

M-TEC

Company Profile



2024. 04. 01

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Overview M-TEC

Malelela Taihan Electric Cable also known as M-TEC

Has been a leading player in the cable industry in South Africa for over 50 years. Established in 1911, M-TEC has developed into a market leader in the wire and cable industry and today the company is ranked as one of South Africa's largest manufacturers and suppliers of Aluminum overhead conductors, copper products, low and medium voltage power cables and various optical fibre cable

Company location : 273 General, Hertzog
Peacehaven Vereeniging

Company Dimension : 90,000m²

Company Workforce : 350 persons

Company shareholder : CIH(51%)
Taihan (49%)

Factory : 5 manufacturing plants

B-BBEE : Level 1



Company Vision & Mission Statement

Mission

We Are All In One To Ensure Customer Satisfaction With Our Best Service On Time

Vision

To Help The World To Become Closer And Brighter

Core Value

Global standard through insight, innovation and Operational Excellence

Shareholder's Profile



<https://www.ciholdings.co.za>

Community Investment Holdings (CIH) is a 100% black owned, women led company with a consolidated group turnover in excess of R20 billion, diversified between **Healthcare, ICT, Power & Energy, Logistics, Mining and Infrastructure development**. Some of its premium investments includes Afrocentric limited(Medscheme), Temo Coal, Jasco Electronics Holdings, Tamasa Investment Holdings as well as property development interests.



Dr. Theresa Mokgokong

Group Executive Chairperson
BSc, UB, MB ChB, D Comm (hc)
Honorary Consul General of Iceland in Pretoria.



Mr. Joe Madungandaba

Group Chief Executive Officer
Member of South Africa Institute of Professional Accountants (SAIPA)
University of South Africa(UNISA), Cranfield School of Management (UK)
Wharton Business School (USA).

Shareholder's Profile

※ As of 2022



<https://www.taihan.com/en>

Established

Korea's first electric cable company
(Predecessor company
Chosun Electric Wire Co., Ltd. 1941)

1955

Largest shareholder

※Hoban Group

**Hoban
E&C Co., Ltd.**

Revenue

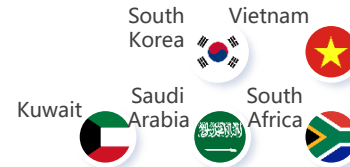
KRW
**2.4505
Trillion
(\$1.81 billion)**

Employees

335 in HQ, 541 in factories
663 in branch offices and
subsidiaries

1,539

Production base



Product & Service

**Manufacture, supply
and construct cables in fields of
electricity, renewable energy,
communications and base metal**

- | | | | | | |
|------|--|------|---|------|--|
| 1941 | Established Chosun Electric Wire Co., Ltd. | 1964 | Became Korea's first company to export cables | 1980 | Constructed SCR (Southwire Continuous Rod) factory |
| 1955 | Established Taihan Electric Wire Co., Ltd. | 1968 | Listed on the stock exchange | 1983 | Established the Technology Research Center |
| 1957 | Produced PVC jacket cable | 1975 | Built Anyang cable plant | 1984 | Built the Anyang optical fiber cable factory |
| | | 1978 | Built EHV OF cable plant | 1996 | Built new VCV tower and EHV cable factory |

1940~1950s | **Beginning of history** 1960~1970s | **Initial establishment of power grid** 1980~1990s | **Expedited growth of projects**

2020s | **New Taihan in HOBAN**

- 2021 Largest shareholder changed to Hoban E&C Co., Ltd.
- 2023 Broke ground for a submarine cable plant in Dangjin
Acquired ESG Composite Grade A for 3 consecutive years (KCGS)

2010s | **Accelerated global localization**

- 2011 Built Dangjin plant
- 2016 Established Taihan Vina, a production base in Vietnam
- 2017 Established Saudi Taihan, a joint venture in Saudi Arabia

2000s | **Building global production bases**

- 2000 Founded a South Africa subsidiary M-TEC
- 2005 Established TSC, a production base in Vietnam
- 2007 Won "\$1 billion Export award" on the 4th Trade Day
Built Dangjin Cable Accessory Plant

Company B-BBEE Verification

Broad Based BEE status level :

A level ONE contributor to B-BBEE

B-BBEE procurement recognition level : 135%

Black Ownership : 51.00%


Black Female Ownership : 31.36%

Black Designated Group Percentage: 4.59%

Black Youth Percentage : 4.59%

Black New Entrant Percentage : 51.00%

Empowering Supplier : YES



Broad-Based Black Economic Empowerment Verification Certificate

MALESELA TAIHAN ELECTRIC CABLE (PTY) LTD
(T/A M-TEC)

Certificate Number: 01/B-BBEE/2025/00389/GEN

Registration Number: 2000/007692/07
VAT Number: 4450188612
Head Office Location: 1 Steel Road, Peacehaven, Vereeniging, Gauteng, 1939

Verification Standard Applied: DTI Codes of Good Practice on Black Economic Empowerment
Issue of the Rating Standard Applied: Section 9 of the B-BBEE Amendment Act 46 of 2013
Scorecard Applied: Generic (>R50 million)

B-BBEE Level: A level ONE contributor to B-BBEE
B-BBEE Procurement Recognition Level: 135%
Financial Year Rated: 2024/12/31


Element	Element weighting	Score
Ownership	25	25.00
Management Control	19	11.95
Skills Development	20	18.18
Enterprise and Supplier Development	42	42.15
Socio-Economic Development	5	5.00
Y.E.S Initiative Bonus Points		0.00
Overall Score	111	102.28

