

CERTIFICATE OF ACCREDITATION

In terms of section 22(2) (b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act 19 of 2006), read with sections 23(1), (2) and (3) of the said Act, I hereby certify that:-

MASC MARKSCHEME AND TRAINING (PTY) LTD

Co. Reg. No.: 2018/368042/07

Facility Accreditation Number: **C83**

is a South African National Accreditation System accredited facility
provided that all SANAS conditions and requirements are complied with

This certificate is valid as per the scope stated in the accompanying scope of accreditation,
Annexure "A", bearing the above accreditation number for

PRODUCT CERTIFICATION

The facility is accredited in accordance with the recognised International Standard

ISO/IEC 17065:2012

While this certificate remains valid, the accredited facility named above is authorised to
use the relevant accreditation symbol to issue facility reports and/or certificates

Mr F Osman
Acting Chief Executive Officer

Effective Date: 09 May 2025
Certificate Expires: 31 January 2029

ANNEXURE A

SCOPE OF ACCREDITATION

Facility Number: **C83****Permanent Address of Facility:**

MASC Markscheme And Training (Pty) Ltd
Unit 5 Lelytapark
45 Jurg Avenue
Hennopspark
Centurion
0157

Management Signatory:

Mr W Mouton

Postal Address:

P O Box 14344
Clubview
Gauteng
0014

Nominated Representative:

Mr W Mouton

Tel: (012) 653 - 2959**Issue No.:** 11**Cell:** 082 394 3331**Date of Issue:** 13 January 2026**E-mail:** tonym@masc-ex.co.za**Expiry Date:** 31 January 2029

MASC Markscheme And Training (Pty) Ltd complies with the accreditation criteria for certification bodies as laid down in ISO/IEC 17065:2012 and guidelines in ISO/IEC 17067:2013, and is authorised to provide certification for the following schemes:

Certification Scheme (MS-P-BM Rev 0)	Type	Standard/Spec	Description of Standard/Specification
---	------	---------------	---------------------------------------

IAF 2: Mining and Quarrying

SM-P-CRN Certification Requirements Non-Ex Rev 1	Type 5	SANS 1484:2007	Permitted explosives
		SANS 1717-1:2023	The design of detonator initiation systems for use in mining and civil blasting applications Part 1: Electronic initiation systems
		SANS 1717-2:2023	The design and approval of detonator initiation systems for use in mining and civil blasting applications Part 2: Electric initiation system - Shot exploder based.
		SANS 1717-3:2023	The design and approval of detonator initiation systems for use in mining and civil blasting applications Part 3: Controlled blasting systems

IAF 14: Rubber and Plastics Product

MS-P-CRN Certification Requirement Non-Ex Rev 1	Type 5	SANS 968:2013	Conveyor Belting - Textile reinforced solid woven carcass construction
		SANS 971:2013	Conveyor Belting - Methods of testing fire retardant properties of all conveyor belting constructions
		SANS 1173:2024	Conveyor Belting - General Purpose textile-reinforced construction
		SANS 1366:2013	Conveyor belting - Steel cord reinforced construction
		SANS 808:2013	Cable glands for use on flameproof enclosures (Exd)
		SANS 1213:2013	Mechanical cable glands

IAF 17: Basic metals and fabricated metal products

MS_DOC_014 Rev 1	Type 5	ISO 16852:2016	Flame arresters - Performance requirements, test methods and limits for use
		SANS 1313-1:2012	Conveyor belt idlers Part 1: Troughed belt conveyor idlers (metallic and non-metallic) for idler roller rotational speeds of up to 750 revolutions per minute
		SANS 1313-2:2012	Conveyor belt idlers Part 2: Link suspended idlers and fixed form suspended idlers (metallic and non-metallic) for idler rotational speeds of up to 750 revolutions per minute

