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Planet Earth has to endure big problems at the moment. On one hand, we have a number of natural phenomena making

From the desk of our new regional MD, Mr Samson Ho...



themselves felt. On the other, many of the economic problems that afflict the global economy are mostly man made. It is now up to smart people to devise lasting solutions. This is easier said than done.

While the economies of Europe and the US will take some time to recover, we are fortunate that Asia Pacific is doing rather well at the moment. China's GDP is expected to grow by some 9.2% this financial year, followed closely by India. In both countries the building and construction industries are dynamic and booming. Most of the other nations in our home range are doing well, too.

Our parent Etex Group's recent acquisition of the European and Latin American activities of Lafarge Gypsum is a major strategic initiative for the Group and confirms its strong commitment to "dry construction" generally.

The growing awareness and desire for sustainable and energy efficient buildings in Europe, the superior performance of lightweight construction and the demand for affordable housing in other emerging markets make dry construction one of the fastest growing segments of the building materials sector.

» Continued on next page

New PROMATECT® 50 CBM Board Application Literature Now Available



New Benchmarks Encourage Principles Of Sustainability In Building And Construction Industry

More people now live in cities than elsewhere! The relationship between urban and rural populations is symbiotic and complex, but human migration to metropolitan living and better prospects will continue and likely accelerate in the years to come!

These trends — combined with concerns about sustainable development and global warming — mean that all societies now have to focus specialised skills and attention on how they create, protect and sustain their built environments.

One way or another, physical structures generally account for about 40% of fossil fuel emissions and more than 60% of landfill pollution.

How we plan and build towns and cities, design and protect structures secure against the forces of nature and other dangers, and how we use non renewable resources wisely while minimising the carbon footprint these actions create, have become increasingly urgent matters to resolve responsibly.

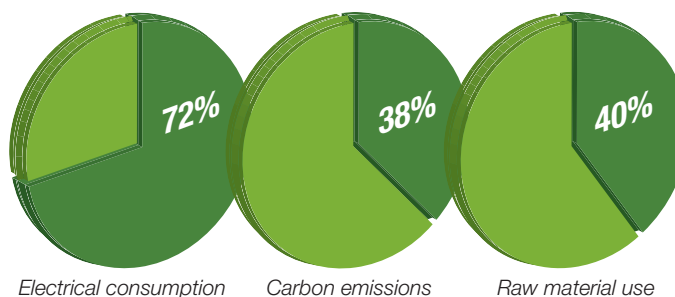
Pressure On Built Environment

The total global population is generally reckoned to exceed 7 billion...and growing fast! By 2050, the United Nations estimates that more than two thirds of a 9.1 billion total will work, play, raise their families and pursue worthwhile careers in cities.

The engines that shape these demographics are mainly economic and political but other factors, such as social aspirations and natural human expectations, are equally significant. The global village is shrinking and accelerating, creating pressures at every dimension of its built environment.

While most of the buildings in use today are based on essentially Victorian technologies, they are vastly different from the structures of yesteryear.

Built environment statistics studied by LEED, USGBC



The modern built environment is used differently and many more user friendly benefits are expected of it. Buildings nowadays simply have to deliver more and better services while being easier and considerably safer to use.

Many countries see little choice but re-examine the principles of how they plan, build and use modern structures. Better performance characteristics and sustainability are at the top of every agenda.

As a result, many regulatory environments have adopted industry and community-wide programmes aimed at making their built environments better for their occupants and users, for now and for the future.

Typical is LEED from the US Green Building Council (USGBC), Green Star of the Green Building Council of Australia (GBCA) and the Green Mark Scheme developed by the Building and Construction Authority of Singapore (BCA).

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» Continued from front page

LEED @ U.S. Green Building Council (USGBC)

The U.S. Green Building Council is based in Washington, D.C., the centre of US government. A high profile nonprofit organisation, USGBC is recognised in commitment to a prosperous and sustainable future for the US electorate through construction and/or refurbishment of cost efficient and energy saving green buildings.