Empowering Supplier	Yes	Black Ownership	51.00%
Designated Group Supplier	No	Black Female Ownership	31.36%
Modified Flow Through Applied	No	Black Designated Group Percentage	4.59%
Exclusion Principle Applied	No	Black Youth Percentage	4.59%
Discounting Principle Applied	No	Black Disabled Percentage	0.00%
Participated in Y.E.S Initiative	No	Black Unemployed Percentage	0.00%
Achieve Y.E.S Target and 2.5% Absorption	N/A	Black People Living in Rural Areas Percentage	0.00%
Achieve 1.5 x Y.E.S Target and 5% Absorption	N/A	Black Military Veterans Percentage	0.00%
Achieve Double Y.E.S Target and 5% Absorption	N/A	Black New Entrant Percentage	51.00%

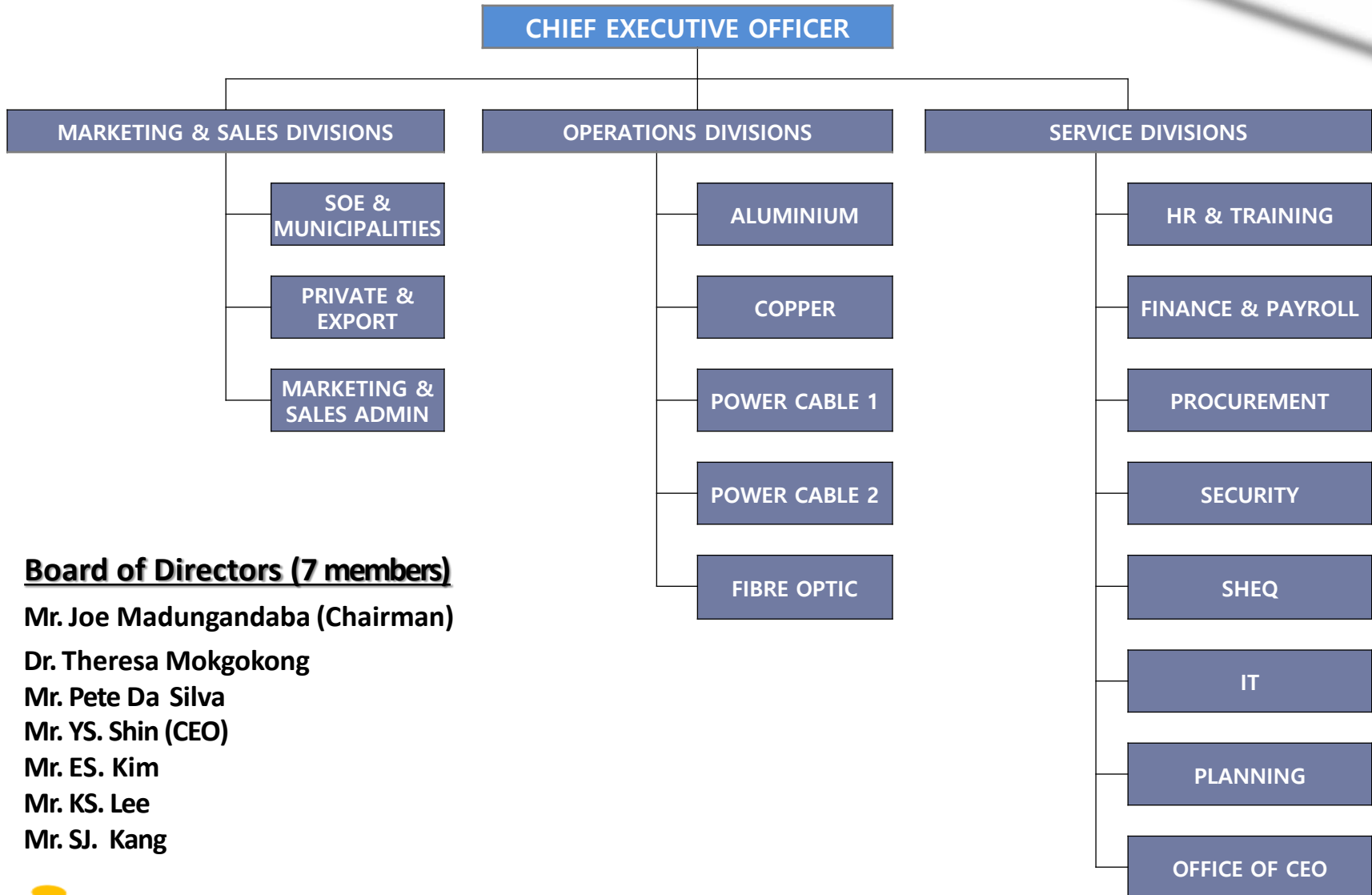
This verification certificate and verification report is based on information provided to Amax BEE Verifications (Pty) Ltd and represent an independent opinion based on the verification and analysis completed by Amax BEE Verifications (Pty) Ltd. The calculation of the scores has been determined in accordance with the DTI Codes of Good Practice on Black Economic Empowerment as Gazetted. Gazettes 36928, 41866, 41975 and 42496

Erik Botha (Technical Signatory)
For Amax BEE Verifications (Pty) Ltd
tel: 012 761 7850
260 Jack Hindon Street | Pretoria North | 0182
PO Box 16949 | Pretoria North | 0216

