

SRI LANKA STANDARD 482:1980

UDC 669.1:669.586.5

CODE OF PRACTICE FOR
HOT-DIP GALVANIZING OF IRON AND STEEL

BUREAU OF CEYLON STANDARDS

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GALVANIZING OF IRON AND STEEL

SLS 482:1980

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This Standard does not purport to include all the necessary provisions of a contract.

SRI LANKA STANDARD
CODE OF PRACTICE FOR HOT-DIP
GALVANIZING OF IRON AND STEEL

FOREWORD

This Sri Lanka Standard has been prepared by the Drafting Committee of the Bureau on Code of Practice for Hot-Dip Galvanizing of Iron and Steel.

It was approved by the Mechanical Engineering Divisional Committee of the Bureau of Ceylon Standards and was authorized for adoption and publication by the Council of the Bureau on 1980-07-28.

Hot-dip galvanizing is an old and well known process of applying zinc coating to iron or steel surface for protection against corrosion. The zinc coating firstly protects the base metal by acting as an impervious shield between the metal and the atmosphere and secondly affords sacrificial protection even when moderately sized areas of the base metal surface are exposed.

When an article is immersed in a galvanizing bath, the metal surface reacts with molten zinc to form a zinc-iron alloy. As the article is withdrawn from the bath, it picks up pure zinc which solidifies on cooling and forms the outer layer. The intermediate alloy layer provides a strong bond between the ferrous base material and the pure zinc and also resists corrosion and abrasion in the event of the pure zinc layer being removed.

The galvanizing process can be grouped under two broad categories, namely the wet process and the dry process, depending on the method of application of the flux coating. In the wet process, a layer of flux (flux blanket) of a few centimetres thickness, floats on the surface of the zinc bath and articles are dipped through the layer of flux. In the dry process, a thin layer of flux is applied onto the article by dipping in an aqueous flux solution followed by drying. The flux coated article is then immersed in a bath of clear molten zinc. The choice of the exact method is dependent on a number of factors, such as the type of work to be galvanized, pre-treatment procedures, drying facilities, rate of through put, etc..

The most important advantage of the dry galvanizing process is a lower production of dross and cleaner working atmosphere. The wet process on the other hand, gives a greater latitude of working conditions and requires relatively less expensive plant installations. Besides these, there are a number of other minor advantages and disadvantages in each of the processes and very often a combination of the two processes is followed to suit individual plant requirements.

A summary of defects commonly met with in the hot-dip galvanizing practice, their causes and remedial measures are given in Appendix A. Working conditions and safety measures which should be observed in galvanizing plants are given in Appendix B.

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

Reference has been made to CS 121 Methods of testing mass thickness and uniformity of coating on hot dipped galvanized articles, in this standard.

Publications of the Indian Standards Institution have been consulted in the preparation of this standard and the assistance gained therefrom is acknowledged.

1 SCOPE

This standard recommends important guide lines for general hot-dip galvanizing of iron and steel.

2 TERMINOLOGY

For the purpose of this standard, the following definition shall apply:

2.1 ash: A mixture of zinc oxide and varying quantities of metallic zinc. The former is formed as a result of oxidation of clear zinc on the bath surface and when the oxide is skimmed off, a certain amount of metallic zinc gets entrapped and removed along with it.

2.2 dross: A complex mixture of zinc and iron which forms in the galvanizing bath as a result of the reaction of molten zinc with iron or iron salts and settles down at the bottom of the bath. Zinc content in dross will vary between 94 per cent to 97 per cent depending on the quantity of metallic zinc entrained in dross during its removal from the pot.

2.3 flux: A chemical compound applied in the form of an aqueous solution and dried on to the work in the dry process or spread as a molten blanket over the zinc bath in the wet process. The primary purpose of the flux is to help keep the surface of both work and molten zinc free from oxide at the time of reaction.

2.4 pickling: Pickling is defined as the removal of oxides in the form of scale or corrosion products from metallix surfaces, usually by means of an acid solution.

2.5 over-pickling: The undue attack of the underlying ferrous surface by the pickling solution after the removal of scale.

