UPDATES & NETWORKING SESSION 2019 (CENTRAL)

Product Certification and Inspection Services

ROHANA BINTI WAGIO
Sales & Business Development Section
Product Certification and Inspection Department

23 October 2019

Overview of Our Product Certification & Inspection Services



Product Certification
(Accredited to ISO/IEC 17065)

- Electrical & Electronic
- Telecommunication & Multimedia
- Industrial & Consumer



Inspection Services
(*Accredited to ISO/IEC 17020)*

- Engineering Inspection
- Inspection on Behalf of Other Foreign Inspection Bodies



Personnel Certification
(Accredited to ISO/IEC 17024)

BENEFITS…

- Improvement & consistency in **Product Quality**
- Improvement in **production efficiency** and **reduction of wastage**
- Customer **confidence** in the Product Compliance to a specification
- **Protection** to consumers.
- Broader **market penetration.**

Regulated Products: Mandatory Compliance to Standards

PRODUCTS	REGULATORY BODY
Consumer & Road Safety Products	Road Transport Dept. (JPJ) and Ministry of Domestic Trade, Co-operatives and Consumerism (KPDNHEP)
34 Categories of Electrical Equipment (Domestic)	Energy Commission (ST)
9 Categories of Fire Safety Products	Fire & Rescue Services Dept. (BOMBA)
14 Categories of Construction Material	Construction Industry Development Board (CIDB)
6 Categories of Water Reticulation and Plumbing equipment	National Water Service Commission (SPAN)
Any apparatus with communication ability operate within a specific frequency band	Malaysian Communications and Multimedia Commission (SKMM)

SIRIM Label

Labels For Regulated Products







SIRIM label for electrical products regulated by Energy Commission

Previous









New



SIRIM label for motorcyclist helmets regulated by Road Transport Department

SIRIM Label



SIRIM label for fire protection equipment regulated by Fire and Rescue Department



SIRIM label for other regulated products



SIRIM label for certified non-regulated products

New





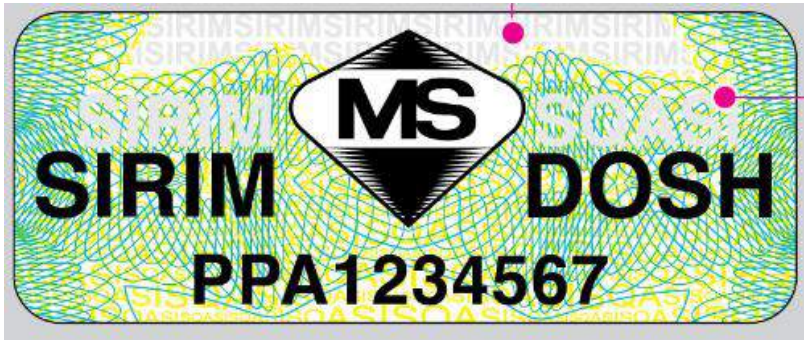
SIRIM label for products regulated by KPDNHEP

New





Label for



LABEL DOSH – PPE products

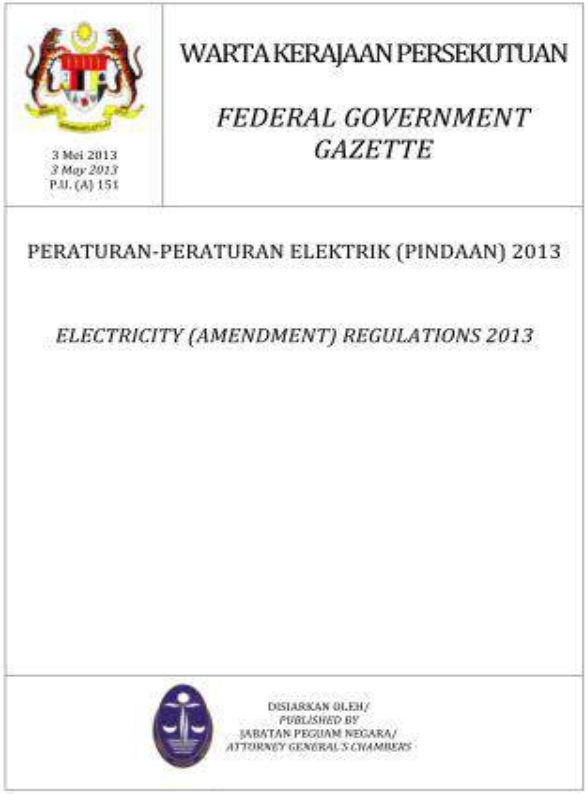
Range of SIRIM Product Certification Scheme

