5. INFORMATION ON THE FCB GROUP

5.1 HISTORY

FCB was incorporated in Malaysia under the Act as a public limited company on 29 April 2004. It was established to become the investment holding company of FS, FM, FAE, FP and FT in conjunction with the listing of the Company on the MESDAQ Market.

The history of the FCB Group began in 1996 with the establishment of FS with a staff force of twelve (12) and rented factory space of 1,600 square metres. FS was founded by two enterprising engineers, Wong Hua Choon and Yeo Lay Poh. Through their prior training and work experiences with major global thermal spraying companies such as Tocalo and Sulzer Metco (Singapore) Pte Ltd, Wong Hua Choon has tremendous capabilities in material engineering and R&D in thermal spray coating processes, while Yeo Lay Poh has capabilities in production techniques and skill sets. Their combined capabilities provide the foundation of the surface metamorphosis technology for the FCB Group. The principal activities of FS then were machining, metal fabrication and thermal spray coating for general engineering industry. It started with a wire metallizing spray system, which was among the lowest range of thermal spray coating systems from the spectrum of thermal spray coating systems available in the market.

Over the next few years, FS continued to grow and invest and acquire more advanced thermal spray system, including the Powder and Rokide Rod spraying system, HVOF, Plasma Transferred Arc Cladding, Plasma Spray System aided with CNC robotic control. FS relocated to a rented production plant with an area of 3,500 square metres which it subsequently acquired in 2001. With better operation facilities and advanced equipment, FS' customer base expanded to include companies in the oil and gas, semiconductor, petrochemical and power generation industries.

In 2001, FS decided to invest in R&D on surface metamorphosis technology using thermal spray coating processes and a series of complementary processes on new applications and new market sectors, with an aim to establish FS as a centre of research excellence and build its technology network with suppliers, partners and customers in order to identify new business opportunities. In the years that followed, FS continued to develop and refine its capabilities and techniques towards innovative surface metamorphosis engineering and has since developed significant expertise in a broad spectrum of surface metamorphosis technology areas essential to the success of the Group's business.

Today, the FCB Group is a leading service provider of mission critical surface metamorphosis engineering for various industries which include semiconductor (including optoelectronics, flat panel display and data storage industries), power generation, petrochemical, and oil and gas industries. The FCB Group's expertise is based on a long history of developing cost effective solutions to tough engineering challenges, as it possesses the engineering knowledge and expertise with proven work processes in surface metamorphosis technology.

In line with its expansion plans and to cater for the growing business, the Group acquired a factory located at 15 Gul Drive, Singapore 629466 with a built-up area of 4,778 square metres in 2004 and set up a new high-end precision cleaning facility, which was completed in 2005. In addition, the Group had taken up the lease of a parcel of land at Kulim Hi-Tech Park measuring approximately 6.81 acres, to house its full range of services, including R&D and accommodate future expansion in production capacity in Malaysia.

Today, the FCB Group is a regional surface metamorphosis technology company with a total staff force of 344 people as at 30 April 2006, providing a full range of thermal spray coating processes and a series of complementary processes to the customers. The Group has an established reputation and foundation for quality, prompt delivery and reliable service in this industry. The Group also has proven track record in providing mission critical surface metamorphosis engineering projects that are rapidly architected, engineered and delivered with speed and reliability, as well as demonstrated the engineering capabilities, financial resources and human capital in completing projects of any size given by the customers.

As a testament of its commitment to continuously improve its quality, FS achieved the ISO 9002 quality system certificate in 2000, which was upgraded to ISO 9001:2000 certification in 2004. The Group's plants in Penang and Shah Alam attained the ISO 9001:2000 certification in 2004 and 2005 respectively.

The corporate structure of the Group is as follows:



Share capital

As at the date of this Prospectus, the authorised share capital of FCB is RM50,000,000 comprising 500,000,000 Shares. The issued and paid-up share capital is RM35,625,000 comprising 356,250,000 Shares as at the date of this Prospectus.

The changes in the issued and paid-up share capital of FCB since its incorporation are as follows:

Date of allotment	No. of shares allotted	Par value RM	Consideration	Cumulative issued and paid- up capital RM
29.04.2004	2	1.00	Subscribers' shares	2
08.03.2006	20	0.10	Shares issued pursuant to Share Split	2
31.03.2006	291,232,780	0.10	Shares issued pursuant to the Acquisition	29,123,280
18.04.2006	65,017,200	0.10	Shares issued pursuant to the Rights Issue	35,625,000

The principal activities of the Company's subsidiaries and associated company are as follows:

Subsidiaries/	Date /	% effective	Issued & paid-	Principal activities
Associated	Country of	equity	up share	
company	incorporation	interest	capital	
FS	05.09.1996 Singapore	100	SGD9,093,984	Provision of surface metamorphosis technology with thermal spray coating processes and a series of complementary processes including mechanical and chemical engineering works

5. INFORMATION ON THE FCB GROUP (Cont'd)

Subsidiaries/ Associated company	Date / Country of incorporation	% effective equity interest	Issued & paid- up share capital	Principal activities
FM	31.05.1999 Malaysia	100	RM5,550,000	Provision of surface metamorphosis technology with thermal spray coating processes and a series of complementary processes including mechanical and chemical engineering works
FAE	13.05.2003 Malaysia	58.12	RM2,168,000	Provision of surface metamorphosis technology with thermal spray coating processes and a series of complementary processes including mechanical and chemical engineering works
FP	25.11.2003 Philippines	99.99	PHP27,963,000	Provision of surface metamorphosis technology with thermal spray coating processes and a series of complementary processes including mechanical and chemical engineering works
FT	19.05.2003 Thailand	39	THB20,000,000	Provision of surface metamorphosis technology with thermal spray coating processes and a series of complementary processes including mechanical and chemical engineering works

5.2 **RESTRUCTURING SCHEME**

As an integral part of the Listing, the Company undertook a restructuring scheme, which was approved by the following:

- SC (including approval under the Guidelines on Acquisition of Interests, Take-Overs and Mergers by Local and Foreign Interests) vide its letters dated 30 November 2005, 9 December 2005, 2 May 2006 and 16 May 2006;
- (ii) MITI vide its letters dated 4 April 2005 and 21 April 2006; and
- (iii) BNM vide its letter dated 17 March 2005.

The approval-in-principle from Bursa Securities for the Listing was obtained on 19 April 2006.

The restructuring scheme entails the following:

5.2.1 Share Split

On 8 March 2006, the Company undertook a sub-division of the par value of its ordinary shares from RM1.00 to 10 sen per ordinary share. Pursuant to the Share Split, the issued and paid-up ordinary shares of FCB were sub-divided from RM2 comprising 2 ordinary shares of RM1.00 each to RM2 comprising 20 ordinary shares of 10 sen each in the Company.

5.2.2 Acquisition

FCB acquired 9,093,984 ordinary shares representing the entire equity interest in FS for a purchase consideration of SGD12,522,371 equivalent to RM29,123,278 (based on an exchange rate of RM2.3257 : SGD1.00), which was fully satisfied by the issuance of 291,232,780 new FCB Shares at par, pursuant to a Share Sale Agreement entered into on 25 January 2005 with Wong Hua Choon, Yeo Lay Poh, Liew Lep Onn, FH, QSSB and PBSB.

The purchase consideration of RM29,123,278 was arrived at based on the adjusted audited consolidated NTA of FS as at 31 July 2004 of RM29,123,278 after taking into consideration the audited consolidated NTA of FS as at 31 July 2004 of RM27,707,957 and the issue of 608,557 new ordinary shares in FS subsequent to 31 July 2004 (based on an exchange rate of RM2.3257 : SGD1.00).

The consideration shares in FCB issued pursuant to the Acquisition were allotted to the vendors of FS in the following manner:

Vendors of FS	No. of shares held in FS	%	No. of consideration shares in FCB	%
Wang Hus Chase	2 810 267	20.0	00.001.2(7	20.0
wong Hua Choon	2,810,307	30.9	90,001,367	30.9
Yeo Lay Poh	687,648	7.5	22,021,772	7.5
Liew Lep Onn	35,156	0.4	1,125,863	0.4
FH	235,750	2.6	7,549,840	2.6
QSSB	2,900,000	31.9	92,871,844	31.9
PBSB	2,425,063	26.7	77,662,094	26.7
Grand Total	9,093,984	100.0	291,232,780	100.0

The 291,232,780 new FCB Shares issued pursuant to the Acquisition rank pari passu in all respects with the then existing ordinary shares in FCB. The Acquisition was completed on 31 March 2006. Upon completion of the Acquisition, the issued and paid-up share capital of FCB increased from RM2 comprising 20 FCB Shares to RM29,123,280 comprising 291,232,800 FCB Shares.

Hwang-DBS, as the Adviser, is of the opinion that the purchase consideration for the Acquisition which was based on the adjusted audited consolidated NTA of FS as at 31 July 2004 of RM29,123,278 is fair and reasonable to FCB.

On 31 March 2006, the 20 subscribers' shares in FCB were transferred to Wong Hua Choon.

5.2.3 Rights Issue

On 18 April 2006, FCB implemented a renounceable rights issue of 65,017,200 new FCB Shares at par on the basis of approximately 2.23 new Shares for every 10 Shares held after the Acquisition, as follows:

Shareholders	FCB Shares held after Acquisition		Entitlements under Rights Issue	Renunciation of rights shares (to)/from	FCB Shares to be held after Rights Issue	
	No. of Shares	%	No. of Shares	No. of Shares	No. of Shares	%
Wong Hua Choon	*90,001,387	30.9	20,092,648	(7,519,683)	102,574,352	28.8
Yeo Lay Poh	22,021,772	7.5	4,916,321	-	26,938,093	7.5
Liew Lep Onn	1,125,863	0.4	251,347	-	1,377,210	0.4
FH	7,549,840	2.6	1,685,488	-	9,235,328	2.6
QSSB	92,871,844	31.9	20,733,473	7,519,683	121,125,000	34.0
PBSB	77,662,094	26.7	17,337,923	-	95,000,017	26.7
	291,232,800	100.0	65,017,200	-	356,250,000	100.0

*

Including the 20 subscribers' shares transferred after the Acquisition

The 65,017,200 new FCB Shares issued pursuant to the Rights Issue rank pari passu in all respects with the then existing FCB Shares.

Upon completion of the Rights Issue, the issued and paid-up share capital of FCB increased from RM29,123,280 comprising 291,232,800 FCB Shares to RM35,625,000 comprising 356,250,000 FCB Shares.

5.2.4 Public Issue

In conjunction with the Listing, the Company will be implementing a public issue of 118,750,000 new FCB Shares at an issue price of 21 sen each.

The 118,750,000 new FCB Shares to be issued pursuant to the Public Issue, which represent 25% of the enlarged share capital of FCB, are to be issued to the following parties:

- (a) 14,250,000 new FCB Shares representing 3% of the enlarged share capital will be reserved for application by Malaysian citizens, companies, co-operatives, societies and institutions, of which at least 30% shall be set aside for Bumiputera individuals, companies, co-operatives, societies and institutions;
- (b) 23,750,000 new FCB Shares representing 5% of the enlarged share capital will be reserved for eligible employees and business associates of FCB and its subsidiaries;
- (c) 59,375,000 new FCB Shares representing 12.5% of the enlarged share capital will be placed to identified investors by the placement agent; and
- (d) 21,375,000 new FCB Shares representing 4.5% of the enlarged share capital will be allocated to Bumiputera investors approved by the MITI.

The 118,750,000 new FCB Shares to be issued pursuant to the Public Issue will rank pari passu in all respects with the then existing FCB Shares in issue except that they shall not rank for any dividends, rights, allotments and / or distributions declared or paid prior to the allotment thereof.

Upon completion of the Public Issue, the issued and paid-up share capital of FCB will increase from RM35,625,000 comprising 356,250,000 FCB Shares to RM47,500,000 comprising 475,000,000 FCB Shares.

5.2.5 Listing and Quotation

Thereafter, FCB will seek admission to the Official List of Bursa Securities and the listing of and quotation for its entire enlarged issued and paid-up share capital of RM47,500,000 comprising 475,000,000 FCB Shares on the MESDAQ Market.

5.3 **BUSINESS OVERVIEW**

5.3.1 Principal Activities

The FCB Group is principally involved in the provision of surface metamorphosis technology using a series of core thermal spray coating processes and a series of complementary processes, including mechanical and chemical engineering works. The Group's surface metamorphosis technology, together with its core thermal spray and complementary processes, are important technologies that modify the surfaces of materials so as to create materials with improved performance and unique properties, which have great potential to increase the efficiency of many processes and reduce the costs of operating and maintaining equipment. The aim is to develop new, advanced coating, capable of extending the materials performance range, coupled with new technologies and capable of improving these new and existing materials.

The Group's surface metamorphosis technology capabilities are suited to a vast number of applications across a spectrum of industry sectors, particularly the semiconductor, power, petrochemical and oil and gas industries. The Group provides a vertically integrated range of services that support its customers from initial component material and surface metamorphosis design to a finished, assembled product. The Group is capable of providing a comprehensive scope in supporting its customers' design and development engineering requirements, including R&D, feasibility study, front-end engineering, project management, basic design, detailed design, testing and documentation.

5.3.2 Principal Products and Services

The Group provides the following services using its surface metamorphosis technology to its customers:

- (a) advanced thermal spray coating services;
- (b) advanced precision cleaning, recycling and refurbishment services; and
- (c) advanced materials engineering R&D support services.

The Group's surface metamorphosis technology consists of core technologies supported by complementary technologies as follows:

- Core Technologies the Group's core technologies are in the areas of thermal spray technologies, including plasma spraying, HVOF spraying, rokide ceramic spraying, electric arc spraying, flame wire metallizing, flame powder spraying technologies.
- Complementary Technologies the Group's complementary technologies are in the areas of abrasive blasting, precision chemical cleaning, carbon dioxide cleaning, mechanical services, machining, plasma transferred arc cladding, balancing and clean room technologies.