USGBC integrates educational programmes, a nationwide network of ambitious chapters and affiliates, an annual Greenbuild International Conference & Expo, and organised advocacy in support of public policy that encourages and enables green buildings and communities.

One of the main tools that USGBC to achieves its objectives through market transformation is its Leadership in Energy and Environmental Design (LEED) green building certification programme. It is a green building rating system and certification process that urges the community, industry and business leaders to adopt policies that aim for holistic sustainability of the green building industry.

LEED does considerably more than examine, test and grade environmentally responsible materials. It also looks at and classifies in depth sustainable architecture techniques as well as many aspects of public policy that have direct and indirect impact on issues of true sustainability.

Typical of LEED are the Centre For Green Schools, the Green Home Guide and the LEED for Homes Scoring Tool. The latter is an easy way for developers and home owners to get a user friendly overview of green home and building concepts and how the LEED For Homes rating system works. It also publishes Green Source, a magazine that reviews case studies of Green Sustainability in action, new products and new technologies.

Established in 1993, USGBC does everything possible in its mandate to educate good sense and enlightened thinking to promote sustainability at every level of development in the ongoing and necessary process of how buildings are designed, built and operated.

USGBC is comprised of more than 18,500 member organisations drawn from every level of the building industry. Its aggressively marketed programmes work towards promoting the theories and pragmatic realities of buildings that are environmentally responsible, profitable and healthy places.

Green Star Programme @ Green Building Council of Australia (GBCA)

The mission of GBCA, established in 2002, is to develop a sustainable property industry throughout Australia. It is now actively supported by federal government agencies, state and local governments across the country.

The GBCA's integration of green building practices is encouraged and promoted through realistic market based solutions. These include educational programmes, coordinated advertising and public relations systems and numerous community outreach campaigns.

Its primary objectives are to ensure complete transition from old conventional thinking and methods prevalent in the building and construction industry to the integration of green building initiatives and modern principles and modern realities of true sustainability.



Launched to a coordinated nationwide publicity campaign in 2003, Green Star environmental rating system for buildings is comprised of rating tools that aim to help the building and construction industry — and indeed every level of the built environment — to reduce the environmental impact of buildings, improve occupant health and productivity, while also achieving worthwhile levels of cost savings.

The Green Star programme makes a point of increasing industry and public awareness for relevant environmental issues by continually and consistently spotlighting innovation in sustainable building practices. Promat's development of PROMATECT® 40 ceiling systems for use in Australia's bushfire susceptible regions is a very good example of this action.

Green Star rating tools are currently available for education, healthcare, industrial, multi unit residential, office, office interiors, retail centre, office design and office as built applications. Green Star pilot rating tools for convention centre design and public building application are also available.

All Green Star rating tools provide users with a microscope to look at and provide simple but effective benchmarks for all relevant matters related to sustainability in built structures. The tools can be downloaded from the GBCA website (<http://www.gbca.org.au/green-star/rating-tools/>) and used as checklists to evaluate all aspects of any building or the entire building process. These include innovation, management, indoor environment quality, energy, transport, water and energy generally, materials, land use and ecology, and emissions.

It's still early days but Green Star rating tools are increasingly and usefully applied by developers and building users, and the building and construction industry generally. With this system in place, and adapted for future trends, Australia's built environment can look to improved future prospects...prospects that will be enhanced by sustainable fire science technologies from companies like Promat.

Green Mark Scheme Of The Building & Construction Authority (BCA), Singapore

BCA's Green Mark Scheme is one of the major incentive programmes that now drives Singapore's modern and progressive construction industry towards more environment friendly buildings.

Launched in 2003, it aims to promote sustainability in the built environment and raise environmental awareness among developers, designers and builders. It takes a holistic approach and encourages awareness for sustainability as an integral component of the development process — from planning right through design to fitting out, commissioning and final building usage.

BCA's Green Mark Scheme is also global in its outlook, absorbing and using international best practices in environmental design and building/structural performance. This adds further benefits by creating favourable, cost effective downstream value chains and adding to the structure's market value.

