#### 12. INDEPENDENT MARKET RESEARCH REPORT

(Prepared for the inclusion in this Prospectus)



28 November 2005

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Dear Sirs

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### Assessment of the Machinery and Equipment Industry

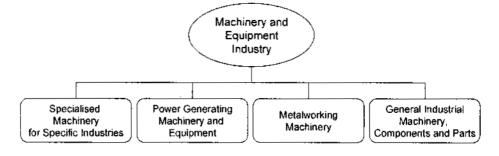
The following is a summary of the Assessment of the Machinery and Equipment Industry in Malaysia prepared by Vital Factor Consulting Sdn Bhd for inclusion in the Prospectus of MMS Ventures Berhad (herein together with all its subsidiaries will be referred to as MMS Ventures Group) in relation to its proposed listing on the MESDAQ market.

### 1. Objective

- The objective of the report is to provide an independent assessment of the Machinery and Equipment Industry focusing on the Specialised Industrial Machinery and Equipment Sector in Malaysia.
- The main business activities of the MMS Ventures are as follows:
  - Design and Manufacture of Industrial Automation Systems and Machinery;
  - Design of Precision Die Sets, Jigs and Fixtures.

## 2. Industry Structure

 According to the Malaysian Industrial Development Authority, the Machinery and Equipment Industry can be classified into four broad categories as follows:



Source: Malaysian Industrial Development Authority

Figure 1 Structure of the Machinery and Equipment Industry



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#### Specialised Machinery for Specific Industries

- The Specialised Machinery for Specific Industries sector caters to the needs of specific manufacturing industries and thus most of the machine and equipment are custom-made. Local companies that are involved in this sector are able to undertake the full project cycle from engineering and design to fabrication and integration of final system and machinery.
- The major machinery and equipment manufactured under this sector include processing machinery for the Rubber and Palm Oil Industries and automation machinery and equipment for the Electrical and Electronics Industry.
- In 2004, there were about 20 companies involved in the manufacturing of rubber and palm oil processing machinery and equipment, which include the following:
  - raw rubber processing machinery;
  - latex dipped product manufacturing lines;
  - crude palm oil and edible oil processing equipment and machinery.

(Source: Malaysian Industrial Development Authority)

- For the manufacturing of automation machinery and equipment, there were 30 companies involved in such production catering to the Electrical and Electronics Industry. The automation machinery and equipment include:
  - pick and place machines;
  - vision inspection systems;
  - integrated circuit (IC) test handlers;
  - tape and reel machines;
  - automatic moulding systems;
  - trim and form machines;
  - laser marking machines;
  - die bonders;
  - automatic dispensing machines.

(Source: Malaysian Industrial Development Authority)

- In 2004, a total of 39 projects with an investment of RM205.3 million were approved
  within the Specialised Machinery sector, representing an increase of 1.6% compared
  to 34 projects with an investment of RM202.1 million in 2003.
- Of the overall number of projects approved, 29 projects were new and 10 other projects were for expansion or diversification.
- Within the Specialised Machinery sector, domestic investment constituted 66.5% or RM136.5 million of the overall investment in 2004. The remainder 33.5% or RM68.8 million were contributed by foreign investments.
- Malaysia is a net importer of Specialised Machinery. In 2004, the import value of Specialised Machinery reached RM10.5 billion whilst export value was RM4.2 billion.

(Source: Malaysian Industrial Development Authority).



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 As MMS Ventures Group is primarily involved in the manufacture of Specialised Machinery for Specific Industries, the focus of this report will be on the overall Machinery and Equipment Industry, and Specialised Machinery for Specific Industries sector.

#### Metalworking Machinery

For the Metalworking Machinery sector, a total of RM14.2 million worth of
investments were approved in 2004. Domestic investment accounted for 66.2%
whilst foreign investment constituted the remainder 33.8% (Source: Malaysian
Industrial Development Authority).

### General Industrial Machinery and Equipment

- In the General Industrial Machinery and Equipment sector, major machinery and equipment produced include:
  - industrial air conditioning plant and equipment;
  - elevators:
  - cranes;
  - pressure vessels;
  - heat exchangers;
  - ultrasonic cleaning machines.
- In 2004, a total of RM166.6 million was invested in the sector, of which 75.2% was contributed by domestic investment. The remainder 24.8% was contributed by foreign investment. (Source: Malaysian Industrial Development Authority).

### 3. Vertical Structure of the Machinery and Equipment Industry

 The manufacturing of Machinery and Equipment can also be vertically extended to include upstream and downstream activities as follows:

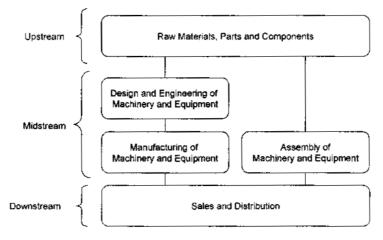


Figure 2 Vertical Structure of the Machinery and Equipment Industry



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### Upstream

- Upstream activities are primarily involved in the supply of raw materials like iron and steel sheets and plates, and other metal products, and parts and components.
- Locally, the Basic Metal Products Industry includes the following:
  - ferrous metal products, namely iron and steel;
  - non-ferrous metal products, namely aluminium, tin, copper, zinc and lead.