		SANS 1313-3:2013	Conveyor belt idlers Part 3: Performance specifications for troughed belt conveyor idlers (metallic and non-metallic) for idler roller rotational speeds of up to 750 revolutions per minute
IAF 18: Machinery and Equipment MS_DOC_014 Rev 1 MS-P-CRR Rev 1 MS-P-CRN Rev 1	Type 5	SANS 868-1-1:2024	Compression-ignition engine systems and machines powered by such engine systems, for use in mines and plants with explosive gas atmospheres or explosive dust atmospheres of both Part 1-1: Hazardous locations in underground mine - Basic explosion protected engines
		SANS 868-1-2:2022	Compression-ignition engine systems and machines powered by such engine systems, for use in mines and plants with explosive gas atmospheres or explosive dust atmospheres of both Part 1-2: Hazardous locations in underground mines - Explosion protected engine systems
		SANS 868-1-3:2024	Compression-ignition engine systems and machines powered by such engine systems, for use in mines and plants with explosive gas atmospheres or explosive dust atmospheres of both Part 1-3: Hazardous locations in underground mines - Machines
		SANS 1589-1:2022	The requirements for braking systems of underground trackless mobile machines Part 1: Design, performance and testing requirements
		SANS 1589-2:2022	The requirements for braking systems of underground trackless mobile machines Part 2: In service brake testing of underground trackless mobile machines and trailer combinations
		SANS 1589-3:2022	The requirements for braking systems of underground trackless mobile machines Part 3: In-service brake testing (trailers excluded)
		SANS 1589-5:2012	The braking performance of trackless mobile mining machines Part 5: Self-propelled machines using hydrostatic drive systems
		SANS 1589-6:2012	The braking performance of trackless mobile mining machines Part 6: Self-propelled road-going vehicles modified for mining use
		SANS 1589-7:2012	The braking performance of trackless mobile mining machines Part 7: Tractor and tractor-towed trailers
IAF 19: Electrical and Optical Equipment			
MS-P-CR Certification Requirement Rev 3 (IEC 80079-34)	Type 5	SANS/ IEC 60079-0:2019	Explosive atmospheres Part 0 – General Requirements
		SANS/ IEC 60079-1:2015	Explosive atmospheres Part 1 – Equipment protection by flameproof enclosures “d”
MS-P-CRR Certification Requirement Repairs Rev1(IECEX OD 314-5/315-5)	Type 5	SANS/IEC 60079-2:2015	Explosive atmospheres Part 2 – Equipment protection by pressurized enclosures “p”
		SANS/ IEC 60079-5:2023	Explosive atmospheres Part 5 – Equipment protection by powder filling “q”
SM-P-CRN-Certification Requirement Non-Ex Rev1	Type 5	SANS/ IEC 60079-7:2023	Explosive atmospheres Part 7 – Equipment protection by increased safety “e”
		SANS/ IEC 60079-10-1:2023	Explosive atmospheres Part 10-1: – Classification of areas – Explosive gas atmospheres
		SANS/ IEC 60079-10-2:2018	Explosive atmospheres Part 10-2: Classification of areas - Combustible dust atmospheres
		SANS/ IEC 60079-11:2024	Explosive atmospheres Part 11 – Equipment protection by intrinsic safety “i”
		SANS/ IEC 60079-14:2014	Explosive atmospheres Part 14: Electrical installations design, selection and erection
		SANS/ IEC 60079-15:2022	Explosive atmospheres Part 15: Equipment repair Overhaul and reclamation
		SANS/ IEC 60079-16:1990	Electrical apparatus for explosive gas atmospheres Part 16: Artificial ventilation for the protection of analyser(s) houses
		SANS/ IEC 60079-17:2014	Explosive atmospheres Part 17: Electrical installations inspection and maintenance
SANS/ IEC 60079-18:2022	Explosive atmospheres Part 18 – Equipment		

	protection by increased safety “m”
SANS/ IEC 60079-19:2021	Explosive atmospheres Part 19: Equipment repair. Overhaul and reclamation
SANS/ IEC 60079-25:2021	Explosive atmospheres Part 25: Intrinsically safe
SANS/ IEC 60079-26:2022	Explosive atmospheres Part 26: Equipment with separation Elements or combined Levels of protection
SANS/ IEC 60079-28:2016	Explosive atmospheres Part 28: Protection of equipment and transmission systems using optical radiation
SANS/ IEC 60079-29-1:2022	Explosive atmospheres Part 29-1: Gas detectors - performance requirements of a detectors for flammable gases
SANS/ IEC 60079-29-2:2017	Explosive atmospheres Part 29-2: Gas detectors - selection, installation, use and maintenance for flammable gases and oxygen
SANS/ IEC 60079-30-1:2023	Explosive atmospheres Part 30-1: Electrical resistance trace heating - General and testing requirements
SANS/ IEC 60079-31:2023	Explosive atmospheres Part 31 – Equipment dust ignition protection by enclosure “t”
SANS/ IEC 60079-33:2023	Explosive atmospheres Part 33 – Equipment protection by special protection “s”
SANS/ IEC 60079-35-1:2013	Explosive atmospheres Part 35-1: Caplights for use in mines susceptible to firedamp-General requirements-construction and testing in relation to the risk of explosion
SANS/ IEC 60079-35-2:2013	Explosive atmospheres Part 35-2: Caplights for use in mines susceptible to firedamp-Performance and other safety-related matters
SANS/ IEC 60079-46:2017	Explosive atmospheres Part 46: Equipment assemblies
SANS/ISO/IEC 80079-36: 2016	Explosive atmospheres Part 36: Non-electrical equipment explosive atmospheres-Basic method and requirements
SANS/ISO/IEC 80079-37: 2016	Explosive atmospheres Part 37: Non-electrical equipment explosive atmospheres-non-electrical type of protection constructional safety “c” control of ignition source “b” liquid immersion “k”
ISO/IEC 80079-34:2018	Explosive atmospheres Part 34: Application of Quality Management System for Ex Product Manufacture. IECEx OD 315-5/315-5 Quality Management System Requirements for IECEx Service facilities involved in the repair, overhaul, and reclamation of Ex equipment
SANS 60529:2013	Degrees of protection provided by enclosures (IP Code)
SANS 1438:2018	Portable light assemblies for underground use in mines
SANS 1515-1:2020	Gas measuring equipment for use in mines Part 1: Battery-operated portable, flammable gas measuring instruments and warning devices
SANS 1515-2:2022	Gas measuring equipment for use in mines Part 2: Fixed, transportable and vehicle-mounted flammable gas measuring and warning sensor heads and instruments.
SANS 10086-1:2023	The installation, inspection and maintenance of equipment used in explosive atmospheres Part 1: Installations including surface installations on mines