- ✓ Product Certification Scheme
- ✓ PV Module Certification Scheme, MS IEC 61215 (Crystalline Si), MS IEC 61646 (thin-film)
- ✓ NGV Workshop Certification Scheme, MS 1096
- ✓ Ready-Mixed Concrete Certification Scheme, CIS 21
- ✓ Product Listing Scheme
- ✓ Modular Coordination Verification Scheme, MS 1064
- ✓ Eco-Labeling Scheme
- ✓ Type Approval for Communication, Multimedia & Hybrid Product
- ✓ Gold Hallmarking



PRODUCT CERTIFICATION (Electrical & Electronics)

Act & Regulation



Previous











34 PRODUCT CATEGORIES UNDER THE ENERGY COMMISION

Energy Star Label / Energy Efficiency Labelling

Minimum Energy Performance Standards (MEPS)

Six (6) MEPS regulated products are mandatory to be affixed with Energy Star Label/ Energy Efficiency Labelling;

- Televisions
- Air Conditioners
- Refrigerators
- Fans
- Lamps
- New Washing machines





Endorsement Label used by Suruhanjaya Tenaga (Energy Commission)

New

Entry no 6 to the EC's Energy Efficiency Product using MEPS (Minimum Energy Performance Standards)

WASHING MACHINE,
effective on the
1st September 2018

Automatic
Without dryer,
capacity less than 16kg



Type Approval for Communication, Multimedia & Hybrid Product

Facts

All pure communication apparatus or equipment needs to be certified under CMA 1998 and Communication and Multimedia (Technical Standards) Regulations 2000 [Reg 14].



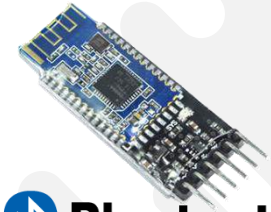
This also include apparatus or equipment which is integrated with communication module for connecting to public communication network or for radiocommunications utilizing band up to 420 THz, which shall be subjected to multiple regulations and requirements.

It is known as hybrid equipment such as, but not exhausted to, electrical appliances, computer products, medical devices and toys.



COMMUNICATION MODULES

(Frequency up to 420THz)



Bluetooth™

Authorized frequency:
2400 MHz - 2500 MHz



Authorized frequencies:
E-GSM: 900 MHz
GSM: 1800 MHz
3G/UMTS: 900 MHz
3G/UMTS Sub-Band E: 2100 MHz

LTE Band 1: 2100 MHz
LTE Band 3: 1800 MHz
LTE Band 5: 850 MHz
LTE Band 7: 2600 MHz
LTE Band 8: 900 MHz
LTE Band 38: 2600 MHz
LTE Band 40: 2300 MHz

Wi Fi



Authorized frequencies:
2400 MHz - 2500 MHz
5150 MHz - 5350 MHz
5470 MHz - 5650 MHz
5725 MHz - 5875 MHz



RFID

Authorized frequency:
919 MHz – 923 MHz
13553kHz - 13567kHz

DVB T2



Authorized frequency:
UHF 470 – 860 MHz



NFC

Authorized frequency:
13.56 MHz

Telephony: Fax Card



Technical Code:
SKMM MTSFB TC T001:2013
CETS-T/SPC/003

Note: The frequencies listed shall only serve as a guide. For the complete list of authorized frequencies, please refer to MCMC Technical Codes/Class Assignment/Apparatus Assignment/ Spectrum Plan.