### Midstream

- MMS Ventures Group's business activities are mainly focused on midstream activities.
- Within the manufacturing of Machinery and Equipment, most of Malaysia's
  machinery and equipment manufacturers produce Specialised Machinery for Specific
  Industries, Power Generating Machinery and Equipment, and General Industrial
  Machinery as well as components and parts.
- The machinery and equipment produced are usually for niche market applications, low volume or batch production or made to order, reflecting local manufacturers' capabilities in engineering design, innovation and research and development (R&D). The average value input for these production range between 40% and 60% (Source: Malaysian Industrial Development Authority).
- The Engineering Supporting Industry encompasses:
  - moulds;
  - tools and dies;
  - machining;
  - metal stamping;
  - metal surface treatment/finishing;
  - heat treatment;
  - metal casting.
- Within the Engineering Supporting Industry, in 2004, there were 115 projects approved involving a total investment of RM763.9 million compared with 75 projects involving a total investment of only RM777.1 million in 2003 (Source: Malaysian Industrial Development Authority).

### Downstream

 Downstream activities involve the services sector, which include sales, distribution and export.



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### 4. Industry Life-Cycle

 The Machinery and Equipment Industry is in the growth stages of the industry life cycle. This is based on the following observations:

#### **Local Production**

- Based on latest available statistics, in 2002, gross output value of manufacture of Special Purpose Machinery (herein referred to in this report as 'Specialised Industrial Machinery and Equipment') increased by 26.1% to reach approximately RM2.7 billion.
- Based on latest available statistics, in 2002, gross output value of manufacture of Other Special Purpose Machinery (sub-sector of Special Purpose Machinery) increase by 29.2% to reach RM247.5 million.

(Source: Department of Statistics Malaysia)

### Exports

- The export value of Machinery Specialised for Particular Industries increased at an average annual rate of 16.3% between 1999 and 2004;
- Between 1999 and 2004, the export value of Machines or Mechanical Appliances Having Individual Functions, Not Elsewhere Specified, grew at an average annual rate of 16.2%;
- Between 1999 and 2004, the export value of Other Machines and Mechanical Appliances Having Individual Functions Not Elsewhere Specified (is the sub-sector of Machines or Mechanical Appliances Having Individual Functions, Not Elsewhere Specified) decreased at an average annual rate of 2.3%;
- Between 1999 and 2004, the export value of Measuring or Checking Instruments, Appliances and Machines, Not Elsewhere Specified, increased at an average annual rate of 25.6%;
- Between 1999 and 2004, the export value of Other Optical Instruments and Appliances for Inspecting Semiconductor Wafers or Devices or for Inspecting Photomasks or Reticles Used in Manufacturing Semiconductor Devices (a sub-sector of Measuring or Checking Instruments, Appliances and Machines, Not Elsewhere Specified) grew at an average annual rate of 55.7%.

(Source: Department of Statistics Malaysia)

- The growth phase of the life-cycle of Machinery and Equipment Industry will continue to be fuelled by the following trends and factors:
  - The Government has identified the Machinery and Equipment Industry as one
    of the key areas for growth and development.



- Exports of Machinery and Equipment, which includes power generating
  machinery and equipment, machinery specialised for particular industries,
  metalworking machinery and general industrial machinery and equipment
  and parts, continue to increase, stimulating demand for local manufacture of
  Machinery and Equipment. The following export performance reaffirms an
  industry that is still in its growth and development phase:
  - Export value of Machinery and Equipment experienced an average annual growth rate of 10.2% between 1999 and 2004. In 2004, export value increased by 28.4% to reach approximately RM15.6 billion.
  - Between 1999 and 2004, export value of Specialised Machinery for Specific Industries grew at an average annual rate of 16.3%. In 2004, export value increased by 28.9% to reach approximately RM4.2 billion.

(Source: Malaysian Industrial Development Authority)

As the Machinery and Equipment sector serve many user-industry sectors
with a proliferation of usage and applications, the growth in the performance
of the user industry sectors will continue to generate demand for Machinery
and Equipment including automation based products and applications.

### 5. Government Legislation, Policies and Incentives

- Apart from the normal manufacturing licence, there are no material government laws, regulations and policies that may impede on operators' performance and growth within a free enterprise environment.
- Application of a manufacturing licence under the Industrial Coordination Act, 1975 is mandatory for companies with shareholders' funds of RM2.5 million or above or engaging 75 or more full-time employees (Source: Malaysian Industrial Development Authority).

#### **Government Incentives**

- As part of the Malaysian Government's intention to nurture the growth and development of the Machinery and Equipment Industry, there are incentives provided for companies in the manufacture of machinery and machinery components under the Promotion of Investments Act 1986. The incentives include:
  - Pioneer Status;
  - Investment Tax Allowance;
  - Reinvestment Allowance.

