

Goodfellow

Serving The Needs of Science and Industry Worldwide

Au service de la Science et de l'Industrie dans le monde entier

Weltweiter Lieferant für Wissenschaft und Industrie

Metals and Alloys
Métaux et Alliages
Metalle und Legierungen

Ceramics
Céramiques
Keramiken

Polymers
Polymères
Polymere

Composites
Composites
Verbundwerkstoffe



Goodfellow Cambridge Limited

Ermine Business Park
HUNTINGDON
PE29 6WR
England

Tel: +44 1480 424 800
or +44 1480 424 800
Fax: +44 1480 424 900
or +44 1480 424 900

Goodfellow Corporation

125 Hookstown Grade Road
Coraopolis, PA 15108-9302
USA

Tel: 1-800-821-2870 (USA and Canada)
or +1 724 695 7060
Fax: 1-800-283-2020 (USA and Canada)
or +1 724 695 7063

Goodfellow SARL

229, rue Solférino
F-59000 Lille
France

Tel : 0800 917 241 (numéro vert)
or +44 1480 424 813
Fax : 0800 917 313 (numéro vert)
or +44 1480 424 900

Goodfellow GmbH

Am Edelspfad 4
D-61169 Friedberg
Germany

Tel: 0800 1000 579 (freecall)
or +44 1480 424 810
Fax: 0800 1000 580 (freecall)
or +44 1480 424 900

Goodfellow (Shanghai) Trading Co., Ltd

Room 803, Centro Build, No. 568 Hengfeng Road
SHANGHAI
200070

The People's Republic of China
Tel: 00 86 21 6112 1560

Standard Price List for Stainless Steel - AISI 316 (Fe/Cr18/Ni10/Mo 3)

CONTENTS

Introduction	4
Product Descriptions	5
Hazards Information	10
General Information	11
Order information	12
Company Details	15
Conditions of Sale	16
Alloy	20
INDEX	33

Introduction

Goodfellow is well known as a specialist supplier of small to medium size quantities of metals, alloys, ceramics, polymers and other materials to meet the research, development and specialist production requirements of science and industry worldwide. We realise that "small" means different things to different people, but we consider small to mean any quantity from a few grammes to a few kilos.

Goodfellow offers two distinct services to meet the requirements of our customers:

- The first meets the needs of our customers who need small quantities of products from our standard range of materials within 24-48 hours.
- The second service is for those who require larger quantities or further processing of our standard products or who need an item which falls within our general area of supply expertise.

The range of materials offered by Goodfellow is extensive, as are the forms in which the various products are available. This Catalogue provides a detailed overview of our standard products which are available from stock. Full details of all of these items, including prices and technical information, can be found in our web Catalogue at www.goodfellow.com.

Materials

Metals and Alloys

Goodfellow supplies virtually all of the pure metals from Aluminium to Zirconium as well as a comprehensive range of alloys. Most are available in a variety of forms, including rod, wire and foil. The Catalog details those materials which are available as standard products from stock. Custom-made items are also available, so please contact us if you are unable to identify the item you require.

Ceramics

The ceramic materials offered by Goodfellow have been carefully chosen, and include both the established as well as more recently developed products. All are available as either standard or custom-made products in a variety of forms and sizes. The Catalog details those items which are

available from stock. For ceramic components made to customer drawings, our Ceramic and Glass Division would be delighted to help. Please visit www.goodfellow-ceramics.com for further information.

Polymers

The range of polymers supplied by Goodfellow is broad and includes both the familiar as well as some of the more unusual or recently developed materials. The Catalog details those items which are available from stock; please contact us if you are unable to find the item you specifically require.

Compounds & Intermetallics

Goodfellow can supply aluminides, borides and silicides as well as other intermetallics and compounds. The majority of these items are made to order and the Catalog details those which are available. Please contact us with details of your requirements.

Composites

Some examples of these materials are listed in the Catalog. As some of these are manufactured on a custom-made basis, please contact us with details of your requirements.

Glasses

Goodfellow offers two distinct types of glass products. The first are generally silica-based and transparent. Generally, these products are made to order for customers, so we do not list them in our Catalog, however, they are available through the Goodfellow Ceramic and Glass Division. Please contact us with your requirements.

The second type of glass product is commonly referred to as "metallic glasses" or "glassy metals". In contrast to crystalline metals and alloys with highly ordered atomic structures, these are non-crystalline (amorphous) metals or, more usually, alloys. Our Catalogue details those glassy metals which are available from stock; please contact us if you are unable to find the item you specifically require.

Product Descriptions



Bar

A straight length of rectangular, square or oval section material.

Tolerances

Section dimensions:	≤ 10mm	± 10%
	> 10mm	± 1mm
Length:	< 100mm	± 1mm
	≥ 100mm	+5% / -1%



Bolt

A threaded pin that can be screwed into a nut or a tapped hole to fasten items together. Bolts are available with different head styles and also in metric and inch-threaded sizes.

Tolerances

Ceramics: ANSI B18.6.7M-1985



Chopped Fibre

Fibres cut into short lengths called cut, staple or chopped fibre.

Tolerances

Fibre diameter:	± 25%
Number of strands:	± 10%
Tex number:	± 10%
Length:	+5% / - 1%



Crucible

A vessel in which other materials may be heated or melted, usually at high temperatures.

Tolerances

Height:	± 10%
Inside Dimensions:	± 10%
Outside Dimensions:	± 10%



Fabric

Woven fabrics are made by the regular interlacing of two arrays of yarns at right angles to each other, these being referred to as the warp and weft (see also Non-woven fabric).

Tolerances

Fabric thickness:	± 25%
Number of yarns:	± 10%
Tex number:	± 10%
Size (linear dimension):	< 100mm ± 5mm
	≥ 100mm ± 5%



Fibre

Yarns or tows consisting of several approximately parallel individual filaments, each filament usually being smaller in diameter than a monofilament. Yarns contain a defined number of filaments, typically three to several hundred; tows contain thousands of filaments whose number is only defined approximately. Both are primarily specified by their linear density measured in "tex", the weight in grams of a 1km length of material.

Tolerances

Fibre diameter:	± 25%
Number of strands:	± 10%
Tex number:	± 10%
Length:	+5% / -1%



Film

A non-metallic sheet material with a thickness < 0.5mm.

Tolerances

Thickness:	± 20%
Size (linear dimension):	< 100mm ± 1mm
	≥ 100mm +2% / -1%



Flake

Flat, irregularly shaped pieces of material. A maximum flake size is indicated but individual flakes may vary greatly in size.

Tolerances

Dimensions shown are nominal

Product Descriptions



Foam

A low density, permeable structure of cells and continuous ligaments offering a high surface area to volume ratio, and also a high strength to weight ratio. Owing to the nature of this material, dimensions are nominal.



Foil

Thin sheets of pure metal and metal alloys. Due to their fragile nature, some foils are coated on one side with an acrylic or polyester support. Where foils are supported they are indicated in the detailed item description.

Tolerances

Thickness: < 0.010mm ± 25%
 0.01-0.05mm ± 15%
 > 0.050mm ± 10%
 Size (linear dimension): < 100mm ± 1mm
 ≥ 100mm + 2% / -1%



Granule

Pellets of an approximately regular shape. Granules may vary in size and, therefore, the dimensions stated are nominal. In addition, the shape of a granule may vary from item to item.

Tolerances

Dimensions shown are nominal



Honeycomb

A cellular structure similar in appearance to natural honeycomb. Owing to the nature of this material, dimensions are nominal.

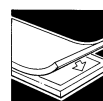


Insulated Wire

A single or multiple flexible strand of metal or alloy with an insulating sheath.

Tolerances

Wire diameter: ± 10%
 Length: + 5% / -1%
 Insulation thickness: Nominal values only



Laminate

Layers of material which have been bonded together by the use of heat, pressure and, possibly, adhesive.

Tolerances

Thickness: ± 10%
 Size (linear dimension): ≤ 100mm ± 1mm
 > 100mm + 2% / -1%

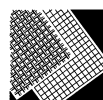


Lump

A solid piece of material with no defined shape.

Tolerances

Dimensions shown are nominal



Mesh

Mesh is available as either a woven wire or electroformed product; in all cases, the quoted aperture sizes are nominal. Wire mesh: a material which is woven from metal wires to provide a thin grid with a regular series of holes. Electroformed mesh: a product made by electroplating the mesh geometry through a mask onto a substrate which is subsequently etched away.

Tolerances

Thickness: woven: ± 10%
 electroformed: ± 20%
 Wire diameter: ± 10%
 Size (linear dimension): < 100mm ± 1mm
 ≥ 100mm + 2% / -1%

Product Descriptions



Metallised Film

Film which is coated with a metal. The thickness of the metal is measured and described in terms of the material's specific electrical resistance in ohms per square.

Tolerances

Thickness: $\pm 10\%$
 Size (linear dimension): $< 100\text{mm}$ $\pm 1\text{mm}$
 $\geq 100\text{mm}$ $+2\% / -1\%$



Microfoil

An extremely thin sheet of metal or alloy mounted on a permanent support. This support **cannot** be removed without destroying the Microfoil.

Tolerances

Thickness: $\pm 30\%$
 Size: $\pm 20\%$



Microleaf

An extremely thin sheet of metal mounted on a removable support. Microleaf is not available for metals which are too brittle to be free standing.

Tolerances

Thickness: $\pm 30\%$
 Size: $\pm 20\%$



Monofilament

A single strand of a non-metallic material.

Tolerances

Diameter: $\pm 20\%$
 Length: $+5\% / -1\%$



Non-Woven Fabric

Non-woven fabrics are made by methods other than weaving or knitting, the yarns and fibres being held together, often quite loosely, by means other than geometric interlacing. Due to the open and porous nature of this material, all other dimensions are nominal. conventional textile fabrics. Due to the open and porous nature of this material, all other dimensions are nominal.

Tolerances

Size (linear dimension): $< 100\text{mm}$ $\pm 5\text{mm}$
 $> 100\text{mm}$ $\pm 5\%$



Nut

Generally a flat piece of material with a threaded hole which can be screwed onto a bolt to fasten items together. Nuts typically have a hexagonal external shape. Nuts are available in metric and inch-threaded sizes.

Tolerances

Ceramics: ANSI B18.2.4.1M-1979
 (R1995)



Powder

Small particles with an approximately defined size range. Those materials described as alloy precursors are not true alloys - they are made by sintering a blend of powders of the component metals to achieve alloying by diffusion. The resultant cake is ground and sieved to the required particle size range. Unless otherwise stated, the particle sizes shown are for guidance only. We do not guarantee either any particular size distribution between the quoted minimum and maximum sizes, or a specific particle shape.

Tolerances

Dimensions shown are nominal

Product Descriptions



Rod

A straight length of circular section material.

Tolerances

Diameter:	≤ 10mm	± 10%
	Polymer	+ 20%/-10%
	Ceramic	+ 20%/-10%
> 10mm	± 5%	
	Ceramic	+ 20%/-10%
	Polymer	+ 20%/-10%
Length:	< 100mm	± 1mm
	≥ 100mm	+ 5% / -1%



Sheet

Flat material with a thickness > 0.5mm.

Tolerances

Thickness:		± 10%
	Ceramic	± 20%
	Composite	± 20%
	Polymer	± 20%
Size (linear dimension):	< 100mm	± 1mm
	≥ 100mm	+ 2% / -1%



Single Crystal

A material grown as a monocrystal, generally to a specific orientation, dimension and surface finish. It may contain a dopant. Single crystals are usually made to order.

Tolerances

Orientation:	± 3°
Size:	Sizes shown are nominal



Sphere

A regular solid or hollow three-dimensional form in which every cross-section is a circle. Spheres are available with standard or precision tolerances, and can be supplied with different surface finishes depending on the material.

Tolerances

Diameter (standard):	± 5%
Diameter (precision):	see item



Sputtering Target

A high purity material used as a source for sputtering, a cold vapourisation process in which atoms are physically removed from the target surface by ion bombardment.

Tolerances

Thickness:	± 0.5mm
Size:	± 0.5mm



Tube

A hollow length of material normally circular in section. Most tubes are straight except those made of flexible polymer.

Tolerances

Outside diameter:	≤ 2mm	± 0.05mm
	Polymer	± 10%
	Ceramic	± 10%
> 2mm	≤ 5mm	± 0.1mm
	Polymer	± 10%
	Ceramic	± 10%
> 5mm	± 5%	
	Polymer	± 10%
	Ceramic	± 10%
Wall thickness:		± 10%
	Polymer	± 20%
	Ceramic	± 20%
Length:	< 100mm	± 1mm
	≥ 100mm	+ 5% / -1%



Washer

A thin, flat piece of material with a hole in the middle, used in conjunction with bolts and nuts to distribute the load of a threaded fastener.

