</sup> after 2013 for drying processes 50 mg/Nm <sup>3</sup> after 2013 for other processes
Any other waste gases	75 mg/Nm <sup>3</sup>

Fugitive Emission Limit Value = 20 % of solvent input

**Or**

2) The use of a Solvent Reduction Scheme to demonstrate the achievement of a Target Emission which is calculated by identifying the total amount of solids used in coating material in a 12 month period (all ingredients other than water and organic solvents should be assumed to form part of the solid coating. The Target Emission is as follows:

Existing Installations at 1/12/98	Existing Installations at 31/10/05	Existing Installations at 31/10/07
Total Mass of Solid x 1	Total Mass of Solid x 0.56	Total Mass of Solid x 0.37

Written notification that the operator wishes to comply with the solvent reduction scheme shall be sent to the Local Authority by 31st October 2005.

## **DOCUMENT C**

### **RESIDUAL DUTY**

In relation to any aspect of the process not regulated by specific conditions in this permit, then Best Available Techniques shall be used:

For the purposes of the Pollution Prevention and Control (England and Wales) Regulations 2000, “best available techniques” means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where practicable, generally to reduce emissions and the impact on the environment as a whole; and for the purpose of this definition –

- a) “available techniques” means those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, in the economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the operator;
- b) “best” means, in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole;
- c) “techniques” includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

## **SUPPLEMENTARY NOTES**

These notes do not comprise part of the Permit PPC/ 041 but contain guidance relevant to the Permit.

### **Inspections and Powers of Entry**

Regular inspections will be carried out by officers of the Council (the Local Authority Inspectors) to check and ensure full compliance with the Permit conditions and residual duties. These inspections may be carried out without prior notice.

Under section 108(6) of the Environment Act 1995 authorised Local Authority Inspectors have been granted powers of entry into any premises for the purposes of discharging relevant duties.

### **Reviews**

The Local Authority has a statutory duty to review the permit at least once every 6 years or in the following circumstances set out in regulation 15 of the Pollution Prevention and Control regulations 2000:

- a) The pollution from the installation is of such significance that the existing emission limit values for the permit need to be revised or new emission limit values need to be included in the permit
- b) Substantial changes in BAT make it possible to reduce emissions from the installation or mobile plant significantly without imposing excessive costs;  
or
- c) Operational safety of the activities carried out in the installation or mobile plant requires other techniques to be used

### **Health and Safety**

This Permit is given in relation to the requirements of the Pollution Prevention and Control (England and Wales) Regulations 2000. It must not be taken to replace any workplace responsibilities the operator has under Health & Safety legislation. Whenever emission limits quoted in this Permit conflict with occupational exposure limits set under the Health and Safety at Work Act 1974 to secure the health, safety or welfare of persons at work, the tighter limit should prevail.

Installation must be operated in order to protect persons at work as well as the environment. In achieving conditions in this Permit the operator must not adopt any course of action that would put at risk the health, safety or welfare of persons at work.

### **Other Statutory Requirements**

This Permit does not detract from any other statutory requirement, such as the need to obtain planning permission, hazardous substances consent, discharge consent from the Environment Agency, building regulations approval, or a waste disposal licence.

This Permit does not authorise a contravention of any other enactment or any order made, granted or issued under any enactment, nor does it authorise a contravention of any rule or breach of any agreement.

The Operator is advised to consult the relevant Planning Department regarding changes that may be required as a result of this Permit (e.g. stack heights) as they may require planning permission.

### **Transfer of Permits**

Where the operator of an installation wishes to transfer, in whole or in part, his permit to another person, the operator and the proposed transferee shall jointly make an application to the regulator to effect the transfer. The permit shall accompany such an application and any fee prescribed in respect of the transfer.

In the case of partial transfer, where the original operator retains part of the permit, the application must make clear who will retain control over the various parts of the installation. The application must include a plan identifying which parts of the site and which activities the operator proposes transferring.