DEVICES + COMMUNICATION MODULES



Electrical & Electronics (13 items)

Medical Devices (4 items)

Remote Controlled Toys & Games (2 items)

Computers & others (9 items)

+ + + +

Communications Modules

=

HYBRID PRODUCTS CERTIFICATION

ABCD12345678

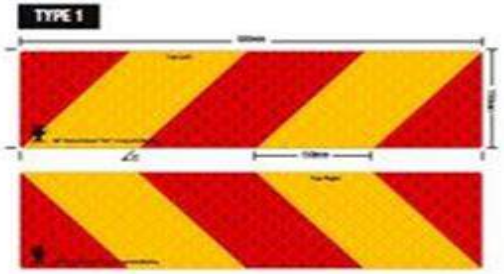
PRODUCT CERTIFICATION (Industrial & Consumers)

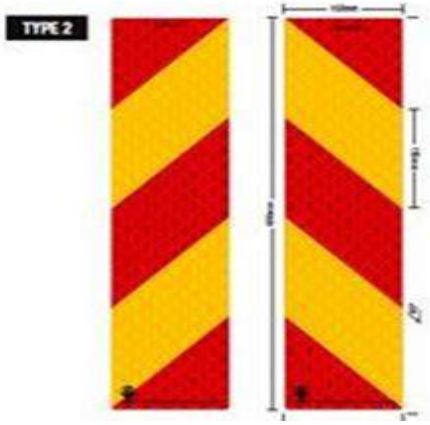
Mandatory Compliance to Standards

Road Transport Department (JPJ) and/or Ministry of Domestic Trade and Consumer Affairs (KPDNHEP) stipulates in their respective rules, Consumer & Road Safety products must bear MS Mark, when on sale

- Helmet for motorcyclist,
- Safety belt,
- New pneumatic tyres for land vehicles,
- Re-treaded pneumatic tyres for land vehicles,
- Replacement Brake lining for power driven vehicles,

Rear & Side Marking For Commercial Vehicle, compliance to **MS 828** , starting **January 2017**













New

TINT FILM CERTIFICATION

TINT FILM ON GLAZING OF ROAD VEHICLES

(MS 2669 : 2017)



The Ministry of Domestic Trade and Consumer Affairs had launched "GARIS PANDUAN PEMATUHAN STANDARD FILEM PENGHADANG HABA KENDERAAN" on 19 June 2019

New

EMERGENCY TRIANGULAR REFLECTOR CERTIFICATION

INTERNATIONAL

Certification of

EMERGENCY TRIANGULAR REFLECTOR FOR MOTOR VEHICLES

(MS 2294 : 2010)



Domestic Gas Cooking Appliances Certification

New

Enforcement 1 October 2019

Energy Commission (EC)

Certification of DOMESTIC GAS APP (LPG)

(MS 1535 : PART 2 : 2002) or (BS EN 30)







Maximum Marked of
Gas Consumption is
14 kW (Combine burners)
5.8 kW (Individual burner)

Mandatory Compliance to Standards

Fire & Rescue Services Department.
Product Certification is required as a condition for renewal of BOMBA's Sijil Perakuan Bahan

	9 Product Categories
1	"KELUAR / EXIT" Sign light
2	"KECEMASAN / EMERGENCY" Sign light
3	Fire Door Set
4	Fire Roller Shutter Set
5	Bricks - Clay, Cement Brick/Block
6	Insulation Materials, Ceiling (Class 0 Material)
7	Hollow Concrete Blocks
8	Fire Alarm Panels
9	Fire Extinguishers

Mandatory Compliance to Standards

Product Certification is required as a condition for obtaining Perakuan Pematuhan Standard (PPS) by CIDB

	Product Category
1	Sanitary Wares
2	Ceramic Tiles
3	Ceramic Pipes & Fittings
4	Cement
5	Pre-Fabricated Timber Roof Truss System
6	Precast Concrete Piles
7	Insulation Materials & Radiant Barrier
8	Architectural glass (Low E, Reflective, Solar, laminated, Tempered)
9	Asbestos-free Fibre Cement Flat Sheet
10	Radiant Barrier
11	Iron & Steel Products (Scaffolding, Reinforcement Bar, Tin plate)
12	Aluminium
13	Ready-Mix Concrete
14	Reinforced Concrete Components