Core Processes - Thermal Spray Coating Processes

A thermal spray coating process is a coating produced by a process in which molten or semi-molten particles, usually within the size range of 5 to 200 microns, are applied by impact onto a substrate. All thermal spraying processes rely on the same principle of heating a feedstock (powder, wire or rod) and accelerating it to a high velocity and then allowing the particles to strike the substrate. The particles will then deform and freeze onto the substrate. The coating is formed when millions of particles are deposited on top of each other. These particles are bonded by the substrate by either mechanical or metallurgical bonding.

5. INFORMATION ON THE FCB GROUP (Cont'd)

Mechanical components are manufactured to meet certain required specifications and functions. Through proper selected coating processes, new parts can be upgraded while useful life of used or worn parts can be extended. The FCB Group's thermal spray coating services create cost effective solutions through these upgrading and life extension capabilities. In other words, thermal spray coating improves the value and in-service performance of components and economics of production in extensive applications in a wide range of industries.

Thermal spray coatings are used for the purpose of minimising corrosion, reducing frictional energy losses, reducing wear, acting as a diffusion barrier, providing thermal insulation, excluding certain wavelengths of radiation, promoting radiation electronic interactions, providing electrical insulation or simply to improve the aesthetic appearance of the surface. For example, turbines can be coated by thermally spraying, allowing their use at higher temperatures. Thermal spray coatings' applications are broad-based and can be classified as follows:

(a) Corrosion protection

- Atmospheric corrosion
- Hot gas corrosion
- Chemical corrosion

(b) Wear protection

- Abrasion
- Adhesion
- Erosion
- Fretting

(c) Thermal function

- Thermal barrier coating
- Thermal conductivity
- Reflection/absorption

(d) Electrical function

- Conductivity
- High tension superconductivity
- Shielding

(e) Special function

- Bioactivity
- Dimension restoration
- Free form restoration
- Good grip surfaces

- Oxidation
- Immersion corrosion
- Oxidation at high temperature
- Galling
- Slurry and dry erosion
- Sliding wear
- Thermal shock
- Thermal fatigue
- Thermal or electrical insulation
- Insulation
- Radio Frequency Interference shielding
- Hard facing
- Non-stick
- Sensor
- Abradables

Thermally sprayed coatings have, in recent years, gained wide spread acceptance for a variety of industrial applications. A vast majority of these applications involve wear resistance, although the use of thermally sprayed coatings in combating high temperature corrosion also continues to receive considerable industrial and academic interest. These sprayed coatings are applied in order to achieve pre-determinable life periods under severe operating conditions. For example, thermally sprayed coatings have been used extensively to prevent stress corrosion cracking in high strength low alloy steel used for liquid petroleum gas tanks. Other surface properties and functions that thermally sprayed coatings can provide are biological compatibility, electrical resistance/conductivity, thermal barriers, and dimensional restoration. Thermally sprayed coatings can also be used to manufacture hybrid microelectronic components by spraying ceramic materials onto a metal substrate to provide electrically insulating areas. Such technology is becoming increasingly important in meeting the demands of modern computing.

5. INFORMATION ON THE FCB GROUP (Cont'd)

Due to its broad-based applications, thermal spray coating is widely used across a broad spectrum of industries, including power generation, oil and gas and refineries, petrochemical, pharmaceutical, marine, pulp and paper, bio-medical, aviation, automotive, industrial, electronics and many more.

There are numerous types of thermal spray coating processes, which are employed by the FCB Group. They can be broadly divided into two categories, namely the flame heating and electric arc processes.



Flame Wire / Rokide Rod Spraying Flame Powder Spraying HVOF Spraying

Plasma Spraying Electric Arc Spraying

(a) Flame Heating Processes

In flame heating processes, the deposition material is passed through an intense combustion flame, where the material becomes molten. The gas stream expands rapidly due to the explosive heating effect, thus propels the molten particles out of the combustion chamber, onto the receiving substrate. There are three (3) main processes where combustion is used to melt the coating material. They are as follows:

Flame Wire / Rokide Rod Spraying Process

Oxyacetylene fuel combustion flame is used to melt the coating material, which may be in either wire or rod form. In the case of the wire metallizing system, a feed mechanism drives in the stock material into the combustion chamber where the flame melts and propels (due to the high flow rates of the gases) the particles as a spray deposit. The wire feed guns are a bit bulky because of the wire drive mechanism and the gas hoses, but these guns are frequently handheld and hand manipulated. When the job permits, the torch can be put on a manipulator.

The materials that can be sprayed with the wire flame spray process are any material that can be made into flexible wire that will melt in the oxyacetylene flame. It is most widely used for coating metals such as aluminium and zinc on carbon steel for rust protection. In fact, stainless steel, aluminium, and zinc are primarily used for corrosion protection. Aluminium and zinc are commonly sprayed on water tanks, bridges, and similar structures. Bronze and hard steel are used for wear protection, while soft steel and molybdenum are used as rebuilding materials for repair jobs.

Rokide rod spray system functions in a very similar way as a wire metallizing system. Major materials used are chromium oxide, aluminium oxide and zirconium oxide mainly for high wear, reflectory and electrical applications.

Flame Powder Spraying Process

Flame powder spraying can be done with oxyacetylene torches that are modified in design to allow powder introduction into the fuel gas stream. A hopper unit is used to store the powder consumables before it is carried to the gun for combustion and deposition. As there is no high-pressure air to assist atomisation of the powder, the deposition rates are usually slower than that of the wire process, but the process is able to produce a coating with serviceability that is adequate for some applications. There are many more consumables available for the powder thermal spray gun, which include bond coats, carbides, high-alloy steel, stainless steel, cobalt-base alloy, and even ceramics. Airassisted powder spray guns can be used to produce faster deposition rates and better coating bond than the simpler torches that do not use air.

HVOF Spraying Process

The HVOF thermal spray process is another form of flame spraying process utilising only powder as the coating material rather than wire or rod. There are two types of thermal spray techniques under this category, namely detonation gun coating and continuous combustion HVOF system. The FCB Group does not use detonation gun coating.

Continuous combustion HVOF thermal spraying is a flame deposition technique whereby powder material is melted by the use of combustion of oxygen and a fuel gas and is propelled at a high velocity by the use of compressed air, towards a surface.

In the combustion zone, the powder material is introduced into the centre of the jet stream using a carrier gas that is compatible with the fuel gas mixture, where it becomes molten or semi-molten depending on the melting temperature and the feed rate of the material. The exiting gas combustion jet can have a velocity as high as 1,370 metres per second, faster than that of a detonation gun.

(b) Electric Arc Heating

There are two (2) processes by which electrical heating is utilised to melt the coating material. They are as follows:

Electric Arc Process

The wire/arc spraying torch has been in use for many years for the same types of application as the combustion gas wire spraying process, but because it uses two consumable wires instead of one, it produces much higher deposition rates. The consumable material is introduced into the torch as two metal wires from reels. They are fed by motor-driven feed rolls, and at the tip of the torch these wires are inclined on an angle such that they meet each other. The wires are electrically insulated from each other, and each wire is connected to a welding power supply. When the torch is energized for spraying, the two wires are driven into contact and an arc is established that melts the wire.

An air jet in the torch atomises the molten metal into droplets that are sprayed at the substrate to form the coatings. Square wires can be used to increase the deposition rate over the round wires. This process is very commonly used for spraying soft metals for corrosion protection. In addition, it has many broad applications in metal and alloy materials.

Plasma Spraying Process

Plasma spraying is the process of applying material by melting and atomising it in powder form in a plasma that is obtained by passing a gas through an electric arc between non-consumable electrodes contained within the torch. A plasma is essentially an ionised gas that also contains electrons, ionised gas atoms, and even some molecules of the plasma gas. The plasma can have temperature in excess of 1,600°C, and the powder material to be sprayed is introduced in powder form into the exiting plasma stream.

The powder is fed by a powder feeder that usually consists of a hopper pressurised with an inert gas, a vibrator to keep the powder from clumping, and a gear pump to meter the powder into the carrier gas stream.

Hundreds of powder consumables are available for plasma arc spraying. They can be divided into four categories, namely metals, ceramics, cermets and composites. Metals vary from soft metal such as aluminium and zinc for corrosion applications to cobalt-base hardfacing materials for wear applications. Ceramics coatings such as aluminium oxide and chromium oxide are used mostly for wear application. Yttria-stabilized zirconia, magnesium zirconate and calciastabilized zirconia are used for thermal barrier coatings on engine components.

Complementary Processes – Precision Cleaning Processes

These are processes that are offered by the Group to complement its core thermal spray coating processes although these complementary processes could be employed on its own, particularly precision cleaning for the semiconductor industry.

Precision cleaning means cleaning to very exacting standards, with a very low tolerance for left over particles or other contaminants (particle size less than 0.3 micron). Parts requiring the most stringent cleanliness criteria are cleaned in environmentally controlled clean room. In many critical applications commonly found in high-technology industries such as semiconductor, flat panel display, hard disk drive, aerospace and medical, precision cleaning is a prerequisite for newly manufactured parts prior to assembly, and for routine service and maintenance of manufacturing devices.

The key factors influencing the choice of cleaning system are the level of cleanliness required, the type and thickness of contamination, and the base material (i.e. the substrate) and geometry of the component.

The FCB Group offers the following range of precision cleaning processes:

(a) Spray Cleaning

Spray cleaning involves delivery of a liquid cleaning agent to the surface through the use of a pump and nozzle. This same pump and nozzle arrangement delivers mechanical energy to the cleaning site as the stream of spray impinges on the surface. In general, spray cleaning is highly effective on any surface that can be "seen" directly by the spray. Different effects can be achieved by changing the pressure of the spray, the spray pattern and the volume of cleaner sprayed to provide more or less impingement on the part. Spray cleaning is an effective means of cleaning parts that have a variety of contaminants and configurations. It is especially useful in removing large amounts of contaminants that would quickly saturate equipment using immersion-cleaning techniques. Due to its effectiveness and simplicity, spray cleaning is probably the most widely used cleaning technology. In some cases, it is possible to clean, rinse and dry parts in a single processing chamber, thus reducing space and material handling requirements.

5. INFORMATION ON THE FCB GROUP (Cont'd)

(b) Immersion Cleaning

Immersion cleaning involves immersing the part directly in a liquid cleaning agent. Immersion alone does not inherently supply any mechanical energy. Mechanical energy is supplied by a number of auxiliary means that may be used alone or in combination.

Ultrasonic Cavitation and Implosion (c)

Agitation of the cleaning solution is one way to enhance cleaning by adding mechanical energy. The goal of agitation is to deliver mechanical energy directly to the part surface where the cleaning is taking place. The selection of the appropriate means of agitation depends primarily on the configuration of the part and the degree of cleanliness required.

Ultrasonic agitation is more than just high frequency mechanical agitation. High frequency sound waves create small cavities (bubbles) in the cleaning liquid that collapse (implode), releasing considerable energy. Due to the nature of the phenomenon, this action is mostly concentrated at the interface between the cleaning solution and the contaminant being removed. Ultrasonic waves can penetrate thin layers of metal and propagate around corners to clean work pieces inside and out.

Part agitation is another way of imparting energy to the cleaning site. Parts are literally moved up and down or side to side while immersed in the cleaning liquid to create shear forces between the liquid and the part surface. The more rapid the agitation, the more effective agitation becomes. Due to hydraulic "pumping" of the cleaning liquid through internal passages, part agitation can also be effective means of cleaning inside some parts with appropriate configurations.

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5.3.3 Engineering Processes



(Source: FCB)

5. INFORMATION ON THE FCB GROUP (Cont'd)

- a) Acceptance Inspection – This involves receiving, incoming inspection (i.e. thoroughly examining, dismantling and documentation of data with digital pictures) and segregation into the required cleaning processes such as the chemical-method and mechanical-method. Any gross contaminations are removed by washing out, swabbing or rinsing with water or solvent.
- b) **Precision Chemical Process** – This is a precision chemical cleaning method to remove any organic/inorganic and metallic deposited contaminants. The method generally includes masking to protect critical areas, immerging or submerging into a tank with an aqueous mixed-acid solution, and then rinsing the process kit in a rinse tank. The surface is then cleaned with water to remove any residues. Quality is inspected by checking the surface cleanliness and conditions and thereafter signs of contamination, faulty cleaning or damage. The process is repeated until it is cleaned.
- c) Mechanical Process – This is a precision mechanical cleaning method using machining or blasting with suitable grit blasting media to achieve the surface roughness requirements and appropriate dimension for subsequent coating. The method generally includes masking to protect critical surfaces from mechanical blasting or machining and then blowing to clean the surface before inspecting the surface roughness or dimensions and conditions. The above steps are repeated until the surface roughness or dimensions are achieved.
- d) Thin-film Thermal Spray Coating Process – This is an advanced precision thermal spraying method using a thermal spray system with a suitable deposition media and proprietaryoptimised spraying techniques to achieve the thickness and surface roughness requirements and the functional specifications. The method generally includes masking to protect critical surface from thermal spray and then spraying to coat the surface with proprietary-optimised spraying parameters (such as current, voltage, speed and distance) according to the deposition media and the thickness and surface roughness requirements. This is followed by blowing to clean the surface and then inspecting the surface roughness and conditions after the thermal spraying. The above steps are repeated until the surface roughness is achieved.
- Finishing Mechanical Process This is the final finishing mechanical processes to bring the e) part back to its original dimensions and conditions so that the physical surface morphology remains intact. The method generally includes final machining, final grinding and polishing to achieve the surface roughness, dimension and condition requirements and functional specifications. The surface treatment areas such as the coated surface, blasted surface, noncoated surface are inspected to ensure non-peeling of coated film and condition, as well as for stain, dirt, defect and fracture. The quality is then inspected by checking the surface cleanliness, dimension and conditions. The above steps are repeated until the surface roughness, dimension and conditions requirements and functional specifications are achieved.
- f) Finishing Precision Chemical Process - This is the final finishing precision chemical process to ensure and verify that the parts are free from organic/inorganic, metallic and particulate impurities and that the physical surface morphology remains intact. The method generally includes rinsing, drying within a class 100 clean-room environment, and then inspecting and confirming the surface treatment areas such as the coated surface, blasted surface, non-coated surface, to ensure non-peeling of coated film as well as confirming the non-existence of stain, dirt, defect and fracture. The physical surface morphology is tested to ensure that it is intact after a cleaning procedure is completed, and then certifying the results of inspection based on the guidelines established. The above steps are repeated until the functional specification is achieved.