SM-P-CRN- Certification Requirement Non-Ex Rev 1	Type 5	SANS 10086-2:2013	The installation, inspection and maintenance of equipment used in explosive atmospheres Part 2: Electrical equipment installed underground in mines
		SANS 10086-3:2018	The installation, inspection and maintenance of equipment used in explosive atmospheres Part 3: Repair and overhaul of equipment
		SANS 10108:2023	The classification of hazardous locations and the selection of equipment for use in such locations.
		SANS 10120	Power-operated dispensing devices for flammable liquid fuels
		SANS/ IEC 60034-1:2023	Rotating electrical machines Part 1: Rating and performance
		SANS/ IEC 60034-2-1:2014	Rotating electrical machines Part 2-1: Standard method for determining losses and efficiency from tests (excluding machines for traction vehicles)
		SANS/ IEC 60034-5:2022	Rotating electrical machines Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code) - Classification
		SANS/ IEC 60034-23 :2021	Rotating electrical Machines Part 23: Repair Overhaul and reclamation
		SANS/ IEC 60034-30-1:2014	Rotating electrical machines Part 30-1: Efficiency classes of line operated AC motors (IE code)
		SANS 10242-1:2017	The rewinding and refurbishing of rotating electrical machines Part 1: Low-voltage three-phase induction motors
		SANS 1804-1:2012	Induction motors Part 1: IEC requirements
		SANS 1804-2:2012	Induction motors Part 2: Low-voltage three-phase standard motor
		SANS 1239:2004	Plug socket outlet and coupler for industrial purposes- Part 2: Dimensional interchangeability requirements for pin and contact-tube accessories
		SANS/IEC 60309-1:2022	Plug socket outlets and couplers for industrial purposes- Part 1: General requirements
		SANS/IEC 60309-2:2022	Plug socket outlet and couplers for industrial purposes- Part 2: Dimensional interchangeability requirements for pin and contact-tube accessories
		SANS 1489-1:2016	Electrical connectors in group I and II hazardous areas – Part 1: General requirements for group I hazardous areas
		SANS 1489-2:2023	Electrical connectors in group I and II hazardous areas – part 2: restrained type plug and sockets for group I hazardous areas
		SANS 1489-3:2023	Electrical connectors in group I and II hazardous areas Part 3: Bolted type plugs and sockets for group I hazardous areas
		SANS 1489-4:2022	Electrical connectors in group I and group II hazardous areas Part 4: Medium voltage couplers and adaptors for group I hazardous areas
		SANS 1520-1:2022	Flexible electric trailing cables for use in mines Part 1: Cables with operating voltages of 640/1 100V and 1 900/3 300 V
		SANS 1520-2:2017	Flexible electric trailing cables for use in mines Part 2: Cables with operating voltage of 3,8/6, 6kV to 19/33kV
		SANS 475:2022	Luminaires for interior lighting, streetlighting and floodlighting - Performance requirements
		SANS 60598-1:2021	Luminaires Part 1: General requirements and tests
		SANS 60598-2-1:2020	Luminaires Part 2: Particular requirements section 1: fixed general purpose luminaires
		SANS 60598-2-2:2013	Luminaires Part 2-2: Particular requirements – Recessed luminaires
		SANS 60598-2-3:2013	Luminaires Part 2-3: Particular requirements - Luminaires for road and street lighting
		SANS 60598-2-5:2016	Luminaires Part 2-5: Particular requirements - floodlights

Original date of Accreditation: 01 February 2018

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

Accreditation Manager