Some projects have even discovered, to their ultimate satisfaction, that the BCA's Green Mark Scheme has a positive effect on corporate image, leasing and resale value of buildings.

This workable and user friendly scheme has received the ultimate compliment but being adopted in part as a benchmark for similar sustainability programmes in other countries in Asia.



BCA GREEN MARK

Promat Fire Science Systems Measure Up To Sustainability Benchmarks

Just as the US, Australian and Singapore building and construction industry sustainability programmes are increasingly recognised and used as effective benchmarks by others around the Asia Pacific region, Promat too is driven by an ongoing programme of scientific Research & Development. This continually refines or creates tested, proven and tried products and systems that save countless lives while also protecting significant installations of expensive property.

In nearly 100 years of fire technology market leadership, Promat has evolved a wide range of modern, integrated fire protection products and systems recognised worldwide for their efficacy and user friendly international benchmark quality.

Promat products and systems are manufactured in ecologically certified plants worldwide. These not only meet the company's own carefully devised and rigorously implemented *Environmental, Health & Safety* policy standards but ISO and other internationally recognised quality standard systems.

When Promat products and systems are specified and integrated into the fire safety design of a built structure, building occupants and users can be reassured that the building owners, operators and managers are working within a regulatory climate fully aware of effective sustainability in fire design and planning.

Promat products and systems are endorsed with the relevant ratings from the LEED, Green Star Australia and Green Mark Singapore programmes. □

» From the desk of our new regional MD...continued from the front page

Indeed, the combination of fibre cement and plasterboard will likely create a leading global player in the expanding dry construction market. The group can now offer a larger and stronger portfolio of qualitative and sustainable building solutions, tailored to the diversified needs of people in their various built environments. In Asia Pacific, the Group will continue its priorities in promoting fibre cement dry construction. It is generally considered that the group's recent breakthrough in Cement Bound Matrix (CBM) boards in the partition and flooring markets, for example, will further enhance our expertise in dry construction throughout the region.

Promat extends these very positive attitudes towards enhanced growth in the region and the capacity of production facilities in China and Indonesia will be increased substantially to meet the expected increased demand in both the fire protection and multipurpose board markets in the year ahead.

As always, technical excellence is a top priority and this issue of PTT, looks at the significance of two interrelated matters, optimising *Green Sustainability Know-How* and the EU's CE Mark system, now exerting worldwide impact. In our *High Performance Insulation* story, we read how Nippon Microtherm (now known officially as NMC) dramatically improves energy efficiency for Jakarta furnaces.

Other notable reports review Promat involvement in polysilicon plants in China and in Singapore's Gardens By The Bay, Lifestyle Pod, National University Heart Centre and Senoko Waste-To-Energy Plant projects, as well as the refurbishment of Hong Kong's Mongkok Stadium.

This is my first edition of PTT and as such the perfect opportunity to thank you all sincerely for your warm welcome and continuing support. As we consider all aspects of sustainability in the ongoing Nature/Nurture debate, I believe that nurturing the built environment with our world class quality fire and safety systems will certainly create many new business opportunities for Promat.

I look forward to working with Team Promat in the months ahead.

Samson Ho
Managing Director
Promat Asia Pacific companies



CE Mark System Good For The Business Of Scientific Fire Protection

For companies concerned with optimising the safety and security of the increasingly complex built environment, minimum benchmark standards for the performance of products and systems established by legislation, regulatory agencies and other industry bodies can have a huge and beneficial impact on society, and on business.

One such company is Promat and the European Union's CE Mark system is a very good example of how the development of recognised code standards, working together with manufacturers and specifiers, can be a very profitable alliance, delivering measurable benefits to end consumers.

Development Of EU As Economic & Regulatory Entity

The European Union was established by six founding countries in 1957. Its continuing commitment to economic and political development, trade and business initiatives, and the welfare of its many constituents has created a market of more than 500 million people.

Nowadays, the European Common Market is an international trading bloc with a combined 2010 Gross Domestic Product (GDP) well in excess of €11.4 (US\$16.2) trillion and per capita income levels pegged at more than €22,800 (US\$32,600).