Date of issue: 9 October 2025
Re-issue Date: N/A
Expiry date: 8 October 2026
Period of validity: 12 Months



Company Organization



Board of Directors (7 members)

Mr. Joe Madungandaba (Chairman)

Dr. Theresa Mokgokong

Mr. Pete Da Silva

Mr. YS. Shin (CEO)

Mr. ES. Kim

Mr. KS. Lee

Mr. SJ. Kang

Company History

- **1911** Union Steel Corporation(USKO) was founded
- **1927** Copper conductor, wire & strip produced
- **1961** Aluminum conductor produced
- **1970** PVC Cable produced
- **1980** LV XLPE Cable produced
- **1985** CCV insulation extruder (Nokia) installed, MV XLPE production started
- **1998** USKO's Wire Division was taken over by Malesela Technologies Pty Ltd. (CIH)
- **2000** Taihan Electric/Korea joined with 49 % Shares (CIH 51 %), and renamed as M-TEC
- **2001** Fibre Optic Cable Plant established, supply FOC to Telkom
- **2003** OPGW line was installed (sole manufacturer of OPGW in the Region)
- **2003** SABS ISO 9001:2000 was obtained
- **2011** 100 years anniversary
- **2016** 33kV XLPE power cable developed (SABS)
- **2017** Bells, Split concentric, control cables, MV ABC developed (SABS)
- **2021** Procure AMSA building
- **2023** Investment for new CCV #2

M-TEC Products in Factory

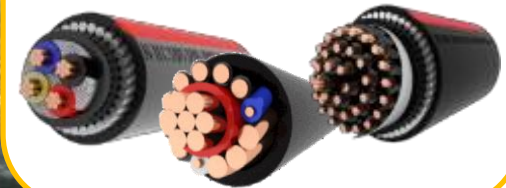
Power Cable Plant 1

1. MV XLPE Cable (1~33kV)
2. Mains Copper and Aluminum
3. ABC (LV, MV)



Power Cable Plant 2

1. Low Voltage Service connection cable
 - Concentric Neutral & Earth (CNE)
 - Split Neutral Earth (SNE)
2. Low Voltage Bell Cable
3. Low Voltage Control Cable



Aluminum Plant

1. ACSR (66~765kV)
2. AAAC
3. AAC
4. Al Strip
5. ACCC
6. OPGW



Fiber Optic Plant

1. FTTH Indoor cable
2. Fibre Optic Drop Cable
3. ADSS
4. HDD (Heavy duty duct)
5. Micro duct Optic Fibre Cable
6. CST (Corrugated Steel tape) Armored
7. Uni-Tube Metallic (CTS)
8. Uni-Tube Non-Metallic



Copper Plant

1. Solid Wire
2. Stranded Copper Conductor
3. Bunched Copper Wire
4. Contact Wire for Railway
5. Copper Strip

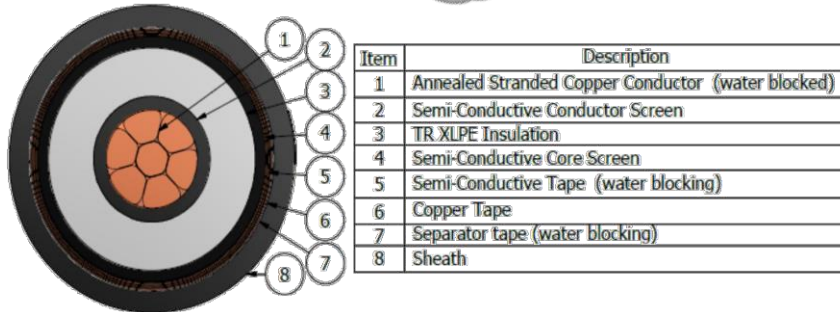


Power Cable 1 Factory

MV Single Core XLPE Cables

(SANS 1339)

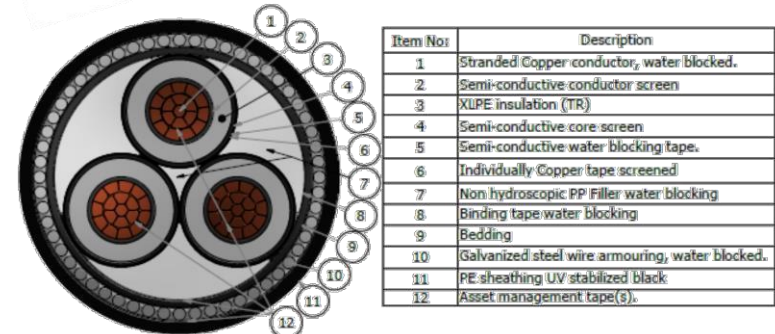
- **Conductor: Class 2 of compacted circular or circular stranded plain copper or aluminium**
- Size range:
 - ✓ 6.6 & 11kV: 35mm² - 300mm² (Cu), 50mm² - 630mm² (Al)
 - ✓ 22kV: 50mm² - 300mm² (Cu), 50mm² - 630mm² (Al)
 - ✓ 33kV: 50mm² - 300mm² (Cu), 50mm² - 630mm² (Al)



MV 3 Core XLPE Cables

(SANS 1339)

- **Conductor: Class 2 of compacted circular or circular stranded plain copper or aluminium**
- Size range:
 - ✓ 6.6 & 11kV: 35mm² - 300mm² (Cu), 35mm² - 300mm² (Al)
 - ✓ 22kV: 35mm² - 300mm² (Cu), 35mm² - 300mm² (Al)
 - ✓ 33kV: 50mm² - 300mm² (Cu), 50mm² - 300mm² (Al)

