

FACTSHEET ON WORKPLACE SAFETY AND HEALTH AWARDS 2016**Introduction**

The Workplace Safety and Health (WSH) Awards is an annual initiative organised by the Workplace Safety and Health (WSH) Council and the Ministry of Manpower. Started in 2006, the WSH Awards recognise companies and individuals who have achieved excellent WSH performances through sound and effective management of WSH issues at their workplaces.

WSH Awards Categories

2 The Awards cover several key WSH areas, including performance, best practices and innovative ideas. The Awards categories are as follows:

a. Workplace Safety and Health Performance Award

This award recognises organisations that have performed well in WSH through the implementation of sound WSH management systems or processes.

- o Organisations are awarded Excellence, Gold or Silver depending on their performance

b. Safety and Health Award Recognition for Projects (SHARP)

This award recognises projects that have performed well in WSH through the implementation of sound WSH management systems or processes.

c. Workplace Safety and Health Developer Award

This award recognises developers who play an active role in ensuring good workplace safety and health practices among their contractors.

d. Workplace Safety and Health Innovation Award

This award recognises work teams for coming up with innovative solutions to improve WSH in their workplaces.

e. Workplace Safety and Health Officer Award

This award recognises registered WSH officers for cultivating safe and healthy workplaces in Singapore.

f. Workplace Safety and Health Award for Supervisors

This award recognises supervisors who demonstrate care for workers under their charge by improving the WSH performance in their workplaces.

g. Workplace Safety and Health Risk Management Award

This award recognises organisations which have effectively implemented Risk Management to enhance WSH in their organisations.

WSH Awards 2016

3 This year, 164 recipients will be receiving the Awards, out of a pool of 352 applications. The table below shows the breakdown of the 2016 WSH Award Recipients by categories. The combined efforts of the recipients of the WSH Awards 2016 have helped more than 94,000 of our workers go home safely every day in 2015.

2016 WSH Award Recipients	
WSH Developer Awards	1
WSH Performance Awards	40
WSH Performance (SHARP) Awards	104
RM Awards	1
WSH Innovation Awards	8
WSH Officer Awards	1
WSH Supervisor Awards	9
Total	164

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WSH Awards 2016 Commemorative Book – Profiles of Award Recipients

WSH Performance Awards (Excellence)

Infineum Singapore Pte Ltd

Infineum believes that every employee has a right to be safe and healthy at work and its goal 'Nobody Gets Hurt' is achievable. A key component to achieving this goal is its Behaviour-based Safety Observation (BBSO) programme.

The programme promotes good workplace safety and health (WSH) behaviour by encouraging all employees to observe and record good WSH practices by other colleagues and contractors who are working on site. These observations can also include positive reinforcements or highlight areas of work for improvements.

By advocating good work behaviour by its employees and contractors, the BBSO programme complements other safety programmes in Infineum to provide a holistic system to ensure that nobody gets hurt.

"Safety is a way of life. At Infineum, we comply with a structured safety system that delivers industry-leading results, but we are never complacent."

Mr. Trevor Russell

Managing Director, Infineum Singapore, Chief Executive Officer, Infineum International

Rockwell Automation Asia Pacific Business Center

As part of Rockwell Automation's workplace safety and health (WSH) efforts, it organises the 'Spot the Hazard' campaign. It encourages its employees to report any potential hazards in and around their workplaces. Employees who report these hazards to its supervisors or the Environment, Health and Safety department will be rewarded.

The continuous improvement team in Rockwell Automation will go on to review these hazards and introduce improvements for each hazard where possible. Through the campaign, Rockwell Automation hopes to encourage a culture where WSH becomes second nature and its employees will take necessary actions against unsafe acts.

"We are honoured to be recognised, but we did not do it for the award. We do it because our employees are our most valuable asset. They are entitled to a safe and healthy workplace every day."

Mr. Co Gia Nguyen

Vice President and General Manager, Rockwell Automation Asia Pacific Business Center

WSH Officer Award

For Ms. May Ong Puay Chin, being an Environment, Safety and Health (ESH) Specialist is not just a job. It is about caring for others and doing something meaningful to save lives.