The EU's development as a manufacturer of recognised international quality products make it a powerful and worldwide trading partner.

EU's CE Mark System Now Recognised Worldwide

The ongoing evolution of unified legislation in the 27 member EU has created a system of benchmark standards that will, in the long term, bring enviable benefits to business, manufacturers and consumers alike.

The CE Mark attests to product, system or service performance and quality, and the ability to deliver declared benefits and advantages.

Today the CE Mark Systems exerts considerable influence that reaches way beyond its home range borders of western Europe.

CE is an abbreviation of the French phrase "Conformite Europeene" and it means that a product, system or service endorsed with a CE Mark has passed a rigorous system of tests and thus clearly "Conforms To European (i.e. EU) Standards".

Products, systems and services awarded the CE Mark have to meet or surpass a system of minimum standards related to their claimed performance for a specific application.

Applying for and being granted a CE Mark amounts to a declaration by the manufacturer that his product or service conforms with all relevant provisions of the appropriate legislation that has a direct impact on that particular product or service.

The CE Mark aims to provides customers and end users with an internationally recognised means of defining and comparing quality. With continued usage, time and exposure to different market conditions, increased awareness for the CE Mark system means that it now has considerable impact on worldwide manufacturing, distribution, marketing, application and usage trends.

CE Mark Process Begins With European Technical Approval



Before applying for and being awarded a CE Mark, manufacturers must first apply for and receive European Technical Approval. This is granted after passing a number of tests at third party, independent and approved test laboratories.

ETA provides a clear, independently reviewed, testing, quality assurance and auditing system for product manufacturers. Every product, system or service is tested to the same standards.

After all tests are complete, an independent auditor ensures that what is delivered and installed fully complies with what was tested.

Test Criteria Might Also Include "Indirect" Performance Characteristics

In many instances, manufacturers must clearly demonstrate with adequate documentary evidence that their product or system complies with and has passed specific test and sustainable business criteria.

In some instances this may not always be related to a direct field of application.

In the area of fire testing and fire protection, for example, products and systems may need to show that their inherent characteristics also perform well in terms of weather and impact resistance.

Before manufacturers and exporters can market their CE mark products and legally sell them to, or within, the European common market, they must also be in compliance with the applicable CE Marking Directive.

This also looks at and attests to safety and sustainable business criteria.

Downstream Responsibilities For CE Mark Holders

Manufacturers are also responsible for non compliance and liable for any damage caused by the product.

If the manufacturer or his authorised representative is not based within the EU, the importer is responsible for the product in Europe.

If a product is not in compliance with the directives, it may be restricted, prohibited from sale or even withdrawn from the market.

It is noteworthy that all Promat products and systems have passed all the relevant tests for ETA and subsequent CE Mark accreditation.

This means that they measure up to and often surpass their promise of fire safety performance, advantages and benefits.

CE Mark accreditation is an ongoing process. It is constantly reviewed, and modified if necessary.

As Promat's ongoing R&D programme improves old products and develops new systems for the competitive international market place, specifiers and customers alike — everyone concerned with protecting human life and expensive property in the built environment — are doubly reassured by Promat's CE Mark accreditation.

This is not just a matter of considerable pride for Promat but also a matter of sensible, good commercial practice for the company and its business associates.

In a world that persistently and understandably looks for better safety standards and the benefits of responsible business sustainability linked with better margins, Promat products and systems, and the CE Mark system, reassure optimal fire safety while delivering improved levels of profitability for everyone involved in the application of modern fire science technologies. □

New Botanical Gardens Long Term Fire Safety Values Enhanced

Location Gardens By The Bay, Marina Bay, Singapore	Chief designers Grant Associates, UK Gustafson Porter Ltd, UK	Main application and product Steel duct cladding with PROMATECT®-H matrix engineered mineral boards
Developer National Parks Board	Consultant CPG Consultants Pte Ltd	

The new Gardens By The Bay project — a huge botanical garden and recreational facility located on the central southern tip of the island and built on land reclaimed from the sea thirty years ago — is a classic example how Singapore successfully combines hard nosed pragmatism with entrepreneurial verve.