2.6 inhibitor: A substance added to pickling solution to prevent undue attack on clean metal without affecting the scale removing property of the pickling solution.

2.7 wetting agent: A substance added to pickling and prefluxing solutions to facilitate wetting of the work surface.

2.8 white rust: A white corrosion product, mainly containing zinc oxide and basic zinc carbonate, that accumulates on the galvanized surface exposed to water film or moist atmosphere.

3 BASE METAL FOR GALVANIZING

3.1 Steel

Mild steel is the most common material that is galvanized and the variations in the range of compositions used have little influence on the galvanizing process. The steel, however, should contain minimum amount of segregation, slag inclusions, rolled-in millscale, etc.

3.1.1 Carbon and silicon tend to increase the rate of reaction between steel and molten zinc. This effect, however, is not so apparent in the range of compositions encountered in mild steels as in high carbon and high silicon steels.

3.2 Cast iron

Cast iron react with zinc differently depending on the exact composition, in particular, the silicon and phosphorus contents.

4 PREPARATION OF THE METAL SURFACE FOR GALVANIZING

4.1 Cleaning of mild steel

If an article is contaminated by oil, grease or paint, pre-treatment in special solvents will be necessary for their removal. Several proprietary reagents are available. Alternatively, a sodium hydroxide solution obtained by dissolving 10 kg to 15 kg of sodium hydroxide dissolved in 100 l of water may be used.

4.1.1 The work should be so handled in the degreasing bath as to allow free circulation of liquid over all parts, taking care to clean the scum that may collect. The temperature of the solution should be usually kept between 85 °C and 90 °C and the immersion time varying from 1 minute to 20 minutes depending on the nature and degree of contamination.

4.1.1.1 Immediately after degreasing, the work should be rinsed in hot water (60 °C) followed, if possible, by a final rinse in cold running water.

4.1.2 When lubricating materials have reacted with the surface of the metal it may be necessary to heat the part to bluing or scaling temperature in order to burn off the offending material. Since this is an expensive and cumbersome process, prior care should be taken to avoid such contamination.

4.2 Cleaning of castings

Grey iron and malleable iron castings if not properly cleaned before annealing, develop burnt-on sand patches at the surface, which are not removed by normal pickling. Except in the case of light castings which would be damaged, all castings should be shot or grit blasted prior to galvanizing. It is generally recommended to give a quick rinse in dilute hydrochloric acid to wash off the grit dust. It is then processed according to normal fluxing practice.

4.2.1 An alternative but less efficient method of cleaning castings with burnt-on sand is to employ a pickling solution containing hydrofluoric acid. For use, the commercial acid is diluted to various strengths, ranging from one volume of acid and 59 volumes of water for a very weak pickle to one volume of acid and 9 volumes of water for a very strong solution. With a weak solution, pickling may take as long as 24 hours while the strong solution should pickle satisfactorily in 10 minutes to 30 minutes.

4.2.1.1 A hydrofluoric acid pickle leaves a gelatinous layer on the surface of the castings which shall be thoroughly removed by hosing with water and scraping and brushing. The casting shall then go through the ordinary pickling process.

4.2.1.2 Solution containing 6 parts by volume of commercial hydrofluoric acid, 4 parts by volume of technical grade hydrochloric acid and 40 parts by volume of water may also be used for pickling. When pickling of castings is done occasionally, a solution consisting of 4 parts of dilute hydrochloric acid (1:1) and one part of hydrofluoric acid may be used.

4.3 Pickling

Both hydrochloric acid (see 4.3.1) and sulphuric acid (see 4.3.2) solutions may be used for pickling. Hydrochloric acid is used at room temperature while with sulphuric acid best results are obtained when it is hot (60°C to 80°C).

4.3.1 Hydrochloric acid solution (150 g/l)

Dilute technical grade acid specified in Appendix D with an equal volume of water.

4.3.1.1 A suitable inhibitor should be used with hydrochloric acid.

4.3.2 Sulphuric acid solution (100 g/l to 150 g/l)

Dilute 6 ml to 8 ml of technical grade acid specified in Appendix D to 100 ml. The actual concentration of sulphuric acid solutions, the temperature of the bath and the time of immersion will depend on the nature of the work to be pickled.