Mandatory Compliance to Standards

Product Certification / Inspection / Testing Report is required as condition to be listed as Pembekal Prodak Bekalan Air by the National Water Service Commission (SPAN)

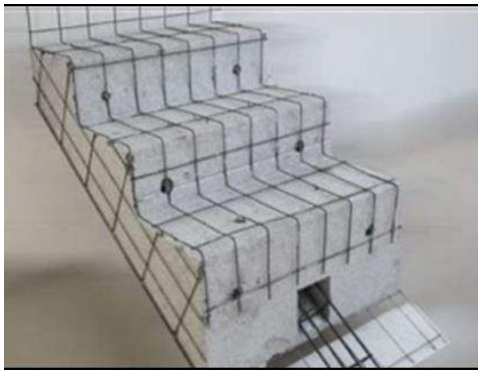
	Product Category
1	PRODUCT FOR WATER TREATMENT (Coagulant, Flocculant, Softening Agent, PH Adjustment, Disinfection & Flouridation)
2	PRODUCTS USED FOR THE CONVEYANCE OF WATER (Pipes, Tubes and Fitting)
3	PRODUCT FOR STORAGE OF WATER (Water tanks)
4	OTHER WATERWORKS MECHANICAL EQUIPMENT AND INSTALLATION (Valves, Penstock, Meter)
5	SANITARY FITTINGS (Taps, Cistern , Sanitary Appliance)
6	SEWERAGE SYSTEM (PreFab Septic Tank, Small Sewerage Treatment System, Package Plant & Std Sewage Treatment Plant)

New

INDUSTRIALISED BUILDING SYSTEM (IBS) CERTIFICATION







Regulated by CIDB – Launching of **IMPACT** programme 17 January 2019

IMPACT- based on the **CIS 24:2018** IBS Manufacturer & Product Assessment & Certification.

New

PERSONNEL PROTECTION EQUIPMENT (PPE) CERTIFICATION

Requirements under **Factories and Machinery Act 1967, Occupational Health and Safety Act 1994 and Regulations. 7 types of PPE which required DOSH approval**

1.Respiratory protection



2.Hearing Protection



3.Eye Protection



4.Hand Protection



5.Foot Protection



6.Head Protection



7.Body Protection



1st October 2019: Employer must ensure these PPE use in workplaces have SIRIM-DOSH" label.

Eco-Labelling Scheme

>80 ECO-LABELLING CRITERIA AVAILBLE IN SIRIM

http://standards.sirimsts.my

>130 LICENSES ISSUED

Sectors Involved are

Building & Construction

Chemical

Water Supply

Lamp and Accessories

Office Equipment

Metal Fabrication

Fire Protection Product

Agriculture

Packaging

Consumer Product

Food Serving

SIRIM Eco-Labelling Scheme

BENEFITS

- Increase marketability of the products to environmentally conscious consumers
- Opportunity to supply to the Government Green Procurement (GGP) which set a target of 20% procurement of green product/services by 2020 and 100% in 2030.
- High-scoring point in MyHIJAU Directory

myhijau@greentechmalaysia.my

UN Marking Scheme

Applied on packaging to imply complying with the UN Marking Requirements in MS 1513 series - “Recommendation on the Packaging of Dangerous Goods”, AND safe to contain DG

24 Licenses have been issued - malaysiancertified.com.my













9 CLASSICIATION OF HAZARDOUS SUBTANCES

Class 1 – Explosive
Class 2 – Gas
Class 3 – Flammable Liquids
Class 4 – Flammable Solid
Class 5 – Oxidizing Substances & Peroxides
Class 6 – Toxic & Infectious Substances
Class 7 – Radioactive Materials
Class 8 – Corrosive Substances
Class 9 – Other Hazardous Substances

Need packaging with 

NAN0*Verify* Program

- A voluntary verification program for products with claims to have nano-elements in the range of 1 to 100 nm(nanometer)
- NANO*Verified* is the mark that will be awarded upon successful completion of NANO*Verify* program



- The mark is applied on finish products or smallest packaging unit to signify it has been verified and characterized to contain nanomaterials.