5. INFORMATION ON THE FCB GROUP (Cont'd)

g) Packaging, Identification and Shipment - This is the packaging, identification and shipment method to ensure the parts are identified and packed carefully so that they remain clean and free from damage. The method generally includes sea worthiness packing and/or vacuum sealing within a class 100 clean room, and then confirming the quantity and generating a correct packing list according to the delivery order with proper labelling. This is followed by packing into a proprietary-designed container box with cushion designated to properly protect and secure the parts before delivery to customer.

5.3.4 Technology

The Group believes in continuously employing new technology to enhance productivity, efficiency, to ensure the consistency of its coating services and more importantly to expand the potential applications of surface metamorphosis technology. Given the different surface metamorphosis methods, a wide array of materials that can be sprayed and their different applications, it is extremely important that the Group has a strong technology and R&D team in order to provide proper and value-added advice and service to the customers in choosing the right material and spraying process. In addition, there are also other factors that will affect the properties of the sprayed coating such as combustion temperature, particle melting temperature, spraying distance and impacting temperature. Therefore, a lot of materials science technology and R&D are required in order to gain insight into the properties of the coating.

There are essentially three (3) components to the thermal spray coating technology, namely:

- the spray equipment / process; (a)
- (b) the coating materials; and
- (c) the technical knowledge and know-how in optimising the most appropriate mix of spray equipment / process and coating materials that best meet the specific needs of end-customers.

R&D for the first two components to develop new or improve on existing thermal spray coating processes and coating materials is mainly undertaken by global OEMs such as Sulzer Metco and Praxair, Inc and private and government-sponsored research institutions. The FCB Group's key strength is in the technical knowledge of optimising these processes and coating materials.

The Group's surface metamorphosis technology consists of core technologies supported by complementary technologies as follows:

- **Core Technologies** the Group's core technologies are in the areas of thermal spray technologies, including plasma spraying, HVOF spraying, rokide ceramic spraying, electric arc spraying, flame wire metallizing, flame powder spraying technologies.
- Complementary Technologies the Group's complementary technologies are in the areas of abrasive blasting, precision chemical cleaning, carbon dioxide cleaning, mechanical services, machining, plasma transferred arc cladding, balancing and clean room technologies. The Group's abrasive blasting capabilities span from manual heavy grit peening and blasting to automated process controlled abrasive blasting and are capable of maintaining the Ra (surface roughness) for critical uniformity applications, for different types of materials such as aluminium, stainless steel, titanium, tungsten, zirconium as well as metal matrix materials including aluminium nitride, silicon carbide, silicon nitride, silicon, quartz and aluminium oxide. The Group's patented chemical cleaning processes consist of ultra-high vacuum chemical cleaning with filtered recirculating hot air dryer and deionised water ultrasound tank with double counter-flow rinses as well as class 100/1000 cleanroom with nitrogen purge capabilities and can process different materials such as aluminium, stainless steel, titanium, tungsten, kovar, inconel, monel, and metal matrix materials such as aluminium nitride, silicon carbide, silicon nitride, silicon, quartz and aluminium oxide, as well as plastics materials such as delrin, vespel, ultem, polypropylene and teflon.

5. INFORMATION ON THE FCB GROUP (Cont'd)

Details of the above core technologies are set out in Section 5.3.2 of this Prospectus.

Materials technology is one of the many areas targeted by many industries for product and process development activities. Materials play a critical role in the economic performance and growth of many industries, and new materials technology will be an essential part of the Group's strategy in developing new applications and opening up new markets. Materials are critical to effective process control and greatly impact the cost, longevity and reliability of equipment. They are also critical from the standpoint of economic competitiveness in the global marketplace. Thus, new materials could potentially expand the applications of thermal spray coating. The primary market opportunities where new materials could have an impact are in ceramics, polymers and metal and non-metallic composites. Potentially important applications include infrastructure, transportation/automotive components, medical/biomedical devices, electronics/optoelectronics, innovative textiles and lightweight power sources/energy storage. Many of the FCB Group's R&D activities are directly related to materials performance in the operation and maintenance of industrial processes.

The development of new materials has helped to fuel the growth of many industries and has changed society dramatically over the past few decades. Traditional materials such as wood, glass, metals and natural fibers have been replaced in some cases with synthetic materials such as polymers and composites. These new materials perform better and provide increased flexibility in design and manufacturing. Advances in the development of composite materials, i.e. mixture of polymers, fibers, metals and ceramics, have greatly extended the range of performance and potential applications for these new materials. Blends of materials have resulted in new materials with better performance. R&D has helped the Group to increase the functionality of existing materials and improve their performance. Materials technology research, development and deployment will be vital in meeting the requirements of many industries to increase efficiency of processes and reduce operating and maintenance cost.

The FCB Group keeps abreast of the latest technology in surface metamorphosis via a technology alliance with Tocalo, the world's largest independent thermal spray coating service provider. Like Tocalo, the Group carries out intensive R&D into surface metamorphosis technology with thermal spray coating processes and a series of complementary processes, albeit on a smaller scale. However, unlike Tocalo, the Group also provides mechanical services and cleaning of parts. Tocalo, on the other hand, is very much focused on its core activity of spray coating and some peripheral processes and caters to the Japanese market alone. The FCB Group's technology alliance with Tocalo is on technical and research issues as well as job referrals. The Group also has technology R&D collaboration with Ares Green for its precision cleaning technologies and OTS for its coating expertise in the power generation industry. The Group also has technology collaboration with Lam Research, a leading supplier of wafer fabrication equipment and services to the global semiconductor industry.

Key management staff of the FCB Group attend the annual thermal spray coating industry conference, a forum where industry players will present research papers on new processes, materials and equipment.

5.3.5 **Intellectual Property**

The Group's intellectual property includes technical know-how, proprietary formula, patents and bestknown-method for the surface metamorphosis technology. The Group constantly identifies and assesses the risks of its intellectual property and selectively files patents on critical processes. The Group holds the following registered intellectual property right / patent:

		Country /	Date of grant
Title of invention	Registrant	Registration No.	of patent
Method and apparatus for deposition removal and recycle cleaning of copper interconnect semiconductor process kits	FS	Singapore / 200307487-9	31.03.2006

The Group has also applied for the following intellectual property rights / patents which are still pending approval:

Title of invention	Registrant	Country
Method and apparatus for recycle wet cleaning high purity quartz process kits used in semiconductor fabrication	FS	Singapore
Method and apparatus for deposition removal and precision cleaning of high purity ceramic process kits used in nanoscale semiconductor manufacturing	FS	Singapore

Estimated Market Size and Market Share 5.3.6

Thermal Spray Coating Industry

There are no published data on the market size of the thermal spray coating industry in Southeast Asia. However, there is a reasonably strong correlation between thermal spray coating output and GDP output. Lynck estimated the thermal spray coating market in Southeast Asia to be worth RM335.4 million. As the region becomes more industrialised, it is expected that the thermal spray coating / GDP output ratio will gradually move towards the level of developed nations. The estimates however relate only to thermal spray coating services and exclude the value of complementary processes such as welding, fabrication, metal finishing and precision cleaning.

Based on the estimated Singapore and Malaysia thermal spray coating market size of RM126.1 million, the FCB Group's overall thermal spray coating market share was estimated to be about 29% in 2004.

The FCB Group is a leading regional player in advanced materials and surface metamorphosis technology with thermal spray as its core. The Group operates the largest thermal coating facility in the region with a comprehensive range of spray systems and complementary processes such as welding, fabrication and metal finishing. The Group also performs R&D in advanced materials and surface engineering technology to produce new and improved coatings for use in the protection against material degradation and to improve the productivity of industrial processes. Many of the Group's R&D initiatives are directly related to materials performance in the operation and maintenance of industrial processes related to the oil and gas and petrochemical sectors.

Most of the thermal spray coating service providers in Singapore and Malaysia do not compete directly with the Group. Plasma Precision Technology Pte Ltd, CRC Engineering Pte Ltd and See Hup Seng Ltd are probably the closest competitors of the FCB Group in that they offer thermal spray coating services for the oil and gas and petrochemical industries, albeit in a much smaller scale.

(Source: Independent Market Research Report by Lynck)

Precision Cleaning Industry

As in thermal spray coating, there are no published statistics on the market size of precision cleaning in Singapore and Malaysia. Lynck estimated the FCB Group's market share in 2004 to be about 14.4% under the "installed capacity" method. Using the revenue method to estimate the outsourced portion of the precision cleaning market size, Lynck estimated the FCB Group's market share to be about 28.4% in 2004.

(Source: Independent Market Research Report by Lynck)

5.3.7 New Product Development

One of the Group's business objectives is to provide reliable advanced materials and surface metamorphosis engineering solutions that will enable its customers to bring their products and/or mission critical applications to the market faster, more efficiently and at a lower cost.

As part of its product development plan to broaden its product offerings and cater to more industries, the Group plans to introduce the following products / services over the next three (3) years:

(a) Selective nickel coating process

Electroless nickel plating is an autocatalytic process and does not use externally applied electric current to produce the deposit. The electroless process deposits a uniform coating of metal, regardless of the shape of the part or its surface irregularities, and therefore, it overcomes one of the major drawbacks of electroplating – the variation in plating thickness that arises from the variation in current density caused by the geometry of the plated part and its relationship to the plating anode. An electroless plating solution produces a deposit whenever it contacts a properly prepared surface, without the need for conforming anodes and complicated fixturing. Since the chemical bath maintains a uniform deposition rate, the latter can precisely control deposit thickness by controlling immersion time.

Electroplated nickel coatings are widely used in industries to improve the surface finish, hardness and wear resistance of metallic surfaces. Fields of application include connectors and associated hardware for the automotive, electrical, construction, defence, household appliances, information technology and telecommunications industries, semiconductor and electronic component industry.

(b) Anodising for semiconductor

Anodising is a process to produce an oxide film or coating on metals and alloys by electrolysis. The metal to be treated is made the anode in an electrolytic cell and its surface is electrochemically oxidized. Anodisation can improve certain surface properties, such as corrosion resistance, abrasion resistance, hardness and appearance. A metal which is often anodised is aluminium. Not only do the above properties improve after anodising, the aluminium metal can also be coloured by the application of pigments or dies since anodic coating has a porous structure.

The Group is currently conducting a feasibility study on the commercialisation of this process.

(c) Vacuum Plasma Spray ("VPS") or Low pressure plasma spray ("LPPS")

LPPS process is often known as the VPS process, because it is a conventional plasma spraying process enclosed in a vacuum tank. Therefore the plasma gun and work-piece remains an inert atmosphere of around 7kPa (kilopascal). The low pressure plasma spraying process was developed by Muehlberger in the early 1970s and gained widespread commercial use in the mid-1980s, to a large extent displacing electron beam - physical vapour deposition ("EB-PVD") for the production of high quality metallic coatings.

In atmospheric plasma spraying, the material is melted and accelerated in a plasma jet. To avoid oxidation of the feed material, spraying can be carried out in an inert gas atmosphere, at a reduced pressure (known as VPS or LPPS). Contrary to atmospheric plasma spraying, the low-pressure plasma spraying process is performed in a vacuum chamber at a pressure of approximately 40-100 hPa (hectopascal). Component and torch are moved with special manipulators capable of being exposed to very fine metal dusts and high operating temperatures. A charging system is frequently used to load the components to be coated into the facilities.

5. INFORMATION ON THE FCB GROUP (Cont'd)

The compositional flexibility afforded by VPS and the high coating rates achieved through liquid droplet transfer versus the limitations of evaporation in EB-PVD caused a major shift to VPS during the 1980s. Of further importance is the ability of VPS to process oxygen-sensitive material, such as reactive metals and intermetallic compounds. For example, considerable work has been carried out on the VPS processing of nickel aluminides and molybdenum disilicide, which have potential uses in the aerospace industry. It was demonstrated that the VPS process was capable of producing dense, freestanding forms, which showed impressive mechanical properties. The deposits were ultra-fine grained and illustrated the capability of VPS in the manufacturing of rapidly solidified intermetallics. There is a clear important potential for VPS in the processing of intermetallics as both protective coatings and freestanding forms.

5.3.8 Principal Markets, Marketing and Distribution

Currently, the FCB Group's main presence is in Singapore, Malaysia, Thailand and the Philippines. Its revenue from Singapore, Malaysia and other countries made up 62%, 35% and 3% respectively of the Group's total revenue for the financial year ended 31 December 2005.

As at 30 April 2006, the Group has two (2) plants in Singapore serving customers within the Southeast Asia and Asian region, and three (3) facilities in Malaysia located in Shah Alam, Penang and Kuching, and a sales / marketing office in Terengganu. Whilst the plant in Penang was set up mainly to cater to the semiconductor industry in Penang's Free Trade Zone and Kulim Hi-Tech Park, the facility in Kuching caters mainly to the industrial sector in East Malaysia. The sales / marketing office in Terengganu services the oil and gas and petrochemical industries in Kertih, Gebeng and Kuantan. The Group's new plant in Kulim will cater mainly to customers in the semiconductor industry initially. The Group also has facilities in the Philippines and Thailand.

The FCB Group currently has 20 sales and marketing staff located all over the Group's facilities and offices. In addition, the Group has marketing agents in Indonesia, Pakistan, Thailand, Nigeria and Myanmar.

Currently, the Group's customers comprise multinational corporations, large companies and small and medium enterprises, which are predominantly from the semiconductor, power generation, petrochemical, and oil and gas sectors, with semiconductor contributing approximately 32% to the Group's revenue for the financial year ended 31 December 2005. Although the semiconductor industry is cyclical and has historically experienced periodic downturns, the Group believes that the successful development and commercialisation of new surface metamorphosis solutions for various industries through continuous R&D, and an expansion of products and services offerings to multiple industries would help to mitigate any risk arising therefrom. Further details are set out in Section 4.3 of this Prospectus.