4.3.2.1 A suitable inhibitor should be used with sulphuric acid.

4.3.3 Agitation

Mild agitation of the work in the pickling tank reduces the time of pickling. Raise or lower the work once or twice to change the acid layer in contact with the work. Air agitation is not recommended.

4.3.4 Control of the acid solution

To make best use of the solution, reasonably close control of its acid content is necessary. The solution should be tested for acid and iron contents at regular intervals in accordance with the methods

given in Appendix C. The strength of the solution should be maintained by periodic addition of fresh concentrated acid. The iron salts in the pickling bath gradually accumulate with continued working and when the iron content falls within the range 100 g/l to 120 g/l, the solution should be discarded.

4.3.5 Disposal of waste liquor

The acid and iron compounds may be recovered from the waste pickling solution. Where this is not done, the pickling solution should be neutralized before dumping into sewers or streams.

4.4 Rinsing

After pickling, the article should be rinsed in running water. Two rinse tanks are preferable, the water cascading from one into the other.

4.5 Pre-fluxing

4.5.1 The rinsed article, in the dry process, is dipped in a strong solution of zinc ammonium chloride ($ZnCl_2 \cdot 3NH_4Cl$), although ammonium chloride is also used to a certain extent. The actual concentration of the flux solution and its temperature depend on the work being undertaken and on individual circumstances. The working level is generally between 200 g to 400 g of zinc ammonium chloride per litre. Some wetting agent is usually added to the flux solution. The temperature may range from room temperature to 80 °C.

4.5.1.1 When dry galvanizing is adopted, the article shall be thoroughly dried after prefluxing over a hot plate or in an air oven. The temperature should be about 120 °C and should not exceed 150 °C as the flux decomposes above this temperature.

4.5.1.2 In the wet process, a deep flux cover is used on the zinc bath and the work is immersed through the flux layer with or without prefluxing.

4.5.2 The article that has been prefluxed and dried should be galvanized without delay, as the flux coating picks up moisture from the air and also tends to oxidize. The recommended time limit for galvanizing is within an hour of prefluxing.

4.5.3 *Control of prefluxing solution*

The specific gravity of the prefluxing solution should be controlled by adding required quantities of flux crystals and water to make up for the drag-out losses.

4.5.3.1 Free acid content of the solution should also be checked, particularly if rinsing is not very thorough and pickle is carried over. The method described in Appendix C may be used for the determination of free acid but the actual titration should be made on a 100 ml sample as the concentration of acid in the solution will be very low. When more than two grams of free acid per litre of the solution is present, it should be neutralized by adding ammonia solution.

5 GALVANIZING

5.1 Quality of zinc

The zinc used for galvanizing shall conform to the following requirements:

- a) Zinc not less than 98.0 per cent,
- b) Lead not more than 1.60 per cent; and
- c) Iron not more than 0.08 per cent.

5.2 Aluminium additions

Aluminium may be added to the galvanizing bath in the dry process to the extent of about 0.005 per cent (0.05 g/kg of zinc) to reduce the rate of oxidation of the molten metal and brighten the appearance of the article.

5.3 Bath temperature

The control of bath temperature is essential if the quality of the product is to be consistent and zinc is to be used economically. Articles should be galvanized at the lowest possible temperature which will allow the free drainage of zinc from the work piece during withdrawal. A low temperature reduces the formation of ash and dross, besides safeguarding the pot and conserving fuel. The bath temperature may vary from 440 °C to 460 °C and a working temperature of 450 °C is commonly used. The temperature of the molten metal should not ordinarily exceed 475 °C to prevent excessive attack of molten zinc on the work as well as on the pot.

5.4 Suspended dross

Dross should be allowed to settle at the bottom of the zinc bath, and should not be disturbed more than necessary during the dipping operation (see 5.5). As far as practicable the article should not be sunk to the bottom of the bath during galvanizing.