May conducts monthly cross-department accident sharing sessions with the ESH coordinators and organises training programmes for supervisors and in-house contractors. She does this regularly to make sure that the employees are fully equipped with relevant safety information and knowledge to help prevent accidents at work. She also encourages the employees to pro-actively share ESH-related information with one another via the company's dedicated ESH online portal.

To her, safety is not just the responsibility of safety officers. She believes that both management and employees should be working together to ensure that all employees go home safe and healthy.

"I believe everyone whether at work or home should undertake activities with safety and health in mind. As an advocate of workplace safety and health (WSH) in my work and personal capacity, I strive to share these best practices to improve WSH standards within the company and my community. It is rewarding to see the people around me make WSH second nature to them."

Ms. May Ong Puay Chin, PBM

ESH Senior Specialist, AFD Pte Ltd

WSH Innovation Awards

CYC International Pte Ltd

Melissa - Robotic Tank Cleaning Lombrico

At CYC International, the workers are required to enter confined spaces to perform tank cleaning duties. The restricted space not only limits movement of the workers while cleaning, but also exposes workers to potential risks such as heat stress, and slips, trips and falls. The workers may also suffer from poor health due to prolonged exposure to oil and hazardous petrochemicals.

To reduce the risks, CYC International created 'Melissa', a compact-sized robotic tank cleaning machine which can enter confined areas with openings as small as 22 inches. The cleaning machine carries out cleaning duties, replacing the need for workers to carry out the task. Compared with the conventional man-entry method which requires 8 workers to clean a 20-metre long tank interior in 11 days, 'Melissa' requires only 4 workers to finish the task in 6 days. Since the implementation of 'Melissa', CYC International has eliminated at least 90% of the workplace safety and health hazards that were identified. 'Melissa' has also increased productivity by 72% and achieved cost savings of \$12,800 per tank each month.

"Every individual working for us is someone's parent, sibling, spouse and/or child. When at work, the responsibility lies with the company in ensuring that they return home safe and sound."

Mr. Danny Chua

Managing Director, CYC International Pte Ltd

Keppel Singmarine Pte Ltd

Mighty Hammer Arrestor

In the shipbuilding industry, the steel hammer is used daily in workshops and on board vessels. However, falling hammer heads pose a threat to workers working below the vessels as the workers may be struck by steel hammer heads. This may result in severe injuries such as skull fractures.

To address the issue, Keppel Singmarine studied the existing methods of securing hammer heads to prevent hammer heads from dislodging. Through its findings, the team decided to use an arrestor, which is a piece of metal sheet, to secure the hammer head to the handle.

The Mighty Hammer Arrestor is a simple yet effective solution. It is made using a 2mm galvanised sheet and secured with lock nuts. It also takes only 15 minutes to produce one set. Since the implementation of the Mighty Hammer Arrestor in many worksites across the yard, there has been zero cases of falling hammer heads.

"Upholding high safety standards is a Keppel core value and the primary consideration in all our operations. At Keppel Singmarine, we champion innovations that improve not only the safety of our yards and offices but also the well-being of our employees, as we strive towards our goal of an incident-free work environment."

Mr. Abu Bakar Bin Mohd Nor

Managing Director, Keppel Singmarine Pte Ltd

Lian Soon Construction Pte Ltd

Innovative Drain (iDrain - The Durable-Reusable ECM Drain)

Before any works can commence at a construction site, a temporary Earth Control Measure (ECM) Drainage system must be installed to prevent silty discharge from entering the water drainage system. In most instances, construction companies will choose to use the C7 concrete drain. However, the drain is not only bulky and heavy, its installation and demolition are time-consuming and labour-intensive. Heavy machines are required to install and demolish the drain. Workers are also exposed to potential hazards such as getting struck by the heavy loads, loud noises and dust.