The Group believes that there exists a huge potential demand from players within the power, semiconductor, electrical and electronics, oil and gas and petrochemical industries that have yet to use thermal spray coating solution. Whilst it is the intention of the Group to focus its marketing efforts on these industry segments in the next three (3) years, the Group also hopes to penetrate the metal and steel, defence, pharmaceutical and aviation industries.

The Group intends to grow its surface metamorphosis technology businesses by expanding its presence and representation in existing markets and also venturing into new markets and industry segments. In order to increase its market visibility and presence, the Group will continue to organise roadshows to showcase its services and coating solutions to existing and potential customers. In 2006, the Group has / will be participated / participating in SEMICON[®] Singapore 2006 (a premier exposition for showcasing the latest semiconductor manufacturing technology) and Offshore South East Asia 2006 (an international event for Asia's oil and gas industry). Over the past two (2) years, the Group has travelled through the East Coast of Peninsular Malaysia as well as the oil and gas towns of East Malaysia, Bintulu and Miri to market its products to the oil and gas and petrochemical industries.

5.3.9 Source and Availability of Raw Materials

The main raw materials used in the provision of thermal spray coating services are thermal coating powders, wires and rods. These coating powders, wires and rods come mainly from the US and Europe. The Group currently buys its thermal coating powder, wires and rods and consumables from the following suppliers:

- CNC Surface Science Pte Ltd
- Sulzer Metco (Singapore) Pte Ltd
- Rocksteel Alloy Industrial
- CHT International Pte Ltd
- K.T.S (Singapore) Pte Ltd
- Dura-Metal (S) Pte Ltd

With long-term relationships and mutual trust with its suppliers, the Group has not in the past experienced any difficulty or disruptions in production due to difficulty in procuring materials. In the event that the Group is unable to source its raw materials from its main suppliers, it will have other readily available alternate suppliers to meet its raw materials requirements.

The prices of the above raw materials are based on prevailing market prices which are affected by market demand and supply conditions and may fluctuate from time to time. The prices of these key raw materials have generally been increasing since the last financial year in line with global increase in metal prices. However, the Group is able to address such cost increases by adjusting its selling price.

5.3.10 Quality Control

The Group believes that the quality of its surface engineering services is one of the cornerstones of its growth and success and intends to continue improving on the quality of its services. It is the policy of the Group to provide its customers with high quality products and on-time delivery, while satisfying statutory and regulatory requirements. The Group is dedicated to the continuous improvement of its product and services through management commitment and continuous development of its employees and processes. As a testament of its customer, Siemens AG Power Generation Operating Plant Services in 2004 for outstanding performance in the field of repair and maintenance of turbine components.

The engineering specifications for each stage of the Group's services from surface preparation, material selection to the actual thermal spray coating are extremely important to achieve the desired coating properties which are specified by customers.

In order to meet the stringent quality requirements, the Group has implemented a Quality Management System ("QMS") structure, which demonstrates the Group's ability to consistently provide products that meet the customer and applicable regulatory requirements by:

- (i) establishing and standardising the product realisation processes;
- (ii) improving and standardising processes and QMS; and
- (iii) enhancing customer satisfaction through continual improvement of the QMS.

In 2000, the Group's Singapore facility achieved the ISO 9002 quality system certificate. This was subsequently upgraded to ISO 9001:2000 certification by Certification International, a United Kingdom Certification Body in May 2004. The Group's Penang plant attained the ISO 9001:2000 certification from the TUV CERT Certification Body in November 2004, while its Shah Alam plant obtained the ISO 9001:2000 certification from Certification International (UK) Limited in August 2005.

5.3.11 R&D

The evolution of thermal spray coating is a direct response to the changes in the production and manufacturing environment, which includes requirement to reduce wear and tear, corrosion, and abrasion and to provide thermal, electrical and other specific functions. The ultimate aim of using thermal spray coating is to improve production and manufacturing efficiency and productivity as well as to prolong the useful life of machinery, which would result in lower production cost over the longer term. Consequently, R&D on product improvements and new product development to cater to a wider range of industries is an important and on-going process.

The Group believes that R&D plays a pivotal role in driving the growth of its business. It ensures that the Group keeps abreast of the latest technological advancements, changes in customer demands and industry developments. It also helps to ensure that the Group's products and services remain relevant and competitive in the market place. Hence, the Group's R&D initiatives will continue to focus on process improvements and new product developments to improve productivity and produce surface engineering solutions that are reliable, productive, cost effective and would lengthen the useful life of the customers' equipment and machinery.

R&D Policies

In essence, the FCB Group's on-going and future R&D projects are targeted at the following objectives:

- (a) to enable the Group to expand industrial applications, based on the new technology to address real market needs and consequently to adopt it as part of the Group's industrial technology platforms;
- (b) to brand the Group as an advanced technology company by disseminating the technical knowhow resulting from the R&D program through publications, seminars, training, workshop and conferences;
- (c) to establish the Group as a centre of research excellence with partners from different industrial/service sectors to exchange experience on the advanced precision cleaning and surface metamorphosis technology; and
- (d) to build the Group's technology network with suppliers, partners and customers in order to identify new business opportunities for the advanced precision cleaning and surface metamorphosis technology within a wide audience of the industries.

R&D Facilities and **R&D** Team

The Group's R&D is housed in its Malaysia and Singapore facilities. The primary 3,000 square feet facility in Singapore currently is designed to support the Group's core R&D processes of thermal spray and process kit recycling.

The Group's R&D operation is headed by Dr Tay Kiang Meng, the Group's Chief Scientist, who is responsible for policy development, scientific review of research proposals, management of the research portfolio, budget formulation and distribution of funds as well as key R&D approach. Dr Tay Kiang Meng is assisted by a team of six (6) R&D personnel, including the Group's Senior Vice-President of Technology, Png Eng Wah. The Group's R&D department is equipped with advanced state-of-the-art R&D equipment that are used to assess, analyse and test the properties of the coating materials.

The Group works closely with its customers, technology partners and equipment manufacturers to develop new high performance coating material, which will optimise machinery and equipment productivity.

5.

INFORMATION ON THE FCB GROUP (Cont'd)

R&D Milestones

The Group's R&D activities began in 2001 to provide value-added services for customers and to establish the Group as a centre of research excellence and build the Group's technology network with suppliers, partners and customers in order to identify new business opportunities for the advanced materials and surface metamorphosis technology within global industries. The Group's R&D milestones and achievements to-date are as follows:

Year	Description
2003 / 2004	Developed method and apparatus for deposition removal and recycle cleaning of copper interconnect semiconductor process kits.
2004	Established system and method for quartz parts deposition removal, precision cleaning and retexturing.
2005	Developed surface metamorphosis technology for Yittrium Oxide coating
2005	Developed x-coating (dual microscopic coating) for use in the media storage industry
2005	Developed surface metamorphosis method for abradable coating for clearance control

Present and Future R&D

The Group carries out R&D activities continuously in response to changes in technology and customers' requirements. It has outlined a number of process improvement and product development initiatives over the next three (3) years, which are expected, among other things, to result in improved quality and adhesion of particles on the thermal coated surface leading to longer surface life, expansion of services offered by the Group to its existing customer base in the power generation and semiconductor industries as well as new customers in the marine and aerospace industries.

Some of the Group's on-going and future R&D activities are as follows:

- (a) developing method and system on thermal spray coatings on substrates to improve and enhance adhesion of deposits during ultra-high vacuum processing;
- (b) developing system and method for ceramic parts deposition removal, precision cleaning and retexturing;
- (c) developing method of electroless nickel-plating for corrosive environment; and
- (d) developing method and systems for estimating the total surface area of a thermal coated surface to improve and enhance adhesion of particles.

R&D Expenses

The amount spent by the Group on R&D (including depreciation of lab equipment, consumables and personnel cost) over the past three (3) financial years are as follows:

Financial years ended 31 December	2003	2004	2005
Amount spent on R&D (RM'000)	744	1,569	1,706
Amount spent as a percentage of revenue (%)	2.6	3.2	2.7

5.3.12 Interruptions in Operations

The FCB Group did not experience any disruption in business which had a significant effect on its operations during the twelve (12)-month period prior to the date of this Prospectus.

5.3.13 Information on Employees

As at 30 April 2006, the Group has a total staff force of 344 employees, of which approximately 49% are Malaysians. They hold various job functions including sales and marketing, finance, administration/human resources, customer service and technical support.

	<i< th=""><th>ength of servic</th><th>e></th><th></th></i<>	ength of servic	e>	
Categories of staff	5 to 10 years	2 to 5 years	Less than 2 years	Total
Directors	2	2	1	5
Management	4	26	10	40
Technical and Supervisory	-	27	21	48
Sales	-	8	12	20
Accounts, Administration and Clerical	1	10	17	28
Skilled Factory Workers	11	38	125	174
General Workers	1	8	20	29
	19	119	206	344

The total number of employees and length of service as at 30 April 2006 are as follows:

The management of FCB maintains close and cordial relationship with its employees. Together with its employees, the Group creates a healthy and comfortable working environment. The employees of the FCB Group are not members of any labour union. There has not been any industrial dispute in the past between the employees and management.

The Group conducts regular training sessions for its employees to keep its staff informed about recent developments in the industry and to further encourage overall productivity and efficiency. Employees of the Group are subject to work orientation programmes, on-the-job training and cross training in the various processes. Key management staff also attend the annual thermal spray coating industry conference, a forum where industry players present research papers on new processes, materials and equipment.

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5. INFORMATION ON THE FCB GROUP (Cont'd)

5.3.14 Key Milestones and Achievements

The key milestones and achievements of the FCB Group are set out below:

Year	Key milestones / achievements
1996	FS commenced operation in machining, fabrication and basic thermal spray coating activities for general engineering industry
1997	FS transformed into a thermal spray coating company and diversified customer base by extending services to oil and gas industry with ExxonMobil Exploration and Production Malaysia Inc (formerly Esso Production Malaysia Inc) as its first end-user customer
1998	FS invested in its first HVOF spray system
	FS relocated to a new 3,500 square metres rented premises and commissioned plasma spraying guns with robotic system
	FS achieved a breakthrough in providing services for Alstom's power generation turbine components
1999	FS achieved another breakthrough in providing services for petrochemical industry with Seraya Chemicals Singapore (Pte) Ltd as its first client in the petrochemical sector
	FS set up a class 1000 clean room facilities for entry into the storage media industry and secured clients such as Showa Denko HD Singapore Pte Ltd and Fuji Electric (M) Sdn Bhd
	FM was incorporated
2000	FS included as part of Tocalo Global Alliance
	FS successfully developed anti-corrosion thermal spray aluminium, zinc and monel coating
	FS successfully carried out first in-situ application of its coating services for Petrobras conversion projects
	FS successfully applied Micro resistant welding technology for chemical vapour deposition application
	FS achieved ISO 9002 certification
	FS further diversified customer base by breakthrough into organic light-emitting diode industry with Osram Opto Semiconductor (Malaysia) Sdn Bhd as its first client
2001	FS acquired its first plant in Singapore with a land area of 11,154 square metres and commenced R&D into surface metamorphosis technology with thermal spray coating processes and a series of complementary processes
2002	FS set up a 2,000 square metres chemical stripping and production facility for Thin Film Transistor / Liquid Crystal Display process kit recycling and secured Ulvac Singapore Pte Ltd as its first client
	Turbo machinery (including dynamic balancing machine) facilities was fully set up which marked FS' entry into rotating equipment repair and refurbishment
2003	FS began technological / R&D alliance with Ares Green
	FM commenced operations in Kuching via newly incorporated subsidiary, FAE
	FS achieved breakthrough in providing MRO services for Siemens AG Power Generation Operating Plant Services
	FS commenced operation in Thailand via associated company, FT
	FS achieved a breakthrough into semiconductor process kit management business with United Microelectronics Corporation (Singapore branch), Chartered Semiconductor Manufacturing Ltd, Hitachi Nippon Steel Semiconductor Singapore Pte Ltd and STMicroelectronics as its customers

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5. INFORMATION ON THE FCB GROUP (Cont'd)

Year	Key milestones / achievements
	FM established its Penang plant for semiconductor business catering to clients such as Osram Opto Semiconductor (Malaysia) Sdn Bhd, Fuji Electric (M) Sdn Bhd, ON Semiconductor, Siltera Malaysia Sdn Bhd, MIMOS Berhad and Komag USA (Malaysia) Sdn.
2004	FS upgraded its quality system to ISO 9001:2000 certification
	FS received R&D grant of SGD925,000 from Singapore Economic Development Board under its Innovative Development Scheme
	The Group commenced operations in the Philippines through FP
	FS' and FM's Penang facilities were qualified by Lam Research for high productivity quartz technology
	FS signed technical collaboration with Lam Research
	FS signed R&D collaboration with OTS
	FM obtained ISO 9001:2000 certification for its Penang plant
2005	FS completed its new precision cleaning facility on a newly acquired factory located at 15 Gul Drive, Singapore 629466 with a built-up area of 4,778 square metres
	FM obtained ISO 9001:2000 certification for its Shah Alam plant
	FM achieved a breakthrough in semiconductor process kit management business

5.3.15 Location of Operations

Currently, the Group operates from the following premises:

Company	Location	Built-up Area Sq. m.	Registered Owner
FS	156A Gul Circle Singapore 629614	4,770	FS
	15 Gul Drive Singapore 629466	4,778	FS
FM	Suite 516, Block E Pusat Dagangan Phileo Damansara 1 No. 9, Jalan 16/11 Off Jalan Damansara 46350 Petaling Jaya Selangor Darul Ehsan	437	Leased
	Lot 2-46, Jalan Subang Utama 7 Taman Perindustrian Subang Utama Seksyen 22 40300 Shah Alam Selangor Darul Ehsan	1,006	FM
	18 & 20, Jalan Pala 12 Kawasan Industri Ringan Permatang Tinggi 14100 Bukit Mertajam Penang	703	FM

Sarawak

5. INFORMATION ON THE FCB GROUP (Cont'd)

Company Location **Built-up Area Registered Owner** Sq. m. Lot B11, Kawasan MIEL Jakar 39 Phase III 24000 Kemaman Terengganu Darul Ehsan FP Lot C3-9, Carmelray Industrial Park II 810 Calamba City, Laguna Philippines FAE 209 Lot 1030, Section 66, KTLD, Jalan Kisar Pending Industrial Estate 93450 Kuching

FT 3 Moo 6, Tambol Homkred, Sampran 2,120 FT Nakornpathom 73110 Thailand

Leased

Leased

Leased

As part of its expansion plan, the Group plans to utilise part of the proceeds raised from the Rights Issue and Public Issue to finance the construction of a new plant located at Kulim Hi-Tech Industrial Park in Malaysia. The new plant will provide the much needed space to house a series of thermal spray coating processes and complementary processes services, and accommodate future expansion in production capacity in Malaysia. The new plant will also serve as a dedicated central facility for the Group's R&D activities.