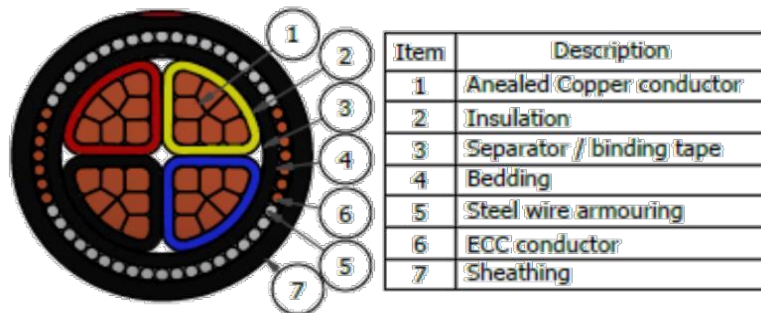
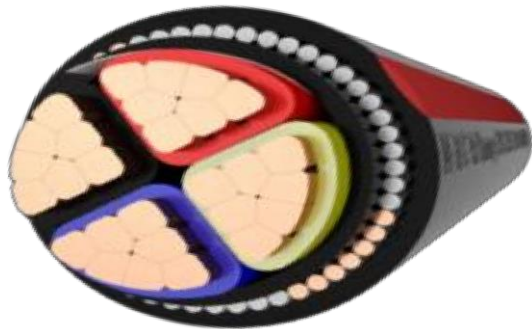


Power Cable 1 Factory

Low Voltage PVC / XLPE (SANS 1507)

Plain Annealed stranded Copper and Aluminum conductor

- **Offering:**
 - ✓ 1 Core, Circular Shaped Stranded AL or CU Conductor
 - ✓ 3 / 4 Core, Sector Shaped Stranded AL or CU Conductor
- **Size range 0.6 / 1.0 kV & 1.9 / 3.3 kV:**
 - ✓ 1 Core : 25 - 630mm²
 - ✓ 3 / 4 Core : 25 - 300mm²



Low Voltage PVC / XLPE (SANS 1507)

Solid Aluminum conductor

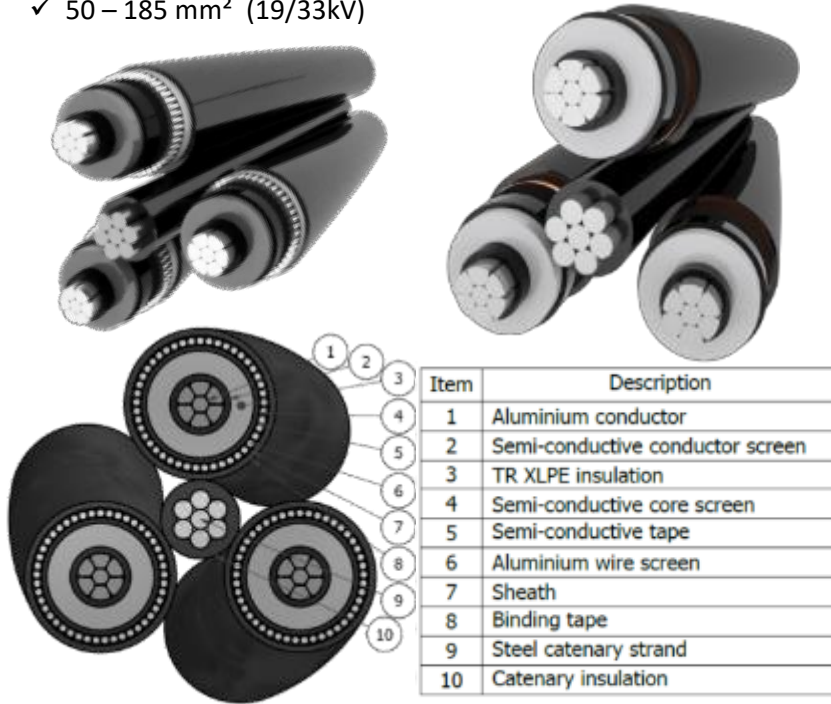
- **Offering:**
 - ✓ 3 / 4 Core, Sector Shaped Solid Aluminum Conductor
- **Size range 0.6 / 1.0 kV & 1.9 / 3.3 kV:**
 - ✓ 3 Core : 25 - 300mm²
 - ✓ 4 Core : 25 - 300mm²