Tolerances

Ceramics:	see item
-----------	----------

Product Descriptions



Wire

A single or multiple flexible strand of pure metal or alloy.

Tolerances

Wire diameter: $\pm 10\%$
Length: $+ 5\% / -1\%$

Hazards Information

HAZARDS

All materials listed in this catalogue, whatever the quantity supplied, are sold for research or development purposes. We make no warranty that the materials are fit for a particular purpose. In purchasing materials from this catalogue, customers should be aware that there may be hazards associated with their use and in the handling of them. Complete toxicological or hazard investigations are the responsibility of the customer. Ingestion or contact with the human body may be harmful. The responsibility for the safe use of our products rests with the customer. All materials should be handled by qualified personnel familiar with laboratory procedures and who are familiar with the nature of the material and any necessary precautions which should be taken in the handling, use and storage of the products. The customer shall be responsible for the control and use of the products offered in this catalogue whether alone or in combination with other articles or substances or in any other manner whatsoever.

HAZARD SYMBOLS



C

Corrosive

Chemicals which may destroy living tissue when in contact with them.



D

Dangerous when wet

Chemicals which, in contact with water or damp air, evolve highly flammable or toxic gases and vapours in dangerous quantities.



E

Explosive

Chemicals which may react exothermically without atmospheric oxygen, quickly evolving gases, and which under defined test conditions detonate, quickly deflagrate or upon heating explode when partially confined.



F+

Extremely Flammable

Chemicals which when finely divided (small particle size) are liable to ignite spontaneously.



Xn

Harmful

Chemicals which may cause death or acute or chronic damage to health when inhaled, ingested or absorbed via the skin.



F

Highly flammable

Chemicals which will ignite after contact with flame, or which will evolve highly flammable gases in contact with water.



Xi

Irritant

Non-corrosive chemicals which, through immediate, prolonged or repeated contact with the skin or mucous membrane may cause inflammation.



R

Radioactive

Chemicals which will emit ionising radiation without being subject to irradiation. General precautions for Toxic chemicals apply to those of low activity. For chemicals of medium or high activity special regulations apply.



T

Toxic

Chemicals which may cause death or acute or chronic damage to health when inhaled, ingested or absorbed via the skin.



T+

Very Toxic

Chemicals which in low quantities cause death or acute or chronic damage to health when inhaled, ingested or absorbed via the skin.

General Information

Analyses

Typical Analysis :

Where appropriate a typical analysis is given. All figures are parts per million (ppm) by weight unless otherwise stated. It must be emphasised that this data is "typical" and no guarantee is given that the material supplied will conform to these analyses. The compositions shown under alloy headings are generally weight percent. Exceptions are the glassy alloys and the rare earth magnets where the convention of using atomic ratio is followed.

Purity

Purities listed are quoted with respect to total metallic impurities. Typical analyses may give additional information about likely non-metallic impurities.

High Purity

For materials described as High Purity, the actual analysis of metallic impurities will be supplied free of charge. For other items, an actual analysis can be supplied and a charge will be made for the analysis and for the sample used.

If you require an analysis please tell us whether you require analysis of metallic impurities only or metallic and gaseous. Where an analysis is required the shipment of your order may be delayed.

Supports

Some items from our range of foils need to be supported on one side of the foil to enable both you and us to handle these very delicate materials. Two types of support can be used, the choice being governed by the material. Wherever possible we use a temporary support, a permanent support only being used when the material is brittle (for example Chromium or Manganese).

The temporary support is Acrylic, approximately 0.2mm thick. This may be removed by dissolving in 2-Propanone (Acetone).

Our permanent support is Polyester, thickness 0.125mm, which is hot-press laminated to one face of the foil. It **cannot** be removed without destroying the foil.

Microfoil is mounted on a permanent 3.5µm polyester support. This support **cannot** be removed without destroying the Microfoil.

Microleaf is mounted on a specially treated support which allows separation of the metal film from the support. Full instructions on the method of removal are issued with each Microleaf supplied.

Light Tight (LT) & Not Light Tested (NLT)

Light tight (LT) foils are supplied without visible pinholes after examination without magnification. Foils 0.025mm or more in thickness are supplied LT unless otherwise stated.

Foils less than 0.025mm thick are normally supplied Not-Light Tested (NLT), and will normally contain pinholes but may occasionally be free from pinholes. Foils less than 0.025mm in thickness can often be supplied LT but may incur additional charges. Please specify if you require LT foils

Vacuum tight

Vacuum tight foils show no detectable leakage when tested with a helium mass spectrometer with a sensitivity of 10^{-9} atm-cm³.s⁻¹.

Continuous Lengths

If you require material in continuous lengths please tell us when you place your order. Unless otherwise specified, we reserve the right to supply in more than one length.

Technical Data and Information

All information and technical data are given as a guide only. Although every effort has been made to ensure that the information is correct, no warranty is given as to its completeness or accuracy.

Tolerances

For details of our standard tolerances, please refer to the Product Description section. In many cases, closer tolerances are available but may be subject to an extra charge. If you have any special requirements it is important that you tell us at the time of ordering. This includes special tolerances, dimensional uniformity or any other special requirement which you may have (for example edge finish, packaging, labelling etc.). Please indicate precisely what is required and we shall do our best to meet your specification.

Order information

General Information

There are over 70,000 stock packs listed and if you cannot find what you need amongst them, please ask for special sizes, thicknesses, tolerances, dimensions or larger quantities. We are also able to offer many other pure metals, alloys, polymers and ceramics to special order.

Prices

All the prices listed are total (lot) prices for the sizes and quantities listed. Prices are subject to change without notice.

Prices shown include delivery except for those items marked as "special offer" or dangerous goods with transport restriction. They do not include value added tax, any import duties or local taxes.

Transport Restriction

Some of the materials supplied by Goodfellow are subject to special transport restrictions. Additional shipment charges may apply which are dependent on destination. Please check the individual item on our website or contact us for details of the charges.

If you intend to have the material transported or sent onwards please ensure that you are aware of the relevant transport restrictions.

Delivery

Split shipment

All orders are accepted for one shipment on one date to one address. A charge will be made for split shipments made at the customer's request.

Special Analysis, Supports or Tolerances

An extra charge is made for non-standard supports, alternative tolerances and certificates of analysis. The analysis is free of charge for items marked "High Purity".

Cancellations

A charge for cancellation of orders may be made. The amount will depend on the circumstances.

Express Service

An administration charge of £10 will be made for any order received for which same day shipment within the UK is requested.

Shipment

We aim to have all items listed in this catalogue in stock in the quantities and sizes listed. We can only undertake to despatch an order on a particular date. The date of delivery at the customer's address is subject to the normal variations of the delivery service used.

Despatch

Orders will normally be despatched within 48 hours of receipt.

Non delivery

If we have notified you of despatch of goods and you have not received delivery within 7 days, please contact us.

Insurance

All consignments will be insured by us against the usual risks unless we are instructed in writing to the contrary.

Export Restrictions

A UK Government export licence may be required for some items to some destinations. If the item you require needs a special export licence or an end-use statement we will inform you at the time you order.

Materials Handling

Many of our materials are extremely delicate and it is essential every care is taken when handling them. Special attention is drawn to the extreme fragility of Microfoil, Microleaf and thinner and finer materials.

All materials are carefully packed to ensure safe transport of goods to your address. We do not accept responsibility for damage caused by mishandling once the outer transit packaging has been removed.

Terms of payment

Our normal terms of payment are net 30 days from date of invoice. Any alternative terms of payment are to be agreed with us in writing at the time of placing an order. Customers may be asked to pay cash with order or cash against pro-forma invoice with their first order. In order to establish a credit account we will require details of your bankers, along with two trade references.

Order information

Credit account

We endeavour to keep our costs down and customers are requested to pay our invoices on time. We reserve the right to delay delivery if there are overdue invoices on the account. Accounts which remain unpaid beyond the due date may incur an interest charge at a rate of 2% per month.

Credit card payments

We also accept payment using the following credit and charge cards:

Mastercard, VISA, American Express, DELTA and Switch.

VAT

VAT number: GB 212 8527 79

UK

VAT will be added to the invoice at the rate ruling at the date of invoice. Where a customer is exempt, VAT will be charged unless we receive a copy of the exemption form at the time the order is placed.

EU

Customers registered for VAT who provide their local registration number will not be charged UK VAT.

Customers who are exempt from VAT will not be charged UK VAT provided we are given a copy of their exemption form at the time the goods are ordered.

Customers not registered for VAT or who fail to give us their registration number will be charged UK VAT at the current rate.

Export

All exports to countries outside the EU are zero-rated for UK VAT unless the invoice is being paid from within the EU.

Return of goods

We will only accept return of goods provided we are contacted BEFORE the goods are returned. When we agree to the return we will issue a Goods Return Number and give instructions for the method of return of the goods. Goods will not be accepted for return without a valid Goods Return Number. Due to the nature of some of our materials, it is imperative that you check any possible transport restrictions with your proposed freight company.

Claims

Great care is taken during manufacture and packing and all items are carefully inspected before shipment. Any claim in respect of short delivery, incorrect material or defective quality must be notified to us in writing within three days of delivery. Please retain ALL packaging for our inspection. Our liability for any such claim shall not exceed the cost of replacement of the goods free of charge, or crediting the customer with the invoice value thereof.

Goods ordered in error

We do not accept responsibility for customers' errors in ordering. The amount of credit for returned goods will be at our discretion. Where we accept returned goods a restocking charge will be made.

Conditions of sale

All orders, contracts and quotations are subject to our standard terms and conditions of sale.

Information and statements provided are indicative only and do not form part of any offer or contract.

Exclusions

We supply materials according to our specification. All conditions warranties and representations regarding the quality, fitness for purpose or state, size, shape, capacity or colour of goods supplied whether expressed or implied by common law or statute or otherwise are hereby expressly excluded. We shall not be liable for any damage direct or consequential arising from the use of goods supplied by us however such damage is caused, nor for delay in delivery.

Law

Customers in the USA: Contracts between Goodfellow Corporation and the customer shall be deemed to be subject in all respects to the laws of the Commonwealth of Pennsylvania, or the United States of America.

Customers in France: Contracts between Goodfellow SARL and the customer shall be deemed to be subject in all respects to French law unless otherwise agreed in writing

Customers in Germany: Contracts between Goodfellow GmbH and the customer shall be deemed to be subject in all respects to German law unless otherwise agreed in writing

Order information

Customers in the UK and all other countries: Contracts between Goodfellow Cambridge Limited and the customer shall be deemed to be subject in all respects to English law unless otherwise agreed in writing.

Copies of our General Terms and Conditions are available upon request or can be downloaded from our websites at www.goodfellow.com or www.goodfellowusa.com.

Company Details

Company Structure

The Goodfellow Group consists of five companies:

Goodfellow Cambridge Limited

Goodfellow was established in the City of London in 1946. The Company now has subsidiary operations in France, Germany and North America with the Group's research laboratories, workshop facilities & central administration located in Huntingdon, England.

Goodfellow Corporation

Established at the same time as our associate company in Germany, Goodfellow Corporation was set up to service the requirements of our customers in the USA.

Goodfellow GmbH

Since 1989, this member of the Goodfellow group of companies has been serving the needs of our German speaking customers within Europe.

Goodfellow SARL

Goodfellow established an operation in France in 1993 to meet the needs of our French-speaking customers in Europe.

Goodfellow (Shanghai) Trading Co., Ltd

Goodfellow established a representative office in Shanghai in 2006, and in 2012 followed this with the creation of a fully-fledged trading company, servicing the research and specialist manufacturing requirements of the Chinese market.