(Source: Malaysian Industrial Development Authority)



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- The promoted activities and products classified under the manufacture of machinery and machinery components, among others, include the development and production of the following:
  - industrial machinery and equipment;
  - agricultural machinery and equipment;
  - mining or mineral processing machinery or equipment;
  - power generating machinery or equipment;
  - construction machinery or equipment;
  - material handling machinery/equipment;
  - machine tools, hand tools or power tools.
- There are also incentives provided for high technology companies in the automation and flexible manufacturing systems under the Promotion of Investments Act 1986.
   According to the Malaysian Industrial Development Authority, high technology companies are referred to companies engaged in promoted activities or in the production of promoted products in areas of new and emerging technologies.
- The promoted activities and products classified under the automation and flexible manufacturing systems include the development and production of the following:
  - computer process control systems/equipment;
  - process instrumentation;
  - robotic equipment;
  - computer numerical control (CNC) machine tools.
- Eligibility for either the Pioneer Status or Investment Tax Allowance will be
  determined according to the priorities termed as "promoted activities" or "promoted
  products". In addition, the level of value-added, technology and industrial linkages
  will also be taken into consideration.
- The MMS Ventures Group subsidiary, Micro Modular System Sdn Bhd was granted Pioneer Status for the manufacture of "Automated Equipment for the Semiconductor Industry" on 5 May 1998. The pioneer status was valid from 1 July 1999 and expired on 30 June 2004.
- As part of the Malaysian Government's incentives to promote the manufacturing industry, Licensed Manufacturing Warehouse (LMW) companies are entitled to the exemption of imported raw materials, component parts, machinery and equipment, which are required directly in the manufacturing process (Source: Malaysian Industrial Development Authority).
- Generally, manufacturers who are approved for LMW are those that have the following:
  - entire production or not less than 80% of the production are meant for export;
  - raw materials/components are mainly imported.

(Source: Malaysian Industrial Development Authority)

 MMS Ventures Group is currently enjoying Licensed Manufacturing Warehouse (LMW) facilities.



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### Environmental Regulations

- In the process of manufacturing machinery and equipment, the main waste material generally produced by the Machinery and Equipment Industry is waste oil.
- The waste oil is created during the following production process:
  - change of machine lubricating oil;
  - change of degreaser during degreasing.
- However, waste oil generated by the Machinery and Equipment Industry is relatively low as they are not operating machinery and equipment for long term, but rather using it for development and testing purposes.
- The disposal of waste oil is regulated under 'spent oil or grease used for lubricating industrial machines' of scheduled wastes from non specific sources in Environmental Quality Act 1974 and Environmental Quality (Scheduled Wastes) Regulations 1989 (Source: Environmental Quality Act and Regulations).

### 7. Labour Usage

- Usage of labour in the manufacture of Specialised Purpose Machinery and Equipment is
  higher compared with the Manufacturing Industry. In 2003, labour cost per employee
  within the Manufacture of Specialised Purpose Machinery and Equipment was 22.6%
  higher compared to Overall Manufacturing Industry.
  - (Source: National Productivity Corporation)
- This is because the industry depends on highly skilled labour to produce customised machinery and equipment. Machinery and equipment are high value-added products and are manufactured in low volumes.

### 8. Supply and Supply Dependencies

### Supply

- Based on latest available statistics, in 2002, the gross output value of the manufacture of Lifting and Handling Equipment declined marginally by 0.5% amounted to RM294.1 million.
- Based on latest available statistics, in 2002, gross output value of manufacture of Special Purpose Machinery (herein referred to in this report as 'Specialised Industrial Machinery and Equipment') increased by 26.1% to reach approximately RM2.7 billion.
- Based on latest available statistics, in 2002, gross output value of manufacture of Other Special Purpose Machinery (sub-sector of Special Purpose Machinery) increased by 29.2% to reach RM247.5 million.



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- The import value of Machinery Specialised for Particular Industries increased at an average annual rate of 7.3% between 1999 and 2004. In 2004, the import value of Machinery Specialised for Particular Industries increased by 30.5% to RM10.4 billion.
- Between 1999 and 2004, the import value of Machines or Mechanical Appliances
  Having Individual Functions, Not Elsewhere Specified grew at an average annual rate
  of 3.7%. In 2004, the import value increased by 37.2% to reach approximately
  RM4.0 billion.
- Between 1999 and 2004, the import value of Other Machines or Mechanical Appliances Having Individual Functions, Not Elsewhere Specified (sub-category of "Machines or Mechanical Appliances Having Individual Functions, Not Elsewhere Specified") grew at an average annual rate of 1.0%. In 2004, the import value of this products increased by 12.5% to approximately RM2.2 billion.
- Between 1999 and 2004, the import value of Measuring or Checking Instruments, Appliances and Machines, not elsewhere specified grew at an average annual rate of 4.9%. In 2004, the import value of this category increased by 49.3%, which amounted to approximately RM2.7 billion.
- Between 1999 and 2004, the import value of Other Optical Instruments and Appliances
  for Inspecting Semiconductor Wafers or Devices or for Inspecting Photomasks or
  Reticles Used in Manufacturing Semiconductor Devices grew at an average annual
  rate of 15.6%. In 2004, the import value of this category increased by 267.7% to
  RM318.8 million.

Note: "Other Optical Instruments and Appliances for Inspecting Semiconductor Wafers or Devices or for Inspecting Photomasks or Reticles Used in Manufacturing Semiconductor Devices" is a sub-sector of "Measuring or Checking Instruments, Appliances and Machines, not elsewhere specified".

(Source: Department of Statistics Malaysia)

### **Supply Dependencies**

- Generally, there are many different types of raw materials required for the manufacturing of Machinery and Equipment.
- However some of the major raw materials required for the manufacturing of Machinery and Equipment focusing on Specialised Industrial Machinery and Equipment include:
  - Other Fabricated Metal Products, not elsewhere classified;
  - Non-Electric Engines and Motor, and Parts, not elsewhere specified;
  - Parts for Machines and Mechanical Appliances;
  - Electric Motors and Generators.
- The manufacture of Other Fabricated Metal Products, not elsewhere classified includes general purpose parts for machinery and specialised parts of machinery and equipment.