5.5 Rate of immersion

The work should be immersed as rapidly as possible but with due regard to operators' safety. This is especially important in wet galvanizing, where the amount of dross increases with the time of contact with the flux blanket. The speed of immersion also

influences the uniformity of coating, particularly with long work piece where the difference in immersion time between the first and the last part to enter the bath may be considerable.

5.5.1 *Time of immersion*

In most cases the article shall be left in the bath until it reaches the temperature of the bath which is usually indicated by the stopping of the boiling action. It is then withdrawn without much delay.

5.6 **Withdrawal**

The rate of withdrawal, which determines the thickness of the unalloyed zinc layer left on the article, varies according to the type of the process being operated and the form of article. With long articles for which withdrawal occupies a large part of the total handling time, speeds are necessarily maintained at higher levels to ensure a reasonable rate of production. It is better to use special jigs and carriers for dipping and withdrawing the work in batches. The rate of withdrawal should be controlled so that zinc drains freely from the surface.

5.6.1 Articles are withdrawn through a bath of clear zinc to avoid contamination by flux. However withdrawal through a flux blanket has also its advantages in the removal of surplus zinc from the surface and in producing a uniform coating at relatively higher speeds. In the latter case it is recommended to quench the material (see 5.7) to remove flux residues.

5.7 **Water quenching**

Where the article is withdrawn through a flux blanket, the quench water needs to be changed frequently to prevent the accumulation of corrosive salts. For this purpose tanks having overflow weir may be used with advantage.

5.7.1 Light gauge articles should be spun quickly through the surface of water so that they retain sufficient heat after quenching to enable, quick drying. Heavy articles retain sufficient heat for drying.

5.8 Centrifuging

Small articles handled in baskets should be centrifuged to remove excess of zinc immediately after galvanizing while the coating is still in the molten condition. The quality of the finish depends on the rapidity with which the material is transferred from the galvanizing bath to the centrifuge. It is also important that the centrifuge should be powered by a high starting torque electric motor to give rapid acceleration to peak speed within 2 seconds to 3 seconds. After centrifuging, the article should be immediately tipped into water to allow the coating to set and prevent the articles from sticking to each other.

5.8.1 Thread brushing

Threads on articles which are unsuited for centrifuging shall be cleaned with a rotating wire brush immediately after galvanizing and before the coating sets. This process reduces the thickness and the protective value of the coating. It should only be confined to the threaded portions of the article.

5.9 Stacking

Articles should not be stacked immediately after quenching (see 5.7) to avoid flaking of coating.

6 TESTING AND INSPECTION

6.1 Freedom from defects

The zinc coating shall be adherent, smooth, reasonably bright, continuous and free from such imperfections as flux, ash and dross inclusions, bare and black spots, pimples, lumpiness and runs, rust stains, bulky white deposits and blisters.

6.2 Uniformity in thickness

Galvanized articles shall be tested for uniformity in thickness of coating in accordance with Preece Dip Method given in CS 121.