COMPANY DETAILS

Goodfellow Cambridge Limited

Ermine Business Park
HUNTINGDON
PE29 6WR
England
Registered in England and Wales no. 1188162
VAT registration GB 212 8527 79

Goodfellow Corporation

125 Hookstown Grade Road
Coraopolis, PA 15108-9302
USA
A Pennsylvania corporation
EIN 23-2557381

Goodfellow SARL

229, rue Solférino
F-59000 Lille
France
Registered in Lille : RCS : B 381 486 836
Siren : 381486836
Numéro de TVA Intracommunitaire :
FR 06 381 486 836

Goodfellow GmbH

Am Edelspfad 4
D-61169 Friedberg
Germany
Registered in Friedberg (Hessen) No. HRB 1309
Import VAT number DE112610478

Goodfellow (Shanghai) Trading Co., Ltd

Room 803, Centro Build, No. 568 Hengfeng Road
SHANGHAI
200070
The People's Republic of China

Conditions of Sale

1 GENERAL

1.1 In these Conditions:

1.1.1 the following expressions shall have the following meanings:-

- "Buyer" the individual firm company or other party from whom an order to supply Goods and/or Services is received by the Seller;
- "Conditions" the standard terms and conditions of sale of the Seller as set out herein and includes any additional terms and conditions of sale agreed in writing by the Seller;
- "Contract" a contract for the Supply of Goods and/or Services by the Seller to the Buyer;
- "Date of Delivery" the date on which delivery of the Goods or Services takes place pursuant to Condition 7;
- "Goods" the goods which the Seller is to supply (or, in relation to Condition 11, the goods in respect of which the Seller is to provide Services) under the Contract and includes any of them or any part of them and where the context so admits includes raw materials, processed materials and/or manufactured products whether processed or manufactured by the Seller or not;
- "Prepayment" a payment to be made by the Buyer pursuant to Condition 6.2 to be used at the Seller's discretion for the purchase of materials and/or towards the costs of labour and other costs relating to the supply of Goods;
- "Recommendations for Use" the recommendations (if any) relating to the storage, handling, application and/or use of the Goods contained in the published literature of the Seller (or, if relevant, a Supplier) or any recommendations made in Writing by an authorised representative of the Seller (or, if relevant, a Supplier);
- "Seller" Goodfellow Cambridge Limited and any subsidiary or holding company or associate (as such terms are defined in the Companies Act 1985 (as amended)) of the said company;
- "Services" the work or services or any of them to be provided by the Seller under the Contract;
- "Supplier" any person, firm or company who or which supplies materials to the Seller which make up the Goods which are to be supplied to the Buyer;

1.1.2 words importing the singular number shall include the plural and vice versa, words importing one gender shall include all genders, and words importing persons shall include bodies corporate, unincorporated associations and partnerships

- 1.2 If satisfactory references and information on the Buyer are not provided within seven days of a request therefore by the Seller, or if, following the provision of such information, the Seller is unable to obtain satisfactory trade indemnity or similar cover in respect of its dealings with the Buyer, the Seller may terminate the Contract and the rights and liabilities of the parties shall be the same as if the Contract had been cancelled in accordance with the provisions of Condition 10.2
- 1.3 The seller reserves the right to assign, sub-contract the Contract or any part thereof. The Buyer shall not be entitled to assign the benefit or burden of the Contract without the consent in writing of the Seller
- 1.4 In relation to all obligations of the Buyer under these Conditions, the time of performance is of the essence
- 1.5 The legal construction of these Conditions shall not be effected by their headings which are for convenience of reference only

2 ORDERS

- 2.1 Notwithstanding that the Seller may have given a detailed quotation or estimate either verbally or in writing no order shall be binding on the Seller unless and until it has been acknowledged in writing by the Seller or the Goods are delivered or the Services are provided by the Seller to the Buyer pursuant to the order
- 2.2 In order to avoid duplication of orders the Buyer shall be responsible for ensuring that any confirmation of an order previously placed is prominently marked as being a confirmation and not a new order. The Buyer acknowledges that any order or confirmation of order which is not so marked may be treated and accepted by the Seller as a new order to create a Contract in addition to any Contract arising out of the previously placed order
- 2.3 These Conditions are incorporated in the Contract and together with any matter set out in the Seller's quotation or acceptance/acknowledgement of order contain the entire obligations between the Seller and the Buyer. In the case of any inconsistency between any letter or quotation incorporating or referring to these Conditions and any order, letter or form of contract sent by the Buyer to the Seller, whatever may be their respective dates, the provisions of these Conditions shall prevail. In the event of the Seller entering into the Contract without the Seller having submitted a written quotation or other letter or document incorporating or referring to these Conditions but in circumstances where the Buyer has had prior notice of these Conditions then all Goods or Services supplied shall be subject to these Conditions
- 2.4 No variation of the Contract by the Buyer shall be binding upon the Seller unless made in Writing and signed on behalf of the Seller. In the event of such variation the Buyer shall indemnify and keep indemnified the Seller in full against all loss, which term shall include (but without prejudice to the generality thereof) loss of profit, costs (including the cost of labour and materials), damages, charges and expenses incurred (directly or indirectly) by the Seller as a result of such variation

2.5 Any representations (except fraudulent misrepresentations) or warranties made by or on behalf of the Seller prior to the Contract (whether verbally or in writing) are hereby expressly excluded and shall be of no effect

3 DESCRIPTION

- 3.1 Any figures, statements, descriptions, illustrations, photographs, drawings, weights or any other matters contained in the Seller's catalogues, pamphlets, price lists or advertising literature are not guaranteed to be accurate and are intended merely to represent a general picture of the Seller's products and shall not form part of the Contract nor be regarded as a warranty or representation relating to the Goods or Services
- 3.2 The Seller reserves the right to amend the specification of its products and services from time to time so that the descriptions thereof as set out in its catalogues, pamphlets, price lists or advertising literature may not be identical with those set out in the Seller's quotation and the Buyer is advised to check the specification set out in the Seller's quotation before placing an order

4 SPECIFICATIONS AND INTELLECTUAL PROPERTY

- 4.1 Where goods are supplied to the Buyer's own specification, or where standard goods of the Seller are altered in accordance with the Buyer's instructions the Buyer warrants and undertakes full responsibility for the suitability and fitness of the specification, pattern or design but also that such specification, pattern or design does not infringe any patent, trade mark, registered design, copyright or any other proprietary right of any third party and the Buyer shall indemnify and keep the Seller indemnified in full against any loss, damage or expense whatsoever (including costs) which the Seller may incur in or arising from the performance of the Contract by reason of any infringement of any such patent, trade mark, registered design, copyright or any other proprietary right
- 4.2 The Seller reserves the right to change the Buyer's specification as required to ensure that the Goods comply with any health, safety or other statutory requirement or provision and no such change by the Seller will constitute a breach of contract or impose upon the Seller any liability whatsoever
- 4.3 Unless otherwise agreed in writing, the Seller will be the sole owner of all inventions, formulations, tools, patterns, designs or other similar items and the copyright in all documents and drawings made or produced by it in preparing a quotation for the Buyer or in the course of work on any Contract with the Buyer

5 QUOTATIONS

5.1 The Seller's quotations are provisional in so far as they are subject to alteration by reference to any changes in the price of raw materials, any item to be acquired by the Seller from a third party, rates of wages, other costs of production and any other circumstances beyond the Seller's control taking place between the date of the quotation and the Buyer's placing of an order in respect thereof

6 PRICE

- 6.1 The Seller shall be entitled to adjust the Contract price of the Goods or Services whether before or after the making of the Contract in the event of any variation in the cost to the Seller of supplying the same or any part thereof caused by:-
- 6.1.1 any increase in the cost of materials required by the Seller for the completion of the Contract; or
- 6.1.2 any increase in wages or production and manufacturing costs or other overheads; or
- 6.1.3 any other reason whatsoever beyond the control of the Seller including (but without prejudice to the generality of the foregoing) fluctuations in exchange rates between monetary currencies the action of any government or any other authority or any labour problems
- 6.2 In the Seller's absolute discretion, a Prepayment in respect of the Contract may be required to be paid by the Buyer to the Seller on the terms set out in this Condition. The Prepayment shall be applied as follows:-
- 6.2.1 in the event that the Contract is performed in full by both parties the Prepayment shall be retained by the Seller in reduction of the total price payable by the Buyer under the Contract;
- 6.2.2 in the event that the Buyer is either in default of any of its obligations under the Contract or cancels or suspends the Contract in accordance with Condition 10 the Prepayment shall be set off by the Seller against its proper costs losses or damages arising in connection with the default and/or cancellation or suspension
- 6.3 Unless otherwise stated, the price set out in the Seller's quotation includes the cost of packaging, carriage, and (save as provided in Condition 6.4) insurance. In respect of supplies of Goods in the United States of America, Canada and Japan the price also includes import duties and sales taxes (if any). In respect of supplies of Goods in other countries the price does not include import duties or VAT or sales taxes which will be extra charges based on prevailing rates
- 6.4 Where the Buyer requests a particular means of delivery, the price set out in the Seller's quotation does not include insurance, which is to be arranged at the responsibility of the Buyer.

7 DELIVERY

- 7.1 Delivery of Goods shall be deemed to be effected by the Seller at the following times:-
- 7.1.1 where Goods are collected by or on behalf of the Buyer by its servants or agents, or where Goods are collected in

Conditions of Sale

- accordance with a means of delivery specifically requested by the Buyer, when the same are collected;
- 7.1.2 where delivery of the Goods is to be the responsibility of the Seller, when they arrive prior to unloading at the Buyer's premises;
- 7.1.3 where Goods are sold FOB or CIF, when they pass the ship's rail or are loaded onto the aircraft
- 7.2 Delivery of Services shall be deemed to be effected by the Seller at the time of completion by the Seller of the Services
- 7.3 Whilst the Seller will make every reasonable effort to complete the Contract by the date or dates therein specified for delivery of Goods or provision of Services such date or dates shall only constitute the times by which the Seller expects to effect such delivery and if no time is agreed delivery will be within a reasonable time but the performance of the Contract by the Seller shall not be the essence of the Contract, the Seller's failure to so deliver by the due date or dates shall not constitute a breach of Contract and the Seller shall not in any circumstances be responsible for any direct or consequential loss or damage of any kind whatsoever resulting therefrom. The Seller may wholly or partly suspend deliveries of Goods or provision of Services and the Buyer shall accept late delivery of such Goods or Services unless the Buyer has cancelled the Contract in accordance with the provisions of Condition 10.3

8 QUANTITIES INSTALMENTS AND STORAGE

- 8.1 Where Goods are delivered or Services are by instalment each instalment shall be deemed to be sold under a separate Contract and the party in default in respect of any instalment shall be liable accordingly, but no default in respect of any one instalment shall effect due performance of the Contract as regards other instalments
- 8.2 The Seller will endeavour to deliver the quantity of Goods ordered and every delivery shall be deemed to comply with the order. If there is a surplus or shortage of Goods which is no more than 10% of the quantity specified in the order the Buyer shall be deemed to have accepted the Goods and shall pay for the actual quantity delivered
- 8.3 If Goods or Services are to be delivered by instalments, the Seller shall be entitled to invoice each instalment as and when delivery is made and payment for all delivered instalments shall be due notwithstanding the non-delivery of other instalments or other default by the Seller. Failure by the Buyer to make payment by the due date for any one instalment for whatever reason shall entitle the Seller to suspend deliveries of Goods or provision of Services under the Contract but without prejudice to any other right the Seller may have under any of the other provisions of these Conditions
- 8.4 Notwithstanding that risk shall have passed to the Buyer pursuant to Condition 15 the Seller may in its absolute discretion arrange for storage of the Goods either at the request of the Buyer or as a result of the failure by the Buyer to take delivery of the Goods under Condition 7. The Seller may insure the goods whilst in storage and the Buyer shall indemnify and keep indemnified the Seller in full against all costs, losses, damages and expenses whatsoever arising in connection with the storage provided for hereunder and such costs, losses, damages and expenses will be added to and form part of the price of the Goods
- 8.5 Unless otherwise agreed between the Buyer and the Seller, the Seller shall be entitled in its absolute discretion and without giving prior notice to the Buyer at the expiration of 3 months to sell or otherwise dispose of Goods kept in storage as provided in Condition 8.4

9 TERMS OF PAYMENT

- 9.1 Unless otherwise agreed the price shall be due and payable at the Seller's offices 30 days after the date of the Seller's invoice
- 9.2 If the Buyer does not pay the whole or any part of the price on the required day then the Buyer shall pay to the Seller on request interest on the amount outstanding from the required day until the actual date of payment at the rate of 2% p.a. over the base rate of Barclays Bank plc from time to time in force which shall accrue on a daily basis
- 9.3 Condition 12 shall apply in the event of any alleged defect or failure in or of the Goods or Services and the Buyer shall not delay or refuse to make payment in any such event
- 9.4 The Buyer shall not be entitled to withhold payment of any amount due to the Seller by reason of any disputed claim by the Buyer in connection with the Contract nor shall the Buyer be entitled to set off against any amount payable under the Contract to the Seller any amount which is not then due and payable by the Seller or for which the Seller disputes liability
- 9.5 All payments payable to the Seller under the Contract shall become due immediately upon termination of the Contract despite any other provision.