In this respect, FM had on 9 May 2006 entered into a Lease Agreement with Kulim Technology Park Corporation Berhad ("KTPC") to take up the lease of all that parcel of land in the Industrial Zone Phase I, Kulim Hi-Tech Park, Kedah Darul Aman and held under H.S. (D) 1600, P.T. No. 1923, Mukim Padang China, Daerah Kulim, Kedah Darul Aman ("the Said Lot"), measuring approximately 6.81 acres for a consideration of approximately RM3.6 million. The Said Lot will be leased to FM for sixty (60) years commencing from 9 May 2006 ("Lease Period"). Subject to the approval of the Kedah State Government being obtained, KTPC shall grant to FM a further term of 39 years commencing from the date of expiration of the Lease Period at such rent and subject to such terms and conditions to be mutually agreed between the parties.

Construction of the new plant for the initial phase is expected to be completed by the third quarter of 2006.

5. INFORMATION ON THE FCB GROUP (Cont'd)

5.3.16 Production Capacity and Output

Thermal spray coatings' applications are broad-based and the provision of thermal spray coating services requires specialised knowledge in optimising the most appropriate mix of appropriate technology and coating materials that best meets the specific needs of the customers. The provision of surface metamorphosis technology services must be individually customised according to different market applications. Further, given the customised nature of the services required, the Group may be required to develop new coating solutions to solve specific industrial problems. The turnaround time for each project varies depending on the extent of restoration required, degree of complexity, the job requirement and the processes involved, and the availability of materials and skilled personnel.

Unlike standard mass manufacturing, the thermal coating services provided by the Group do not follow a routine production schedule and therefore, it is impractical to estimate the production capacity of the Group's operating facilities.

Currently, the monthly production capacity and output for the Group's precision cleaning services, on the basis that the production is operated on a 24-hour shift, are approximately 30,150 units and 17,950 units respectively, representing a utilisation rate of approximately 60%.

The Group does not face any constraint on its production or operating capacities currently.

Competitive Advantages 5.3.17

The Directors believe that the FCB Group has the following distinct advantages over its competitors:

(a) Established track record

Thermal spray coatings' applications are broad-based and widely used across a broad spectrum of industries. It is therefore crucial that thermal spray coating service providers are technically competent and have the track record when dealing with difficult and complex wear and surface problems. The FCB Group has established a reputation for quality, prompt delivery and reliable service in the thermal spray coating industry. The Group also has proven track record in providing mission critical surface metamorphosis engineering projects that are rapidly architected, engineered and delivered with speed and reliability, as well as demonstrated the engineering capabilities, financial resources and human capital in completing projects of any size given by the customers. Despite having a shorter operating history than some of its competitors, the Group has established itself as an industry leader by revenue in Singapore and Malaysia, with many multinational corporations such as Siemens, Shell, ExxonMobil, Ulvac Singapore Pte Ltd, Showa Denko HD Singapore Pte Ltd and United Microelectronics Corporation (Singapore branch) as its clients.

(b) In-depth industry knowledge

The Group's founders and management have extensive experience in the thermal spray industry. The Group's two (2) co-founders, Wong Hua Choon and Yeo Lay Poh, were trained by Tocalo, the world's largest independent thermal spray coating service provider. Wong Hua Choon has also worked for Sulzer Metco, the world's largest supplier of thermal spray coating equipment and materials and possesses in-depth knowledge and understanding of this specialised industry. The Group's understanding of the industry dynamics, in particular the market competition, distribution network and market structure, has been used to strategically position the Group to compete more effectively. All this industry knowledge has also been applied to enable the progressive development of the Group from its inception in 1996.

(c) Total solutions provider

The Group's core expertise lies in its ability to identify customers' needs and requirements and fulfil them by applying a total solutions approach. The Group provides a vertically integrated range of services from initial component material and surface metamorphosis design to a finished, assembled product. As a service-based solutions provider with R&D, engineering design, machining and fabrication capabilities, the Group is able to customise its surface engineering solutions to meet customers' requirements for special specifications, develop new coating solutions and provide consultancy services to find solutions to coating problems.

Given the huge range of thermal spray coating solutions which could be created by deploying different materials and processes, the Group is able to fulfil the demands of a huge range of industries and applications to satisfy customers' needs. The Group currently has customers from the power, oil and gas, petrochemical, marine, electrical and electronics and the semiconductor industries. The synergy and teamwork among the FCB Group's senior staff from R&D, production and marketing has helped the Group position itself as a professional and reputable thermal spray coating company. This teamwork will likely also result in new coating solutions with potential new applications, which could propel the Group's future growth.

(d) Strong technology collaboration and technology alliances

The Group has technological alliances with Tocalo, the world's largest independent thermal spray coating service provider, Lam Research, a leading supplier of wafer fabrication equipment and services to the global semiconductor industry, and Ares Green, Taiwan's biggest precision cleaning service provider, and OTS. The FCB Group keeps abreast of the latest technology in surface metamorphosis via strategic alliances with these global specialists. These alliances present opportunities for the sharing of technology which would enable the Group to expand its scope of services and be involved in joint R&D projects.

(e) Strong R&D capability

Strong R&D, engineering capabilities and technical competence will enable a service provider to develop and provide surface engineering solutions that meet specific customers' needs and are paramount in delivering reliable and quality service. Within Southeast Asia, the Directors believe that the Group has the largest R&D set up amongst its closest competitors. The R&D department is headed by Dr Tay Kiang Meng, who has 17 years of R&D experience. The Group's main R&D focus is in developing new innovative processes and materials for new market segments that are undergoing strong expansion.

(f) Diversified customer base

The FCB Group is not dependent on a single customer for its earnings. Its earnings are well spread out across five (5) core industries and no single client accounted for more than 15% of the Group's revenue for the year ended 31 December 2005. Most of the Group's competitors, who are either in thermal spray coating or some complementary processes, are reliant on a few key customers in one or two industries. The Group's close proximity to its customers via various facilities strategically located in Singapore, Malaysia, Thailand and the Philippines is another added advantage it has over its competitors.

5. INFORMATION ON THE FCB GROUP (Cont'd)

5.4 SUBSIDIARIES

5.4.1 Information on FS

(a) History and Business

FS was incorporated as a private limited company in the Republic of Singapore under the Companies Act, Cap.50 on 5 September 1996 and commenced operations in the same year. FS is principally involved in the provision of surface metamorphosis technology with thermal spray coating processes and a series of complementary processes including mechanical and chemical engineering works.

FS was established with a total of 12 staff and started at a rented factory with a wire metallizing spray system, which was among the lowest range of thermal spray coating systems from the spectrum of thermal coating systems available in the market. As business grew over the years, the company invested in more advanced thermal spray systems and developed significant expertise in broad spectrum of surface metamorphosis technology areas essential to the success of the Group's business.

As at 30 April 2006, FS has a staff force of 185 people and operates from two (2) factories in Singapore with a combined built-up area of 9,548 square metres.

(b) Share Capital

With effect from 30 January 2006, the concept of authorised share capital has been abolished under the Companies (Amendment) Act 2005 and all shares have ceased to have par value.

As at 30 April 2006, the issued share capital of FS was SGD9,093,984 comprising 9,093,984 ordinary shares.

Cumulativa

(c) Changes in Share Capital

The changes in the issued share capital of FS since its incorporation are as follows:

Date of allotment	No. of shares allotted	Consideration	issued share capital SGD
05.09.1996	4	Cash (Subscribers' shares)	4
18.12.1996	1,000,000 (Class A shares [#])	Capitalisation of loans	1,000,004
09.03.1998	50,000 (Class A shares [#])	Cash	1,050,004
12.10.1998	93,750 (Class A shares [#])	Cash	1,143,754
10.11.1998	250,000 (Class A shares [#])	Cash	1,393,754
03.05.1999	19,200 (Class B shares*)	Cash	1,412,954
20.05.1999	150,000 (Class A shares [#])	Cash	1,562,954
20.12.1999	19,200 (Class B shares*)	Cash	1,582,154

Date of allotment	No. of shares allotted	Consideration	Cumulative issued share capital SGD
30.06.2001	56,250 (Class A shares [#])	Bonus issue of approximately 3.6 new Class A shares for every 100 Class A shares held	1,638,404
30.12.2001	1,361,596 (Class A shares [#])	Bonus issue of approximately 85 new Class A shares for every 100 Class A shares held	3,000,000
08.03.2002	50,002 (Class A shares [#])	Allotment of shares in exchange for 50,002 shares in Frontken Engineering Pte Ltd	3,050,002
19.01.2004	2,700,000 (Class A shares [#])	Bonus issue of approximately 9.0 new Class A shares for every 10 Class A shares held	5,750,002
27.03.2004	218,000 (Class A shares [#])	Capitalisation of advances	5,968,002
26.07.2004	2,517,425 (Class A shares [#])	Capitalisation of advances	8,485,427
21.12.2004	608,557	Capitalisation of advances	9,093,984

Notes:

- # On 26 July 2004, all Class A shares were converted into ordinary shares of SGD1.00 each.
- * On 26 July 2004, the 38,400 Class B shares of SGD1.00 each were converted into 38,400 Class A shares of SGD1.00 each, and thereafter converted into ordinary shares of SGD1.00 each. Class A shares carry voting rights, whilst Class B shares do not.

(e) Substantial shareholders

As at 30 April 2006, FS is a wholly-owned subsidiary of FCB. Please refer to Section 6.1 of this Prospectus for information on FCB's substantial shareholders.

(f) Subsidiary and associated company

As at 30 April 2006, FS has three (3) subsidiaries, namely FM, FAE and FP, and an associated company, namely, FT. Details of the subsidiaries and associated company are set out in Sections 5.4.2, 5.4.3, 5.4.4 and 5.4.5 of this Prospectus respectively.

5.4.2 **Information on FM**

History and Business (a)

FM was incorporated as a private limited company in Malaysia under the Act on 31 May 1999 and commenced operations in 2002. FM is principally involved in the provision of surface metamorphosis technology with thermal spray coating processes and a series of complementary processes including mechanical and chemical engineering works.

Currently, FM has (2) plants which are located in Shah Alam and Penang and a sales and marketing office in Terengganu. Whilst the plant in Penang was set up mainly to cater to the semiconductor industry in Penang's Free Trade Zone and Kulim Hi-Tech Park, the Shah Alam plant services the industrial sector. The sales / marketing office in Terengganu services the oil and gas and petrochemical industries in Kertih, Gebeng and Kuantan.

As part of its expansion plan, the Group plans to utilise part of the proceeds raised from the Rights Issue and Public Issue to finance the construction of a new plant located at Kulim Hi-Tech Industrial Park in Malaysia. The new plant will provide the much needed space to house a series of thermal spray coating processes and complementary processes services, and accommodate future expansion in production capacity in Malaysia. The new plant will also serve as a dedicated central facility for the Group's R&D activities. Further information is set out in Section 5.3.15 of this Prospectus.

As at 30 April 2006, FM has 100 employees.

(b) Share Capital

As at 30 April 2006, the authorised and issued and paid-up share capital of FM are as follows:

	RM
Authorised	
Ordinary shares of RM1.00 each	10,000,000
Issued and paid-up	
Ordinary shares of RM1.00 each	5,550,000

Changes in Share Capital (c)

The changes in the paid-up share capital of FM since its incorporation are as follows:

Date of allotment	No. of shares allotted	Consideration	Cumulative issued and paid-up capital
			RM
31.05.1999	2	Cash (Subscribers' shares)	2
12.06.2002	300,000	Cash	300,002
28.07.2004	5,249,998	Cash	5,550,000

(d) Substantial shareholders

As at 30 April 2006, FM is a wholly-owned subsidiary of FS, which in turn is a wholly-owned subsidiary of FCB. Please refer to Section 6.1 of this Prospectus for information on FCB's substantial shareholders.

(e) Subsidiary and associated company

As at 30 April 2006, FM has a 58.12% subsidiary, namely FAE, details of which are set out in Section 5.4.3 of this Prospectus.

5.4.3 Information on FAE

(a) History and Business

FAE was incorporated as a private limited company in Malaysia under the Act on 13 May 2003 and commenced operations soon thereafter. FAE is principally involved in the provision of surface metamorphosis technology with thermal spray coating processes and a series of complementary processes including mechanical and chemical engineering works.

FAE operates from a rented plant at Pending Industrial Estate in Kuching which caters mainly to the industrial sector in East Malaysia. As at 30 April 2006, the company has 47 employees.