To minimise workers' exposure to workplace safety and health risks and to improve productivity, Lian Soon Construction developed the 'iDrain' to replace the C7 concrete drain. Made of galvanised mild

steel, the iDrain is corrosion resistance, reusable and durable. It is moderately light weight so it can be easily carried and installed by two workers. Each iDrain piece is installed by overlapping each section on top of the other in the trench. The iDrain can also be manually lifted from its position and replaced or reused with another piece when required. When not in use, the iDrain can be easily stacked and recycled as scrap metal after several years of repeated usage.

The iDrain eliminated the use of heavy machines during installation and exposure to loud noises and dust during the removal process. The iDrain has also improved productivity by 67% and contributed to a greener environment through its zero disposal waste concept.

"In Lian Soon Construction's culture, we believe that all accidents are preventable. We emphasise on preventive measures rather than corrective measures. With everyone's involvement in the project, we can achieve accident-free, healthy and zero-harm work environment that we can be proud of."

Mr. Lee Kay Chai

Executive Director, Lian Soon Construction Pte Ltd

Resorts World at Sentosa Pte Ltd

Safety Post for Maintenance Pit Access

The Facilities Management and Engineering team at Resorts World Sentosa is required to enter the maintenance pits frequently to conduct maintenance and ad-hoc troubleshooting. The means of access to these maintenance pits is through cat ladders inside the pits and it can pose some risks if control measures are not put in place.

To ensure that a worker can enter and exit the maintenance pit safely, the project team took inspiration from existing retractable posts for roof access, and developed a safety post or a separate handle/ hand rail, for workers to hold on while climbing up and down the cat ladder.

The safety post is easy to use, fits different cat ladders and has back-up safety features in case of critical mechanical parts failure. The retractable safety post can be extended up to 1 metre above the pit and this allows the workers to have a safe and secure hand grip when entering or exiting the maintenance pit. This reduces the risk of falling into the maintenance pit, thus improving the safety of Resorts World Sentosa's workers and contractors.

"The safety and well-being of our team members working at Resorts World Sentosa are our paramount concern. Resorts World Sentosa stays committed to creating a safe and healthy workplace for everyone."

Mr. Lee On Nam

SVP Resort Services, and Chairman, RWS Safety Steering Committee, Resort World at Sentosa Pte Ltd

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Sembcorp Marine Admiralty Yard

Fatigue Free Hull Flat Bottom Hydroblaster El-Aqua

At Sembcorp Marine's shipyards, workers are exposed to workplace safety and health hazards when using hydro-jetting methods to clean the hull flat bottoms of the vessels. To carry out this task, the workers need to operate pressurised guns close to their bodies. The close proximity to the high pressure jet not only exposes the workers to the possibility of injuring themselves, but standing for long hours in the same position can also lead to ergonomics-related injuries. In addition, the environment is often wet and has low visibility which increases the risk of slips, trips and falls.

To address these risks, Sembcorp Marine Admiralty Yard developed the 'El-Aqua'. The 'El-Aqua' is a modified machine that enables workers to clean the vessels easily. The machine has a stable foundation with a 360-degree free-rotating rear wheel and two forward wheels to move around easily. Compared with the traditionally used pressurised guns, 'El-Aqua' has a 3-in-1 mounted water gun system connected to a rotatable turret with handles so that the workers can swing it left and right to wash the vessels without having to come into contact with the water jets. The machine also allows workers to adjust the height of the machine.

The risk of hand, finger and arm injuries as well as ergonomic risks have been reduced by 90%. It is also a greener alternative since it has a cleaner surface preparation method compared to the abrasive blasting which uses toxic materials that are harmful to the environment.

"At Sembcorp Marine, we believe strongly in constantly seeking new ideas and ways to improve safety. Our innovative approach to safety is encapsulated in our organisation's well established innovation programmes, campaigns and ground-up initiatives. Winning this award is a strong testament of our commitment to continuously leverage innovation in our quest for safety excellence."

Mr. Tan Cheow Nam

General Manager (Operation), Sembcorp Marine Admiralty Yard

Sembcorp Marine Tuas Road Yard

Roller Pad

Sembcorp Marine Tuas Road Yard fabricates and assembles pre-fabricated blocks such as steel block structures, pontoons, living quarters, columns, turret rigid arms and helidecks. Existing methods to align the blocks pose various hazards such as heavy lifting and falling from heights as chain blocks are used to align them manually.