Power Cable 1 Factory

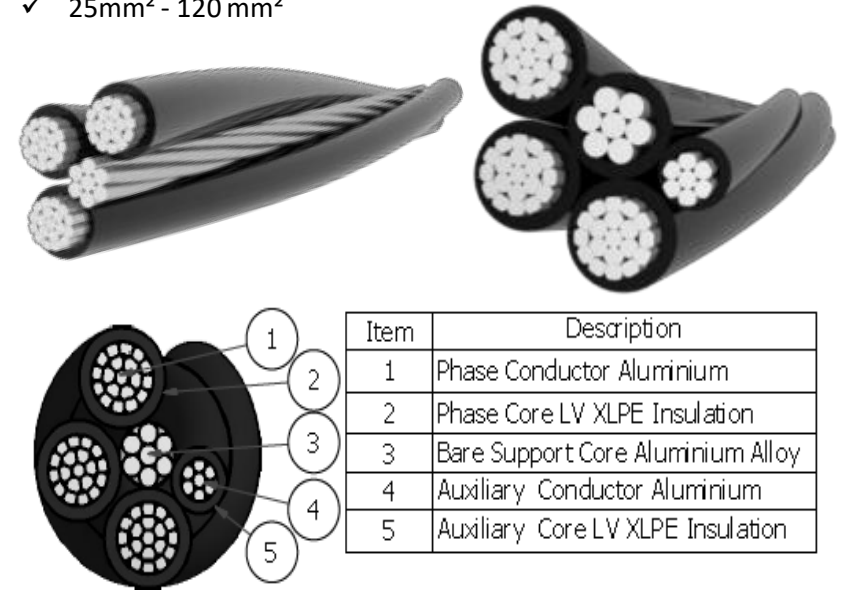
MV ABC Cables (SANS 1713)

- Aluminium, XLPE insulated, FR PVC + Catenary Support
- Size Range -Type A (Armoured)
 - ✓ 95 – 185 mm² (3.8/6,6kV, 6.35/11kV, 12.7/22kV, 19/33kV)
- Size Range -Type B (Unarmoured)
 - ✓ 35 – 185 mm² (3.8/6,6kV, 6.35/11kV, 12.7/22kV)
 - ✓ 50 – 185 mm² (19/33kV)



ABC (Aerial Bundled Conductor) (SANS 1418)

- ABC cable manufactured by M-TEC complies with SANS 1418 / ESKOM standard DSP 34-1803
- ABC Types:
 - ✓ Self Supported System
 - ✓ Insulated alloy support
 - ✓ Bare Neutral Support
- Size range 0.6 / 1.0 kV :
 - ✓ 25mm² - 120 mm²



Power Cable 2 Factory

Low Voltage Control PVC SWA Cable

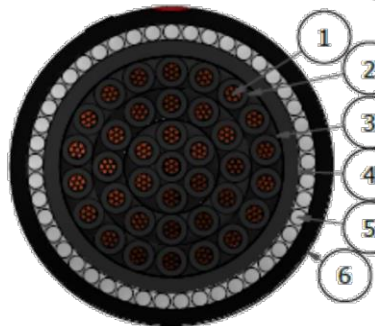
(SANS 1507)

Plain Annealed stranded copper conductor to SANS 1507

- **Size range - 0.6 / 1.0 kV:**
 - ✓ 5 Cores : 1.5 – 16mm²
 - ✓ 7+ Core : 1.5 – 4mm²

5, 7, 12, 19, 24, 27 and 37 core Control cables are most common;

However M-TEC is capable of manufacturing other core numbers on request.



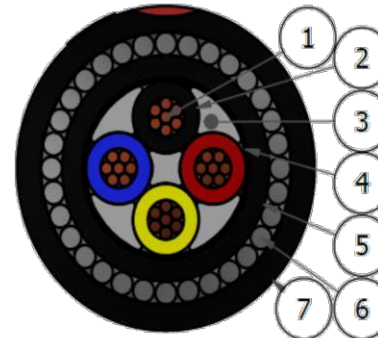
Item	Description
1	Annealed Copper conductor
2	PVC insulation
3	Binding /separator tape
4	Bedding
5	Steel Wire Armour
6	Sheath

Low Voltage Bell PVC SWA Cable

(SANS 1507)

Plain Annealed stranded copper conductor to SANS 1507

- **Offering:**
 - ✓ 2 / 3 / 4 Core, Copper stranded circular
- **Size range - 0.6 / 1.0 kV & 1.9 / 3.3 kV:**
 - ✓ 2 / 3 / 4 Core: 1.5 - 25mm²



Item	Description
1	Annealed Copper conductor
2	Insulation
3	Filler
4	Binding tape
5	Bedding
6	Steel wire armour
7	Sheath

Power Cable 2 Factory

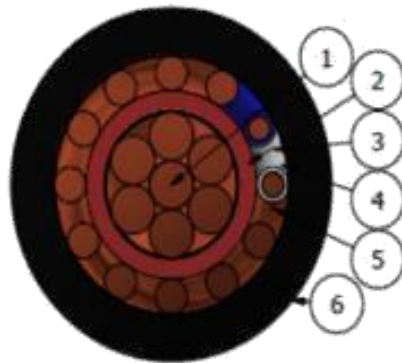
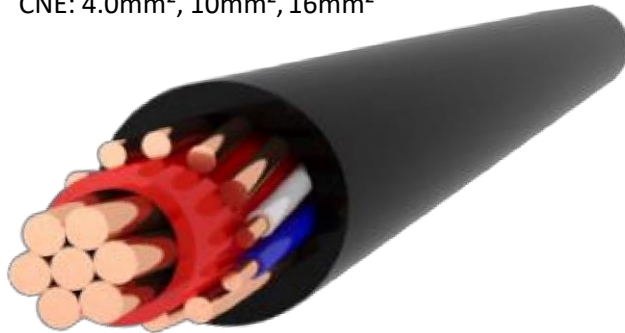
LV Service Connection Cable - CNE

(SANS 1507-6)

Concentric Neutral & Earth (CNE)

Plain hard drawn stranded copper conductor to SABS 1507-6 /ESKOM Specification DISSCAAC7

- Size Range:
 - ✓ CNE: 4.0mm², 10mm², 16mm²



Item	Description
1	HD Copper conductor
2	XLPE Insulation red UV stable
3	Bare Copper concentric wires
4	Pilot conductor
5	Communication cores PE insulated white and blue
6	PE sheath UV stable