10 SUSPENSION AND CANCELLATION

- 10.1 If the Buyer shall commit any breach of the Contract and fail to remedy the same within 7 days of receiving the Seller's request in writing so to do or any distress or execution is levied upon any goods or property of the Buyer or the Buyer makes any voluntary arrangement with its creditors or becomes subject to an administration order or (being an individual or firm) becomes bankrupt or (being an incorporated company) passes a resolution for winding up (otherwise than for the purpose of amalgamation or reconstruction), or a Court makes an order to that effect, or an encumbrancer takes possession, or an administrative receiver or receiver is appointed, of any of the property or assets of the Buyer, or the Buyer ceases, or threatens to cease, to carry on business or is unable to pay its debts within the meaning of section 123 Insolvency Act, 1986, or the Seller reasonably apprehends that any of the events mentioned above is about to occur in relation to the Buyer and notifies the Buyer accordingly, the Seller may:-
- 10.1.1 stop any Goods in transit and suspend any further deliveries;

and/or

- 10.1.2 suspend work on the Contract; and/or
- 10.1.3 determine the Contract forthwith and if the Goods or Services, or any part of them have been delivered but not paid for, the price shall become immediately due and payable notwithstanding any previous agreement to the contrary but without prejudice to the Seller's right to any unpaid price for Goods or Services delivered under the Contract and to damages for loss (both direct and consequential) suffered in consequence of such determination
- 10.2 If the Buyer requires cancellation of the Contract this will only be accepted at the sole discretion of the Seller and unless otherwise agreed in writing only upon condition that any costs, charges or expenses (both direct and consequential) incurred by the Seller up to the date of cancellation and the value of all loss or damage (both direct and consequential) incurred by the Seller by reason of such cancellation will be reimbursed by the Buyer to the Seller forthwith. Acceptance by the Seller of any cancellation by the Buyer will only be binding upon the Seller if it is made in writing
- 10.3 In the event of the Seller other than in any of the circumstances set out in Condition 10.1 being prevented or hindered from completing the Contract either wholly or in part in accordance with the terms thereof for any reason whatsoever beyond its reasonable control which, for the avoidance of doubt and without prejudice to the generality of the foregoing, shall include governmental action, war, riot, civil commotion, fire, flood, epidemic, labour disputes (including labour disputes involving the work force or any part thereof of the Seller or Supplier), restraints or delays affecting shipping or carriers, licensing, exporting or importing restrictions, currency restrictions and Acts of God then further performance of the Contract shall be suspended for the period during which the Seller is so prevented provided that in the event of the Contract being suspended for a continuous period of more than 3 months then either party may give the other notice in writing to terminate the Contract forthwith and in such circumstances the Buyer shall pay for all Goods or Services supplied to the date of such termination such payment to be made on or before the last day following the month during which termination was effected. The Seller shall be under no liability whatsoever to the Buyer for any direct or consequential loss or damage suffered by the Buyer as a result of the Seller's inability to perform its obligations under the Contract in these circumstances
- 10.4 The Seller's rights contained in Condition 17 (but not the Buyer's rights) shall continue beyond the discharge of the parties' primary obligations under the Contract consequent upon its termination
- 10.5 The termination of the Contract for whatever reason will be without prejudice to the rights and duties of either party accrued prior to termination

11 INSPECTION AND CLAIMS FOR DEFECTS

- 11.1 The Goods are of a highly specialised nature and must be treated with the utmost care. It is essential that the Buyer checks that they correspond in all respects with the Buyer's requirements. Any discrepancies should be notified to the Seller immediately. The Buyer undertakes to ensure that all Goods are unpacked and handled only by persons qualified to deal with such specialised products, to safeguard against injury to the Goods or to the Buyer's personnel
- 11.2 The Buyer shall inspect the Goods and carry out tests to ensure the Goods conform with the description of the Goods or Services in the Buyer's orders within 7 days of Delivery and whether or not the Buyer carries out such obligation to inspect and test no claims for non-delivery, shortages in quantity of units delivered, defective Goods or Services, non-conformity to description or partial loss or damage to Goods will be accepted by the Seller unless:-
- 11.2.1 they are notified in writing by the Buyer to the Seller within 10 days after the Date of Delivery (in the case of partial loss, damage, non-conforming or defective Goods or Services) or 14 days after the date of the invoice (in the case of non-delivery);
- 11.2.2 the Goods in respect of which a claim is made together with all the relevant packing are preserved intact as received for a period of 35 days from notification of any such claim and the Buyer permits the Seller or its servants or agents full and free right of access to inspect the Goods and investigate the claim; and
- 11.2.3 if the Buyer fails to give the appropriate notice as specified in Condition 11.2.1, the Buyer's claim will be deemed to have been waived and will be absolutely barred
- 11.3 It is in all cases the responsibility of the Buyer to ensure by testing or otherwise that the Goods are fit and suitable for the purposes for which the Buyer requires them in the conditions in which they will be used. The Buyer acknowledges that the Seller shall be under no liability of any description to the Buyer if the Goods prove to be unsuitable for whatever reason for application or use notwithstanding that the Seller may, at the request of the Buyer, have given in good faith technical or other advice in relation to the proposed application or use of the Goods and the Buyer shall indemnify and keep indemnified the Seller in full against any and all liability of any kind arising out of or connected with the application or use of the Goods
- 11.4 Section 3 Sale and Supply of Goods Act 1994 shall not apply
- 11.5 The Seller will not accept the return of Goods in any circumstances unless it has first issued a Goods return number and such number is quoted with the returned Goods

12 WARRANTY

- 12.1 In substitution for all and any other rights which the Buyer might or would have had but for these Conditions and subject to Condition 11,

Conditions of Sale

the Seller shall make good by replacement any failure in the Goods or Services which results from defects in the Seller's materials or workmanship and which appear not later than 2 months after the Date of Delivery and shall replace any Goods or Services which do not conform with the description in the Buyer's order

- 12.2 Notwithstanding the provisions of Condition 12.1, in the case of a claim falling within Condition 12.1, the Seller reserves the right at its sole discretion to credit the Buyer in full the price paid by the Buyer to the Seller
- 12.3 The Seller's liability under this Condition shall automatically cease if:
- 12.3.1 the Buyer has not paid for all Goods or Services supplied under any Contract by the due date or is otherwise in breach of this or any other Contract made with the Seller; or
- 12.3.2 the Seller or its servants or agents are denied full and free right of access to the allegedly defective Goods; or
- 12.3.3 the Buyer has not properly maintained the Goods or has not complied with any Recommendations for Use; or
- 12.3.4 the defect or failure is caused by a breach by the Buyer of its undertakings and warranties contained in Condition 17; or
- 12.3.5 the Buyer has failed to notify the Seller in writing of any defect or suspected defect within 14 days of the same coming to the knowledge of the Buyer
- 12.4 The warranty set out in Condition 12.1 shall be in lieu of any warranties conditions or undertakings whether express or implied by statute, common law or otherwise howsoever which warranties, conditions and undertakings are hereby expressly excluded, except that such exclusions will not apply to any implied condition that the Seller has or will have the right to sell the Goods when the property is to pass
- 12.5 Nothing in these Conditions excludes or limits the liability of the Seller for death or personal injury caused by the Seller's negligence or fraudulent misrepresentation
- 12.6 SUBJECT TO CONDITIONS 12.4 AND 12.5
- 12.6.1 the seller's total liability in contract, tort (including negligence or breach of statutory duty), misrepresentation or otherwise, arising in connection with the performance or contemplated performance of the contract shall be limited to the price paid for the goods or services under the contract; and
- 12.6.2 the seller shall not be liable to the buyer for any indirect or consequential loss or damage (whether for loss of profit, loss of business, depletion of goodwill or otherwise), costs, expenses or other claims for consequential compensation whatsoever (however caused) which arise out of or in connection with the contract

13 CONSUMER SALES

- 13.1 Where the Goods are sold under a consumer sale (as defined by the Sale of Goods Act 1979) the statutory rights of the Buyer are not affected by these conditions

14 TITLE TO GOODS

- 14.1 Full legal and beneficial ownership of the Goods shall be retained by the Seller notwithstanding that the risk in the same shall pass to the Buyer at the time of delivery until the Seller has received payment in full in respect of
- 14.1.1 The Goods; and
- 14.1.2 All other sums which become due and owing by the Buyer to the Seller on any account whatsoever
- 14.2 Until ownership of the Goods has passed to the Buyer the Buyer shall hold the Goods in a fiduciary capacity and as bailee of the Seller and shall at all times take proper care of the same and will not obliterate or obscure any identifying mark or their packaging and will keep the Goods separate from any other goods and in such manner that they may be clearly identified as belonging to the Seller and the Buyer hereby grants to the Seller the right to enter on the Buyer's premises at any time during the continuation of the Contract to check that the Buyer is complying with the obligation contained in this Condition. The Buyer will return the Goods to the Seller if it receives a request whether verbally or in Writing so to do prior to payment in full as aforesaid having been made and the Seller will then repay any part of the purchase price it has already received in respect of the Goods less a reasonable amount in respect of its costs and expenses in connection with the Contract
- 14.3 For the purposes of Condition 14.1, the expression "the Buyer" includes any subsidiary or holding company or associate of the Buyer (as such terms are defined in the Companies Act 1985 (as amended))
- 14.4 The Seller will have the right to maintain an action against the Buyer for the price of the Goods notwithstanding that property in the Goods has not been passed

15 RISK AND INSURANCE

- 15.1 The risk in the Goods shall pass to the Buyer at the time of delivery as provided for in Condition 7
- 15.2 Notwithstanding the reservation of title contained in Condition 14, the Buyer shall insure the Goods and/or any products made wholly or partly therefrom for the full amount of the price payable under the Contract with an insurance office of repute from the time of delivery of the Goods until the date title in the Goods passes to the Buyer pursuant to Condition 14.1

16 EXPORT TERMS

- 16.1 In these Conditions "Incoterms" means the international rules for the interpretation of trade terms of the International Chamber of Commerce

as in force at the date when the Contract is made. Unless the context otherwise requires, any term or expression which is defined in or given a particular meaning by the provisions of Incoterms has the same meaning in the Contract

- 16.2 Where the Goods are supplied for export from the United Kingdom then unless otherwise agreed in writing between the Buyer and the Seller

- 16.2.1 the provisions of Incoterms shall (subject to any special terms agreed in writing between the Buyer and the Seller) apply but if there is any conflict between the provisions of Incoterms and these Conditions, the latter shall prevail.
- 16.2.2 the Buyer shall be responsible for complying with any legislation or regulations governing the importation of the Goods into the country of destination and (save in respect of the United States of America, Canada and Japan) for the payment of any duties and taxes thereon unless payment for these is included in the Contract
- 16.2.3 the Buyer shall be deemed to have satisfied itself that such Goods comply with the safety regulations of any country or state in which the Goods are to be used outside the United Kingdom and the Buyer shall indemnify and keep indemnified the Seller in full for any loss or damage whatsoever which the Seller may incur if such Goods do not comply with such safety regulations

- 16.3 The Goods shall not be used in any country other than that for which the Seller was aware they were originally ordered without the Seller's consent in writing

- 16.4 The Buyer undertakes not to offer the Goods for resale in any country notified by the Seller at or before the time the Buyer's order is placed, or to sell the Goods to any person if the Buyer knows or has reason to believe that person intends to resell the Goods in any such country

17 BUYER'S WARRANTIES

- 17.1 The Buyer warrants to the Seller that:
- 17.1.1 the Buyer will install, operate or otherwise use or store the Goods strictly in accordance with the Recommendations for Use and with all relevant or applicable statutory or other regulations governing the installation, operation, use or storage of the Goods; and
- 17.1.2 any collection vehicle, container, ship or other means of transport provided by the Buyer or any agent of the Buyer will comply with all relevant legislation and regulations relating to health and safety requirements; and
- 17.1.3 the storage and transport facilities and all parts thereof and all equipment used in connection therewith is suitable for storage (both short term and long term) and transport of the Goods and complies with any statute, regulation, bye law or other rule having the force of law and relating to the storage of goods of the nature of the Goods; and
- 17.1.4 the Buyer will ensure that the Goods are stored in conditions appropriate to goods of that nature and will comply with any recommendations as to the storage of Goods notified to it by the Seller from time to time; and
- 17.2 The Buyer shall indemnify and keep indemnified the Seller in full against any claim, loss or damage (including, without limitation, damage to the reputation of the Seller) arising directly or indirectly from any breach of the warranty contained in Condition 17.1

18 SEVERANCE

- 18.1 If at any time any one or more of the provisions or part thereof of these Conditions becomes or is invalid, illegal or unenforceable in any respect under any law or is held by a court to be invalid, illegal or unenforceable, the validity and enforceability of the remaining provisions hereof and the remainder of such provision shall not in any way be affected or impaired thereby

