

SPECIFICATION**For****OVERHEAD GROUND WIRE**

Galvanized Steel Overhead Ground Wire

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CUSTOMER

Rev.	Date	Description
0	21/10/2019	Issued specification
1	18/08/2020	Add size 70 mm ²

Customer Document	Rev.

Remark:

This document is based on the Customer Document for the structure and properties of electric wire and cable only. If there are different points, will be shown in deviation table.

1. Scope

This specification cover galvanized steel overhead ground wire strand.

2. Standard

The overhead ground wire shall be manufactured and tested according to TIS 404-2540.

3. General Requirement


Galvanized steel overhead ground wire strand shall conform to high strength Class A coating steel strand and have properties as shown in proposal data.

4. Packing

The overhead ground wire shall be place on non-returnable wooden reels.

The reels shall be lagged to provide the cable with physical protection during transportation and during ordinary storage and handling operation.

Each package shall be clearly marked as follows.

1. Designation "OVERHEAD GROUND WIRE"
2. Size of wire
3. Conductor length
4. Net and gross weight
5. Manufacturer's name and trade mark "  **YAZAKI** "
6. Rolling direction of reel

Test and Inspection

Sample Tests

- Constructions..... specified in Reference 1 to 5
- Breaking Strength, kN..... specified in Reference 1 to 5
- Elongation, % specified in Reference 1 to 5
- Weight of zinc coating, g/m²..... specified in Reference 1 to 5

Definition concerning the tests

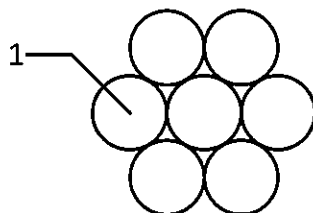
Routine tests: Tests made by the manufacturer on each manufactured length of cable to check that each length meets the specified requirements.

Sample tests: Tests made by the manufacturer on samples of completed cable or components taken from a completed cable, at a specified frequency, so as to verify that the finished product meets the specified requirements.

Type tests: Tests made before supplying, on a general commercial basis, a type of cable covered by this standard, in order to demonstrate satisfactory performance characteristics to meet the intended application.

Cable structure

Cross-sectional (Not scale)



No.	Structure	Material
1	Steel wire	Galvanized steel

Application: For overhead transmission and distribution line

REFERENCE 1**OVERHEAD GROUND WIRE****25 mm²**

a. Manufacturer/Country	SINTHANI INDUSTRY or CPL or OTHER / THAILAND	
b. Applied Standards	TIS 404-2540	
c. No. of Steel Wire	7	Strand
d. Diameter of Each Wire	2.10±0.08	mm
e. Overall Diameter (Approx.)	6.30	mm
f. Breaking Strength (Minimum)	16.15	kN
g. Elongation in 610 mm (Minimum)	4	%
h. Weight of Zinc Coating (Minimum)	214	g/m ²
i. Net Weight (Approx.)	192	kg/km
j. Length of wire per Reel	500	m

REFERENCE 2**OVERHEAD GROUND WIRE****35 mm²**

a. Manufacturer/Country	SINTHANI INDUSTRY or CPL or OTHER / THAILAND	
b. Applied Standards	TIS 404-2540	
c. No. of Steel Wire	7	Strand
d. Diameter of Each Wire	2.50 ± 0.10	mm
e. Overall Diameter (Approx.)	7.50	mm
f. Breaking Strength (Minimum)	22.85	kN
g. Elongation in 610 mm (Minimum)	4	%
h. Weight of Zinc Coating (Minimum)	214	g/m ²
i. Net Weight (Approx.)	272	kg/km
j. Length of wire per Reel	500	m

REFERENCE 3**OVERHEAD GROUND WIRE****50 mm²**

a. Manufacturer/Country	SINTHANI INDUSTRY or CPL or OTHER / THAILAND	
b. Applied Standards	TIS 404-2540	
c. No. of Steel Wire	7	Strand
d. Diameter of Each Wire	3.00 ± 0.10	mm
e. Overall Diameter (Approx.)	9.00	mm
f. Breaking Strength (Minimum)	32.9	kN
g. Elongation in 610 mm (Minimum)	4	%
h. Weight of Zinc Coating (Minimum)	259	g/m ²
i. Net Weight (Approx.)	392	kg/km
j. Length of wire per Reel	500	m

REFERENCE 4**OVERHEAD GROUND WIRE****70 mm²**

a. Manufacturer/Country	SINTHANI INDUSTRY or CPL or OTHER / THAILAND	
b. Applied Standards	TIS 404-2540	
c. No. of Steel Wire	19	Strand
d. Diameter of Each Wire	2.10 + 0.08	mm
e. Overall Diameter (Approx.)	10.50	mm
f. Breaking Strength (Minimum)	43.75	kN
g. Elongation in 610 mm (Minimum)	4	%
h. Weight of Zinc Coating (Minimum)	214	g/m ²
i. Net Weight (Approx.)	522	kg/km.
j. Length of wire per Reel	500	m

REFERENCE 5**OVERHEAD GROUND WIRE****95 mm²**

a. Manufacturer/Country	SINTHANI INDUSTRY or CPL or OTHER / THAILAND	
b. Applied Standards	TIS 404-2540	
c. No. of Steel Wire	19	Strand
d. Diameter of Each Wire	2.50 + 0.10	mm
e. Overall Diameter (Approx.)	12.50	mm
f. Breaking Strength (Minimum)	62.0	kN
g. Elongation in 610 mm (Minimum)	4	%
h. Weight of Zinc Coating (Minimum)	214	g/m ²
i. Net Weight (Approx.)	740	kg/km.
j. Length of wire per Reel	500	m