This work in progress is defined to some extent by the iconic backdrop of soaring steel and glass towers of the nearby downtown central business district and Marina Bay Sands Integrated Resort. But it is the large body of the surrounding fresh water — created by the new Marina Barrage across the Singapore and Kallang Rivers — that will provide refreshing counterpoint to what will be, when Gardens By The Bay is complete in a few years time, a highly attractive recreational destination for residents and visitors alike.

Comprised of 101 hectares of sculptured landscape, about the size of 177 football fields, the new Gardens are spread over three interconnected green zones. Bay South, Bay East and Bay Central are all rich in exotic botanical bounty.

Construction began in 2007 and Phase 1, comprising most of Bay South, is slated for official inauguration in June 2012. Exterior work on the two distinctly shaped, climate controlled conservatories (at top of the page) is already complete. Designed to house many endemic

and non native species, installation of interior facilities continues.

To enhance safety functions of the sophisticated structures, approximately 7,500m² of 120 minute fire resistant PROMATECT®-H ducts have been employed in the basement, ground floor and other levels of buildings related to the new conservatory complex.

While it is interesting to note that the successful and constantly expanding Green Mark Scheme from Singapore's Building and Construction Authority (BCA) is now also a benchmark recognised by other countries, the fire protection in infrastructure of Gardens By The Bay pushes the fundamental principles of sustainability and the considerable benefits of reduced carbon footprint another step ahead.

Steel duct cladding with PROMATECT®-H boards among other Promat products and systems are comfortably at home protecting this valuable, new green showcase for an increasingly important international city at the crossroads of the world. □



Polysilicon Maker in China Goes For Top Security



Project/Owner Sichuan Yongxiang Poly-Silicon Co Ltd	Contractor Sichuan Tongli Engineering & Construction Ltd	Products PROMATECT®-N and PROMINA® matrix engineered mineral boards
Designer Chengda Engineering Corp of China	Supplier Chengdu Guangyao Heng Co	

Silica is planet earth's second most abundant element and nowadays much in demand as the raw material for polysilicon trichlorosilane, used by the photo voltaic power generation and semiconductor industries. The future looks very bright on a global scale for manufacturers of polysilicon. Thanks to advantages in raw materials and



production costs, and national policies that encourage investment in clean environments such as polysilicon production, China has become the world's largest provider of polysilicon. One such manufacturer is Sichuan Yongxiang Poly-Silicon Co. Ltd., now China's biggest polysilicon enterprise.

Established in 2008 by China's Tongwei Group and Sichuan Giastar Group, Yongxiang Poly-Silicon today operates as a wholly owned subsidiary of Sichuan Yongxiang Co. Ltd. Located in the Wutongqiao district of Leshan, Sichuan province, the company's integrated complex covers an area of about 1.9 million m² with an employment of over 490 managerial, technological and other personnel.

Yongxiang Poly-Silicon currently has an annual production capacity of 20,000 tons of hydrogen chloride silicon and plans to expand to 100,000 tons per year. One 1,000 ton per year project was put into production in September 2008 and the second phase of a 3,000 tons per year project will be officially completed and put

into production by the end of 2011. The third phase a 6,000 tons per year project has been officially launched.

The installation of 22,000m² PROMATECT®-N and PROMINA® boards in fire resistant partitions, ceilings, ductwork and structural steel cladding of the second phase 3,000 tons per year project reflects Yongxiang Poly-Silicon's rigorous, forward looking attitudes as a modern manufacturing company mindful of the quality and safety expectations of the international market.

The quality of Promat passive fire protection systems, their reliability and the excellent technical services have attracted increasing attention in recent years, especially from more than ten new polysilicon projects in China. These include Sichuan Tianwei, Shanxi Lu An, Ningxia Guodian, Jiangxi Saiwei, Shaanxi Tianhong, Jing Yang and Dun An of Inner Mongolia.