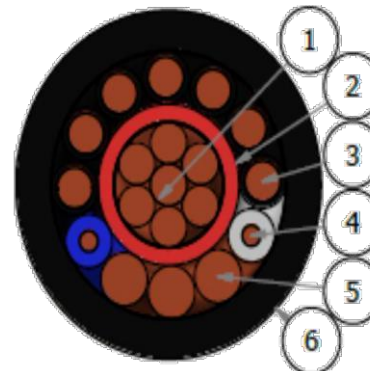
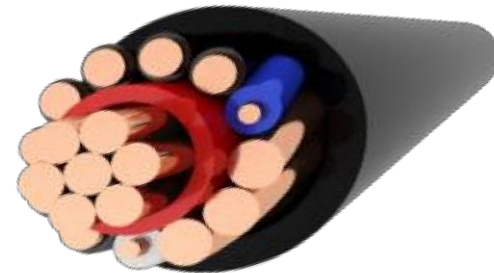
LV Service Connection Cable – SNE

(SANS 1507-6)

Split Neutral & Earth (SNE)

Plain hard drawn stranded copper conductor to SABS 1507-6/ ESKOM Specification DISSCAAC7

- Size Range:
 - ✓ SNE: 10mm², 16mm²



Item	Description
1	HD Copper conductor
2	XLPE insulation red UV stable
3	Black PE covered neutral wires
4	Communication cores PE insulated white and blue
5	Bare earth conductor wires
6	PE sheath UV stable

Aluminium Factory

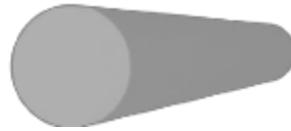
Aluminium Overhead Conductors 66kV-765kV range (SANS 182-3)

- AAC – All Aluminium Conductors
- AAAC – Aluminium Alloy
- ACSR – Aluminium Conductors Steel Reinforced
- ACCC (High Temperature Low Sag)



Aluminium Wire (SANS 182-2)

- EC Grade (1350):
 - ✓ 0.30mm to 9.00mm diameter



Alloy Wire (SANS 182-2)

- Alloy grades:
 - ✓ 1.50mm to 8.50mm diameter
 - ✓ straight lengths up to 6m



Aluminium Strip (SANS 182-2)

Size Range:

- 3.3 mm × 1.90 mm up to
19.0 mm × 3.0 mm



Aluminium Profiles (SANS 182-2)

Profile:

- Sector Shaped Solid Conductors
- 90°, 120°, and 180° Sectors

Size Range:

- 25 mm² up to 300 mm²



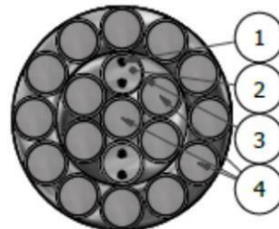
OPGW Factory

Optical Fibre Ground Wire(OPGW)

M-TEC's OPGW series provide an entirely new form of telecommunication in that is made up of a ground for aerial power lines, which contain optical fibers. The product is designed to resist strong winds, lightning and short circuit current. This product meet both the electrical and mechanical equivalent of conventional ground wire.

General Application:

- Power line protection system
- Power line operation system
- Maintenance data information system
- Monitoring & controlling electrical power system



Item	Description
1	Fiber optics
2	Thixotropic gel
3	Stainless steel tube
4	Aluminium clad steel wires



Product Profile

M-TEC Product Profile (1/2)

Product Category		No Of Core(s)	Copper Size Range (mm2)	Aluminium Size Range (mm2)	Water Blocking	Metallic Core Screen	Armouring			Sheath	Specification with Certificate
							Type A		Type B		
							SW A	AW A	None		
Medium Voltage Power Cable	3.8/ 6.6 kV – 19/ 33kV XLPE	1/3	50-300	50-630	WB or Standard	CTS/CWS	YES	YES	YES	FR, LH, ZH, PE	SANS
	ABC 3.8/ 6.6 kV – 19/ 33 kV XLPE	3	-	95-185	-	CTS	-	YES	YES	FRPVC	SANS
Low Voltage Power Cable	1 kV (CP/AP/APS)	1/ 3/ 4	16-630	25-360	-	-	YES	YES	YES	FR, LH, ZH, PE	SANS
	3.3 kV (PVC/XLPE)	1/ 3	16-630	25-360	-	-	YES	YES	YES	FR, LH, ZH, PE	SANS
	ABC 1 kV XLPE	2/ 3/ 4/ 5	-	25-120	-	-	-	-	-	XLPE (Insulation)	SANS
	Bells (1kV)	2, 3, 4	1.5-16	-	-	-	YES	YES	YES	FR, LH, ZH, PE	SANS
	Control (1kV)	7, 12, 19, 27, 37	1.5-4.0	-	-	-	YES	YES	YES	FR, LH, ZH, PE	SANS
	Service Connection (CNE/SNE)	1	4.0-16	-	-	-	-	-	-	PE	SANS

Abbreviations

CTS: Copper Tape Metallic Screen

CWS: Copper Wire Metallic Screen

AWA: Aluminium Wire Armour (non-magnetic)

SWA: Galvanized Steel Wire Armour

Type A: Armoured Cable

Type B: Unarmoured Cable

YES*: SWA Cable is Intended for DC applications only

ES#: AWA Cable can be Manufactured but not Common

Product Profile

M-TEC Product Profile (2/2)