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- Malaysia is a producer of Other Fabricated Metal Products. In 2004, the sales value
  of the manufacture of Other Fabricated Metal Products, not elsewhere classified,
  amounted to RM4.2 billion, representing a growth of 17.9% over the previous year
  (Source: Department of Statistics).
- Malaysia has an engineering supporting industry, which encompasses moulds, tools
  and dies, machining, metal stamping, metal surface treatment/finishing, heat treatment
  and metal casting. This is supported by the following number of companies in the
  engineering supporting industry in Malaysia:
  - there are approximately 350 mould, tool and die companies in operation;
  - there are approximately 150 machining companies in operation;
  - there are approximately 300 metal stamping companies;
  - there are approximately 35 metal surface treatment/finishing companies in operation;
  - there are approximately 70 foundry companies in operation;
  - there are approximately 60 die-casting companies in operation.

(Source: Malaysian Industrial Development Authority)

### 9. Demand and Demand Dependencies

- Demand for Machinery and Equipment is dependent on the following markets:
  - Local market demand;
  - Overseas in terms of export market demand.
- The export value of Machinery Specialised for Particular Industries increased at an average annual rate of 16.3% between 1999 and 2004. In 2004, the export value of Machinery Specialised for Particular Industries increased by 30.3% to RM4.2 billion over the previous year.
- Between 1999 and 2004, the export value of Machines or Mechanical Appliances
  Having Individual Functions, Not Elsewhere Specified, grew at an average annual
  rate of 16.2%. In 2004, the export value increased by 41.5% to RM1.7 billion.
- Between 1999 and 2004, the export value of Other Machines and Mechanical Appliances Having Individual Functions Not Elsewhere Specified (sub-sector of "Machines and Mechanical Appliances Having Individual Functions Not Elsewhere Specified") decreased at an average annual rate of 2.3%. In 2004, the export value decreased by 34.3% to reach approximately RM342.1 million.
- Between 1999 and 2004, the export value of Measuring or Checking Instruments, Appliances and Machines, Not Elsewhere Specified, increased at an average annual rate of 25.6%. In 2004, the export value increased by 18.9% to a value of RM904.1 million.

(Source: Department of Statistics Malaysia)



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## 10. Competitive Nature and Intensity

- Operators in the Machinery and Equipment Industry face normal competition conditions.
- Competition exists in two areas:
  - Local market:
  - Global market.
- At the local level, manufacturers within the Machinery and Equipment Industry compete with other Malaysian manufacturers as well as with imports.
- At the global level, Malaysian manufacturers of Machinery and Equipment Industry compete against foreign manufacturers as well as other Malaysian export-oriented manufacturers.
- The nature of competition in the global arena is also segmented based on market perception:
  - Countries commonly associated with producing high quality, complex and robust machinery and equipment are Germany and Japan. Machinery and equipment from these countries are usually more expensive.
  - Countries commonly associated with producing less robust and lower quality machinery and equipment are Taiwan and China. Machinery and equipment from these countries are usually priced significantly lower.
- As with most free enterprise environments, competition is based on a number of factors, including:
  - Quality of products and services;
  - Manufacturing capabilities and capacities;
  - Prompt delivery schedules;
  - Established track record;
  - Cost competitiveness;
  - Market reputation.
- Competition among operators in the Machinery and Equipment Industry focusing on the manufacturing of Automation Machinery and Equipment for the Electrical and Electronics Industry is moderate.

#### Factors that Moderates Competitive Intensity

• In 2004, there were 30 companies involved in the manufacturing of Automation Machinery and Equipment catering to the Electrical and Electronics Industry in Malaysia (Source: Malaysian Industrial Development Authority). This represents a relatively small number of operators in an industry that gross exports RM257.1 billion worth of Electrical and Electronics products in 2004 (Source: Bank Negara Malaysia)



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- Requirements of the Electrical and Electronics Industry are more stringent compared
  to other industries, for example the Metalworking Machinery sector. The Electrical
  and Electronics Industry are typified by machinery and equipment that are required to
  meet some of the following operating conditions:
  - high speed based on number of units done per hour
  - precise with tolerance as low as 1 to 3 microns
  - handling small parts and components
  - dealing with highly sensitive components and finished products
  - clean as most of these machines are used in air-conditioned and relatively clean environment (not necessary Clean Room conditions).

As such, there are typically fewer manufacturers able to meet such stringent requirements, which moderate the intensity of competition.

- Specialised Automation Machinery and Equipment are customised machinery, which cater to the needs of specific manufacturing environment. Hence, manufacturers are in a competitive position if they can meet the following:
  - conform to international quality standards including ISO accreditation and compliance;
  - . meet the requirements and specifications of customers;
  - ability to integrate machinery and systems in achieving greater functional flexibility, reliability, efficiency and speed;
  - capability to undertake in-house research and development, engineering design and testing in order to customise and modify machinery and equipment based on varying end-users' requirement.
- Thus, with different degrees of accreditations, specialisations and capabilities, competition is moderated as not all manufacturers have the same skill sets and capabilities.