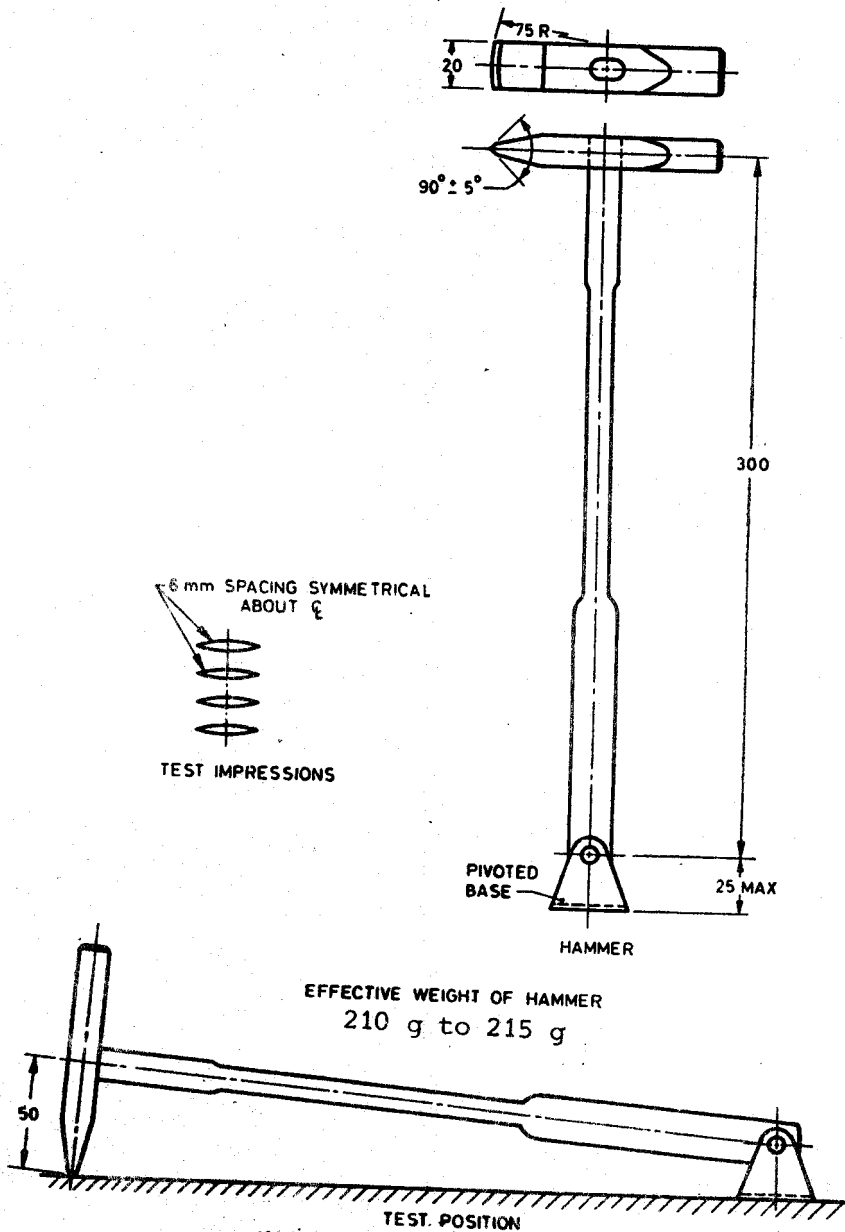
6.3 Weight of coating

The weight of zinc coating shall be determined in accordance with CS 121.

6.4 Adhesion tests

6.4.1 *Pivoted hammer test for zinc coated fabricated products (Fabricated from plates, bars, strip, etc)*

The adherence of the zinc coating on steel shall be determined by the pivoted hammer test. The hammer used shall conform to the drawing shown in Fig. 1. The hammer blow shall be controlled by holding the pivoted base of the handle on a horizontal surface of the galvanized member and allowing the hammer head to swing freely through an arc from vertical position to strike the horizontal surface. The test shall consist of two or more standard blows forming parallel impressions with 6 mm spacing and a common axis, as illustrated in Fig. 1. No part of an impression shall be closer than 12 mm to the edge of the member. Removal or lifting of the coating in the area between the impressions shall constitute failure.



All dimensions in millimetres.
FIGURE 1 - Pivoted riveting hammer

An extruded ridge less than 2 mm wide immediately adjacent to the impression shall be disregarded. The specimen is tested in several places throughout its length.

6.4.2 Knife test for zinc coated hardware and assembled steel products

When the coating is cut or pried into, such as with a stout knife applied with considerable pressure in a manner tending to remove a portion of the coating, it shall only be possible to remove small particles of the coating and it shall not be possible to peel any portion of the coating so as to expose the underlying iron or steel.

6.4.3 Bend and wrapping tests for zinc coated sheet and wire

The materials such as sheet or wire shall be tested by bending or wrapping in accordance with tests given in the relevant Sri Lanka Standards.