Product Category		Aluminium Size Range		Specification		
Aluminium	AAC	All sizes range from 7 – 61 stands according to customer specification		SANS/ IECBS/ ASTM		
	AAAC					
	ACSR					
	ACCC					
	OPGW	Optical Ground Wire	Central Sus-tube or Multi Layer, as per specification/requirements kA rating	NRS/ IEC/ IEEE		
Product Category		Copper Size range	Technical Specification			
Copper	Wire	0.45mm ϕ – 20.0mm ϕ	BS 13602, BS 13601			
	Bunched	1mm ² -35mm ²	Customer Specification, SANS 1411			
	Strand	1mm ² -630mm ²	SANS 1411, SANS 182, BS 7884			
	Strip	3.00mmx 2.00mm– 30.00mmx 4.00mm	Customer Specification			
	Contact Trolley Wire	80mm ² , 107mm ² , 161mm ²	Transnet BS23-1970			
	CCS	16mm ² -70mm ²	Copper Cladded Steel Earth Conductor			
	CCA	16mm ² -630mm ²	Copper Cladded Aluminium Conductor			
			SANS			
			Customer Specification			
Product Category		Size Range	Max Span	Fibre Range	Specification	
Fibre Optic Cables	Aerial	Short Span (SSA)	100m	4-144 Fibre	In accordance with various National and International specifications, i.e. – Telkom, MTN, Neotel, Vodacom, Cell- C, Eskom, Transnet, IEC, etc.	
		Medium Span (MSA)	250m			
		Long Span (LSA)	250m-400m			
		Extra Long Span (XLSA)	400m-800m			
	Underground	HDD Single Sheath				4-144 Fibre
		HDD Double Sheath				
		HDD Blow In				
		CST Single Sheath				
		CST Double Sheath				
	Micro	Micro Duct				4-144 Fibre
FTTH Drop		2-12 Fibre				
FTTH Indoor		2-12 Fibre				

Copper Factory

Copper Wire Conductors and Strip (SANS 182-1)

Contact Wire (trolley wire)

- Size range: 80mm² to 161 mm²
- Condition: Hard drawn to BS23 / BS EN 50149

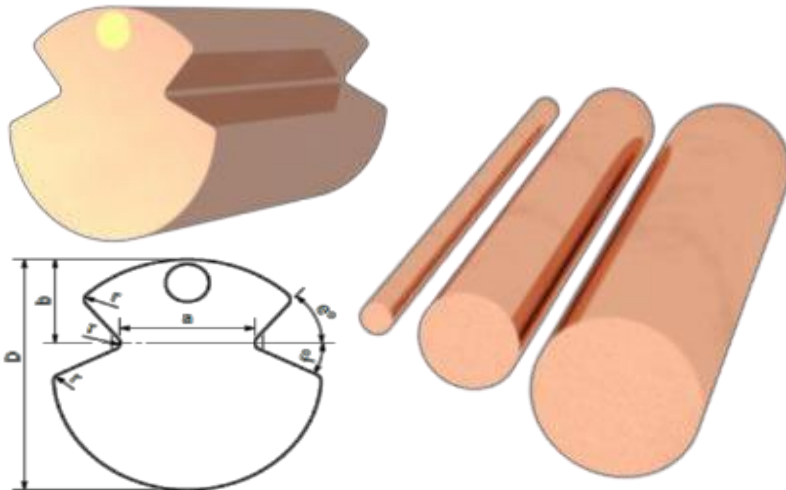
Solid Copper wire

Single wire size range:

- From 0.20mm up to 19.00mm diameter

Condition:

- Annealed, hard drawn and medium hard to BS 4109 – 1970 and BS 1433-1970



Copper Wire Conductors and Strip (SANS 182-1)

Rotor Bars

- Size range: to customer specification
- Condition: Hard drawn to BS 1433 - 1970

Copper Strip

- Condition: Hard drawn, medium hard or annealed to BS 1432 – 1987

Bunched Conductors

- Various configurations to customer specifications

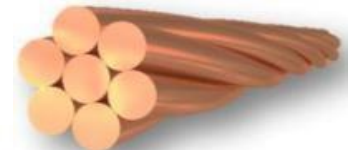
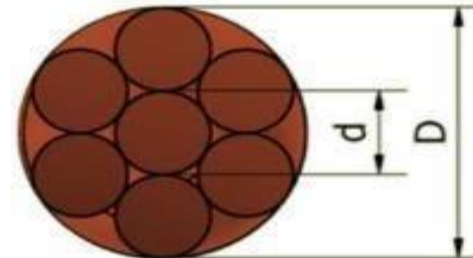
Copper Conductor

Stranded copper wire:

- From - 1.0mm² to 630mm²

Condition:

- Annealed: SABS 1411 Part 1-1986
- Hard drawn: SABS 182 Part 1-1973

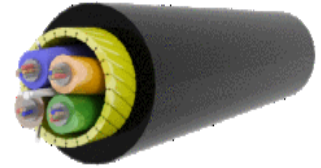


Fibre Optic Factory

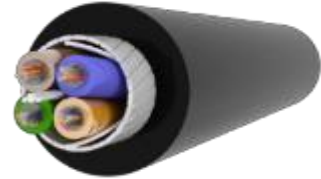
Fibre Optic Cables

Product Category	Size Range	Max Span	Fibre Range
Arial	Short Span (SSA)	100m	4-144 Fibre
	Medium Span (MSA)	250m	
	Long Span (LSA)	250-400m	
	Extra Long Span (XLSA)	400-800m	
Underground	HDD Single Sheath		4-144 Fibre
	HDD Double Sheath		
	HDD Blow-In		
	CST Single Sheath		
	CST Double Sheath		
Micro	Micro Duct	4-144 Fibre	
	FTTH Drop		
	FTTH Indoor	2-12 Fibre	