### **Factors that Increase Competitive Intensity**

- As Malaysia is still a net importer, in value terms, of machinery and equipment, Malaysia faces significant competition from imported machinery and equipment particularly from Japan, Taiwan, Germany and China. Overseas competition increases the competitive intensity for operators in the industry.
- In 2004, the imports of Machinery and Equipment amounted to approximately RM32.9 billion whilst export value was approximately RM15.6 billion (Source: Malaysian Industrial Development Authority).
- In 2004, the import value of Machinery Specialised for Particular Industries increased by 30.5% to RM10.4 billion. (Source: Department of Statistics).



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• Although the requirements for the Electrical and Electronics Industry is stringent for Automation Systems and Machinery, there are "back-yarders" that are not registered with the Malaysian Industrial Development Authority and are able to meet some of the requirements of the Electrical and Electronics Industry. Most of these will be for the low-end and relatively simpler operations and functions. However, their relatively lower cost would place competitive pressure, especially to manufacturers that are focussed at the low-end of the requirements.

### 11. Manufacturers in the Industry

- Some of the players in the Machinery and Equipment Industry focusing on Automation Machinery and Equipment are as follows:
  - MMS Ventures Berhad (through subsidiary, Micro Modular System Sdn Bhd)
  - AT Systematization Berhad
  - Pentamaster Corporation Berhad (through subsidiary, Pentamaster Technology (M) Sdn Bhd)
  - LKT Industrial Berhad (through subsidiary, LKT Automation Sdn Bhd)
  - Kobay Technology Berhad (through subsidiary, Polytool Automation Sdn Bhd)
  - NEC Machinery (M) Sdn Bhd
  - Tateyama Auto Machines Co. (M) Sdn Bhd
  - ASM Technology Sdn Bhd
  - Autoveyor (M) Sdn Bhd
  - Cosmo Industrial Automation Sdn Bhd
  - Cosmo Engineering Sdn Bhd
  - Ever Technologies Sdn Bhd
  - Greatech (M) Sdn Bhd
  - Matromatic Handling Systems (M) Sdn Bhd
  - Multimatic Systems Sdn Bhd
  - Towam Sdn Bhd
  - Navelasia Sdn Bhd
  - Ohnishi Electronics (M) Sdn Bhd
  - Soritsu Technology Malaysia Sdn Bhd
  - Elemac Precision Engineering Sdn Bhd
  - ADA Precision Manufacturing Sdn Bhd
  - Heidelberg Graphic Sdn Bhd

(Source: Malaysian Industrial Development Authority and Primary Market Research undertaken by Vital Factor Consulting)

## 12. Barriers to Entry

 Generally, barriers to entry into the Machinery and Equipment Industry are moderate to high. This is mainly substantiated by the following:



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- Within the manufacturing of Specialised Machinery for Specific Industries, there are about 20 companies specialising in the manufacturing of rubber and palm oil processing machinery and equipment, whilst there are about 30 companies involved in the production of automation machinery and equipment for the Electronics and Electrical Industry.
- Within the manufacturing of Power Generation Machinery, there are approximately 10 active manufacturers of industrial broilers in Malaysia.
- Within the manufacturing of Metalworking Machinery, there are 6 companies involved in the manufacturing of machine tools.
- For General Industrial Machinery and Equipment, there are 7 manufacturers of industrial air conditioning plant and equipment, 5 companies producing elevators, 85 companies producing pressure vessels and heat exchangers, 6 companies producing tower cranes, port cranes, overhead travelling cranes and other lifting equipment.

(Source: Malaysian Industrial Development Authority)

### Capital and Set-up Costs

 The barriers to entry based on capital requirements (excluding land and building) for the Machinery and Equipment Industry are low.

The capital investment required to start up a small sized manufacturing facility would cost approximately RM500,000 (excluding land and building). Revenue would depend significantly on ability to win sales as the other production constrains are people related which could be hired if there is a business case to do so. With such capital set-up cost, it is possible for the small sized manufacturing set-up to generate revenue of RM2 million to RM4 million per year (Source: Primary Market Research undertaken by Vital Factor Consulting)

- Capital costs start to escalate for larger operations within the manufacturing of Machinery and Equipment Industry.
- However, smaller sized operators will face difficulties in competing with larger operators that have the advantage of economies of scale. This is in consideration of the diverse end-user industries and export markets served by larger operators that have the capital resources and capability to innovate, design, engineer as well as manufacture different types of machinery and equipment based on a few standard manufacturing platforms.

### **Technical Skills**

 Generally, the skill level of labour used in the Machinery and Equipment Industry is high. Some of the key personnel required include the following:



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- Professional engineers and technical personnel with engineering background, experienced in mechanical engineering, exposure to computer software development and technology, as well as mechatronics engineering.
- Large-pool of semi-skilled and general labour, usually recruited from vocational schools. At this level of skill, workers would have undergone extensive training and have experience in welding and metalwork.
- Skilled labour with extensive experience are essential in various aspect of machinery and equipment manufacturing operations as each production line caters to customised manufacturing and requires significant engineering skills and technical knowledge to produce machinery and equipment.
- Experienced and trained workers are also required in the operation of machinery and equipment to conduct machinery and equipment testing and optimise the level of productivity.
- Thus, having access to a pool of skilled labour that is experienced would pose some barriers of entry for new entrants.
- In addition, the ability to develop and build machinery and equipment based on various end-user requirements would enable manufacturers to maintain their competitive edge by keeping abreast with changing trends and needs of industrial users.