19 JURISDICTION

- 19.1 These Conditions and each and every Contract made pursuant to them shall be governed by and construed in all respects in accordance with the laws of England and the Seller and the Buyer hereby agree to submit to the non-exclusive jurisdiction of the English Courts

20 NOTICES

- 20.1 Any notice required or permitted to be given by either party to the other under these Conditions shall be in writing addressed to that other party at its registered office or principal place of business or such other address as may at the relevant time have been notified pursuant to this provision to the party giving notice
- 20.2 Any notice given pursuant to clause 20.1 shall be deemed to have been served:
- 20.2.1 if delivered by hand, on the first Business Day following delivery;
- 20.2.2 if sent by post, on the third Business Day after posting if the address of the recipient is in the country of despatch, otherwise on the seventh Business Day after posting;
- 20.2.3 if sent by facsimile transmission, on the first Business Day following successful transmission
- 20.3 In proving service it shall be sufficient proof in the case of a notice sent by post, that the envelope containing the same was properly stamped, addressed and placed in the post and, in the case of facsimile transmission, that it was properly addressed and successfully transmitted
- 20.4 In this Condition 20, "Business Day" shall mean any day other than Saturday, Sunday or any other day which is a public holiday in the place at which the notice is left or to which such notice is despatched

21 WAIVER

Conditions of Sale

21.1 No waiver by the Seller of any breach of any provision of the Contract by the Buyer shall be considered as a waiver of any subsequent breach

of the same or any other provision and the Seller shall not be prejudiced by any forbearance or indulgence granted by it to the Buyer

Stainless Steel - AISI 316

Fe/Cr18/Ni10/Mo 3

Stainless steels are iron based alloys containing at least 10.5% Chromium. They achieve their stainless characteristics through the formation of an invisible and adherent Chromium rich oxide film. Alloy 316 is a general purpose austenitic stainless steel with a face centered cubic structure. It is essentially non-magnetic in the annealed condition and can only be hardened by cold working. Molybdenum has been added to increase corrosion resistance particularly in chloride containing environments, and the lower Carbon content of alloy 316L gives even better corrosion resistance in welded structures.

Physical Properties

Density 7.96 g cm⁻³
 Melting point 1370-1400 C

Electrical Properties

Electrical resistivity 70-78 μOhmcm
 Temperature coefficient - K⁻¹

Thermal Properties

Coefficient of thermal expansion @20-100C 16-18 x10⁻⁶ K⁻¹
 Specific heat @23C 502 J K⁻¹ kg⁻¹
 Thermal conductivity @23C 16.3 W m⁻¹ K⁻¹

Mechanical Properties

Elongation at break < 60 %
 Hardness - Brinell 160-190
 Izod impact strength 20-136 J m⁻¹
 Modulus of elasticity 190-210 GPa
 Tensile strength 460-860 MPa



Foil

FE240201 Thickness **0.005mm** Coil width **95mm**
 Temper **As rolled**

Coil

Web Code
 298-831-678
 477-710-288
 738-363-550
 769-676-127

Width 95mm

Length	1 Reel
0.025 m	EUR 243.00
0.05 m	EUR 304.00
0.1 m	EUR 405.00
0.2 m	EUR 713.00

Quantity

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C < 1200, Mo 2.0 - 3.5%

FE240200 Thickness **0.0075mm** Temper **As rolled**

Sizes LT

Web Code
 580-775-917
 005-607-204
 564-511-802

Width 95mm

Size	1pc	2pcs	5pcs
25 x 25 mm	EUR 192.00	EUR 221.00	EUR 282.00
50 x 50 mm	EUR 258.00	EUR 314.00	
100 x 100 mm	EUR 389.00		

Quantity

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C < 1200, Mo 2.0 - 3.5%

FE240210 Thickness **0.01mm**

Sizes LT

Web Code
 691-109-391
 408-659-136
 382-323-015
 309-591-411

Width 200mm

Size	1pc	2pcs	5pcs	10pcs	20pcs
25 x 25 mm	EUR 184.00	EUR 210.00	EUR 263.00	EUR 327.00	EUR 423.00
50 x 50 mm	EUR 241.00	EUR 290.00	EUR 391.00	EUR 508.00	EUR 679.00
100 x 100 mm	EUR 355.00	EUR 452.00	EUR 647.00	EUR 870.00	
200 x 200 mm	EUR 584.00	EUR 776.00	EUR 1417.00		

Quantity

Coil

Web Code
 681-208-729
 151-095-905

Width 200mm

Length	1 Reel
0.5 m	EUR 885.00
1 m	EUR 1443.00

Discs

Web Code
 874-505-542
 313-191-861
 148-981-676
 622-709-063
 838-635-144
 829-388-209
 673-535-104

Width 200mm

Diameter	10 discs	20 discs	50 discs
4 mm	EUR 272.00	EUR 312.00	EUR 406.00
6 mm	EUR 289.00	EUR 337.00	EUR 445.00
8 mm	EUR 307.00	EUR 361.00	EUR 484.00
10 mm	EUR 324.00	EUR 386.00	EUR 523.00
15 mm	EUR 368.00	EUR 448.00	EUR 620.00
25 mm	EUR 455.00	EUR 571.00	EUR 815.00
50 mm	EUR 673.00	EUR 880.00	

Quantity

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C < 1200, Mo 2.0 - 3.5%

Alloy – Stainless Steel - AISI 316

Stainless Steel - AISI 316

Fe/Cr18/Ni10/Mo 3



Foil

FE240220

Thickness 0.0125mm

Temper Hard

NLT Sizes

Web Code
315-224-077

Size	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
300 x 300 mm	EUR 490.00	EUR 646.00	EUR 1107.00		

Sizes LT

Web Code
552-575-541
536-042-776
912-255-041
884-184-587

Size	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
25 x 25 mm	EUR 152.00	EUR 167.00	EUR 199.00	EUR 238.00	EUR 300.00
50 x 50 mm	EUR 183.00	EUR 210.00	EUR 267.00	EUR 335.00	EUR 437.00
100 x 100 mm	EUR 244.00	EUR 297.00	EUR 405.00	EUR 530.00	EUR 712.00
150 x 150 mm	EUR 306.00	EUR 384.00	EUR 543.00	EUR 724.00	

Coil

Web Code
268-613-511
576-693-177

Width 305mm

Length	1 Reel
	0.5 m
1 m	EUR 836.00

Discs

Web Code
086-638-569
829-819-967
727-492-235
936-530-731
066-339-633
292-450-578
556-314-046

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	EUR 250.00	EUR 283.00	EUR 363.00
6 mm	EUR 259.00	EUR 296.00	EUR 384.00
8 mm	EUR 268.00	EUR 310.00	EUR 405.00
10 mm	EUR 278.00	EUR 323.00	EUR 426.00
15 mm	EUR 301.00	EUR 356.00	EUR 479.00
25 mm	EUR 348.00	EUR 422.00	EUR 583.00
50 mm	EUR 465.00	EUR 588.00	EUR 847.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C < 1200, Mo 2.0 - 3.5%

FE240236

Thickness 0.025mm

Temper Annealed

Size

Web Code
287-215-168
077-662-977
176-888-420
219-178-538

Size	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
25 x 25 mm	EUR 123.00	EUR 131.00	EUR 150.00	EUR 175.00	EUR 217.00
50 x 50 mm	EUR 138.00	EUR 153.00	EUR 185.00	EUR 225.00	EUR 287.00
100 x 100 mm	EUR 169.00	EUR 197.00	EUR 255.00	EUR 323.00	
150 x 150 mm	EUR 200.00	EUR 241.00	EUR 324.00		

Coil

Web Code
002-714-482
374-373-073
640-341-755
525-720-344

Width 150mm

Length	1 Reel
	0.3 m
0.5 m	EUR 311.00
1 m	EUR 382.00
2 m	EUR 483.00

Discs

Web Code
696-721-569
770-716-080
257-560-506
002-261-348
071-270-305
558-113-813
114-361-288

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	EUR 223.00	EUR 253.00	EUR 326.00
6 mm	EUR 228.00	EUR 260.00	EUR 336.00
8 mm	EUR 233.00	EUR 266.00	EUR 347.00
10 mm	EUR 238.00	EUR 273.00	EUR 358.00
15 mm	EUR 249.00	EUR 290.00	EUR 384.00
25 mm	EUR 273.00	EUR 323.00	EUR 437.00
50 mm	EUR 332.00	EUR 407.00	EUR 570.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C < 1200, Mo 2.0 - 3.5%

FE240235

Thickness 0.025mm

Temper Hard

Size

Web Code
539-255-548
406-944-306
868-043-217
505-400-046
324-323-523

Size	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
25 x 25 mm	EUR 123.00	EUR 131.00	EUR 150.00	EUR 175.00	EUR 217.00
50 x 50 mm	EUR 138.00	EUR 153.00	EUR 185.00	EUR 225.00	EUR 287.00
100 x 100 mm	EUR 169.00	EUR 197.00	EUR 255.00	EUR 323.00	EUR 426.00
150 x 150 mm	EUR 200.00	EUR 241.00	EUR 324.00	EUR 421.00	
300 x 300 mm	EUR 293.00	EUR 373.00	EUR 532.00		

Coil

Web Code
175-000-147
875-021-259
377-654-242
206-783-620

Width 300mm

Length	1 Reel
	0.3 m
0.5 m	EUR 382.00
1 m	EUR 482.00
2 m	EUR 634.00

Discs

Web Code
847-953-403
994-182-140
272-763-858
095-476-903
934-621-616
827-712-415
464-054-696

Diameter	Quantity		
	10 discs	20 discs	50 discs
4 mm	EUR 223.00	EUR 253.00	EUR 326.00
6 mm	EUR 228.00	EUR 260.00	EUR 336.00
8 mm	EUR 233.00	EUR 266.00	EUR 347.00
10 mm	EUR 238.00	EUR 273.00	EUR 358.00
15 mm	EUR 249.00	EUR 290.00	EUR 384.00
25 mm	EUR 273.00	EUR 323.00	EUR 437.00
50 mm	EUR 332.00	EUR 407.00	EUR 570.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C < 1200, Mo 2.0 - 3.5%

Alloy - Stainless Steel - AISI 316

Stainless Steel - AISI 316

Fe/Cr18/Ni10/Mo 3



Foil

FE240240

Thickness **0.038mm**

Temper **Annealed**

Size

Web Code

006-831-080
 178-754-469
 072-015-385
 380-310-386
 455-537-985

Size

25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 280 x 300 mm

1pc

2pcs

5pcs

10pcs

20pcs

Quantity					
1pc	2pcs	5pcs	10pcs	20pcs	
EUR 112.00	EUR 119.00	EUR 135.00	EUR 156.00	EUR 193.00	
EUR 123.00	EUR 135.00	EUR 161.00	EUR 194.00	EUR 246.00	
EUR 147.00	EUR 169.00	EUR 214.00	EUR 268.00	EUR 351.00	
EUR 170.00	EUR 202.00	EUR 266.00	EUR 343.00		
EUR 236.00	EUR 295.00	EUR 418.00			

Coil

Web Code

379-802-547
 853-881-141
 735-142-248

Width 300mm

Length

0.5 m
 1 m
 2 m

Quantity

1 Reel

EUR 317.00
EUR 393.00
EUR 578.00

Discs

Web Code

445-569-259
 696-152-985
 019-120-251
 390-026-771
 753-345-180
 168-145-165
 018-144-978

Diameter

4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

Quantity			
10 discs	20 discs	50 discs	
EUR 212.00	EUR 241.00	EUR 312.00	
EUR 216.00	EUR 246.00	EUR 320.00	
EUR 219.00	EUR 251.00	EUR 328.00	
EUR 223.00	EUR 256.00	EUR 336.00	
EUR 232.00	EUR 269.00	EUR 356.00	
EUR 250.00	EUR 294.00	EUR 396.00	
EUR 295.00	EUR 358.00	EUR 497.00	

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

FE240241

Thickness **0.043mm**

Temper **Annealed**

Size

Web Code

268-120-320
 906-304-575
 043-823-339
 357-363-636
 145-399-675

Size

25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

1pc

2pcs

5pcs

10pcs

20pcs

Quantity					
1pc	2pcs	5pcs	10pcs	20pcs	
EUR 107.00	EUR 112.00	EUR 125.00	EUR 142.00	EUR 173.00	
EUR 114.00	EUR 122.00	EUR 141.00	EUR 165.00	EUR 206.00	
EUR 129.00	EUR 143.00	EUR 173.00	EUR 211.00	EUR 271.00	
EUR 143.00	EUR 164.00	EUR 206.00	EUR 257.00		
EUR 187.00	EUR 225.00	EUR 304.00			