ADSS



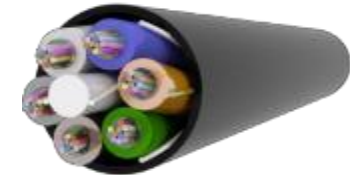
HDD



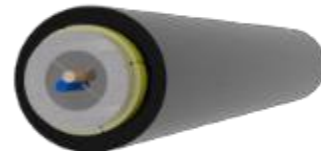
CST



Micro



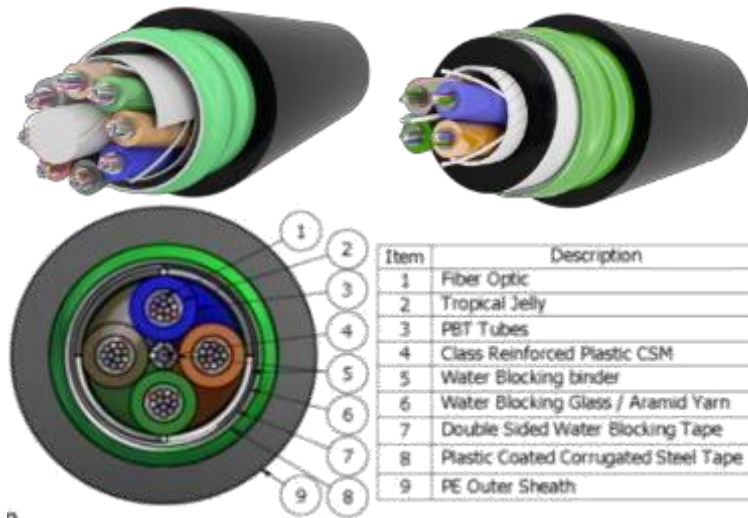
FTTH



Fibre Optic Categories

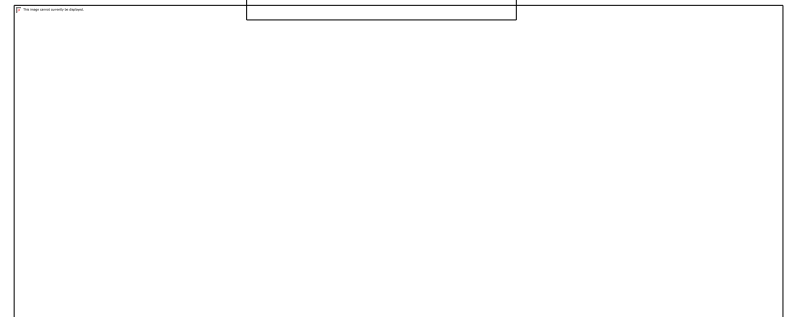
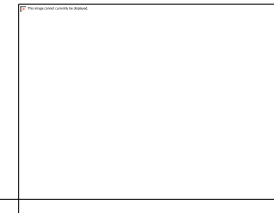
Corrugated Steel Tape (CST) Cable for Direct Buried

- Multimode and single Mode
- Rodent and termite resistant
- Corrugated steel tape amour
- Application: Direct buried or hauled into ducting
- Standard fibre count: 2-144 fibre's



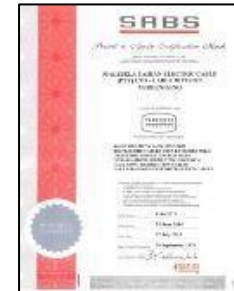
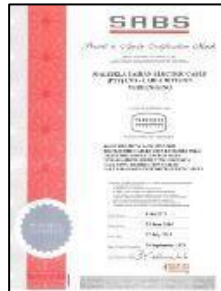
All Dielectric Self Supported (ADSS) – Aerial Cables

- Multimode and single Mode
- Round aerodynamical stable design
- Aramid pheripiral strength members
- Water Blocking (optional)
- Anti-Track sheath (optional)
- Application: Strung in air between supports
- Standard fibre count: 2-144 fibres



Accreditation and Certification

- ✓ ISO 9001 Quality Management System
- ✓ ISO 14001 Environmental Management
- ✓ ISO 45001 Health & Safety Management
- ✓ SANS 182-1 Copper Wire & Stranded Copper Conductors
- ✓ SANS 182-2 Stranded Aluminium Conductors
- ✓ SANS 182-3 Aluminium Conductor, Steel Reinforced
- ✓ SANS 1339 MV XLPE Distribution Cables (3.8/6.6kV to 19/33kV)
- ✓ SANS 1507-3 PVC Distribution Cables
- ✓ SANS 1507-4 XLPE Distribution Cables
- ✓ SANS 1507-5 Halogen Free Distribution Cables
- ✓ SANS 1507-6 Service Connection (CNE/SNE) Cables
- ✓ SANS 1713 MV ABC Cables (3.8/6.6kV to 19/33kV)
- ✓ SANS1418-1 LV ABC Cores
- ✓ SANS1418-2 LV Assembled ABC Conductor





Thank you