#### Track Record and Quality Assurance Program

- As machinery and equipment particularly are tools for the production of various endproducts, quality assurance is an important factor. As such, manufacturers that have stringent quality assurance programmes in place including ISO accreditation and compliance to standards are important factors in securing sales.
- In addition, operators that have a strong track record would have a significant advantage in winning sales compared to new entrants.

#### 13. Barriers To Exit

- Barriers to exit for the manufacturing of Machinery and Equipment are low.
- This is due to the fact that there are numerous operators within each sector of the Machinery and Equipment Industry.
- Manufacturers of Machinery and Equipment can sell their entire production line to
  other manufacturers within the industry. It would not be expensive or difficult for the
  purchaser to convert or modify tools and equipment to be used in the manufacture of
  other types of machinery and equipment catering for specific applications.



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#### 14. Industry Outlook

- The outlook of the Specialised Industrial Machinery and Equipment Industry in Malaysia is favourable.
- The Specialised Industrial Machinery and Equipment is forecasted to grow at approximately 5% to 8% per annum for the next five years.
- This is mainly substantiated by the following analysis and observations:

#### **Local Production**

- Based on latest available statistics, in 2002, gross output value of manufacture
  of Special Purpose Machinery (herein referred to in this report as 'Specialised
  Industrial Machinery and Equipment') increased by 26.1% to reach
  approximately RM2.7 billion.
- Based on latest available statistics, in 2002, gross output value of manufacture of Other Special Purpose Machinery (sub-sector of Special Purpose Machinery) increased by 29.2% to reach RM247.5 million.
- Based on latest available statistics, in 2002, the gross output value of the manufacture of Lifting and Handling Equipment declined marginally by 0.5% amounted to RM294.1 million.

(Note: The Manufacture of Lifting and Handling Equipment and the Manufacture of Other Special Purpose Machinery Not Elsewhere Classified constitute part of the total Specialised Industrial Machinery and Equipment Industry)

(Source: Department of Statistics Malaysia)

### **Exports**

- The export value of Machinery Specialised for Particular Industries increased at an average annual rate of 16.3% between 1999 and 2004. In 2004, the export value increased by 30.3% to RM4.2 billion over the previous year.
- Between 1999 and 2004, the export value of Machines or Mechanical Appliances Having Individual Functions, Not Elsewhere Specified, grew at an average annual rate of 16.2%. In 2004, the export value increased by 41.5% to RM1.7 billion.
- Between 1999 and 2004, the export value of Other Machines and Mechanical Appliances Having Individual Functions Not Elsewhere Classified (a subsector of Machines or Mechanical Appliances Having Individual Functions, Not Elsewhere Specified) decreased at an average annual rate of 2.3%. In 2004, the export value decreased by 34.3% to reach RM342.1 million.
- Between 1999 and 2004, the export value of Measuring or Checking Instruments, Appliances and Machines, Not Elsewhere Specified, increased at an average annual rate of 25.6%. In 2004, the export value increased by 18.9% to a value of RM904.1 million.



Between 1999 and 2004, the export value of Other Optical Instruments and Appliances for Inspecting Semiconductor Wafers or Devices or for Inspecting Photomasks or Reticles Used in Manufacturing Semiconductor Devices (a sub-sector of Measuring or Checking Instruments, Appliances and Machines, Not Elsewhere Specified) grew at an average annual rate of 55.7%. In 2004, the export value decreased by 21.9% to reach approximately RM22.5 million.

(Source: Department of Statistics Malaysia)

#### **Imports**

- Malaysia is still a net importer, in value terms, of Machinery and Equipment.
   In 2004, the imports of Machinery and Equipment amounted to approximately RM32.9 billion. Malaysia continues to import machinery and equipment to meet industrial as well as high technology industries' needs.
- In 2004, import value of Machinery and Equipment increased by 32.8%.
   Between 1999 and 2004, import value of Machinery and Equipment grew at an average annual rate of 6.6%.

(Source: Malaysian Industrial Development Authority)

- The import value of Machinery Specialised for Particular Industries increased at an average annual rate of 7.3% between 1999 and 2004. In 2004, the import value of Machinery Specialised for Particular Industries increased by 30.5% to RM10.4 billion over the previous year.
- Between 1999 and 2004, the import value of Machines or Mechanical Appliances Having Individual Functions, Not Elsewhere Specified grew at an average annual rate of 3.7%. In 2004, the import value increased by 37.2% to reach approximately RM4.0 billion.
- Between 1999 and 2004, the import value of Other Machines or Mechanical Appliances Having Individual Functions, Not Elsewhere Specified (subsector of Machines or Mechanical Appliances Having Individual Functions, Not Elsewhere Specified) increased at an average annual rate of 1.0%. In 2004, the import value of this category increased by 12.5% to approximately RM2.2 billion.
- Between 1999 and 2004, the import value of Measuring or Checking Instruments, Appliances and Machines, not elsewhere specified increased at an average annual rate of 4.9%. In 2004, the import value of this category increased by 49.3%, which amounted to approximately RM2.7 billion.