Coil

Web Code

475-317-419
 515-047-022
 380-876-465
 609-561-962

Width 300mm

Length

0.5 m
 1 m
 2 m
 5 m

Quantity

1 Reel

EUR 247.00
EUR 294.00
EUR 361.00
EUR 559.00

Discs

Web Code

716-230-104
 528-773-464
 096-685-377
 085-674-774
 709-344-073
 668-008-088
 501-001-183

Diameter

4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

Quantity			
10 discs	20 discs	50 discs	
EUR 210.00	EUR 237.00	EUR 306.00	
EUR 212.00	EUR 240.00	EUR 311.00	
EUR 214.00	EUR 243.00	EUR 316.00	
EUR 216.00	EUR 247.00	EUR 321.00	
EUR 222.00	EUR 254.00	EUR 333.00	
EUR 233.00	EUR 270.00	EUR 358.00	
EUR 260.00	EUR 309.00	EUR 420.00	

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

FE240252

Thickness **0.05mm**

Coil width **50mm**

Temper **Annealed**

Coil

Web Code

335-248-059
 550-032-385
 772-471-539
 098-081-069
 583-919-504

Width 50mm

Length

0.5 m
 1 m
 2 m
 5 m
 10 m

Quantity

1 Reel

EUR 151.00
EUR 164.00
EUR 184.00
EUR 222.00
EUR 267.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

Alloy – Stainless Steel - AISI 316

Stainless Steel - AISI 316

Fe/Cr18/Ni10/Mo 3



Foil

FE240250

Thickness 0.05mm

Temper Annealed

Size

Web Code

625-147-387
 143-423-411
 927-927-628
 990-952-718
 869-091-472

Size

25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

Quantity

1pc	2pcs	5pcs	10pcs	20pcs
EUR 90.00	EUR 94.50	EUR 105.00	EUR 120.00	EUR 148.00
EUR 95.00	EUR 101.00	EUR 116.00	EUR 136.00	EUR 170.00
EUR 105.00	EUR 115.00	EUR 138.00	EUR 167.00	EUR 215.00
EUR 115.00	EUR 130.00	EUR 161.00	EUR 199.00	EUR 260.00
EUR 145.00	EUR 172.00	EUR 228.00		

Coil

Web Code

414-677-654
 636-425-843
 553-237-050
 154-626-820

Width 315mm

Length

1 Reel
0.5 m EUR 199.00
1 m EUR 232.00
2 m EUR 279.00
5 m EUR 422.00

Quantity

Discs

Web Code

044-185-686
 523-204-179
 400-518-197
 064-766-329
 095-799-983
 974-988-944
 873-617-576

Diameter

4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

10 discs	20 discs	50 discs
EUR 182.00	EUR 204.00	EUR 260.00
EUR 183.00	EUR 206.00	EUR 263.00
EUR 184.00	EUR 208.00	EUR 266.00
EUR 185.00	EUR 209.00	EUR 269.00
EUR 188.00	EUR 214.00	EUR 276.00
EUR 195.00	EUR 223.00	EUR 290.00
EUR 211.00	EUR 245.00	EUR 325.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C < 1200, Mo 2.0 - 3.5%

FE240260

Thickness 0.075mm

Temper Annealed

Size

Web Code

202-193-183
 274-139-626
 267-451-277
 431-406-861
 925-850-540

Size

25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

Quantity

1pc	2pcs	5pcs	10pcs	20pcs
EUR 90.00	EUR 94.00	EUR 105.00	EUR 120.00	EUR 148.00
EUR 95.00	EUR 101.00	EUR 116.00	EUR 135.00	EUR 170.00
EUR 105.00	EUR 115.00	EUR 137.00	EUR 166.00	EUR 214.00
EUR 114.00	EUR 129.00	EUR 159.00	EUR 197.00	EUR 257.00
EUR 144.00	EUR 170.00	EUR 225.00		

Coil

Web Code

834-711-260
 731-314-989
 414-366-159
 795-774-431

Width 300mm

Length

1 Reel
0.5 m EUR 195.00
1 m EUR 227.00
2 m EUR 272.00
5 m EUR 428.00

Quantity

Discs

Web Code

976-315-340
 039-422-771
 927-843-251
 980-402-709
 550-338-714
 792-349-824
 043-730-078

Diameter

4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

10 discs	20 discs	50 discs
EUR 181.00	EUR 204.00	EUR 260.00
EUR 183.00	EUR 206.00	EUR 263.00
EUR 184.00	EUR 207.00	EUR 266.00
EUR 185.00	EUR 209.00	EUR 268.00
EUR 188.00	EUR 214.00	EUR 275.00
EUR 194.00	EUR 222.00	EUR 289.00
EUR 210.00	EUR 244.00	EUR 324.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C < 1200, Mo 2.0 - 3.5%

FE240261

Thickness 0.1mm

Temper Hard

Size

Web Code

466-251-938
 281-489-244
 186-152-477
 269-054-407
 038-579-803

Size

25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 200 x 200 mm

Quantity

1pc	2pcs	5pcs	10pcs	20pcs
EUR 90.00	EUR 94.00	EUR 105.00	EUR 120.00	EUR 148.00
EUR 95.00	EUR 101.00	EUR 116.00	EUR 135.00	EUR 170.00
EUR 105.00	EUR 115.00	EUR 138.00	EUR 166.00	EUR 214.00
EUR 114.00	EUR 129.00	EUR 159.00	EUR 197.00	EUR 257.00
EUR 124.00	EUR 143.00	EUR 181.00	EUR 228.00	

Coil

Web Code

976-562-169
 070-268-148
 783-518-246
 939-777-689

Width 200mm

Length

1 Reel
0.5 m EUR 181.00
1 m EUR 207.00
2 m EUR 245.00
5 m EUR 349.00

Quantity

Alloy – Stainless Steel - AISI 316

Stainless Steel - AISI 316

Fe/Cr18/Ni10/Mo 3



Foil

FE240265

Thickness 0.1mm

Temper Annealed

Size

Web Code

561-794-353
 224-291-668
 036-456-935
 557-117-288
 639-659-534

Size

25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

Quantity

1pc	2pcs	5pcs	10pcs	20pcs
EUR 90.00	EUR 94.00	EUR 104.00	EUR 120.00	EUR 147.00
EUR 94.50	EUR 101.00	EUR 115.00	EUR 135.00	EUR 169.00
EUR 104.00	EUR 114.00	EUR 136.00	EUR 165.00	EUR 212.00
EUR 114.00	EUR 128.00	EUR 158.00	EUR 195.00	EUR 254.00
EUR 143.00	EUR 169.00	EUR 222.00		

Coil

Web Code

531-999-735
 957-445-820
 680-733-184
 091-640-331

Width 300mm

Length

1 Reel
0.5 m EUR 194.00
1 m EUR 225.00
2 m EUR 269.00
5 m EUR 447.00

Quantity

Discs

Web Code

043-512-503
 439-072-166
 884-024-841
 503-109-086
 888-629-671
 078-711-042
 838-877-904

Diameter

4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

10 discs	20 discs	50 discs
EUR 181.00	EUR 204.00	EUR 260.00
EUR 183.00	EUR 206.00	EUR 263.00
EUR 184.00	EUR 207.00	EUR 265.00
EUR 185.00	EUR 209.00	EUR 268.00
EUR 188.00	EUR 213.00	EUR 275.00
EUR 194.00	EUR 222.00	EUR 289.00
EUR 209.00	EUR 243.00	EUR 323.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C < 1200, Mo 2.0 - 3.5%

FE240270

Thickness 0.125mm

Temper Annealed

Size

Web Code

859-741-931
 467-742-886
 467-858-087
 482-252-580
 281-567-544

Size

25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

Quantity

1pc	2pcs	5pcs	10pcs	20pcs
EUR 90.00	EUR 94.00	EUR 104.00	EUR 120.00	EUR 147.00
EUR 94.50	EUR 101.00	EUR 115.00	EUR 135.00	EUR 169.00
EUR 104.00	EUR 114.00	EUR 137.00	EUR 165.00	EUR 212.00
EUR 114.00	EUR 128.00	EUR 158.00	EUR 195.00	EUR 255.00
EUR 143.00	EUR 169.00	EUR 222.00		

Coil

Web Code

338-901-712
 195-942-444
 492-812-288
 601-527-128

Width 300mm

Length

1 Reel
0.5 m EUR 194.00
1 m EUR 225.00
2 m EUR 269.00
5 m EUR 488.00

Quantity

Discs

Web Code

861-599-197
 699-888-083
 486-003-341
 750-417-602
 802-202-487
 275-310-865
 413-855-170

Diameter

4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

10 discs	20 discs	50 discs
EUR 181.00	EUR 204.00	EUR 260.00
EUR 183.00	EUR 206.00	EUR 263.00
EUR 184.00	EUR 207.00	EUR 265.00
EUR 185.00	EUR 209.00	EUR 268.00
EUR 188.00	EUR 213.00	EUR 275.00
EUR 194.00	EUR 222.00	EUR 289.00
EUR 209.00	EUR 243.00	EUR 323.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C < 1200, Mo 2.0 - 3.5%

FE240290

Thickness 0.15mm

Temper Annealed

Size

Web Code

731-893-232
 486-651-776
 831-465-077
 933-128-284
 641-030-718

Size

25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

Quantity

1pc	2pcs	5pcs	10pcs	20pcs
EUR 90.00	EUR 94.50	EUR 105.00	EUR 121.00	EUR 149.00
EUR 95.50	EUR 102.00	EUR 116.00	EUR 137.00	EUR 171.00
EUR 105.00	EUR 116.00	EUR 139.00	EUR 169.00	EUR 217.00
EUR 116.00	EUR 131.00	EUR 162.00	EUR 201.00	EUR 263.00
EUR 146.00	EUR 174.00	EUR 231.00		

Coil

Web Code

362-714-704
 128-839-016
 104-875-058
 109-384-493

Width 305mm

Length

1 Reel
0.5 m EUR 199.00
1 m EUR 233.00
2 m EUR 289.00
5 m EUR 543.00

Quantity

Discs

Web Code

415-027-873
 878-475-987
 809-489-860
 186-233-697
 279-202-137
 900-273-673
 534-211-512

Diameter

4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

10 discs	20 discs	50 discs
EUR 182.00	EUR 204.00	EUR 260.00
EUR 183.00	EUR 206.00	EUR 263.00
EUR 184.00	EUR 208.00	EUR 266.00
EUR 185.00	EUR 210.00	EUR 269.00
EUR 189.00	EUR 214.00	EUR 276.00
EUR 195.00	EUR 223.00	EUR 291.00
EUR 211.00	EUR 246.00	EUR 327.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C < 1200, Mo 2.0 - 3.5%

Alloy - Stainless Steel - AISI 316

Stainless Steel - AISI 316

Fe/Cr18/Ni10/Mo 3



Foil

FE240300

Thickness 0.25mm

Temper Annealed



Size

Web Code

776-446-489
 055-811-008
 976-380-143
 047-514-019
 939-259-410

Size
 25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

		Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs	
EUR 89.00	EUR 93.00	EUR 103.00	EUR 117.00	EUR 144.00		
EUR 93.00	EUR 98.50	EUR 111.00	EUR 129.00	EUR 161.00		
EUR 101.00	EUR 110.00	EUR 129.00	EUR 155.00	EUR 197.00		
EUR 109.00	EUR 121.00	EUR 147.00	EUR 180.00	EUR 232.00		
EUR 133.00	EUR 154.00	EUR 200.00				

Coil

Web Code

339-340-573
 407-427-151
 928-392-810
 049-111-956

Width 300mm

Length

0.5 m
 1 m
 2 m
 5 m

Quantity

1 Reel

EUR 181.00
 EUR 207.00
 EUR 249.00
 EUR 443.00

Discs

Web Code

374-319-748
 789-968-309
 746-049-552
 256-194-296
 024-275-443
 034-427-441
 303-425-078

Diameter
 4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

	10 discs	20 discs	50 discs
EUR 181.00	EUR 203.00	EUR 259.00	
EUR 182.00	EUR 205.00	EUR 261.00	
EUR 183.00	EUR 206.00	EUR 264.00	
EUR 184.00	EUR 208.00	EUR 266.00	
EUR 187.00	EUR 211.00	EUR 271.00	
EUR 192.00	EUR 218.00	EUR 283.00	
EUR 204.00	EUR 236.00	EUR 311.00	

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

FE240312

Thickness 0.5mm

Condition Ion Implanted



Size

Web Code

165-089-544

Size
 50 x 50 mm

Quantity

1pc
 POA

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

This material has been Ion Implanted with Nitrogen Ions to a dose of 3×10^{17} ions cm^{-2} .