NAN0*Verify* Program

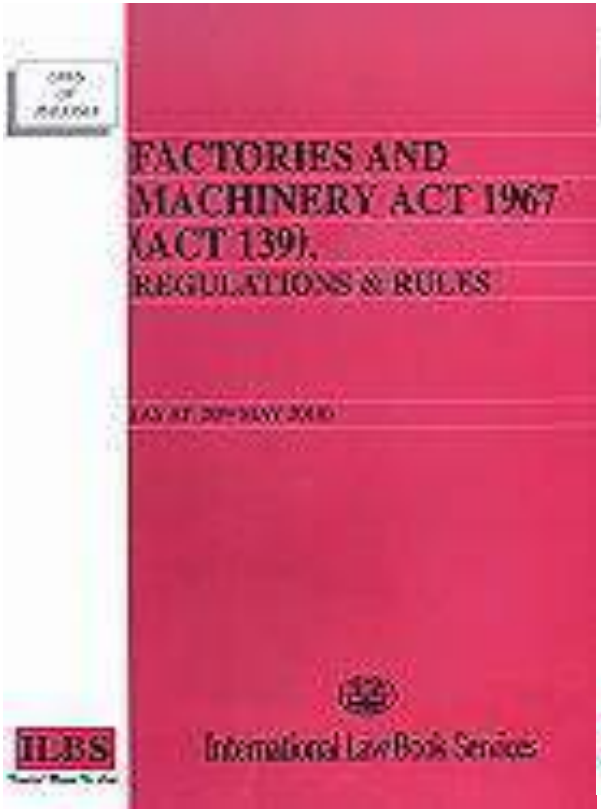
- NANO*Verify* program is operated in collaboration with Nano Verify Sdn. Bhd.

- The certificate is valid for 2 years and surveillance audit will be conducted yearly to maintain the certification.

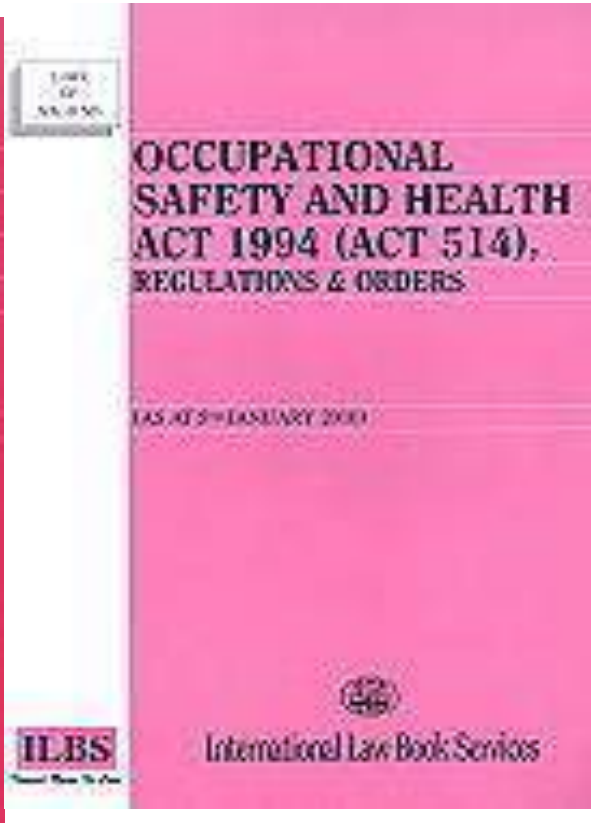
- Benefits of NANO*Verify* program
  - Helps genuine products in the market
  - Increase public trust in nanotechnology
  - Facilitate trade
  - Certifies the presence of nanomaterials based products

