

7.1.2 Tension load shall be of maximum during the test, and minimum load giving permanent elongation of 0.2 % shall be specified with an intersection on load-elongation curve made by the line parallel to straight part of the curve with distance of 0.2 %.

7.1.3 Wire elongation shall be the gauge length of fractured test piece for original gauge length of 100 mm when the ends of the fractured test piece are fitted together carefully. Regarding the strand, after setting distance of grips so as to conform to 7.1.1, the initial load which is equivalent to 10 % of the required minimum breaking strength as specified in Table 3 shall be applied on the test piece and the total elongation at the time shall be considered as 0.1 %, then the strand elongation when strand test piece fractured shall be calculated by measuring the movement of the test machine head. Upon measuring elongation at the fracture, if the elongation value reaches the value prescribed therein before the fracture, then the measuring elongation at the fracture may not be required.

7.2 Relaxation Test Gipping the test piece at the proper distance at room temperature, the load equivalent to 80 % of the required minimum load giving the test piece permanent elongation of 0.2 % which is prescribed in Table 3 shall be applied on the test piece for about one minute, then holding the distance of grips as it is for 10 hours and decrease of the load shall be measured. The relaxation value then shall be determined as a percentage of the decreased load for the original load.

Galvanized Steel Wire Strands*

1. Scope

This standard specifies galvanized steel wire strands for use of electric power transmission lines, earth wire messenger wires, guy wires of self supported cable and stay wires as well as for similar purpose hereto, hereinafter referred to as the "steel wire strands".

2. Classification and Grade

2.1 The steel wire strands shall be classified into three kinds of No. 1 to No. 3 in accordance with the construction as given in Table 1.

Table 1

Classification	No. 1	No. 2 (a)	No. 2 (b)	No. 3 (a)	No. 3 (b)
Section					
Construction	3-wires	7-wires		19-wires	
Constructional symbol	1 x 3	1 x 7 (a)	1 x 7 (b)	1 x 19 (a)	1 x 19 (b)

2.2 The steel wire strands shall be classified into 1 to 3 grade in accordance with standard tensile strength of the individual wire.

Grade	Grade 1	Grade 2	Grade 3
Standard tensile strength of individual wire kg/mm ²	125	90	70

2.3 The steel wire strands shall be divided into Class Special A, Classes A and B in accordance with weight of zinc coating of individual wire.

Class	Special A	A	B
Weight of zinc coating	Extra thick coating	Thick coating	Thin coating

3. Manufacturing Process

3.1 The steel wire strands shall be of wire rod to conform to SWRM 17 to SWRM 22 specified in JIS G 3505-Mild Steel Wire Rods and SWRH 27, SWRH 32, SWRH 37, SWRH 42 (A, B), SWRH 47 (A, B), SWRH 52 (A, B), SWRH 57 (A, B), and SWRH 62 (A, B) specified in JIS G 3506-Hard Steel Wire Rods.