The local authority will then determine whether to allow the transfer within a two-month period, unless the local authority and the applicants agree a longer period. Where the local authority approves the transfer, the transfer will take effect from the date requested by the operator or a date that may be agreed by the local authority and the applicants.

### **Variation to Permits**

Variation to permits may be initiated either by the local authority or the operator, either in response to changes in the operation of an installation or if new conditions are needed to deal with new matters. Variations may be required in response to the following.

- Change of operation of the installation. (The operator shall notify the local authority under Section 16(1) of the Regulations.)
- In response to the findings of a periodic review of conditions.
- In response to the findings of an inspection.
- New or revised sector guidance notes

The operator should apply to the Local Authority in order to vary a permit under regulation 17 of the Regulations. The application must be in writing and, in accordance with Part 1 of Schedule 7 to the Regulations contain:

- The name, address and telephone number of the operator.
- The address of the installation.
- A correspondence address.
- A description of the proposed changes.
- An indication of the variations the operator would like to make.
- Any other information the operator wants the authority take account of.

### **Substantial Change**

A substantial change means, in relation to an installation, a change in operation, which in the opinion of the local authority may have significant negative effects on human beings or the environment.

Where the local authority deems that a proposed variation constitutes a substantial change, the operator will be informed of the process to follow.

### **Noise**

This Permit does not include reference to noise. Statutory noise nuisance is regulated separately under the provisions of Part III of the 1990 Act.

### **Appeals**

An Appeal can be made against the conditions in, or variations to this Permit as per Part IV of the Regulations. Appeals are made to the Planning Inspectorate who acts on behalf of the Secretary of State. Appeals against conditions within a Permit must be submitted within 6 months of the date of issue of the permit. Appeals against variation notices must be submitted within 2 months of the date of issue of the notice. Appeals should be despatched on the day they are dated and sent to:

The Planning Inspectorate  
Environmental Appeals Administration  
Room 4/19 – Eagle Wing  
Temple Quay House  
2 The Square  
Temple Quay  
BRISTOL  
BS1 6PN

### **HMSO Publications**

All HMSO publications can be ordered by telephone on Tel: 0870 600 5522, Fax: 0870 600 5533 or e-mail: [book.orders@tso.co.uk](mailto:book.orders@tso.co.uk)

### **Emission Monitoring Protocol**

The documented procedure by which reliable and comparable results are obtained from measurements at source is known as a Protocol.

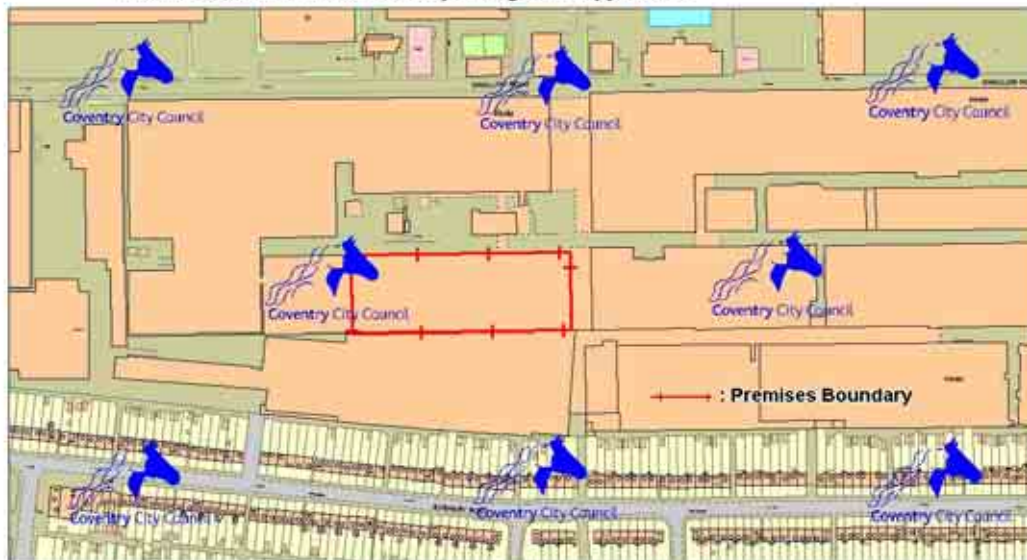
Protocols ensure that the sampling procedures are carried out correctly and that the results obtained accurately characterise the process.