INSPECTION SERVICES

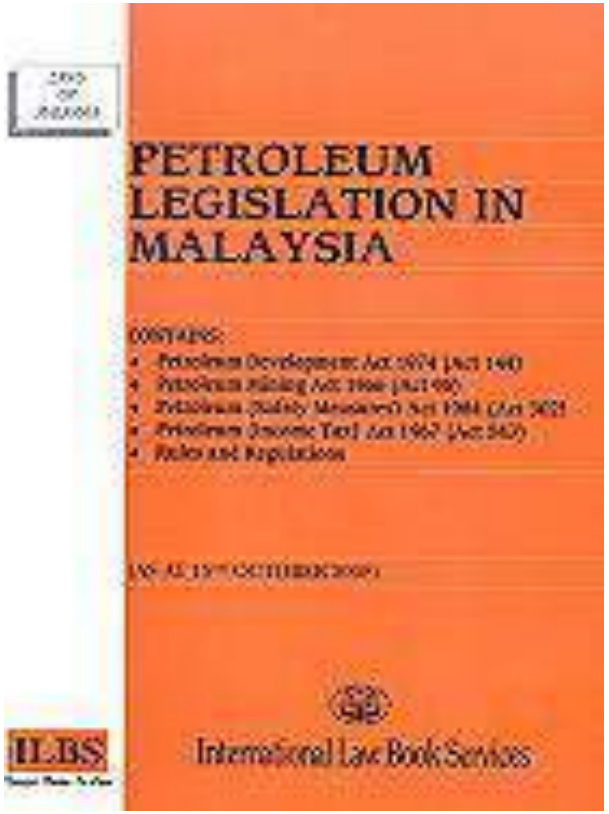
APPLICABLE ACT & REGULATION



- Inspecting Authority
- Boiler
- Pressure Vessel
- Lifting Devices
- Machineries
- Inspection



- Duties of Manufacturer
- Duties of Suppliers
- Designed to be safe
- Construct to be safe
- Installed to be safe
- Inspection



- Petroleum Safety Measures
- Pipeline works
- Gas Supply
- Inspection

3rd Party Inspecting Authorities (Factory and Machinery Act)

Independent Inspecting Authority for :-

- **Designs verification of *new* steam boilers, unfired pressure vessels, pipelines, cranes, and other non-pressurised steel structures.**
- **Inspection and test of *new* and *in-service* of steam boilers, unfired pressure vessels, pipelines, cranes and other non-pressurised steel structures.**
- **Qualification of Welding Procedure Specification (WPS) and Welder Performance Qualification Test (WPQT) – ASME**
- **Inspection of Pressurized Hot Work Enclosure System.**
- **Non-Destructive and Destructive Assessment including failure analysis and asset integrity (Thermograph and Ultrasonic).**
- **Risk Based Inspection (RBI)**
- **Design verification, inspection and test of *used* steam boilers, unfired pressure vessels and lifting equipment.**

3rd. Party Inspection Services for Unfired Pressure Vessel



LPG TANK





AUTOCLAVES



AIR COMPRESSOR





AIR RECEIVER

3rd. Party Inspection Services for Lifting Equipment



Crawler crane



Truck- Mounted crane



Container Crane



Overhead Travelling Crane

General Inspection Services

Inspection of vehicle with Green Diesel Engine (DOE)

Inspection of imported Used Tyres intended for retreaded industries (MITI)

Inspection of Pre-Fabricated Constructions Component / Item as a condition for obtaining Perakuan Pematuhan Standard (PPS) from CIDB

USED TYRE IMPORT FACILITIES SCHEME FOR NON-RETREADERS

New







Customs (Prohibition of Imports) (Amendment)(No.2) Order 2016

- Requiring all importation of used pneumatic tyres and used retreaded tyres, rubber classified under HS (harmonized system) codes Heading 4012, to be accompanied by a **Letter of Approval (LoA)** issued by or on behalf of SIRIM Berhad

PERSONNEL CERTIFICATION

SIRIM Personnel Certification : WELDERS

- To examine a welder's capability to produce weld of acceptable quality against a well defined Welding Procedure Specification (WPS).