The notion that effective fire protection applications — available only from a company like Promat — enhance an investment's value, is clearly gathering momentum. □



Old Stadium Gets A New Lease On Life

Mongkok, Hong Kong is home to the planet's highest population density with something like 130,000 residents per km².

Despite well regulated building codes, Mongkok's mixture of old and new multi level structures, commercial and residential units is no stranger to fire.

The most recent, in August 2009 at Cornwall Court, caused considerable damage and claimed four fatalities, including two firefighters.

It is not surprising that when the popular but old 7,000 seat Mongkok Stadium, first built in 1961, was closed in 2009 for a two year refurbishment, quality fire protection was a top priority.

More than 7,000m² of structural steel, including the stadium's I-section columns and beam support for the main spectator structure and circular hollow sections supporting the fabric cover, are now coated with Caico SPRAYFILM® WB3 for 120 minute fire resistance.

Football fans and spectators of other events can now enjoy the stadium in comfort and reassurance. □

NUHCS Puts Heart Into Fire Safety And Security

National University Heart Centre, Singapore (NUHCS) brings together cardiac specialists and experts from a multitude of sophisticated medical and surgical disciplines. Located within the sprawling National University Hospital complex, NUHCS is currently experiencing major redevelopment, extension and renovation.



Between February and May 2011, the structural steel components over total work area of about 5,000m², including the entire roof structure, link way to SMRT public transport, operating theatres, reception, consultant rooms, driveway canopy and facade structure, were coated with Green Label Singapore certified Caico SPRAYFILM® WB3, combined with water based primer and top coat.

The environmentally sensitive installation provides the desired quality and performance characteristics for cleanliness, life cycle longevity, safe contact, low maintenance, low downtime and the required 120 minute fire resistance. □

Wise Choice For Steel Protection Keeps Pace With Developments In Hong Kong and Singapore

Clockwise from top left

Project
Mongkok Stadium, Kowloon, Hong Kong
Developer
Leisure & Cultural Services Department
Architect
Design 2 Consultant
Main contractor
Paul Y Construction Co Ltd

Project/Owner
National University Heart Centre, Singapore
Architect
RDC Architects Pte Ltd
Main contractor
PBT Pte Ltd
Installer
Innovente Asia Pacific Pte Ltd

Project/Owner
Senoko Waste-To-Energy Plant, Singapore
Developer
Keppel Integrated Engineering Ltd
Main contractor
Keppel Seghers Engineering Singapore Pte Ltd
Steel engineering contractor
TKM Engineering Pte Ltd
Installer
Innovente Asia Pacific Pte Ltd

Project
Lifestyle Pod, Collyer Quay, Singapore
Developer
The Fullerton Heritage
Architect
DP Architects Pte Ltd
Engineer
Delta Marine Consultants Singapore Pte Ltd
Main contractor
Marina Technology & Construction Pte Ltd
Steel engineering contractor
Kong Hwee Iron Works & Construction Pte Ltd
Installer
Innovente Asia Pacific Pte Ltd

Application and product used in all projects
Steelwork protected with Caico SPRAYFILM® WB3 water based intumescent coating

Structural Components Of Waste Energy Plant Sprayed Off Site



Governments worldwide are looking for practical solutions to waste disposal and in land scarce Singapore, landfill methods are too expensive to contemplate. Naturally, the pragmatic tropical island city state has turned to a system that utilises thermal treatment of residual waste to recover energy through waste-to-energy (WTE) technology.

Energy from the combustion of non recyclable waste can be used to produce electricity and heat. It conserves fossil fuels and WTE is a net reducer of greenhouse gas emissions, diverting significant residual waste away from decreasing landfill sites. Most types of such municipal and industrial waste can be treated at Senoko Waste-To-Energy Plant.

