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# International Standard



# 6283

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

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## Refined nickel

*Nickel raffiné*

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Price based on 1 page

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 6283 was developed by Technical Committee ISO/TC 155, *Nickel and nickel alloys*, and was circulated to the member bodies in February 1978.

It has been approved by the member bodies of the following countries:

Australia	Germany, F. R.	Romania
Austria	India	South Africa, Rep. of
Bulgaria	Japan	Spain
Canada	Mexico	Turkey
Czechoslovakia	Norway	USSR
Finland	Philippines	Yugoslavia
France	Poland	

The member bodies of the following countries expressed disapproval of the document on technical grounds:

United Kingdom  
USA

## Refined nickel

### 1 Scope and field of application

This International Standard specifies the designation and chemical composition of commercially available grades of refined nickel.

### 2 Definition

**refined nickel** : A metal having a minimum content of 99 % (*m/m*) nickel plus cobalt, the cobalt content being allowed up to and including 1,5 % (*m/m*).

### 3 Designation

The designations for the various grades of nickel are given in the table.

### 4 Composition

The various grades of nickel shall conform to the requirements given in the table.

The chemical composition given in the table shows the minimum content for nickel plus cobalt and the maximum limits for the usual impurities. If the purchaser requires lower limits for specified elements and/or limits for non-specified elements, this shall be agreed upon between supplier and purchaser.

### 5 Forms

Refined nickel is usually supplied as briquette forms, cathode forms, granules, pellets, powders, rondelles, and shot.

### 6 Sampling for analysis

Methods of sampling refined nickel will form the subject of a future International Standard.

### 7 Analysis

Methods of analysis for refined nickel will form the subject of future International Standards. Other methods may be agreed upon between supplier and purchaser.

Table — Chemical composition of refined nickel, % (*m/m*)

Designation Element	Ni 9900	Ni 9950	Ni 9990	Ni 9995
Ni + Co min.	99	99,5	99,9 <sup>1)</sup>	99,95 <sup>1)</sup>
Co max.	1,5	1,0	0,5	0,1
Ag max.				0,000 5
As max.				0,001
Bi max.			0,002	0,000 5
C max.	0,05	0,05	0,03	0,015
Cu max.	0,3	0,1	0,03	0,005
Fe max.	0,1	0,1	0,03	0,02
P max.				0,002
Pb max.		0,005	0,005	0,001 0
S max.	0,05	0,03	0,03	0,002 5
Sb max.			0,002	0,001
Se max.				0,001
Sn max.				0,000 5
Te max.				0,000 5
Tl max.				0,000 5
Zn max.				0,002

1) Ni + Co to be determined by difference.