(b) Share Capital

As at 30 April 2006, the authorised and issued and paid-up share capital of FAE are as follows:

	RM
Authorised Ordinary shares of RM1.00 each	5,000,000
Issued and noid up	
Ordinary shares of RM1.00 each	2,168,000

(c) Changes in Share Capital

The changes in the paid-up share capital of FAE since its incorporation are as follows:

Date of allotment	No. of shares allotted	Consideration	Cumulative issued and paid-up capital RM
13.05.2003	1,000	Cash (Subscribers' shares)	1,000
26.07.2004	628,938	Cash	629,938
26.07.2004	1,470,062	Capitalisation of advances	2,100,000
17.11.2004	68,000	Cash	2,168,000

(d) Substantial shareholders

As at 30 April 2006, FAE is effectively a 58.12% subsidiary of FCB. The substantial shareholders of FAE as at 30 April 2006 are as follows:

	Country of incorporation /	Direct No. of		Indirect	
	Nationality	shares held	%	shares held	%
FM	Malaysia	1,260,000	58.12	-	-
AMT Engineering	Malaysia	800,000	36.90	-	-
Sdn Bhd					
FS	Singapore	-	-	1,260,000	[#] 58.12
Sia Chiok Meng	Malaysian	-	-	800,000	*36.90
Jong Jun Hian	Malaysian	-	-	800,000	*36.90
Kho Hang Yaw	Malaysian	-	-	800,000	*36.90

Notes:

- # Deemed interest pursuant to Section 6A(4) of the Act by virtue of its shareholding through FM. FS is in turn a wholly-owned subsidiary of FCB. Please refer to Section 6.1 of this Prospectus for information on FCB's substantial shareholders.
- * Deemed interest pursuant to Section 6A(4) of the Act by virtue of his shareholding through AMT Engineering Sdn Bhd.

(e) Subsidiary and associated company

As at 30 April 2006, FAE does not have any subsidiary or associated company.

5.4.4 Information on FP

(a) History and Business

FP was incorporated as a private limited company in the Republic of the Philippines under the Corporation Code of the Philippines (Batas Pambansa Blg. 68) on 25 November 2003 and commenced operations soon thereafter. FP is principally involved in the provision of surface metamorphosis technology with thermal spray coating processes and a series of complementary processes including mechanical and chemical engineering works.

FP operates from a rented plant with a built-up area of 810 square metres in Laguna, Philippines and services mainly the industrial sector in the country. As at 30 April 2006, the company has 14 employees.

(b) Share Capital

As at 30 April 2006, the authorised and issued and paid-up share capital of FP are as follows:

	PHP
Authorised Common voting stocks of PHP100 each	28,000,000
Issued and paid-up Common voting stocks of PHP100 each	27,963,000

(c) Changes in Share Capital

The changes in the paid-up share capital of FP since its incorporation are as follows:

Date of allotment	No. of shares allotted	Consideration	Cumulative issued and paid-up capital PHP
25.11.2003	16,200 (Class A voting stock [#])	Cash	1,620,000
25.11.2003	10,800 (Class B voting stock [#])	Cash	2,700,000
28.06.2004	112,280	Capitalisation of advances	13,928,000
10.09.2004	140,350	Capitalisation of advances	27,963,000

Class A shares were held by Philippine nationals and Class B shares were held by non-Philippine nationals. On 21 January 2005, all Class A and Class B common voting stocks were reclassified into a single class of common voting stocks.

(d) Substantial shareholders

As at 30 April 2006, FP is effectively a 99.99% subsidiary of FCB. Please refer to Section 6.1 of this Prospectus for information on FCB's substantial shareholders.

(e) Subsidiary and associated company

As at 30 April 2006, FP does not have any subsidiary or associated company.

5.4.5 Information on FT

(a) History and Business

FT was incorporated as a private limited company in Thailand under the Ministry of Commerce on 19 May 2003 and commenced operations soon thereafter. FT is principally involved in the provision of surface metamorphosis technology with thermal spray coating processes and a series of complementary processes including mechanical and chemical engineering works.

(b) Share Capital

As at 30 April 2006, the authorised and issued and paid-up share capital of FT are as follows:

	THB
Authorised Ordinary shares of THB10.00 each	20,000,000
Issued and paid-up Ordinary shares of THB10.00 each	20,000,000

(c) **Changes in Share Capital**

The changes in the paid-up share capital of FT since its incorporation are as follows:

Date of allotment	No. of shares allotted	Consideration	Cumulative issued and paid-up capital THB
19.05.2003	100,000	Cash (Subscribers' shares)	1,000,000
17.11.2003	800,000	Cash	9,000,000
30.01.2004	1,100,000	Cash	20,000,000

(d) Substantial shareholders

As at 30 April 2006, FT is effectively a 39% associated company of FCB. The substantial shareholders of FT as at 30 April 2006 are as follows:

	Country of incorporation /	Direct No. of		Indirect No. of	
	Nationality	shares held	%	shares held	%
FS	Singapore	780,000	39	-	-
Wirote Wannasiwaporn	Thai	1,219,995	61	-	-

Note:

FS is a wholly-owned subsidiary of FCB. Please refer to Section 6.1 of this Prospectus for information on FCB's substantial shareholders.

(e) Subsidiary and associated company

As at 30 April 2006, FT does not have any subsidiary or associated company.

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5.5 **INDUSTRY OVERVIEW**

5.5.1 The Global Economy

In 2005, global economic expansion was sustained at a strong pace of 4.3% against the backdrop of higher oil prices, rising interest rates, large balance of payment imbalances and disruptions from natural disasters. Consumer spending was sustained, reinforced to a significant extent by wealth effects, particularly from robust housing markets from several major economies. Reflecting robust demand conditions, stronger corporate financial positions and rising capacity utilisation, investment spending expanded further. Overall, higher global growth was reflected in the continued expansion in world trade, which rose at a strong pace of 7.0%.

Strong global demand was also a key factor in driving higher global commodity prices in 2005. While higher oil and commodity prices did have some impact on headline inflation, the effect was relatively modest as sustained improvements in productivity and the emergence of competitive sources from several regions of the world helped to mitigate the pass-through effects. The relatively restrained inflationary environment allowed monetary authorities across the world to raise interest rates at a gradual and measured pace. Financial market activity generally benefited from the abundant liquidity conditions and sustained economic growth.

The US and People's Republic of China remained major drivers of global growth expanding at 3.5% and 9.9% respectively in 2005. In the Asian region, growth remained strong at 7.2%. Growth, nevertheless, declined slightly from 7.9% in 2004 in the face of surging oil prices, monetary tightening cycle and some slowdown in global IT demand.

In 2005, exports grew by 20% (2004: 28.5%). After some slowing down in the first half-year, export performance picked up in the second half-year as the global technology revived. Private consumption continued to grow at a stable pace in the region, with rising incomes offsetting the impact of higher oil prices and tighter monetary policies.

World output and trade are projected to expand at a firm pace of 4.3% and 7.4% respectively in 2006, emanating from a more balanced growth across major industrial countries. Growth will be supported by an uptrend in investment and electronics cycle as well as continued favourable liquidity conditions. For the Asian region, the global electronics up-cycle is expected to strengthen further following higher ICT-related spending in the industrial economies, stronger intra-regional demand and accommodative monetary conditions.

(Source: Bank Negara Malaysia Annual Report 2005)

5.5.2 **Singapore Economy**

The Singapore economy grew by a healthy 6.4% in 2005 after a strong 8.7% growth in the previous year. Forward-looking indicators point to continued growth in the next few quarters. The latest surveys of business expectations show that businesses in both manufacturing and services are optimistic about business conditions in the next six (6) months.

Total demand rose by 9.1% in 2005, moderating from the 18% recovery momentum in 2004. External demand, up by 11%, provided much of the growth impetus. This reflected contributions mainly from exports of information technology and telecom products. Among services exports, most important were business services, financial services, transport and travel.

The improvement in the unemployment rate to 2.5% at the end of 2005 will improve consumer sentiments. This and continued robust external demand could encourage businesses to increase capital spending, boosting domestic demand.

5. INFORMATION ON THE FCB GROUP (Cont'd)

While the general economic outlook is benign, some downside risks persist. Most notable is the continuing tightness of the supply-demand situation in the oil industry. Other uncertainties include an abrupt unwinding of current international imbalances, threats of terrorism and an outbreak of Avian flu among humans.

In view of the positive developments in the external economic environment and domestic demand, the Ministry of Trade and Industry has raised the 2006 gross domestic product growth forecast to between 4% and 6%, from the previous forecast of between 3% and 5%.

(Source: Independent Market Research Report by Lynck)

5.5.3 **Malaysia Economy**

Notwithstanding the persistently high oil prices and the downturn in the global electronics cycle, real GDP expanded by 5.3% in 2005. Appropriate macroeconomic policies and favourable financial conditions continued to enhance economic resilience and supported balanced economic expansion. Growth was balanced and broad based, with most sectors of the economy (except the construction sector) registering positive growth rates.

Domestic demand conditions remained favourable in 2005, registering a strong growth of 7.3%, supported mainly by the buoyant expansion in private sector activities. Public sector expenditure remained supportive of private demand whilst private investment continued to expand strongly during the year, posting growth of 10.8%, spurred by higher investment in the manufacturing, services and upstream oil and gas sectors. Inflation rate increased from 1.4% in 2004 to 3.0% in 2005 primarily due to the supply-related factors following the increase in international oil prices.

Gross exports expanded by 11.0% during the year, mainly due to the strong performance in the commodities sector. Exports to the US, Malaysia's largest trading partner, grew by 16.5% as a result of higher demand induced by the replacement cycle for wireless computers and computer-related items. Meanwhile, Malaysia's trade with ASEAN countries (except Singapore) expanded by 12.3% in 2005 due to increasing intra-regional trade and better economic performance of ASEAN countries.

On a gross basis, foreign direct investment ("FDI") increased to RM25 billion or 5.3% of GDP, with broad-based inflows across major sectors such as the oil and gas, services and manufacturing sectors. The bulk of FDI continued to be in the form of reinvested earnings, reflecting continued expansion and diversification of operations by existing multinational corporations amidst favourable investment conditions in Malaysia.

On 21 July 2005, Malaysia shifted from a fixed exchange rate regime of USD1 = RM3.80 to a managed float against a basket of currencies. The policy shift was taken to better position Malaysia to respond to and benefit from the structural changes occurring in the region. During the period after the move to a managed float regime, the Ringgit moved not only against the US Dollar, but also other major and regional currencies.

In 2006, growth is expected to strengthen further where real GDP is forecast to expand at 6% supported by strengthening exports and resilient domestic demand. The private sector would provide the main impetus to growth for the fourth consecutive year. While private consumption remains an important source of growth in domestic demand, growth in private investment will be broad-based, across most sectors of the economy. FDI inflows are expected to increase, supported by stronger demand arising from the high capacity utilisation rate as well as investments in new industries. Reflecting a greater interest by companies to diversify aboard, overseas investment by Malaysian companies is also forecast to increase in 2006.

(Source: Bank Negara Malaysia Annual Report 2005)

5.5.4 Surface Metamorphosis Technology Overview

Surface metamorphosis encompasses all processes that change the surface properties either metallurgically, mechanically, chemically or by adding a layer of coating, aimed at improving the component's productivity, economic useful life, overall equipment effectiveness and/or aesthetic appearance. This in turn lowers production cost and the overall cost of ownership of the equipment.

The fact is engineering components not only rely on their bulk material properties but also on the design and characteristics of their surface. Therefore, the behaviour of a component is highly dependent on its surface, surface contact area and the complex environment under which the component must operate.

Improving the characteristics of surfaces is the current trend for solving today's many engineering problems, such as wear, corrosion, conductivity and thermal shock. These problems take place at the surface and the near-surface. Hence, it makes economic sense to focus R&D efforts on enhancing the properties of the surface, rather than to concentrate on developing new wear-resistant or corrosion-resistant bulk materials. The surface of a metallic material is made up of a matrix of individual grains, which vary in size and bond strength depending on the means by which the material was manufactured and on the elements used to form those grains. In order to enhance the surface characteristics, the surface of these components may require treatment. The purpose may be to minimise corrosion, reduce frictional energy loss, reduce wear, act as a diffusion barrier, provide thermal insulation, exclude certain wavelengths of radiation, promote radiation electronic interactions or simply improve the aesthetic appearance of the surface.

Thermal spray coating is one of many processes for treating surfaces of engineering components. Today, thermal spraying is used throughout all the major engineering industry sectors for component protection, against for example wear and corrosion, and reclamation. These sectors include aerospace, automotive, power, petrochemical, oil and gas, marine, pharmaceutical, metal and steel, pulp and paper, textile, electronics and printing. In recent years, improvements to equipment and material quality have enhanced the technical credibility of thermal spraying, leading to a significant growth in new markets such as bio-medical, dielectric and electronic coatings.

It is one of the most versatile surface-coating processes today and acquiring an increasingly important position in industries such as energy, automobile and aerospace.

Thermal spray coatings' applications are broad-based and can be classified under the following categories:

- Corrosion protection atmospheric corrosion, hot gas corrosion, chemical corrosion, oxidation, immersion corrosion, oxidation at high temperature;
- Wear protection wear rebuild, abrasion, adhesion, erosion, fretting, galling, slurry and dry erosion, sliding wear;
- Thermal function thermal barrier coating, thermal conductivity, reflection/absorption, thermal shock, thermal fatigue, thermal shock, thermal or electrical insulation;
- Electrical function conductivity, high tension superconductivity, shielding, insulation, radio frequency interference shielding; and
- Special function bioactivity, dimension restoration, free from distortion, good grip surfaces, hard facing, non-stick, sensor.

Due to its broad-based applications, thermal spray coating is widely used across a broad spectrum of industries, including power generation, oil and gas and refineries, petrochemical, pharmaceutical, marine, pulp and paper, bio-medical, aviation, automotive, industrial, electronics and many more.

(Source: Independent Market Research Report by Lynck)

5. INFORMATION ON THE FCB GROUP (Cont'd)

5.5.5 The Cleaning Technology Overview

The common factor in all cleaning technologies is that they involve the removal of substances that have a negative impact on the objects or spatial environments. For a long time in industrial production, the cleaning of components or products was regarded simply as a cost factor that would have to be dealt with at some stage. A fundamental change in this attitude is evident today. Two factors now make advanced cleaning technologies interesting and important for a broad spectrum of industries.

The first relates to companies which supply high-performance and reliable cleaning systems and machines. For instance, we expect foodstuffs and medical products to be manufactured and packed in completely hygienic production facilities. And in the home, at work and in public facilities, modern technologies are being increasingly used to perform the required cleaning work. Such technologies help us to meet today's standards of cleanliness and hygiene at acceptable levels of cost.