The main components of a Protocol are as follows:-

1. Calibre and quality of the sampling team.
2. A reference measurement method (standard methods may not always be available)
3. A standard methodology setting out:
  - health and safety considerations
  - pollutants of interest
  - plant operating conditions required
  - selection and location of sampling position

- sampling characteristics (e.g. isokinetic etc) and techniques
- sampling frequency
- sampling duration
- number of samples
- type (including make and model), condition and suitability of sampling equipment
- required accuracy
- variability of emissions
- analytical methods including laboratory competence and NAMAS accreditation certificate copy for each pollutant of interest
- analytical precision
- procedures to be adopted if standard methods unavailable
- calibration certificate(s) for sampling equipment
- Quality Control and Quality Assurance procedures
- Presentation of results and associated information.

Plan PPC/041/A Premises Boundary of Magnetto Topy Wheels



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City Services Directorate,  
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 Environmental Protection,  
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 Coventry, CV1 1NH

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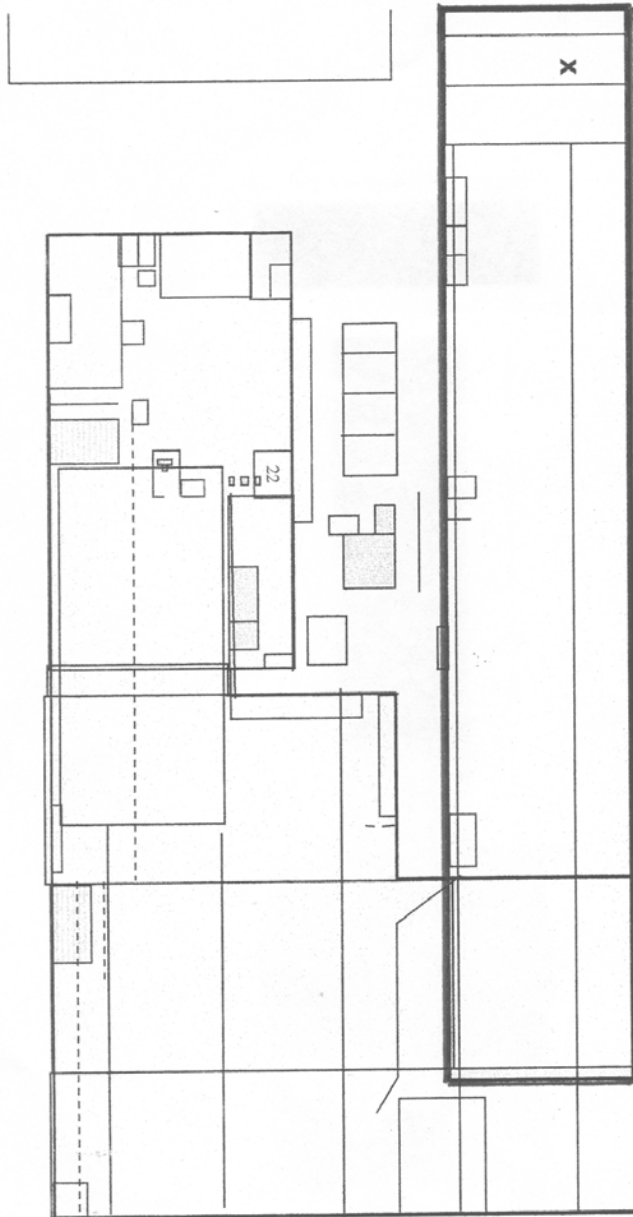
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PLAN PPC/041/B

**Magnetto-Topy Wheels Ltd**

Nov 2004

Plan View



PLAN PPC/041/C

### PAINT SHOP & YARD LAYOUT