To reduce the risks, Sembcorp Marine Tuas Road Yard invented the 'Roller Pad'. It fits beneath the blocks so that alignment of the blocks can be conducted easily. The 'Roller Pad' is lighter and can be carried by one man. The steel balls in the 'Roller Pad' allows free movement and makes it easier to adjust the alignment of the blocks, which will minimise the risk of collision and potential mechanical energy hazards.

The 'Roller Pad' does not require the use of chain block at the top of the pre-fabricated blocks and thus, reducing the need to work at height. The total time taken to perform one horizontal assembly has been reduced by 50% from 16 hours to 8 hours. The 'Roller Pad' has hence reduced the risk level from medium to low/acceptable level, and increased productivity by reducing manpower needed and time taken to assemble the blocks.

"Our top management is committed to achieving continuous improvements in Safety, Health and Environment to ensure that each and every individual of the company go home safely from work every day."

Mr. Freddie Woo Fong Wah

SVP and Head of Specialised Shipbuilding, Sembcorp Marine Specialised Shipbuilding Pte Ltd

ST Aerospace Engineering Pte Ltd

Windshield Adjustable Platform

During an Airbus A320 or Boeing B757 heavy maintenance visit, ST Aerospace Engineering's maintenance crew is required to inspect the aircraft windshield section. However, getting access to the windshield with the standard working stands is difficult because of the shape of the aircraft. To reach the windshield, the maintenance crew need to lean forward to bridge the gap between the stand and the aircraft. This resulted in a number of workers falling from heights.

To allow for safe access, ST Aerospace Engineering created the windshield access platform. It is customisable and can be used for different aircrafts such as Airbus A320, Boeing 757 and Boeing 737. It is also versatile as it can be used for safe access to the windshield and other parts of the aircraft, and eliminated the need for a boom lift or boom lift driver. Through using the windshield access platform, the risk of falling from heights when accessing and cleaning of the windshield has been reduced.

"ST Aerospace Engineering is committed to ensuring the well-being of all her employees through continuous improvement in Occupational Safety and Health management and practices."

Mr. Cheng Teck Meng, Harold

Vice President – DGM Ops-Commercial & BAS, ST Aerospace Engineering Pte Ltd

ST Aerospace Services Co Pte Ltd

Landing Gear Braces Replacement

ST Aerospace Services specialises in aircraft maintenance, repair and overhaul, and other aircraft modifications. This includes Boeing converted freighters, cabin and in-flight entertainment upgrades, winglet modifications, fleet standardisation programme and heavy maintenance checks for more types of aircrafts. As part of the maintenance work activities, the workers are required to remove the existing landing gear of the Boeing 777 and replace with a new set.

To carry out this task, the workers will manually lift up the landing gear braces and align them to the desired positions using the existing ground equipment. This process usually requires at least 18 workers to support the braces as the braces are heavy. However, the limited work area of the aircraft wheel well, restricts the number of manpower that are allowed to support the braces. This is not only labour intensive but also increases the risk of work-related ergonomics injuries to the workers.

To address the issue, ST Aerospace Services developed the landing gear braces replacement, an extension arm which can be easily attached to the existing ground equipment. The extension arm supports the weight of the braces and allows access to the desired position of the aircraft easily. Since its implementation, ST Aerospace Services has seen an improvement in productivity and man-hour cost savings. The number of workers needed to carry out the task of installing the braces has decreased from 18 workers to 4, and the time required to install the braces has also been reduced from 300 minutes to 180.

"Bearing in mind the ST Aerospace's mission statement of 'We Keep Aircraft Flying Safely', we are committed to have a safe environment by continuous improvement so that our employees can deliver quality aircraft to fly safely."

Ms. Lee Hui Fung

Deputy General Manager (Operations, Paya Lebar), ST Aerospace Services Co Pte Ltd

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