The second factor relates to industrial production itself. Protective coatings, for example must be applied to thoroughly cleaned surfaces if they are to achieve their function over the long term, and components can only be produced with the necessary precision if in critical phases of manufacture they are free of impurities and contamination. A properly integrated cleaning system ultimately brings down the cost of production as the quality of product rises and the number of rejected samples reduces.

The manufacture of microelectronics, micro-optical and micromechanical systems entails particular problems where cleanliness is concerned. Even nano-scale layers of dirt or particles can have a detrimental effect on the functioning of a product and render it worthless. In micro-production, therefore, special efforts have to be made to ensure cleanliness.

The importance of clean substrate surfaces in the fabrication of semiconductor microelectronic devices has been recognised since the dawn of solid-state device technology in the 1950s. It is well known that the device performance, reliability and product yield of silicon circuits are critically affected by the presence of chemical contaminants and particulate impurities on the wafer or device surface. Effective techniques for cleaning silicon wafers initially and after oxidation and patterning are now more important than ever before because of the extreme sensitivity of the semiconductor surface and the submicron sizes of the device features.

Precision cleaning means cleaning to very exacting standards, with a very low tolerance for left over particles or other contaminants (particle size less than 0.3 micron). Parts requiring the most stringent cleanliness criteria are cleaned in environmentally controlled clean rooms. In many critical applications commonly found in high-technology industries such as semiconductor, flat panel display, hard disk drive, aerospace and medical, precision cleaning is a prerequisite for newly manufactured parts prior to assembly, and for routine services and maintenance of manufacturing devices.

There are many precision cleaning systems available in the market today. The key factors influencing the choice of cleaning system are the level of cleanliness required, the type and thickness of contamination, and the base material (i.e. the substrate) and geometry of the component.

(Source: Independent Market Research Report by Lynck)

5.5.6 **Differing Segments and Demand and Supply Conditions**

Thermal Spray Coating Industry

Demand for thermal spray coating services globally and in this region is principally driven by the pursuit to achieve a desired functionality for the equipment/component and high replacement costs. The thermal spray coating market can be broadly divided into two major segments, namely the OEM market ("primary" market) and the maintenance and repair market ("secondary" market).

The primary market involves OEM collaborating with thermal spray coating specialists and/or research institutions to develop new and improved surface engineering solutions against material degradation of the component surface. Successful development of proprietary advance surface properties accords OEM designers and manufacturers an added competitive advantage to stay ahead in the industry. Given OEM companies, especially high-technology equipment manufacturers, are largely located in industrialised countries such as the US, Japan and Europe, it is not surprising that thermal spray coating applications are significantly more established, well researched and recognised in industrialised countries when compared to emerging regions like Southeast Asia.

The service and repair market involves reclaiming used components as a result of material degradation processes such as wear and corrosion. The aim is either to bring the component back to its original state or to enhance the component's useful life, performance and/or productivity to levels beyond that of new components.

In the power industry, big global power OEMs such as General Electric, Siemens, Alstom and Mitsubishi Heavy Industries all have a division that provides after sales services, including repair and restoration of power equipment. However, in line with the global outsourcing trend, a portion of these services is either outsourced or can be outsourced to third party service providers such as the FCB Group. This could be due to one or a combination of the following reasons:

- (a) lack of specialised skills set or equipment;
- (b) cost consideration; and
- (c) better service level to the end customers, such as a shorter turnaround time, which translates into significant cost savings for customers.

Other than General Electric, the other OEMs do not have repair / restoration facilities in Southeast Asia.

The power support industry faces a shortage of capable and competent sub-contractors in this region. While GE Keppel Energy Services Pte Ltd ("GKES") has a full-fledged repair and service outfit in Singapore, the company is nonetheless a unit of the General Electric group. Companies like Siemens and Alstom would not be prepared to send their turbines to GKES for repair works, as it would mean revealing the engineering designs and repair methodology to a competitor.

As such, many power OEMs have no choice but send equipment back to their home country for repair. This translates into higher transportation cost and longer turnaround time. In the power industry, every additional day of power outage is very costly. The FCB Group, which is building up its repair and refurbishment capabilities via technological collaborations with Siemens and OTS, offers a good alternative to major power equipment manufacturers globally.

In many of the other industries such as the oil and gas, and petrochemical industries, thermal spray coating and repair and restoration of specialised production equipment and components are not within their competency and business scope. As such, these activities are usually carried out by third party service providers such as the FCB Group.

OEMs, such as Flender-Graffenstaden SA (gear box), Thomassen (compressor and turbine) and Elliot Ebara (cryogenic) informally collaborate with the FCB Group to provide repair and restoration services to their end customers.

Precision Cleaning Industry

Like the thermal spray coating market, the precision cleaning market can be broadly divided into two major segments, namely the OEM market ("primary" market) and the service and repair market ("secondary" market).

The primary market involves cleaning of newly fabricated components of high-technology devices, before they are assembled and packaged for delivery to end customers. This segment of the market is typically undertaken by the OEMs themselves or their approved contract manufacturers.

The secondary market comprises regular cleaning requirement of manufacturing devices as a result of contamination from the manufacturing process, and cleaning of damaged components prior to and after repair (including coating). Regular cleaning ensures device performance and reliability and product yields are not affected by the presence of chemical contaminants and particulate impurities.

Most semiconductor and high-end electronics manufacturing companies would have at least some inhouse precision cleaning capabilities to cope with ad-hoc cleaning requirements and routine maintenance-type cleaning demands. However, many of these companies have opted to outsource some or most of their cleaning requirements to professional third party service providers such as the FCB Group, in order to focus on the core product development and manufacturing activities. Additionally, in-house cleaning demand alone will not be able to justify the investment outlay of a comprehensive cleaning line.

OEMs such as Applied Materials, Inc and Lam Research also provide cleaning and repair and restoration services to their customers (foundries). Other than Applied Materials, Inc which has cleaning facilities in major chip production hubs via Metron Technology's network, most other OEMs maintain a panel of approved vendors that their customers can go to. Insofar as the Directors are aware, the FCB Group is the only approved vendor for surface metamorphosis services, including precision cleaning services, for Lam Research's and Ulvac's equipment in this region.

(Source: Independent Market Research Report by Lynck)

5.5.7 Substitutes

Thermal spray coating serves very specific customer needs. There are only very limited applications where other coating technologies can be considered as alternatives to thermal spray.

(Source: Independent Market Research Report by Lynck)

In the precision cleaning segment, insofar as the Directors are aware, there is currently no known close substitute, save for replacement of parts. Replacement is however expensive and makes little economic and commercial sense unless the part is beyond repair.

5.5.8 Industry's reliance on and vulnerability to imports

There is no major foreign independent thermal spray coating service provider operating in the Southeast Asia region, mainly because the existing size of the thermal spray coating market is still relatively small and fragmented to warrant the setting up of separate operations in this region. The FCB Group has successfully overcome this issue by diversifying its customer base to include several major industries, i.e. power, oil and gas, petrochemical and electronics / semiconductor.

(Source: Independent Market Research Report by Lynck)

5. INFORMATION ON THE FCB GROUP (Cont'd)

5.5.9 **Competition and Industry Players**

Thermal Spray Coating Market

Although thermal spray coating applications have been around for decades and have found a position in a broad spectrum of global industries, the regional thermal spray coating market within Southeast Asia remains relatively under-developed and the number of players is small. There are very few hightechnology OEMs in the region to provide the required thrust in thermal spray coating R&D. However, there is an increasing trend, albeit gradually, where high-technology OEMs are either relocating a portion of their manufacturing activities to this region, or outsourcing some of the component fabrication jobs to local companies within this region. These trends, if sustained, will bode well for the development of thermal spray coating industry in Southeast Asia.

The competitive factors in thermal spray coating sector include:

- the ability to develop and provide surface engineering solutions that meet specific customer (a) needs:
- (b) having the right equipment, manpower and know-how to execute these solutions, which is particularly true for high-technology industrial field applications;
- quality, given that choosing the wrong coating process and / or material can be extremely (c) costly if they result in component / equipment damage or the lowering of component/equipment performance;
- (d) price, whilst important, is less of an issue in advanced thermal applications when compared to lower end thermal systems mainly because of the huge economic benefits derived and limited competition; and
- service and reputation. (e)

In the thermal spray coating market, the FCB Group operates principally in the petrochemical, oil and gas and power industries with some exposure to the marine sector.

The competitive environment of thermal spray coating varies depending on industry. Generally, the competitive space is more crowded in industries where customer demands are comparably less stringent. The marine industry is one such example. Most of today's marine applications are based on established thermal spray systems and commonly used coating materials. The level of skills and knowledge required to operate these processes are also lower.

Given the lower barriers to entry, the thermal spray coating market within the marine sector is relatively more fragmented, comprising a number of local players. The main participants in this arena are See Hup Seng Limited, the FCB Group, CRC Engineering Pte Ltd and Plasma Precision Technology Pte Ltd. While the FCB Group has some exposure to the marine sector, it is not one of the Group's core sectors.

In contrast, there is generally less competition in the high-technology industrial fields, such as the aviation and power industries, where barriers to entry are substantially higher. Thermal spray coating applications in these sectors typically involve more advanced spray technologies and systems, which require specialised skills and know-how to operate. This is not surprising, given the complex environment under which the components / equipment must operate.

Additionally, in the aviation and power sectors, the financial stakes are high due to their heavy equipment cost. As a result, large multinational companies dominate this segment of the market. For example, Pratt & Whitney, a world leader in the design, manufacture and service of aircraft engines, space propulsion systems and industrial gas turbines, has two joint ventures in Singapore, namely Turbine Overhaul Services Pte Ltd and Turbine Coating Services Pte Ltd that together provide a full range of aero-engine repair and overhaul services to the regional aviation industry. Its local joint venture partners are Singapore Technologies Aerospace Ltd and SIA Engineering Company.

In the power sector, General Electric, the world's largest gas turbine manufacturer, has a 51% stake in Singapore's GE Keppel Energy Services Pte Ltd. The company provides turbine repair and refurbishment services principally for General Electric's turbines installed within the region. The FCB Group is the only other Singapore-based player in this segment, serving the Singapore, Malaysia, Thailand, Vietnam and the Philippines markets. In Malaysia, there are Sapura Power Services Sdn Bhd, a subsidiary of SapuraCrest Petroleum Berhad, and TNB Repair and Maintenance Sdn Bhd, a subsidiary of Tenaga Nasional Berhad, which provide general repair and maintenance services to the power industry.

Based on the research conducted by Lynck, there are only four (4) major players in the petrochemical and oil and gas industries in Malaysia and Singapore, namely the FCB Group, CRC Engineering Pte Ltd, Plasma Precision Technology Pte Ltd and MTQ Engineering Pte Ltd. This is believed to be due to the fact that thermal spray coating applications in the oil and gas and petrochemical industries in Southeast Asia have not yet been fully developed and accepted as part of the repair methodology. Consequently, while the growth potential is good, the existing market size of thermal spray coating applications is small. Few engineering shops are prepared to venture into this area given the small size of the market, which could not justify the heavy investments in thermal spray systems (HVOF and Plasma systems), R&D and manpower.

The table below lists the key thermal spray coating participants in each of these industries:

Key Thermal Spray Coating Participants by Industry					
	Core Process	Complementary Processes			
	Thermal Spray Coating	Engineering Repair & Refurbishment	Recycle Precision Cleaning		
Semiconductor	 The FCB Group 	 The FCB Group 	 The FCB Group Metron Technology (Singapore) Pte Ld UMS Semiconductor Pte Ltd 		
Mass storage / Flat panel display	 The FCB Group 	 The FCB Group 	 The FCB Group 		
Energy and power	 The FCB Group 	 The FCB Group GE Keppel Energy Services Pte Ltd Sapura Energy Sdn Bhd TNB Repair and Maintenance Sdn Bhd (Remaco) 	The FCB Group		
Oil and gas	 The FCB Group Plasma Precision Technology Pte Ltd CRC Engineering Pte Ltd 	 The FCB Group MTQ Engineering Pte Ltd 	N/A		
Petrochemical	 The FCB Group Plasma Precision Technology Pte Ltd 	 The FCB Group 	N/A		
Marine	 The FCB Group See Hup Seng Ltd CRC Engineering Pte Ltd Plasma Precision Technology Pte Ltd 	 The FCB Group 	N/A		

Precision Cleaning Market

Precision cleaning services industry in Southeast Asia is similar to those in developed countries. The players comprise equipment manufacturers (e.g. UMS Semiconductor Pte Ltd), semiconductor/electronics manufacturers (e.g. wafer fabs) and third party independent precision cleaning service providers (e.g. the FCB Group).

The competitive factors in the precision cleaning business are quality, service and price.

The quality of the cleaning process is of utmost importance given the high investment cost of semiconductor equipment. Vendors must not only give assurance the components being cleaned will not be damaged in the process, but also the efficiency and efficacy of the devices would not be compromised after being re-assembled. Consequently, OEM accreditation is important, as it lends credit to the suppliers' technical and service competency. While some wafer fabs do not place heavy emphasis on this, so long as the vendor is able to stand up to rigorous pre-qualification tests and audits, others would only consider using the services of a vendor that has been endorsed by the OEMs.

Wafer fabrication facilities run 24 hours a day, seven days a week. Therefore, service reliability is critical in light that any unscheduled outage resulting from failure by suppliers to meet tight delivery deadlines could potentially disrupt the entire production process, causing millions of dollars of losses. The typically short turnaround time for routine maintenance jobs means the vendors have to be physically close to the customers. Not surprisingly, other than complex repair and refurbishment jobs, wafer fabs hardly send components overseas for maintenance repair and cleaning.

In virtually every outsourcing decision, price would feature prominently as one of the chief considerations. Being a local outfit, the FCB Group's key advantage is its low cost structure. Unlike multinational corporations, the FCB Group is not burdened by substantial overheads normally associated with global companies. As such, the Group's competitive pricing has given it a distinct edge over its more established rivals.