Between 1999 and 2004, the import value of Other Optical Instruments and Appliances for Inspecting Semiconductor Wafers or Devices or for Inspecting Photomasks or Reticles Used in Manufacturing Semiconductor Devices (a sub-sector of Measuring or Checking Instruments, Appliances and Machines, not elsewhere specified) increased at an average annual rate of 15.6%. In 2004, the import value of this category grew by 267.7% to RM318.8 million.

(Source: Department of Statistics Malaysia)

### **End-User Industry Sectors**

- The performances of some of the end-user industries for Machinery and Equipment are as follows:
  - Between 1999 and 2004, the production index of the Electrical and Electronic Products grew at an average annual rate of 10.5%. In 2004, the production index recorded growth of 17.7% (Source: Bank Negara Malaysia);
  - Between 1999 and 2004, the output of Electronics Industry recorded an average annual growth rate of 6.4%. In 2004, the output of the Electronics Industry increased by 17.5% to reach RM172.9 billion; (Source: Malaysian Industrial Development Authority)
  - Between 1999 and 2004, the sales value of manufacture of Semiconductors and Other Electronic Components and Communication Equipment and Apparatus grew at an average annual rate of 5.4%. In 2004, the sales value increased by 9.6% to approximately RM110.0 billion over the previous year;
  - Between 1999 and 2004, sales value of the manufacture of mobile telephones recorded a robust average annual growth rate of 35.1%. In 2004, sales value of the manufacture of mobile telephones increased by 52.2% to reach RM8.3 billion;
  - Between 1999 and 2004, sales value of the manufacture of office, computing and accounting machinery grew at an average annual rate of 16.7%. In 2004, sales value of manufacture of office, computing and accounting machinery increased by 112.0% to reach RM33.7 billion.

(Source: Department of Statistics Malaysia)



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#### 15. Threats and Risk Analysis

Areas of threats and risks for operators within the Machinery and Equipment Industry in general and the Specialised Industrial Machinery and Equipment Industry in particular are as follows:

### 15.1 Lack of Engineering Supporting and Ancillary Activities

- Engineering supporting and ancillary activities including foundries, forging, heavy and precise machining, heat treatment electroplating as well as moulds and die making are critical in supporting the growth of the Machinery and Equipment Industry.
- The Engineering Supporting and Ancillary Industry are weak and fragmented. Such a situation has the potential of shrinking existing market and deterring any development of the Machinery and Equipment Industry.

### Mitigating Factors

- Recognising the current situation of the Engineering Supporting and Ancillary Industry, some major developments of the industry have taken place. These include:
  - The establishment of the Rasah Machinery and Equipment Technology Centre (RAMET) under SIRIM Berhad has been earmarked not only for developing human resources within the engineering sector but more so on providing standards testing facilities and promoting cluster development through the grouping of small, medium and big foundry, operators of machining, forging, heat treatment, tool, die making and welding. RAMET was established in 2003.
  - The Mould and Die Design Centre approved under the Eighth Malaysia Plan is in its first phase of implementation and is providing Computer-Aided-Design (CAD) system services to 16 Small Medium Enterprises. The centre is in the progress of renovation. Upon completion in 2005, the centre will promote the usage of the CAD systems by SME.

These developments are in tandem with the thrust of the Government and aimed towards strengthening the foundation of local Engineering Supporting and Ancillary Industry in support of further growth within the Machinery and Equipment Industry.

### 15.2 Competitive Pressure from Overseas Players

Malaysia is still a net importer, in value terms, of Machinery and Equipment. In 2004, the imports of machinery and equipment amounted to approximately RM32.9 billion whilst export value was only approximately RM15.6 billion. Malaysia continues to import machinery and equipment to meet industrial as well as high technology industries' needs (Source: Malaysian Industrial Development Authority).



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 Major import threats of Machinery and Equipment are from Japan, Taiwan, China and Germany.

### **Mitigating Factors**

- Despite Malaysia's current position as a net importer of Machinery and Equipment, the Government has identified the Machinery and Equipment Industry, a high valueadded and high technology product sector, as one of the key areas for growth and development.
- In recognition of the growth opportunities, various incentives have been introduced to high technology companies including:
  - Pioneer Status
  - Investment Tax Allowance
  - Tax-related incentives within the Machinery and Equipment Industry based on the level of value-added input.
- In addition to the Government incentives, operators that are able to provide high value adding, undertake research and development, customise engineering design and services, would be in a better position to sustain business and minimise competitive threats.

### 15.3 Availability of Skilled Manpower

• There is a shortage of skilled technical workers within the Machinery and Equipment Industry in Malaysia (Source: Malaysian Industrial Development Authority). The shortage of technical professionals is a concern to the operations of the Machinery and Equipment Industry. The shortage of skilled and experienced labour may hamper the growth of the industry in general.

### **Mitigating Factors**

- In ensuring long-term and sufficient supply of skilled technical professionals, technical institutions and centres namely the RAMET and the Mould and Die Design Centre are in a position to provide technical training and assistance to fortify the engineering base in the country.
- In addition, it is estimated that 64,516 students will be enrolled in Engineering course, representing 98.9% of overall technical courses enrolment in local public higher education institutions (Source: Mid-Term Review of the Eighth Malaysia Plan 2001 2005, Economic Planning Unit, Prime Minister Department).
- With the high and preferred Engineering courses, enrolment and graduation as well as
  the Government support in developing the technical skill base in Malaysia, the industry
  is anticipated to have a pool of skilled resources to sustain growth.



