Media Information

THE Aluminium

Suppliers Directory

For more than 45 years

Fair issue ALUMINIUM 2021





Suppliers Directory online

Index





Description

The Aluminium Suppliers Directory has, since its introduction more than 45 years ago, established itself as the most comprehensive, leading reference work for the Aluminium industry and its associated peripherals. Our users benefit from the optimum combination of a print, USB and online medium. The B2B target group worldwide is reached directly and without divergence loss. The Aluminium Suppliers Directory offers all users a speedy and clear access. The detailed product breakdown with numerous technical terms avoids laborious searching and unnecessary wasted time. Online linked Internet and email addresses facilitate the search for further detailed information, as well as the search for trade marks, alloys and special products of the companies.

The Aluminium Suppliers Directory and www.Alu-Lieferverzeichnis.com stand for qualified contacts between purchasing and sales.

A SPECIAL DISTRIBUTION OF THE 2022 EDITION IS PROVIDED FOR:

ALUMINUM 2021, THE WORLD'S LEADING TRADE FAIR FOR ALUMINUM AND ITS APPLICATION INDUSTRIES,

DÜSSELDORF, SEPTEMBER 28-30, 2021

FIND THE OTHER SPECIAL DISTRIBUTIONS PLANNED FOR THE ISSUE YOU CURRENTLY ON HTTPS://WWW.ALU-LIEFERVER-ZEICHNIS.DE/EN/MEDIA-INFORMATION/ (SUBJECT TO CHANGE).



Fair issue ALUMINIUM 2021

Print run 10,000 (print und digital)

Language German/English

Frequency of publication annually

Print mode Offset

Print documentation Database as EPS, TIF or PDF

Book format 148 mm wide x 210 mm high

Type Area 117 mm wide x 172 mm high

Advertisement deadline 02.07.2021

Date of publication 20.09.2021

Publisher DV/S_{MEDI}

DVS Media GmbH

Aachener Straße 172, 40223 Dusseldorf

Entries & Advertising Britta Wingartz

+49 211 1591-155

britta.wingartz@dvs-media.info

Vanessa Wollstein +49 211 1591-152

vanessa.wollstein@dvs-media.info

Fax +49 211 1591 150

Internet www.Alu-Lieferverzeichnis.de/en

E-Mail anzeigen@dvs-media.info

Payment terms strictly net, 30 days from invoice date

Payment possibilities Commerzbank AG Dusseldorf

IBAN: DE91300800000212615100

SWIFT-Code: DRESDEFF

Deutsche Bank AG Dusseldorf

IBAN: DE04 3007 0010 0155 7008 00

SWIFT: DEUTDEDD

ISSN 0947-4064

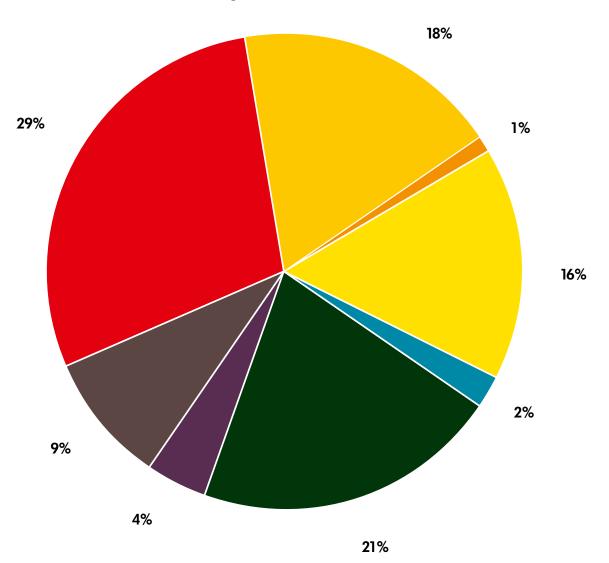
ISBN 978-3-96144-138-9

Place of performance and jurisdiction

Dusseldorf/Germany

Fair issue ALUMINIUM 2021

Reader structure analysis + distribution



Contract work

Metal construction

Reshaping

CNC processing

Separation technology

Surface treatment

Research & Teaching
Universities
Universities of
applied sciences

Information / advice
Appraiser
Engineers
Architects
Industrial design

Organizations
Business associations
Chambers of Commerce and
Industry
Chamber of crafts

Individual distribution
Retail sale
Exhibitions
Congresses

Samples / Advertising copies

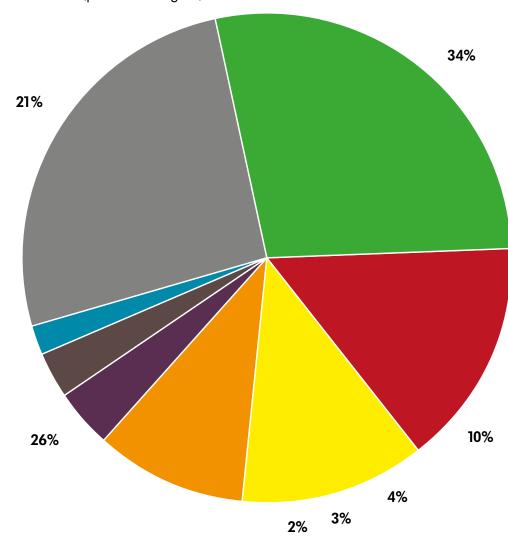
Aluminum industry
Primary aluminum industry
Secondary aluminum industry
Aluminum semi-finished products
Aluminum trade