FE240311

Thickness 0.5mm

Surface treatment Titanium Nitride coating 2-3 microns



Size

Web Code

208-512-757
 064-094-706
 011-846-779
 157-334-036

Size
 25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 160 mm

Quantity

	1pc	2pcs	5pcs	10pcs
EUR 120.00	EUR 139.00	EUR 180.00	EUR 235.00	
EUR 153.00	EUR 185.00	EUR 293.00		
EUR 237.00	EUR 391.00			
EUR 446.00				

Discs

Web Code

480-847-457
 105-927-598
 240-946-727
 118-342-655
 792-827-942
 103-498-505

Diameter
 4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm

Quantity

	10 discs	20 discs	50 discs
EUR 244.00	EUR 305.00	EUR 472.00	
EUR 254.00	EUR 318.00	EUR 494.00	
EUR 263.00	EUR 331.00	EUR 515.00	
EUR 272.00	EUR 345.00	EUR 536.00	
EUR 296.00	EUR 378.00	EUR 620.00	
EUR 342.00			

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

This item is shown as an example of Titanium Nitride (TiN) coated material.

FE240310

Thickness 0.5mm

Temper Annealed



Size

Web Code

458-966-314
 370-789-930
 348-745-018
 593-133-269
 141-657-484

Size
 25 x 25 mm
 50 x 50 mm
 100 x 100 mm
 150 x 150 mm
 300 x 300 mm

Quantity

	1pc	2pcs	5pcs	10pcs	20pcs
EUR 89.50	EUR 93.50	EUR 104.00	EUR 119.00	EUR 146.00	
EUR 94.00	EUR 100.00	EUR 114.00	EUR 133.00	EUR 166.00	
EUR 103.00	EUR 113.00	EUR 134.00	EUR 161.00	EUR 207.00	
EUR 112.00	EUR 126.00	EUR 154.00	EUR 190.00	EUR 252.00	
EUR 139.00	EUR 164.00	EUR 219.00	EUR 356.00		

Coil

Web Code

707-181-822
 397-730-760
 716-347-429

Width 300mm

Length

1 m
 2 m
 5 m

Quantity

EUR 219.00
 EUR 288.00
 EUR 542.00

Discs

Web Code

543-436-276
 929-528-053
 191-000-781
 875-099-534
 387-444-335
 430-541-302
 817-668-178

Diameter
 4 mm
 6 mm
 8 mm
 10 mm
 15 mm
 25 mm
 50 mm

Quantity

	10 discs	20 discs	50 discs
EUR 181.00	EUR 204.00	EUR 260.00	
EUR 182.00	EUR 205.00	EUR 262.00	
EUR 184.00	EUR 207.00	EUR 265.00	
EUR 185.00	EUR 209.00	EUR 267.00	
EUR 188.00	EUR 213.00	EUR 274.00	
EUR 193.00	EUR 221.00	EUR 287.00	
EUR 208.00	EUR 241.00	EUR 319.00	

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

Alloy - Stainless Steel - AISI 316

Stainless Steel - AISI 316

Fe/Cr18/Ni10/Mo 3



Foil

FE240315

Thickness **0.914mm**

Temper **As rolled**



Size

Web Code
 248-488-265
 731-022-947
 717-455-986
 077-963-248

Size	Quantity			
	1pc	2pcs	5pcs	10pcs
50 x 50 mm	EUR 94.50	EUR 101.00	EUR 114.00	EUR 132.00
150 x 150 mm	EUR 114.00	EUR 128.00	EUR 158.00	EUR 195.00
300 x 300 mm	EUR 144.00	EUR 170.00	EUR 239.00	
500 x 500 mm	EUR 184.00	EUR 250.00		

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%
 Prices for pieces up to 1220mmx1220mm on request.

FE240320

Thickness **0.914mm**

Temper **Annealed**



Size

Web Code
 342-019-545
 752-439-667
 054-955-976
 869-494-002
 686-762-057

Size	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
50 x 50 mm	EUR 96.00	EUR 102.00	EUR 117.00	EUR 136.00	EUR 168.00
100 x 100 mm	EUR 107.00	EUR 118.00	EUR 141.00	EUR 171.00	EUR 218.00
150 x 150 mm	EUR 118.00	EUR 133.00	EUR 166.00	EUR 206.00	
300 x 300 mm	EUR 151.00	EUR 180.00	EUR 246.00		
500 x 500 mm	EUR 195.00	EUR 258.00			

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%
 Prices for pieces up to 1220mmx1220mm on request.

FE240350

Thickness **1.0mm**

Temper **Annealed**



Size

Web Code
 645-289-041

Size	Quantity		
	1pc	2pcs	5pcs
15 x 45 mm	EUR 90.00	EUR 94.50	EUR 104.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

FE240380

Thickness **3.0mm**

Temper **Annealed**



Size

Web Code
 680-191-272
 435-504-236
 605-864-987

Size	Quantity			
	1pc	2pcs	5pcs	10pcs
100 x 100 mm	EUR 135.00	EUR 163.00	EUR 203.00	EUR 267.00
150 x 150 mm	EUR 155.00	EUR 191.00	EUR 273.00	
300 x 300 mm	EUR 223.00	EUR 362.00		

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%
 Prices for pieces up to 1220mmx1220mm on request.

FE240385

Thickness **5.0mm**



Size

Web Code
 873-427-564
 800-467-838
 494-538-259

Size	Quantity		
	1pc	2pcs	5pcs
40 x 100 mm	EUR 137.00	EUR 166.00	EUR 207.00
40 x 200 mm	EUR 155.00	EUR 190.00	
40 x 500 mm	EUR 189.00		

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%
 Prices for pieces up to 1220mmx1220mm on request.



Foam

FE243825

Thickness **6.35mm**

Bulk density **0.55g.cm⁻³**

Porosity **93%**

Pores/cm **24**



Size

Web Code
 593-627-241

Size	Quantity	
	1pc	2pcs
150 x 150 mm	EUR 426.00	EUR 750.00

FE243840

Thickness **12.7mm**

Bulk density **0.55g.cm⁻³**

Porosity **93%**

Pores/cm **24**



Size

Web Code
 848-851-265
 237-560-811

Size	Quantity	
	1pc	2pcs
300 x 350 mm	POA	POA
300 x 700 mm	POA	



Mesh

FE248703

Nominal Aperture **0.085mm**

Wire diameter **0.05mm**

Wires/inch **188x188**

Open area **39.6%**

Type **Plain weave mesh**



Size

Web Code
 387-491-021
 907-193-870
 472-118-700
 764-746-487

Size	Quantity			
	1pc	2pcs	5pcs	10pcs
100 x 100 mm	EUR 249.00	EUR 287.00	EUR 374.00	EUR 462.00
150 x 150 mm	EUR 282.00	EUR 334.00	EUR 448.00	
300 x 300 mm	EUR 383.00	EUR 477.00		
600 x 600 mm	EUR 632.00			

Stainless Steel - AISI 316

Fe/Cr18/Ni10/Mo 3



Mesh

FE248705

Nominal Aperture..... **0.103mm**
 Wires/inch..... **150x150**
 Type **Plain weave mesh**

Wire diameter..... **0.066mm**
 Open area **37%**



Size

Web Code

688-485-215
 707-822-407
 366-118-058

Size	Quantity		
	1pc	2pcs	5pcs
150 x 150 mm	EUR 199.00	EUR 251.00	EUR 365.00
300 x 300 mm	EUR 299.00	EUR 393.00	
600 x 600 mm	EUR 548.00		

FE248710

Nominal Aperture..... **0.38mm**
 Wires/inch..... **40x40**
 Type **Plain weave mesh**

Wire diameter..... **0.25mm**
 Open area **37%**



Size

Web Code

087-878-424
 984-806-837
 100-862-188
 607-766-689

Size	Quantity		
	1pc	2pcs	5pcs
100 x 100 mm	EUR 155.00	EUR 189.00	EUR 267.00
150 x 150 mm	EUR 183.00	EUR 229.00	EUR 331.00
300 x 300 mm	EUR 269.00	EUR 350.00	
600 x 600 mm	EUR 439.00		



Wire

FE245100

Diameter..... **0.05mm**

Temper..... **Annealed**



Length

Web Code

142-882-389
 860-291-284
 536-407-496
 050-925-897
 365-730-597

Length	Quantity
	1 Reel
50 m	EUR 111.00
100 m	EUR 126.00
200 m	EUR 149.00
500 m	EUR 209.00
1000 m	EUR 248.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

FE245102

Diameter..... **0.15mm**

Temper..... **Hard**



Length

Web Code

716-324-920
 540-619-941
 577-488-104
 186-014-334
 251-798-917

Length	Quantity
	1 Reel
20 m	EUR 119.00
50 m	EUR 141.00
100 m	EUR 168.00
200 m	EUR 209.00
500 m	EUR 334.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

FE245105

Diameter..... **0.25mm**

Temper..... **Hard**



Length

Web Code

474-869-646
 358-708-909
 838-616-807
 827-108-405
 388-550-430
 568-809-288

Length	Quantity
	1 Reel
20 m	EUR 110.00
50 m	EUR 124.00
100 m	EUR 142.00
200 m	EUR 169.00
500 m	EUR 231.00
1000 m	EUR 312.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

FE245320

Diameter..... **0.5mm**

Condition..... **Straight wire**

Temper..... **Hard**



Size

Web Code

Length

Length	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
			1.6g	#1000 mm#	

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

FE245130

Diameter..... **0.5mm**

Temper..... **Hard**



Length

Web Code

258-148-975
 978-409-300
 268-624-649
 578-078-949
 555-728-684
 259-864-590

Length	Quantity
	1 Reel
10 m	EUR 101.00
20 m	EUR 112.00
50 m	EUR 136.00
100 m	EUR 165.00
200 m	EUR 236.00
500 m	EUR 457.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

Alloy – Stainless Steel - AISI 316

Stainless Steel - AISI 316

Fe/Cr18/Ni10/Mo 3



Wire

FE245131 Diameter **0.5mm** Temper **Annealed**



Length		Quantity	
Web Code	Length	1 Reel	
258-136-833	10 m	EUR	101.00
616-548-222	20 m	EUR	112.00
165-919-019	50 m	EUR	136.00
536-661-963	100 m	EUR	165.00
671-759-507	200 m	EUR	236.00
897-804-288	500 m	EUR	457.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

FE245135 Diameter **0.6mm** Temper **Hard**



Length		Quantity	
Web Code	Length	1 Reel	
064-047-906	10 m	EUR	103.00
561-306-677	20 m	EUR	115.00
743-237-733	50 m	EUR	141.00
149-692-672	100 m	EUR	172.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

FE245138 Diameter **0.71mm** Temper **Hard**
 Condition **Straight wire**



Web Code	Length	Quantity			
		1pc	2pcs	5pcs	10pcs
				3.1g	#1000 mm#

FE245140 Diameter **0.8mm** Temper **Hard**



Length		Quantity	
Web Code	Length	1 Reel	
379-933-151	10 m	EUR	107.00
137-120-935	20 m	EUR	121.00
200-043-659	50 m	EUR	150.00
010-572-272	100 m	EUR	194.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

FE245110 Diameter **1.0mm** Temper **Hard**



Length		Quantity	
Web Code	Length	1 Reel	
101-150-314	5 m	EUR	97.00
643-797-629	10 m	EUR	107.00
474-709-891	20 m	EUR	121.00
338-726-433	50 m	EUR	152.00
340-810-060	100 m	EUR	189.00
601-252-407	200 m	EUR	276.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%



Insulated Wire

FE245815 Conductor diameter **0.025mm** Insulation thickness **0.002mm**
 Insulation **Polyester**



Length		Quantity	
Web Code	Length	1 Reel	
394-782-819	5 m	EUR	142.00
347-856-704	10 m	EUR	165.00
482-089-898	20 m	EUR	203.00
261-227-442	50 m	EUR	375.00
653-432-145	100 m	EUR	663.00

FE245820 Conductor diameter **0.05mm** Insulation thickness **0.003mm**
 Insulation **Polyester**



Length		Quantity	
Web Code	Length	1 Reel	
679-021-504	5 m	EUR	140.00
877-689-494	10 m	EUR	162.00
711-186-933	20 m	EUR	194.00
898-365-097	50 m	EUR	353.00
295-629-145	100 m	EUR	617.00

Alloy – Stainless Steel - AISI 316

Stainless Steel - AISI 316

Fe/Cr18/Ni10/Mo 3



Insulated Wire

FE245810

Conductor diameter **0.075mm** Insulation thickness **0.018mm**
 Insulation **PTFE (Polytetrafluoroethylene)**