- ISO 9606-1(Steel),
- Fusion Welding (Plate/Pipe)



- The scheme is structured in accordance with ISO/IEC 17024 (Two Stage Assessment: Knowledge & Performance)
- Surveillance - Every 6 month
- Re-Certification – Every 3 Years

SIRIM Personnel Certification : INSTALLER OF PRESSURIZED HOT WORK ENCLOSURE (PHWE)





Pressurized Hot Work Enclosure (PHWE) offers a practical engineering solution in managing and controlling the risks associated for carrying out hot work and use of other sources of ignition in classified hazardous areas (explosive environment).

SIRIM Personnel Certification : INSTALLER OF PRESSURIZED HOT WORK ENCLOSURE (PHWE)

Installer should have certain level of knowledge in ;

- **Hazardous Area Ex protection type**
- **OHS requirements in hazardous area,**
- **Ex equipment inspection and handling**
- **PHWE installation and dismantling requirements**

Two Stage Assessment :

- KNOWLEDGE ASSESSMENT - Written Examination
- PRACTICAL ASSESSMENT- Pre-Assembly, Assembly (Thermography : Heat Leaks) and Dismantling

IECEx Certification : Personnel Competence (CoPC)

International Electrotechnical Commission

International Electrotechnical Commission
System for Certification to Standards relating to equipment for use in Explosive Atmospheres

CERTIFICATE OF ACCEPTANCE

IECEx Certification Body

This is to certify that

SIRIM QAS International Sdn Bhd

is an Accepted IECEx Certification Body (ExCB) within the *IECEx Scheme for Certification of Personnel Competencies (CoPC) for Explosive Atmospheres* in accordance with the *Scheme Rules of Procedure, IECEx 05*

Chris Agius
IECEx Executive Secretary
June 2013

The scope and currency of this Certificate may be confirmed by visiting the IECEx Web Site at www.iecex.com

IECEx Certification

- Hazardous areas are areas where flammable liquids, gases or vapours or combustible dusts exist in sufficient quantities to produce an explosion or fire.
- Examples
  - Oil refineries, rigs, processing plants and pipelines
  - Refuelling activity or petrol stations
  - Chemical processing plants
  - Printing industries, paper and textiles
  - Surface coating industries
  - Underground coalmines
  - Sewerage treatment plants
  - Grain handling and storage
  - Woodworking areas
  - Sugar refineries
  - Metal surface grinding, especially aluminium dusts and particles

IECEx Certification : Personnel Competence (CoPC)

- Scheme that provides the global Ex industries with a single system for the assessment and qualification of persons meeting the competency prerequisites needed to properly implement the safety requirements based on International Standards IEC 60079 series covering explosive atmospheres.

- Provides the international Ex industries with a qualification system that is transportable across borders

- To date, more than 337 personnel local and foreigner have been certified as competence by SIRIM QAS

SIRIM Personnel Certification
CoPC Unit of Competence

Unit of Competence	
Ex 000	Basic knowledge and awareness to enter a site which includes a classified hazardous area
Ex 001	Apply basic principles of protection in explosive atmospheres
Ex 003	Install explosion-protected equipment and wiring systems
Ex 004	Maintain equipment in explosive atmospheres
Ex 005	Overhaul and repair of explosion-protected equipment
Ex 006	Test electrical installations in or associated with explosive atmospheres
Ex 007	Perform visual and close inspection of electrical installations in or associated with explosive atmospheres
Ex 008	Perform detailed inspection of electrical installations in or associated with explosive atmospheres
Ex 009	Design electrical installations in or associated with explosive atmospheres
Ex 010	Perform audit inspection of electrical installations in or associated with explosive atmospheres

IECEx Certification : Personnel Competence (CoPC)

Application to IECEx CB

Scope
Qualifications
Job details
Experience

Knowledge

ASSESSMENT

Performance


IECEx Certificate
Personnel Competence

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

Certificate No.: IECEx CP SIRM14.0056 Issue No.:0

Status: Current

Date of Original Issue: 2014-09-12
Date of Expiry: 2017-09-12

Applicant: MANSOR BIN LAMAN

Scope of Competence: Ex 603 - Installation - Based on IEC 60079-14
(Units according to IECEx OD 504)

For Detailed information on Scope Application in accordance with IECEx OD 502 click on PCAR Number below:

PCAR Reference No.: MY/SIRM/PCAR14.0056/00

This certificate is issued as verification that the Applicant was assessed and found to comply with the IECEx CoPC Scheme requirements, relating to the scope of Competence and referenced Standards listed above. This certificate is granted subject to the conditions as set out in IECEx CoPC Scheme Rules, IECEx 05 as amended.