Lynck identifies three (3) players which dominate the precision cleaning market in Singapore and Malaysia. They are Metron Technology (Singapore) Pte Ltd ("Metron Singapore"), UMS Semiconductor Pte Ltd ("UMS") and the FCB Group. Another company called Advanced Integrated Solutions ("AIS") entered the Singapore market in 2004, bringing the total number of participants to four. Other than the FCB Group, which has set up cleaning facilities in Penang for the semiconductor industry, none of the other three remaining participants has precision cleaning facilities in Malaysia.

In August 2004, Applied Materials, the world's largest semiconductor equipment manufacturer, which already owns a minority stake in UMS, announced it would acquire the worldwide operations of Metron Technology N.V. ("Metron"). According to the company's press release, the acquisition will expand Applied Materials' current portfolio of service products to support chip manufacturers worldwide.

Based on research conducted by Lynck, Applied Materials has consolidated its precision cleaning division with that of Metron, and is currently using the latter as the platform to provide precision cleaning services to all makes of equipment. However, there has not yet been any apparent change in the way Metron conducts its business, including its pricing policy.

(Source: Independent Market Research Report by Lynck)

5.5.10 Government Legislation, Policies and Incentives

Other than the environmental management requirements under the Environmental Quality (Sewage and Industrial Effluents) Regulations 1979, the Directors are not aware of any specific law and regulation governing the surface metamorphosis industry in Malaysia currently. FM has obtained approval from the Department of Environment in Malaysia for waste treatment facilities in its Penang plant.

There are also some tax incentives provided for under the Promotion of Investments Act 1986 which are generally available to surface metamorphosis activities in Malaysia. These tax incentives, such as pioneer status and investment tax allowance, grant partial or total relief from income tax payment for a specified period. Other incentives include double deduction for R&D approved by the Inland Revenue Board and partial tax exemption for researchers to commercialise their research findings, subject to verification by the Ministry of Science, Technology and Environment.

The Economic Development Board of Singapore had in October 2004 granted FS a SGD925,000 grant under its Innovative Development Scheme which was to be used for R&D to develop cutting edge surface metamorphosis technology for the semiconductor industry. This is a testimony of the Singapore Government's confidence in the capabilities of the FCB Group and the importance of the Group's services as a support service to many multinational corporations located in Singapore.

The Group's surface metamorphosis activities in Singapore are regulated under the Environment Pollution Control Act by the National Environment Agency. FS has obtained a permit from the said agency in respect of its waste treatment plant.

5.5.11 Prospects and Outlook

The future of the manufacturing and engineering industries will continue to change dramatically, and for numerous engineering or consumer durable products, appropriate surface engineering as applied by thermal spraying techniques is becoming a decisive factor in sustaining a competitive edge. Among the many surface engineering techniques available, surface metamorphosis technology using thermal spray process and a series of complementary processes are particularly well placed to meet the market demands. They allow the deposition of a large variety of coatings, deposition of elaborate multimaterials (such as functionally gradient coatings) and offer a great potential for the development of new innovative coatings which can be processed with the minimal environmental disturbance.

The prospects and outlook for the surface metamorphosis technology industry in Southeast Asia are excellent. Not only is thermal spray increasingly being recognised and accepted as the preferred coating solution when compared to some of the other coating technologies such as chrome plating and spray painting, new processes and materials are continuously being developed globally through intensive research that would further widen thermal spray applications in the industrial fields in the future.

Between 2000 and 2004, the global thermal spray coating market grew by a compound average growth rate (CAGR) of 12.7% per annum to about USD5.6 billion in 2004. Sulzer Metco further projects that the industry will grow by an average annual compound rate of 5% to 6% in 2005 - 2007.

In the same period, the FCB Group's revenue grew by a CAGR of 37%. This is significantly higher than the industry average of 12.7%. Lynck attributes the FCB Group's superior growth to two (2) main reasons:

- (a) There is an acute shortage of competent local players. Historically, most of the demand for thermal spray coating services had been satisfied by foreign suppliers. However, with the FCB Group emerging as a reliable independent thermal spray service provider in this region, more and more jobs are increasingly being conducted locally.
- (b) New market creation by the FCB Group through successful development and commercialisation of new surface metamorphosis solutions. In order to sustain its growth and remain competitive, the FCB Group continuously invests in and carries out R&D activities on tough engineering problems, which will address specific customers' needs or resolve specific industrial problems. Upon completion, these R&D activities are commercialised, thus creating market needs for the Group's services.

In the petrochemical and oil and gas industries for instance, thermal spray, which has historically been used primarily to resist wear in **rotating components** such as valves, pumps and compressors, are increasingly becoming a prerequisite for new **static equipment** installations such as piping, heat exchangers, spool system, storage tanks and pressure vessels, as well. Companies like Shell, Exxon Mobil and Petrobras of Brazil have already taken the lead, and it is believed more would soon follow suit.

Outside of Singapore, the awareness level of the benefits of thermal spray coating in the region remains considerably low until today. This, according to Lynck, is attributed to the absence of major independent thermal spray service firms to promote and educate end-users of the advantages and economics of thermal spray as a surface metamorphosis solution. There are therefore tremendous opportunities which companies like the FCB Group can tap on. In fact, the Group has in the last 18 months been beefing up its sales and marketing arm and has since 2004 commenced regular road shows in Malaysia to promote its services to end-customers in the oil and gas and petrochemical industries.

There will also be more scope for expansion as the governments of Singapore and Malaysia continue to put in place the right policies and incentives to attract new foreign direct investments in the manufacturing sector, including semiconductor and electronics, oil and gas and petrochemical industries.

The prospects and outlook for the precision cleaning industry in Singapore and Malaysia look promising. For instance, in Singapore, United Microelectronics Corporation has in 2004 begun commercial production in its new 12-inch wafer fab in Pasir Ris. Chartered Semiconductor Manufacturing and Hewlett Packard also commenced commercial production in their new 12-inch wafer fab (Fab VII) and 6-inch wafer fab respectively, last year. STMicroelectronics, which has invested a total of USD2.4 billion to date in Singapore's TechnoPark in Ang Mo Kio, has recently announced it would invest as much as another USD1.2 billion by the end of 2006 on expanding the capacities of existing fabs, and is considering building a new USD2 billion 12-inch wafer fab in 2006. Other semiconductor projects in the pipeline in Singapore include TECH Semiconductor Singapore Pte Ltd's new 12-inch and Hewlett Packard's new 8-inch wafer fabs.

In Malaysia, German semiconductor giant Infineon Technologies AG is building a new 8-inch fab with a total investment cost of USD1 billion to mainly produce power and logic chips used in automotive and industrial power applications. Storage media companies such as Hoya Corporation, Fuji Electric Holdings Co., Ltd, Showa Denko K.K. and Komag, Inc are also expanding capacities in Malaysia.

The evolving trend in today's manufacturing environment should also see wafer fabs outsourcing more and more of their non-core operations, including precision cleaning. This is expected to bode well for independent service providers like the FCB Group.

(Source: Independent Market Research Report by Lynck)

5.6 MAJOR CUSTOMERS

The Group's major customers include local and multinational corporations who are manufacturers or service providers in the semiconductor, power generation, petrochemical and oil and gas industries. Over the years, the Group has built a well-diversified customer base comprising over 500 customers. The Group is not reliant on any single customer.

The Group's major customers (i.e those individually contributing 10% or more of the Group's revenue for each of the last three (3) financial years ended 31 December 2003 to 31 December 2005) are as follows:

	Country	Length of relationship Year	Contribution to Group's sales		
Name of customers			2003 %	2004 %	2005 %
Siemens Malaysia Sdn Bhd	Malaysia	4	6.0	9.1	12.4
Showa Denko HD Singapore Pte Ltd	Singapore	7	17.6	12.1	8.1
Petra Resources Sdn Bhd	Malaysia	8	10.7	9.9	5.1
Ulvac Singapore Pte Ltd	Singapore	4	10.6	7.4	5.0

5.7 MAJOR SUPPLIERS

The Group's major suppliers comprise mainly suppliers of thermal coating powders, wires and rods, and sub-contractors or service providers in the engineering field.

The Group's major suppliers (i.e those individually contributing 10% or more of the Group's raw materials and subcontracting costs for each of the last three (3) financial years ended 31 December 2003 to 31 December 2005) are as follows:

	Country	Length of relationship Year	Contribution to Group's raw materials and subcontracting costs		
Name of suppliers			2003 %	2004 %	2005 %
Chinyee Engineering & Machinery Pte Ltd	Singapore	3	15.5	8.2	5.4
CNC Surface Science Pte Ltd	Singapore	9	20.1	8.9	9.3
Siemens Westinghouse Technical Services Pte Ltd	Singapore	9	11.1	5.1	1.1
Farron Ship Repair & Engineering Pte Ltd	Singapore	7	11.0	3.6	0.6

The Group is not dependent on any single major supplier for raw material supplies or sub-contracting work.

5.8 FUTURE PLANS, STRATEGIES AND OUTLOOK

The Group aims to be a leading world-class total advanced materials and surface metamorphosis technology solution provider. This objective is strategically supported by its strong and experienced management team, R&D capabilities led by Dr Tay Kiang Meng with 17 years of R&D experience, collaborations with established technology leaders such as Tocalo, Ares Green and Lam Research, the use of leading edge technology, growing distribution network and strong customer service orientation.

In order to achieve its objectives and mission, the Group has outlined the following plans over the next three (3) years:

(a) New product development

One of the Group's business objectives is to provide reliable advanced materials and surface metamorphosis engineering solutions that will enable its customers to bring their products and/or mission critical applications to the market faster, more efficiently and at a lower cost. As part of its product development plan to broaden its product offerings and cater to more industries, the Group plans to introduce the following products / services over the next three (3) years:

- (i) Selective nickel coating process
- (ii) Anodising for semiconductor
- (iii) Vacuum plasma spray or low pressure plasma spray

Details of the above new products / services are set out in Section 5.3.7 of this Prospectus.

(b) **R&D** initiatives

The Group believes that R&D plays a pivotal role in driving the growth of its business. It ensures that the Group keeps abreast of the latest technological advancements, changes in customer demands and industry developments. It also helps to ensure that the Group's products and services remain relevant and competitive in the market place. Hence, the Group's R&D initiatives will continue to focus on process improvements and new product developments to improve productivity and produce surface engineering solutions that are reliable, productive, cost effective and would lengthen the useful life of the customers' equipment and machinery.

The Group has outlined a number of process improvement and product development initiatives over the next three (3) years, which are expected, among other things, to result in improved quality and adhesion of particles on the thermal coated surface leading to longer surface life, expansion of services offered by the Group to its existing customer base in the power generation and semiconductor industries as well as new customers in the marine and aerospace industries.

In essence, the FCB Group's on-going and future R&D project are targeted at the following objectives:

- (i) to enable the Group to expand industrial applications, based on the new technology to address real market needs and consequently to adopt it as part of the Group's industrial technology platforms;
- (ii) to brand the Group as an advanced technology company by disseminating the technical know-how resulting from the R&D program through publications, seminars, training, workshop and conferences;

5. INFORMATION ON THE FCB GROUP (Cont'd)

- (iii) to establish the Group as a centre of research excellence with partners from different industrial/service sectors to exchange experience on the advanced precision cleaning and surface metamorphosis technology; and
- (iv) to build the Group's technology network with suppliers, partners and customers in order to identify new business opportunities for the advanced precision cleaning and surface metamorphosis technology within a wide audience of the industries.

The FCB Group plans to expand its R&D activities in Malaysia, which includes working closely with overseas technology partners, equipment manufacturers as well as the customers. The Group also intends to make Malaysia the hub for its regional activities and expansion.

(c) **Marketing initiatives**

The Group intends to grow its surface metamorphosis technology businesses by expanding its presence and representation in existing markets as well as venturing into new markets and industry segments. The Group plans to expand the number of sales and marketing staff in Singapore and Malaysia by thirteen (13) over the next two (2) years via the recruitment of sales engineers in the power, semiconductor, oil and gas and petrochemical industries. The Group also plans to appoint representatives / agents in countries where it has no physical presence, and set up sales offices in Vietnam, Indonesia, China and the Middle East.

Over the past two (2) years, the Group has travelled through the East Coast of Peninsular Malaysia as well as the oil and gas towns of East Malaysia, Bintulu and Miri to market its products to the oil and gas and petrochemical industries. In order to increase its market visibility and presence, the Group will continue to organise roadshows to showcase its services and coating solutions to existing and potential customers. In 2006, the Group has / will be participated / participating in SEMICON[®] Singapore 2006 (a premier exposition for showcasing the latest semiconductor manufacturing technology) and Offshore South East Asia 2006 (an international event for Asia's oil and gas industry).

The thermal spray industry is still at its early development stage in this region. Future growth will be spurred by continuous education and promotion to raise awareness among prospective customers of the benefits and versatility of thermal spray, and development of new applications.

There is tremendous opportunity for the Group to expand horizontally by moving up the technology ladder in order to better serve high-technology industrial fields such as the power industry. For instance, the Group has recently teamed up with OTS to expand its scope to include repair of more complex power components e.g. gas turbine blades. This tie-up paves the way for the Group to secure more jobs from Siemens, and possibly from other end users.

Given the Group's engineering capability and track record in developing new technology through technical collaboration or partnership with global specialists, there is a lot of potential for the Group to leverage off its existing businesses and customer relationships to expand into other high value complementary services. For instance, the Group intends to expand into mechanical seal repair and servicing to complement its existing pump component repair activities for the marine, oil and gas and petrochemical industries. In doing so, the Group would be able to provide one-stop industrial pump repair services to its customers.

In the semiconductor sector, the Group plans to set up selective nickel plating and anodising facilities to complement its precision cleaning business. The move will enable the Group to tap on the huge OEM market.

The potential of the surface metamorphosis technology using thermal spray process and a series of complementary processes industry in Southeast Asia bodes well for the Group. As a leading advanced material and surface metamorphosis technology solution provider in Southeast Asia, coupled with the Group's strong R&D capabilities, technical tie-up with established players in their field, technical know-how, growing distribution network and customer-oriented services, the FCB Group is poised to take advantage of the potential growth in new applications of thermal spray coatings.

(Source: Independent Market Research Report by Lynck)

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