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SPECIFICATION FOR
MILD STEEL WIRE FOR GENERAL ENGINEERING PURPOSES
(FIRST REVISION)

SRI LANKA STANDARD INSTITUTION

SPECIFICATION FOR MILD STEEL WIRE FOR GENERAL ENGINEERING PURPOSES [FIRST REVISION]

SLS 139: 2003

Gr. 8
(AMD 405 Attached)

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SPECIFICATION FOR MILD STEEL WIRE-FOR GENERAL ENGINEERING PURPOSES
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FOREWORD

This standard was authorized for adoption and publication as a Sri Lanka Standard by the Council of the Sri Lanka Standards Institution on 2003.01.14 after the draft, finalized by the working group on mild steel wire for general engineering purposes, had been approved by the Sectoral Committee on Engineering Materials, Mechanical systems and Manufacturing Engineering.

This is the first revision of CS 139: 1972 Specification for mild steel wire for general engineering purposes. In this edition, mainly the requirements for sizes, coating mass, and dimensional tolerances have been revised.

Guidelines for the determination of compliance of a lot with the requirements of this standard, based on statistical sampling and inspection is given in Appendix **C**.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or an analysis, shall be rounded off in accordance with **CS 102**. The number of significant places retained in the rounded off value shall be the same as that of the specified value in this standard.

In the preparation of this specification valuable assistance derived from the relevant publications of the International Organization for Standardization, British Standards Institution and Japanese Standard Association is gratefully acknowledge.

1 SCOPE

This Sri Lanka Standard covers the requirements, materials, sizes, finishes, mechanical properties and marking for drawn mild steel wire for general engineering purposes.

2 REFERENCES

ISO 377 Location and preparation of samples test pieces for mechanical testing
SLS 978 Tensile testing of metallic materials
CS 102 Presentation of numerical values

3 DEFINITIONS

3.1 zinc coated wire: Mild steel wire to which a coating of zinc has been applied as a protection against corrosion. This can be performed either by dipping in a bath of molten zinc or electro deposition in an aqueous solution of zinc salt.

3.2 coating mass: Mass of the zinc coating per unit area of wire expressed in grams per square meter

3.3 wire: Finished product with uniform circular cross section, the dimensions of the section being very small compared to the length, manufactured by cold drawing and generally supplied in coils.

3.4 length: A straight piece of drawn wire cut to a specified length.

4 DESIGNATION

The level of zinc coating shall be indicated as a quality designated by the letters A, AB, B, C or D as shown in Table **3.**

5 REQUIREMENTS

5.1 Material

The composition of mild steel used for the manufacture of wire shall comply with the following limits of phosphorus and sulphur.

Phosphorus, maximum 0.065 per cent
Sulphur, maximum 0.060 per cent

5.2 Manufacture

The mild steel wire shall be cold drawn. It shall be cleanly drawn to the nominal dimensions specified in **5.3** and physical properties as specified in Table **4** and shall be sound and free from splits, surface flaws and scale.