APPENDIX A

DEFECTS, THEIR CAUSES AND REMEDIAL MEASURES

DEFECTS	CAUSES	RECOMMENDED ACTIONS
Bare spots	Paint grease, or oil residues	Check cleaning practices
	Scale or rust residues	Check pickling practices
	Residual welding slag	Blast-clean welds avoid coated rods
	Breakdown of preflux coating	Check preflux and drying conditions

DEFECTS

CAUSES

RECOMMENDED
ACTIONS

Bare spots	Aluminium content of bath too high	Regulate aluminium additions
	Rolling defects in basis steel	Check steel supply
	Articles in contact during galvanizing	Keep articles separated
	Original surface condition of steel	Check steel supply
General roughness	Overpickling	Reduce pickling use inhibitor
	High galvanizing temperature or long immersion time or both	Adjust galvanizing conditions
Pimples	Entrapped dross particles	Avoid agitation of dross layer, check carry-over, of pickle salts
Lumpiness and runs (uneven drainage)	Withdrawal speed too high	Remove work slowly
	Cold galvanizing bath	Increase temperature
	Delayed run-off from seams, joints, bolt holes, etc.	Remove work slowly
	Articles in contact during withdrawal	Keep articles separated

DEFECTS	CAUSES	RECOMMENDED ACTIONS
Flux inclusions	<ul style="list-style-type: none"> Stale flux burnt on during dipping Surface residues on base metal Flux picked up from top of bath 	<ul style="list-style-type: none"> Refresh or renew flux blanket Check preparation of metal surface Skim before withdrawal
Ash inclusions	<ul style="list-style-type: none"> Ash burnt on during dipping Ash picked up from top of bath 	<ul style="list-style-type: none"> Skim bath before dipping Skim bath before withdrawal
Black spots	<ul style="list-style-type: none"> Includes flux particles from flux 'dusting' Dirt smuts, splash marks 	<ul style="list-style-type: none"> Confine fluxing to top of bath Check storage conditions
Dull grey coating (all alloy no free zinc)	<ul style="list-style-type: none"> Base metal composition (high silicon, phosphorus or carbon) or severe cold work Slow cooling after galvanizing Release of absorbed hydrogen during solidification of coating 	<ul style="list-style-type: none"> Check base metal supply for composition in order to adjust for galvanizing Avoid hot stacking; quench Avoid overpickling; use inhibitor

DEFECTS**CAUSES****RECOMMENDED
ACTIONS****Rust
stains**Weeping of acid,
etc., from seams
and foldsCheck product
design and fabrica-
tionStorage near
rusty materialCheck
storage condition**Bulky
white
deposit
(wet
storage
stain,
white
rust**Confinement of
close-packed
articles
under damp con-
ditionsStore and ship in dry
well-ventilated condi-
tions; separate articles
with spacerPacking of arti-
cles while dampDry before packing;
include desiccantExpansion of
entrapped hydro-
gen and moisture
in flaws

Check steel quality

**Blis-
ters**Driving off of
hydrogen absor-
bed during pic-
kling. Improper
malleablizing
(for malleable
iron castings
only)Use shot blast instead
of pickle. Check steel
supplyCheck malleablizing
practice**Tiny
blisters**Effect some-
times observed
on quenched
work, notably
malleable cas-
tings. May be
caused by gas
evolved fromUse shot blast instead
of pickle. Check mallea-
blizing treatment.
Should have no combined
carbon near surface of
castings

DEFECTS**CAUSES****RECOMMENDED
ACTIONS**

Tiny
blisters

{ the work resul-
ting from absor-
bed hydrogen or
break-down of
combined carbon
near surface

APPENDIX B**WORKING CONDITIONS AND SAFETY MEASURES****B.1 WORKING CONDITIONS**

B.1.1 The galvanizing shop should be neat and tidy. Hoods, extraction ducts and exhaust fans should be used to maintain a concentration of hazardous substances below accepted limits.

B.2 SAFETY MEASURES

B.2.1 All safety measures should be properly exhibited.

B.2.2 The workers at the galvanizing bath should be provided with:

- a) Goggles or face shields;
- b) Shoes;
- c) Rubber boots and steel-capped boots;
- d) Leather gloves;
- e) Rubber and leather aprons; and
- f) Long gloves made of rubber or PVC or neoprene.

B.2.3 While cleaning the articles with sodium hydroxide solution, the operators should be warned that it produces severe flash burns. Special precautions should be taken to protect them from splashes of sodium hydroxide solution.