Approved for issue on behalf of the IECEx Certification Body: MUHAMMAD NAZIF BIN ZAKARIA

Position: DEPUTY CERTIFICATION MANAGER

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

SIRIM QAS International Sdn. Bhd.
Building 8, SIRIM Complex
No. 1, Persiaran Dato' Menteri
Section 2, P. O. Box 7035
40700 Shah Alam
Selangor Darul Ehsan
Malaysia

SIRIM QAS INTERNATIONAL

Annexe:

Website Registration

Reassessment - 5 years

Note: For further detail information please refer to www.iecex.com/

IECEx Service Facilities

IECEx Certification : IECEx SERVICE FACILITIES

International Electrotechnical Commission

International Electrotechnical Commission
System for Certification to Standards relating to equipment for use in Explosive Atmospheres

CERTIFICATE OF ACCEPTANCE

IECEx Certification Body

This is to certify that

SIRIM QAS International Sdn Bhd

is an Accepted IECEx Certification Body (ExCB) within the IECEx Certified Service Facilities Program in accordance with the Scheme Rules IECEx 03 - IECEx Certified Service Facilities Program covering repair and overhaul of Ex equipment – Rules of Procedure

Chris Agius
IECEx Secretary
March 2011

The scope and currency of this Certificate may be confirmed by visiting the IECEx Web Site

IECEx Certification : IECEx SERVICE FACILITIES

- IECEx 03-2 Selection of equipment for Ex installation
- IECEx 03-3 Installation and initial inspection
- **IECEx 03-4 Maintenance and inspection**
- **IECEx 03-5 Repair and overhaul of Ex equipment** (e.g motor, junction box)



INTERNATIONAL PARTNERS

Business Partners

- ✓ ESTABLISHED BILATERAL MUTUAL RECOGNITION TO FACILITATE TWO WAYS TRADE THROUGH MOU, SPECIFIC AGREEMENTS, ETC.
- ✓ MANDATED TO PERFORM AUDIT/INSPECTION FOR MORE THAN 10 FOREIGN CERTIFICATION BODIES SUCH AS CSA, VDE, DEKRA, JQA, JET, ASTA, SABS, SEMKO, FIMKO, NSAI, LCIE, NEKO, TUV MProduct Services, SAI, CQC, KTL, SASO, KTC & TEI.
- ✓ CONDUCTED MORE THAN 500 AUDIT/INSPECTIONS ON BEHALF OF THESE FOREIGN BODIES ANNUALLY.
- ✓ PROVIDE OTHER THIRD PARTY INSPECTION/AUDITING RELATED TO QUALITY and ECO-LABEL.

Current Foreign Business Partners

SIRIM QAS INTERNATIONAL

JET

Japan Electrical Safety & Environment Technology Laboratories.

VDE Testing And Certification Institute (Fed. Rep.of Germany)

ASTA Certification Services (UK)

Japan Quality Assurance Organization (JQA)

SEMKO AB (Sweden)

C SA US

CSA International, Canada

nsai

National Standard Authority of Ireland (NSAI)

FI

SGS FIMKO LTD (Finland)

Certified Product

Australian Standard

SAI Global Assurance Services

NF

LCIE (France)

DEKRA

The Thailand Environmental Institute (TEI)

Korea Testing Laboratory (KTL)

ICTC

Korea Testing Certification

DER BLAUE ENGEL

Blue Angle (Germany)

CQC

China



www.sirim-qas.com.my email:ask.pci@sirim.my tel:603-55445636