Length

Web Code
 383-402-006
 925-257-992
 657-241-273
 155-158-270
 553-097-872
 137-237-145

Quantity

Length 1 Reel
 1 m EUR 150.00
 2 m EUR 173.00
 5 m EUR 218.00
 10 m EUR 268.00
 20 m EUR 340.00
 50 m EUR 530.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C < 1200, Mo 2.0 - 3.5%

FE245840

Conductor diameter **0.125mm** Insulation thickness **0.007mm**
 Insulation **Polyester**



Length

Web Code
 953-638-592

Quantity

Length 1 Reel
 5 m EUR 137.00

FE245850

Conductor diameter **0.25mm** Insulation thickness **0.009mm**
 Insulation **Polyester**



Length

Web Code
 753-515-393
 189-424-081
 678-001-916
 750-239-842
 779-984-825

Quantity

Length 1 Reel
 5 m EUR 135.00
 10 m EUR 155.00
 20 m EUR 183.00
 50 m EUR 307.00
 100 m EUR 526.00



Rod

FE247910

Diameter **2.0mm** Temper **Hard**



Size

Web Code
 961-139-762
 311-859-074

Quantity

Length	1pc	2pcs	5pcs	10pcs
500 mm	EUR 86.50	EUR 108.00	EUR 141.00	EUR 185.00
1000 mm	EUR 96.50	EUR 121.00	EUR 162.00	EUR 216.00

FE247915

Diameter **10.0mm** Temper **As drawn**



Size

Web Code
 225-331-281
 022-001-948
 481-325-580
 432-093-904

Quantity

Length	1pc	2pcs	5pcs	10pcs
100 mm	EUR 106.00	EUR 129.00	EUR 164.00	EUR 206.00
200 mm	EUR 120.00	EUR 149.00	EUR 195.00	EUR 290.00
500 mm	EUR 148.00	EUR 188.00		
1000 mm	EUR 179.00	EUR 271.00		

FE247930

Diameter **12.7mm**



Size

Web Code
 078-312-894
 533-090-449
 555-686-168
 109-543-357

Quantity

Length	1pc	2pcs	5pcs	10pcs
100 mm	EUR 109.00	EUR 133.00	EUR 169.00	EUR 213.00
200 mm	EUR 123.00	EUR 153.00	EUR 202.00	EUR 317.00
500 mm	EUR 153.00	EUR 195.00	EUR 359.00	
1000 mm	EUR 186.00	EUR 298.00		

FE247940

Diameter **25.4mm**



Size

Web Code
 127-684-190
 884-949-798
 122-201-539
 564-993-843

Quantity

Length	1pc	2pcs	5pcs
100 mm	EUR 113.00	EUR 135.00	EUR 187.00
200 mm	EUR 125.00	EUR 152.00	EUR 232.00
500 mm	EUR 150.00	EUR 204.00	
1000 mm	EUR 195.00		

Alloy – Stainless Steel - AISI 316

Stainless Steel - AISI 316

Fe/Cr18/Ni10/Mo 3



Tube

FE247200

Outside Diameter **3.0mm**
 Inside Diameter **1.5mm**

Wall Thickness **0.75mm**
 Temper **Hard**



Size

Web Code

999-643-999
 919-010-338
 916-996-557
 215-303-933

Length	Quantity				
	1pc	2pcs	5pcs	10pcs	20pcs
100 mm	EUR 111.00	EUR 134.00	EUR 158.00	EUR 188.00	EUR 233.00
200 mm	EUR 122.00	EUR 149.00	EUR 181.00	EUR 220.00	EUR 312.00
500 mm	EUR 142.00	EUR 178.00	EUR 227.00	EUR 346.00	EUR 596.00
1000 mm	EUR 165.00	EUR 210.00	EUR 340.00	EUR 583.00	

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

FE247400

Outside Diameter **6.35mm**
 Inside Diameter **2.35mm**

Wall Thickness **2.0mm**
 Temper **Annealed**



Size

Web Code

475-441-945
 695-560-457
 496-542-888
 847-230-265

Length	Quantity		
	1pc	2pcs	5pcs
100 mm	EUR 113.00	EUR 130.00	EUR 170.00
200 mm	EUR 124.00	EUR 145.00	
500 mm	EUR 145.00	EUR 176.00	
1000 mm	EUR 169.00		

Typical Analysis : Not applicable

FE247500

Outside Diameter **8.0mm**
 Inside Diameter **6mm**

Wall Thickness **1.0mm**
 Temper **Annealed**



Size

Web Code

138-470-258
 308-784-443
 598-056-033
 757-000-873

Length	Quantity			
	1pc	2pcs	5pcs	10pcs
100 mm	EUR 113.00	EUR 130.00	EUR 170.00	EUR 207.00
200 mm	EUR 124.00	EUR 145.00	EUR 195.00	EUR 252.00
500 mm	EUR 145.00	EUR 176.00		
1000 mm	EUR 169.00	EUR 220.00		

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

FE247600

Outside Diameter **11.1mm**
 Inside Diameter **9.7mm**

Wall Thickness **0.7mm**
 Temper **Annealed**



Size

Web Code

625-104-193
 138-014-307
 251-787-556
 473-439-118

Length	Quantity			
	1pc	2pcs	5pcs	10pcs
100 mm	EUR 120.00	EUR 140.00	EUR 186.00	EUR 229.00
200 mm	EUR 133.00	EUR 158.00	EUR 215.00	EUR 288.00
500 mm	EUR 159.00	EUR 194.00		
1000 mm	EUR 187.00	EUR 253.00		

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%

FE247800

Outside Diameter **20.0mm**
 Inside Diameter **17mm**

Wall Thickness **1.5mm**
 Temper **Annealed**



Size

Web Code

179-895-094
 486-877-771
 859-717-634
 464-703-045

Length	Quantity			
	1pc	2pcs	5pcs	10pcs
100 mm	EUR 130.00	EUR 154.00	EUR 209.00	EUR 261.00
200 mm	EUR 147.00	EUR 178.00	EUR 247.00	EUR 368.00
500 mm	EUR 181.00	EUR 226.00		
1000 mm	EUR 219.00	EUR 333.00		

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <1200, Mo 2.0 - 3.5%



Powder

FE246020

Max. Particle size **45micron**



Web Code

876-168-519
 521-063-072
 132-878-437
 609-800-815
 225-107-744

Quantity	Weight	
	1 Pot	
100 g	EUR 117.00	
200 g	EUR 129.00	
500 g	EUR 152.00	
1000 g	EUR 180.00	
2000 g	EUR 264.00	

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <300, Mo 2.5 - 3.5%

Hazardous goods, additional shipment charges apply which are dependent on destination. Please check the individual item on our website or contact us for further details.

Alloy – Stainless Steel - AISI 316

Stainless Steel - AISI 316

Fe/Cr18/Ni10/Mo 3



Powder

FE246010 Max. Particle size 150micron



Web Code

498-107-219
 263-406-897
 925-855-156
 731-896-044
 487-009-310

Quantity

Weight	1 Pot
100 g	EUR 106.00
200 g	EUR 114.00
500 g	EUR 132.00
1000 g	EUR 153.00
2000 g	EUR 208.00

Typical Analysis : Cr 16.5 - 20%, Mn <2%, Ni 8 - 14%, C <300, Mo 2.5 - 3.5%

Hazardous goods, additional shipment charges apply which are dependent on destination. Please check the individual item on our website or contact us for further details.



Sphere

FE246805 Diameter 0.5mm Tolerance ±12.7µm
 Sphericity 2.50µm Grade Precision Sphere
 Condition Grade 100



Quantity

Web Code
 955-436-807
 968-006-094
 436-137-262

Quantity

Spheres	1 Pot
50 pcs	EUR 146.00
100 pcs	EUR 199.00
200 pcs	EUR 277.00

Typical Analysis : Not applicable

FE246810 Diameter 1.0mm Tolerance ±12.7µm
 Sphericity 2.50µm Grade Precision Sphere
 Condition Grade 100



Quantity

Web Code
 527-345-842
 647-046-850
 154-293-609

Quantity

Spheres	1 Pot
50 pcs	EUR 144.00
100 pcs	EUR 196.00
200 pcs	EUR 265.00

Typical Analysis : Not applicable

FE246820 Diameter 2.0mm Tolerance ±12.7µm
 Sphericity 2.50µm Grade Precision Sphere
 Condition Grade 100



Quantity

Web Code
 821-001-919
 741-323-330
 787-943-530

Quantity

Spheres	1 Pot
50 pcs	EUR 144.00
100 pcs	EUR 196.00
200 pcs	EUR 265.00

Typical Analysis : Not applicable

FE246825 Diameter 2.5mm Tolerance ±12.7µm
 Sphericity 2.50µm Grade Precision Sphere
 Condition Grade 100



Quantity

Web Code
 016-642-431
 683-009-392
 468-675-172

Quantity

Spheres	1 Pot
50 pcs	EUR 144.00
100 pcs	EUR 196.00
200 pcs	EUR 265.00

Typical Analysis : Not applicable

FE246830 Diameter 3.0mm Tolerance ±12.7µm
 Sphericity 2.50µm Grade Precision Sphere
 Condition Grade 100



Quantity

Web Code
 931-231-544
 804-938-686
 421-549-490

Quantity

Spheres	1 Pot
50 pcs	EUR 144.00
100 pcs	EUR 196.00
200 pcs	EUR 265.00

Typical Analysis : Not applicable

FE246840 Diameter 4mm Tolerance ±100µm
 Grade Precision Sphere



Quantity

Web Code
 240-729-606
 091-207-653
 400-951-547
 118-947-005

Quantity

Spheres	1 Pot
20 pcs	EUR 106.00
50 pcs	EUR 144.00
100 pcs	EUR 196.00
200 pcs	EUR 265.00

Alloy – Stainless Steel - AISI 316

Stainless Steel - AISI 316

Fe/Cr18/Ni10/Mo 3



Sphere

FE246850

Diameter **5mm**
 Sphericity **2.50µm**
 Condition **Grade 100**

Tolerance **±12.7µm**
 Grade **Precision Sphere**



Quantity

Web Code

320-680-542
 085-072-574
 634-063-464
 257-925-888

Quantity

Spheres	1 Pot
20 pcs	EUR 107.00
50 pcs	EUR 146.00
100 pcs	EUR 198.00
200 pcs	EUR 274.00

Typical Analysis : Not applicable

FE246860

Diameter **6mm**
 Grade **Precision Sphere**

Tolerance **±25µm**



Quantity

Web Code

868-376-860
 547-108-385
 388-543-343
 567-915-146

Quantity

Spheres	1 Pot
20 pcs	EUR 112.00
50 pcs	EUR 154.00
100 pcs	EUR 212.00
200 pcs	EUR 319.00

FE246870

Diameter **8mm**
 Grade **Precision Sphere**

Tolerance **±25µm**



Quantity

Web Code

147-920-471
 286-978-005
 096-365-432
 087-169-238

Quantity

Spheres	1 Pot
20 pcs	EUR 114.00
50 pcs	EUR 156.00
100 pcs	EUR 218.00
200 pcs	EUR 330.00

FE246880

Diameter **10mm**
 Sphericity **2.50µm**
 Condition **Grade 100**

Tolerance **±12.7µm**
 Grade **Precision Sphere**



Quantity

Web Code

989-391-656
 673-960-783
 245-090-558
 636-321-894

Quantity

Spheres	1 Pot
20 pcs	EUR 116.00
50 pcs	EUR 160.00
100 pcs	EUR 229.00
200 pcs	EUR 353.00

Typical Analysis : Not applicable

FE246890

Diameter **25mm**
 Sphericity **5.08µm**
 Condition **Grade 200**

Tolerance **±25.4µm**
 Grade **Precision Sphere**



Quantity

Web Code

359-714-094
 978-190-048

Quantity

Spheres	1 Pot
10 pcs	EUR 154.00
20 pcs	EUR 243.00

Typical Analysis : Not applicable

Alloy – Stainless Steel - AISI 316

INDEX

F

Foam, Stainless Steel - AISI 316	26
Foil, Stainless Steel - AISI 316	20

I

Insulated Wire, Stainless Steel - AISI 316	28
--------------------------------------------	----

M

Mesh, Stainless Steel - AISI 316	26
----------------------------------	----

P

Powder, Stainless Steel - AISI 316	30
------------------------------------	----

R

Rod, Stainless Steel - AISI 316	29
---------------------------------	----

S

Sphere, Stainless Steel - AISI 316	31
Stainless Steel - AISI 316 (Fe/Cr18/Ni10/Mo 3)	20

T

Tube, Stainless Steel - AISI 316	30
----------------------------------	----

W

Wire	
.. Stainless Steel - AISI 316	27