B.2.4 Hydrofluoric acid sometimes used for pickling castings (see 4.2) is dangerous and causes very severe burns and sores when it comes in contact with the skin. It should, therefore, be carefully handled by wearing rubber boots, gloves and aprons.

B.2.5 The galvanizer should be protected from the fumes over the zinc bath by providing an efficient exhaust system.

APPENDIX C

(Clauses 4.3.4 and 4.5.3.1)

TEST METHODS

C.1 QUALITY OF REAGENTS

C.1.1 Unless otherwise specified, pure chemicals shall be employed in tests and distilled water shall be used when the use of water as a reagent is intended.

NOTE - 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

C.2 DETERMINATION OF ACID CONTENT OF THE PICKLING SOLUTION

C.2.1 Reagents

C.2.1.1 Standard sodium carbonate solution (Approximately 0.5 N.)

C.2.1.2 *Methyl orange indicator solution*

Dissolve 0.05 g of methyl orange in 100 ml of alcohol.

C.2.2 Procedure

Filter exactly 25 ml sample of the pickle liquor into 250-ml measuring cylinder and make up to 250 ml by adding distilled water. Mix thoroughly. Pipette out 25 ml of this solution in a 250-ml conical flask. Add a few drops of methyl orange indicator and titrate it with the standard sodium carbonate solution to yellow end point.

C.2.3 Calculation

$$\text{Mass of hydrochloric acid in g/l} = \frac{A \times B \times 36.5}{2.5}$$

$$\text{Mass of sulphuric acid in g/l} = \frac{A \times B \times 49}{2.5}$$

Where

A = volume in millilitres of the standard sodium carbonate solution required; and

B = normality of the standard sodium carbonate solution.

C.3 DETERMINATION OF IRON CONTENT OF THE PICKLING SOLUTION

C 3 1 Measure density of the pickling solution with a hydrometer; then on the corresponding nomograph (see Fig. 2 and Fig. 3) depending on the acid used for pickling, join with a transparent ruler the point representing this reading shown on the left hand line with the point on the right hand line representing the acid content of the pickle. Read off the iron content on the middle line.

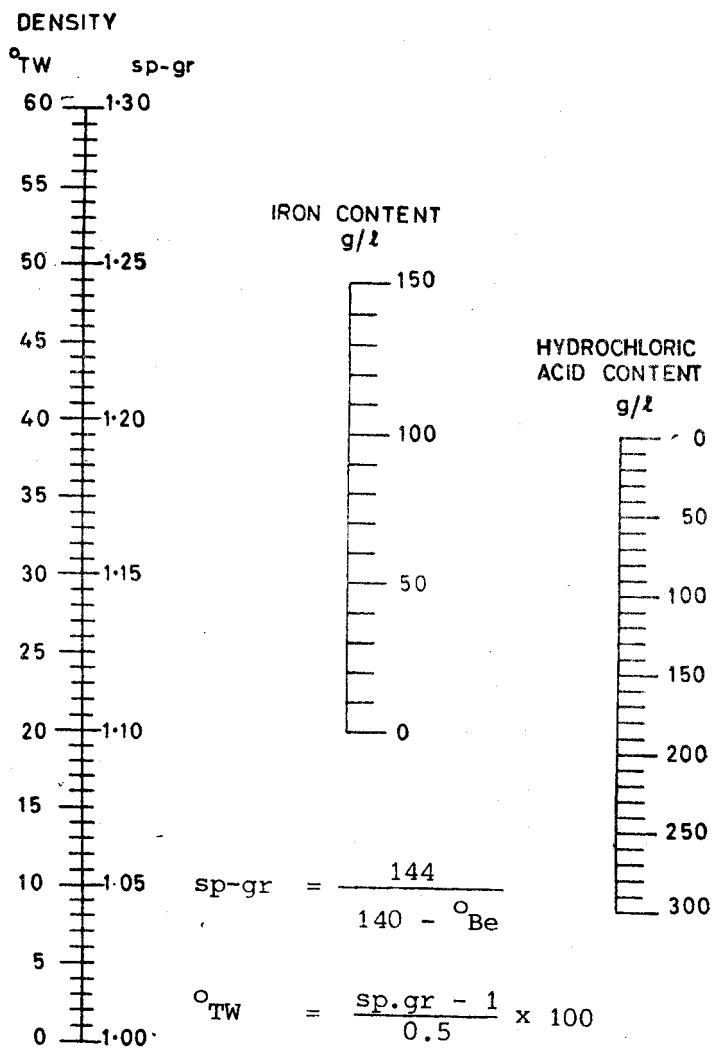


FIGURE 2 - Nomograph relating the iron content of hydrochloric acid pickle to the acid content and density

