

EDS

Engineering,
GM DAEWOO Auto & Technology
Standards

METHOD OF TORSION, WINDING AND BENDING TEST FOR STEEL WIRE

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1. PURPOSE

This standard aims at examining a fractured surface condition, torsion condition and surface condition of wire when performing the torsion, winding and bending test for steel wire at more than specified angle and for more than specified time.

2. SCOPE

This standard specifies the method of torsion, winding and bending test for steel wire.

3. DEFINITIONS

3.1. Torsion test

A test to examine the torsion numbers, condition of fractured surface and torsion by applying the torsion moment to the test piece(wire with a diameter of 6.0mm or less).

3.2. Winding test

A test to examine the occurrence of defects harmful to the surface of wire and fractured or not after performing the winding test to the test piece(wire with a diameter of 6.0mm or less).

3.3. Bending test

A test to examine the occurrence of defects harmful to the surface of wire and fractured or not after performing the bending test to the test piece(wire with a diameter of 6.0mm or more).

4. TEST PIECE

4.1. The test pieces shall be taken from each ends of the wire.

4.2. The test piece shall be constructed in an appropriate length for each testing methods.

4.3. For the first approval at least 3 test piece, and for the routine quality control at least 1 test piece shall be used.

5. TESTING METHOD

5.1. Torsion test

5.1.1. Clamp both ends of the test piece firmly with the clamping distance 100 times as large as the wire diameter.

5.1.2. Stretch the test piece just hard enough not to be bent.

5.1.3. Twist one end until it fractures and examine the number of twists, the condition of fractured section and the condition of twist at that time.

5.1.4. The number of twists tested with a clamping distance other than 100 times as large as the wire diameter