මෙය රාජ්‍ය භාෂාවෙන් වෙනම මුද්‍රණය කර ඇත.

ශ්‍රී ලංකා ප්‍රමිති 415 : 1977

SRI LANKA STANDARD 415 : 1977

විශ්ව දශම වර්ග කිරීම UDC 621-791-042 : 621-791-5

අත් වායු වෙල්ඩිම සඳහා මෘදු වානේ පිරවුම් කූරු පිළිබඳ පිරිවිතර

SPECIFICATION FOR MILD STEEL FILLER RODS FOR MANUAL GAS WELDING

ලංකා ප්‍රමිති කාර්යාංශය

BUREAU OF CEYLON STANDARDS

SPECIFICATION FOR MILD STEEL FILLER RODS FOR MANUAL GAS WELDING

S. L. S. 415 : 1977

Gr. 2

BUREAU OF CEYLON STANDARDS
53, Dharmapala Mawatha,
COLOMBO 3.

SRI LANKA STANDARD SPECIFICATION FOR MILD STEEL FILLER RODS FOR MANUAL GAS WELDING

FOREWORD

This Sri Lanka Standard Specification has been prepared by the Drafting Committee of the Bureau on Welding. It was approved by the Mechanical Engineering Divisional Committee of the Bureau of Ceylon Standards and was authorised for adoption and publication by the Council of the Bureau on 1977-05-11.

The diameters and lengths specified, are in accordance with the recommendations of the International Organization for Standardization.

All values given in this specification are in SI (metric) units.

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 shall be rounded off in accordance with CS 102 : 1971*. The number of significant figures to be retained in the rounded off value shall be the same as that of the specified value in this standard.

Publications of the International Organization for Standardization and the Indian Standards Institution have been consulted in the preparation of this specification and the assistance gained therefrom is acknowledged.

1. SCOPE

This specification covers requirements of mild steel filler rods for manual gas welding.

2. TERMINOLOGY

For the purpose of this standard the following definitions shall apply.

2.1 Filler Rods — Filler metal in the form of a rod.

2.2 Gas Welding — Fusion welding in which the high temperature for welding is produced by the combustion of a fuel gas or gases with an admixture of oxygen.

* C S 102 : 1971 - Presentation of Numerical Values.

3. REQUIREMENTS

3.1 Chemical Composition — The filler rods shall have the following chemical composition.

		Percentage	
		Maximum	*Minimum*
Carbon	...	0·15	0·09
Phosphorus	...	0·05	—
Sulphur	...	0·05	—
Manganese	...	0·70	0·40

3.2 Dimensions and Tolerances

3.2.1 The filler rods shall be of the following diameters with a tolerance of ± 0·08 mm.

Diameters of filler rods
mm
1·00
1·25
1·60
2·00
2·50
3·15
4·00
5·00
6·30

3.2.2 Lengths — Rods less than 2·5 mm diameter shall preferably be supplied in lengths of 500 or 1,000 mm. Rods 2·5 mm and larger in diameter shall preferably be supplied in lengths of 1,000 mm. Rods may be supplied in other lengths by mutual agreement between the purchaser and the manufacturer. Tolerance on each length of rod shall be ± 5 mm.

3.3 Workmanship and Finish — The surface of the rods shall be free from rust, grease, oil, paint, impurities and major defects. The rods may be provided with rust proofing coatings but these must not adversely affect the welding properties. The type of rust proofing generally used is copper plating. In addition, the rod should be pliable.

4. PACKING

The filler rods shall be suitably packaged, wrapped, boxed or crated to protect against injury during transit.

5. MARKING

Each package of filler rods manufactured in accordance with this Sri Lanka Standard shall be clearly marked with the following:

(*a*) Name of manufacturer and trade designation;

(*b*) Type (i.e. Mild Steel filler rods for manual gas welding);

(*c*) Diameter and Mass;

(*d*) Batch number,

6. METHOD OF SAMPLING

6.1 The location and the method of sampling shall be as agreed to between the supplier and the purchaser.

6.2 The area to be sampled shall be from the combined transverse sections obtained by bundling the rods or wires after cutting into suitable lengths or by folding. The sample shall be collected by milling out the areas.

7. TEST CERTIFICATES

The supplier shall guarantee that the welding rods in all sizes and classifications conform to this specification. The supplier's responsibility shall be limited to replacement of any welding rods that do not conform to the requirements of this specification.

SLS CERTIFICATION MARK

The Sri Lanka Standards Institution is the owner of the registered certification mark shown below. Beneath the mark, the number of the Sri Lanka Standard relevant to the product is indicated. This mark may be used only by those who have obtained permits under the SLS certification marks scheme. The presence of this mark on or in relation to a product conveys the assurance that they have been produced to comply with the requirements of the relevant Sri Lanka Standard under a well designed system of quality control inspection and testing operated by the manufacturer and supervised by the SLSI *which includes surveillance inspection of the factory, testing of both factory and market samples.*

Further particulars of the terms and conditions of the permit may be obtained from the Sri *Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.*

Printed at SLSI (Printing Unit)

SRI LANKA STANDARDS INSTITUTION

The Sri Lanka Standards Institution (SLSI) is the National Standards Organization of Sri Lanka established under the Sri Lanka Standards Institution Act No. 6 of 1984 which repealed and replaced the Bureau of Ceylon Standards Act No. 38 of 1964. The Institution functions under the Ministry of Science & Technology.

The principal objects of the Institution as set out in the Act are to prepare standards and promote their adoption, to provide facilities for examination and testing of products, to operate a Certification Marks Scheme, to certify the quality of products meant for local consumption or exports and to promote standardization and quality control by educational, consultancy and research activity.

The Institution is financed by Government grants, and by the income from the sale of its publications and other services offered for Industry and Business Sector. Financial and administrative control is vested in a Council appointed in accordance with the provisions of the Act.

The development and formulation of National Standards is carried out by Technical Experts and representatives of other interest groups, assisted by the permanent officers of the Institution. These Technical Committees are appointed under the purview of the Sectoral Committees which in turn are appointed by the Council. The Sectoral Committees give the final Technical approval for the Draft National Standards prior to the approval by the Council of the SLSI.

All members of the Technical and Sectoral Committees render their services in an honorary capacity. In this process the Institution endeavours to ensure adequate representation of all view points.

In the International field the Institution represents Sri Lanka in the International Organization for Standardization (ISO), and participates in such fields of standardization as are of special interest to Sri Lanka.

Printed at the Sri Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.