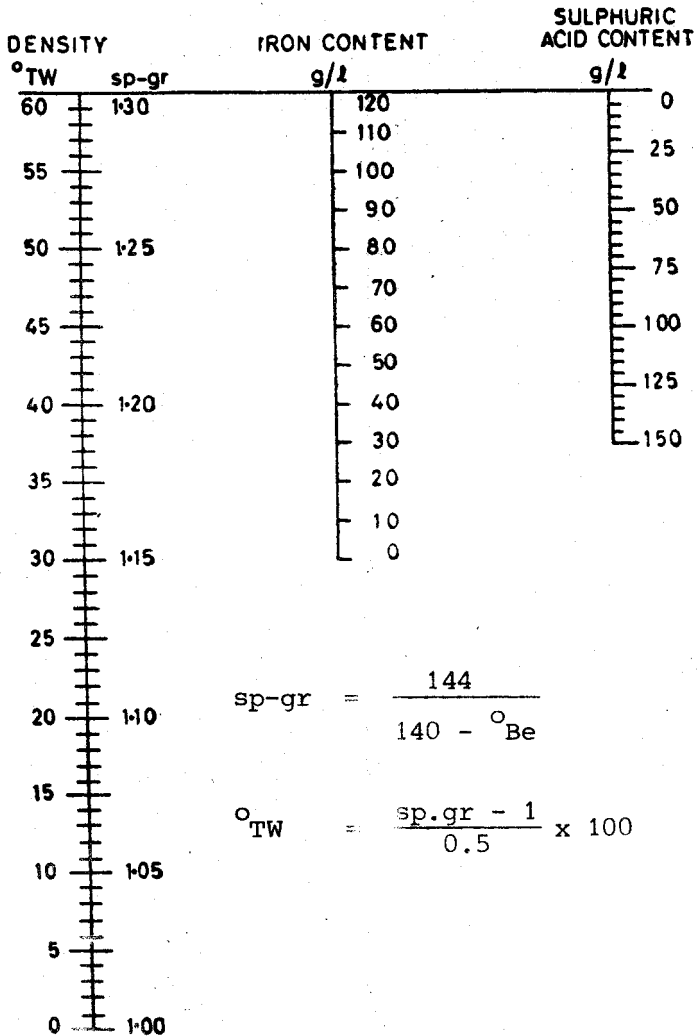


FIGURE 3 - Nomograph relating the iron content of sulphuric acid pickle to the acid content and density

APPENDIX D

(Clauses 4.3.1 and 4.3.2)

REQUIREMENTS FOR TECHNICAL GRADE HYDROCHLORIC ACID AND SULPHURIC ACID

D.1 Hydrochloric acid

Specific gravity at 27 °C, min	1.145
Hydrochloric acid (HCl), per cent by mass, min	30
Residue on ignition, per cent by mass, max	0.1
Sulphates (as H ₂ SO ₄), per cent by mass, max	0.1
Iron (as Fe), per cent by mass, max	0.02
Free chlorine and bromine (as Cl), per cent by mass, max	0.02
Sulphites (as SO ₂), per cent by mass, max	0.05

D.2 Sulphuric acid

Specific gravity at 25 °C, min	1.825
Sulphuric acid (as H ₂ SO ₄), per cent by mass, min	95.0
Residue on ignition, per cent by mass, max	0.2
Iron (as Fe), per cent by mass, max	0.05
Heavy metals (as Pb), per cent by mass, max	0.005
Arsenic (as AS ₂ O ₃), per cent by mass, max	0.01

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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.