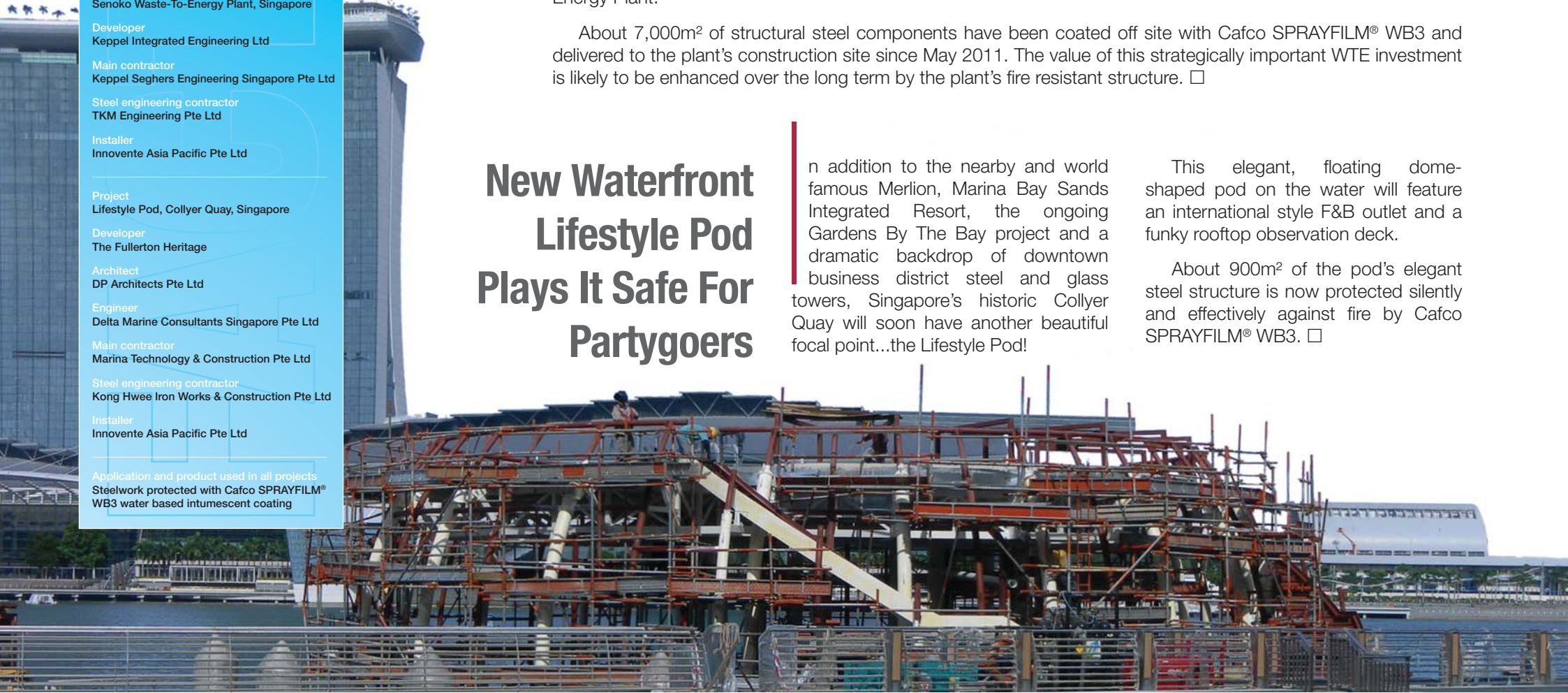
About 7,000m² of structural steel components have been coated off site with Caico SPRAYFILM® WB3 and delivered to the plant's construction site since May 2011. The value of this strategically important WTE investment is likely to be enhanced over the long term by the plant's fire resistant structure. □

New Waterfront Lifestyle Pod Plays It Safe For Partygoers

In addition to the nearby and world famous Merlion, Marina Bay Sands Integrated Resort, the ongoing Gardens By The Bay project and a dramatic backdrop of downtown business district steel and glass towers, Singapore's historic Collyer Quay will soon have another beautiful focal point...the Lifestyle Pod!

This elegant, floating dome-shaped pod on the water will feature an international style F&B outlet and a funky rooftop observation deck.