### 15.4 Movement of MNC in Electrical and Electronic Industries to China

- China is becoming a major attraction for Foreign Direct Investment (FDI) particularly in
  the electrical and electronics manufacturing industry. Over the years, there has been a
  movement of Multinational Corporations (MNC) into China. This trend is predicated
  by the following:
  - According to the Ministry of Commerce in China, FDI into China recorded a growth of 1.4%, which amounted to USD53.5 billion in 2003. Of this, the manufacturing sector contributed 70% of the total FDI, including electronics, telecommunications equipment, chemicals and others.
  - In contrast, FDI in the Electrical and Electronics Industry in Malaysia declined over the last five years. In 2003, FDI in the Electrical and Electronic Industries dropped by 9.4% amounting to RM3.6 billion. Between 1999 and 2003, FDI in these industries decreased at an average annual rate of 11.6%. (Source: Various Issues of Economic Reports, Ministry of Finance)
- The increasing movement of MNC to China may impact on the manufacturers of Machinery and Equipment Industry who are servicing this group of customers.

### Mitigating Factors

- According to Malaysian Industrial Development Authority, the trade liberalisation under Asean Free Trade Area (AFTA) has opened up new export market opportunities for the industry. In 2004, Malaysia's exports of Machinery and Equipment to Asean totalled RM6.4 billion, with Singapore, Thailand, Indonesia, Philippines and Brunei being the top five destinations (Source: Malaysian Industrial Development Authority).
- In addition, operators with the financial stability are in a stronger position to expand its business operations overseas and follow the customers by setting-up operations in China.

## 15.5 Trade Liberalisation - Asean Free Trade Area (AFTA)

- Under the AFTA agreement initiated by the ASEAN countries, a comprehensive programme of regional tariff reduction has been laid out.
- The Common Effective Preferential Tariff (CEPT) has been proposed for goods traded within the ASEAN region. Tariffs on such goods which meet a 40% ASEAN content requirement, will be reduced to between 0% and 5% from 2003 onwards. Such tariffs will be reduced for Vietnam and Myanmar in 2006 and 2008 respectively.
- The implementation of AFTA has meant that intensity of competition from imports has increased for certain types of Machinery and Equipment due to the reduction in import tariff.



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### Mitigating Factor

 By the same token, the gradual reduction of tariffs will also generate opportunities for the export of Machinery and Equipment for operators to create their own market niches and compete successfully within the ASEAN region.

### 16. Market Size and Share

- In 2004, the estimated market size of the Specialised Industrial Machinery and Equipment Industry focusing on Electronics and Electrical sector, based on production output was approximately RM850 million in Malaysia. (Source: Primary Market Research undertaken by Vital Factor Consulting Sdn Bhd)
- In 2004, the estimated market share of MMS Ventures Group within the Specialised Industrial Machinery and Equipment Industry based on production output was approximately 2.5% in Malaysia.

Vital Factor Consulting Sdn Bhd has prepared this report in an independent and objective manner and has taken all reasonable consideration and care to ensure the accuracy and completeness of the report. It is our opinion that the report represents a true and fair assessment of the industry within the limitations of, among others, secondary statistics and information, and primary market research. Our assessment is for the overall industry and may not necessarily reflect the individual performance of any company. We do not take any responsibilities for the decisions or actions of readers of this document. This report should not be taken as a recommendation to buy or not to buy the shares of any company.

Yours sincerely

Wooi Tan

Managing Director

Vital Factor Consulting Sdn Bhd

#### 13. DIRECTORS' REPORT



# MMS Ventures Berhad (647125-P)

84A Lintong Bayan Lepas 9, Bayan Lepas Industrial Park, Phase 4, 11900 Penang, Malaysia. Phone: (604) 646 0888 Fax: (604) 646 7516 (Prepared for the inclusion in this Prospectus)

### Registered Office:

Unit 41-5-5, 5th Floor Wisma Prudential 41 Jalan Cantonment 10250 Penang

The Shareholders MMS Ventures Berhad

5 December 2005

### Dear Sir/Madam

On behalf of the Board of Directors of MMS Ventures Berhad ("MMSV" or "Company"), I report after due enquiry, that during the period from 30 June 2005 (being the date to which the last audited accounts of the Company and its subsidiary companies have been made up) to 5 December 2005 (being a date not earlier than fourteen days before the issue of this Prospectus):

- (a) the business of the Company and its subsidiary companies has, in the opinion of the Directors, been satisfactorily maintained;
- (b) in the opinion of the Directors, no circumstances have arisen subsequent to the last audited accounts of the Company and its subsidiary companies which have adversely affected the trading or the value of the assets of the Company and its subsidiary companies;
- (c) the current assets of the Company and its subsidiary companies appear in the books at the value which are believed to be realisable in the ordinary course of business;
- (d) there are no contingent liabilities which have arisen by reason of any guarantees or indemnities given by the Company or its subsidiary companies; and
- (e) there have been no default or any known event that could give rise to a default situation, in respect of payments of either interest and/or principal sums in relation to any borrowings in which they are aware of; or
- (f) save as disclosed in this Prospectus, there have been no material changes in the published reserves nor any unusual factors affecting the profits of the Company and its subsidiary companies since the last audited accounts of the Company and its subsidiary companies.

Yours faithfully

On behalf of the Board of Directors of

MMS Ventures Berhad

Sia Teik Keat Managing Director