About 900m² of the pod's elegant steel structure is now protected silently and effectively against fire by Caico SPRAYFILM® WB3. □



Indonesia's economy is the largest in Southeast Asia and blessed with abundant natural resources it has been doing rather well in recent years.

Despite being a net exporter of crude oil and natural gas, and being a founding member of OPEC (Organisation of the Petroleum Exporting Countries), rising energy costs through the 17,000 island archipelago are forcing many to look very critically at energy saving initiatives.

One such sector in this nation of 240 million people is the automotive industry and specifically manufacturers of automotive dies in which aluminium melting and holding furnaces constitute a major part of the process.

These electrically powered aluminium holding furnaces are mostly of the Holimesy® type which typically hold the molten metal at a controlled temperature before transferring it to casting stations.

Critical operational parameters aim to ensure quality of die casted products are temperature control, and uniformity of molten aluminium.

In addition to operational safety and efficiency, good insulation design and material is another critical factor.

Insulation must be carefully selected and installed to deliver low electrical energy consumption, heat enclosure retention and controlled shell surface temperature, while also promoting safety and good working environmental conditions.

Some manufacturers are also developing specifications to control surface temperature and establish requirements for heat retention in the Holimesy® furnace in the event of power failure, not an unknown occurrence in Indonesia.

In this event, temperature drop over eight hours must not exceed 100°C so that molten metal can be salvaged by efficient re-heating upon restoration of power.

Such manufacturer is PT Chemco Harapan Nusantara, a subsidiary of the worldwide Nissin Kogyo Co. Ltd. corporation of Japan and located in Bekasi on the outskirts of Indonesia's capital Jakarta.

Chemco Harapan recently asked Promat company Nippon Microtherm Co. Ltd. to evaluate new insulation material and to increase understanding of new technologies, preferably proven systems in the market.

The Vice President of Operations at Chemco Harapan championed this project and invited Nippon Microtherm to conduct a Jakarta technical seminar sharing best practices in Japan.

Scope of the exercise by the Nippon Microtherm microporous design team included:

- Technical seminar to PT Chemco Harapan Nusantara
- Thermal and heat flow analysis
- Design proposals and costing
- Preparation of Microtherm insulation material and site installation
- Actual installation and training for the Chemco Harapan team
- Handover, testing and monitoring
- Reporting to senior management team
- ROI analysis and further action plan

The successful seminar quickly led to an approved project trial carried out in the first quarter of 2011 in which the design of a Microtherm insulated Holimesy® system demonstrated the ability to deliver sustained 30% reductions in electrical consumption and shell temperatures of 50~55°C.

The design team were also able to systematically introduce ways to improve the Holimesy® furnace construction with Promat's high performance insulation approach systems.

Successful Technical Seminar And Trial Installation Lead To Reductions Of More Than 30% Electrical Consumption

Location/Owner
The Holimesy® aluminium holding furnace, PT Chemco Harapan Nusantara, Jakarta, Indonesia
Consultant
Promat company Nippon Microtherm Co Ltd, Japan

Application and products
Holimesy® furnaces designed with PROMASIL® 1000Q and MONOLITE® M1 calcium silicate insulating boards, Promat ALSIFLEX®-1260 ceramic fibre mats, MICROTHERM® SG hydrophobic panels

In a planned programme of conversion managed by Nippon Microtherm, all ninety of Chemco Harapan's Holimesy® furnaces will be progressively equipped with energy saving high performance insulation by the end of 2013. □



Far left, top and bottom left: samples of Microtherm high performance insulation material employed at Chemco Harapan's furnaces with Promat ALSIFLEX®-1260, MONOLITE® M1 and MICROTHERM® SG.

Above: completing installation of MICROTHERM® SG in a Holimesy® furnace.

DISCLAIMER

The Promat Asia Pacific Network spans the region with innovative proactive fire protection products, systems and solutions: Australia, China, Hong Kong, India, Malaysia and Singapore, with distributors in Brunei, Indonesia, Japan, New Zealand, Philippines, South Korea, Taiwan, Thailand and Vietnam.

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