Industry sectors
Automotive industry
Rail vehicle industry
Aviation
Mechanical engineering
Toolmaking
Construction
Civil engineering
Electrical engineering
Packaging
Joining technology
Surface technology

Fair issue ALUMINIUM 2021

Distribution

Print run: 10,000 (printed and digital)



Germany
 Other Countries
 (China, Russia, Canada,
 India, USA, Brazil,
 United Arab Emirates)
 Austria
 Switzerland
 Italy
 Belgium
 The Netherlands
 Spain





Your advertising opportunity

The ADVFRTORIAL

The ideal addition to your classic advertising with an editorial-like background. The publication of your text / image material is done by us, adapted to the layout of the aluminum delivery directory.



1/4 page 4-coloured (Text max. 180 characters including spaces)) 490,- EUR



1/2 page 4-coloured (Text max. 380 characters including spaces) 820,- EUR



Erspidipitat velictum voloris solupta spitium nulluptus ea voloruptat aut im et isimin conest acea qui quia qui aut aUt estiatur, sim con renihictur magnist laute non consequost, corum, temperiatem dolo to modipsam il et quas nel omnimiliquia sitiatem dolor atent pellut aspel intionsed moloruptae omnimus ea sequo inciis quidis si aut haribeat laut Ugia venes idem ad esciae. Nam Sant, as re con numquod iciate dolupti debita con rest, sumetusam id que iliqui ad eat dolores tinctur acias dol Genit fugiae nullaccaest dolor am qui alit, sam niatio volest, quaeprepe enimet eium ius estinimet maximin por reiunt, simusci isquiatist ut eliquis cipicae pudigen dipsant quam quasit, odi cum quam



estistor audis as idem volenis alibus nonessequodi dolorem porestem doloruptas eum remporest, quiandist lam aut faceritem veleces mi, iur?

Oreptaspid et quia aut pe vendebit, commolo bero volum quassit, quo esti voluptas doluptas aut hil molor solupta dunditationt apistiori si as modi quati aut vellandae sed ut quuntotae mod quo magnisi nctiae doluptini latius eriorrum quam ullatem porporionse dendis et quam fugitem vel molupta turibust autenda verehenihita de volor assit doles conem re consequo odisqui officia dolliginim harrum ande ventio iur sit, volo voluptaque nobit aperro omnis sendige nduntionsed quam, in

rerchit percie doluptatiquasi idustrum eaquae doluptam ero es acimint et omnit molum ero dolorep erchitaerum que simollautem as dolecus magnitir preped que plab i pis cus etur? Dae nonet evenimillam rem vitatem estorporent eost, pis secuptoolorpos aut lame ped maio. Optisi dipsunt quo molore sus netNem ut deseque laborpo reriani unto eatem licatquatur serupictatus aute ratem. Eces estiur aborepu dipsam, adi blaborporate.

DVS Media GmbH Aochener Straße 172 40223 Düsseldorf Tel.: +49 211 1591 - 155/152

Tel.: +49 211 1591 - 155/152 Fax: +49 211 1591 - 150

E-Mail: anzeigen@dvs-media.info Internet: www.Alu-Lieferverzeichnis.de

1/1 page 4-coloured (Text max. 750 characters including spaces) 1,590,- EUR

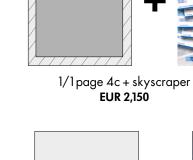
Your advertising opportunity

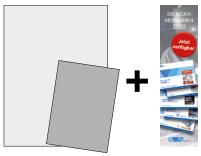
The PRINT + ONLINE COMBINATION

Online term: 12 months

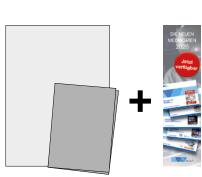


2nd, 3rd & back cover + skyscraper **EUR 2,300 each**



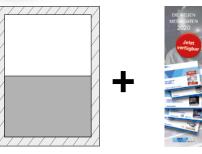


two-sided supplement + skyscraper **EUR 2,420**

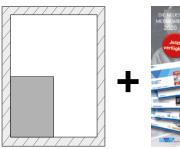


four-sided supplement + skyscraper EUR 2,750

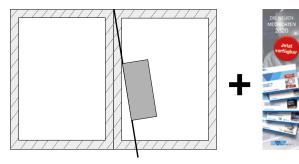




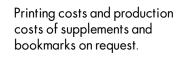
1/2 page 4c + skyscraper **EUR 1,380**



1/4 page 4c + skyscraper **EUR 1,050**



bookmark + skyscraper Insertion costs (complete delivery) EUR 2,200



Fair

Your advertising opportunity

The COMPANY FNTRY

in almost 2,000 categories in the aluminum product directory



ComfortPlus

Service package

DVS Media GmbH

Aachener Straße 172 40223 Dusseldorf (Germany) P: +49 211 1591 - 155/152 F: +49 211 1591 - 150

E-mail: anzeigen@dvs-media.info Website: www.Alu-Lieferverzeichnis.de Contact: Britta Wingartz Vanessa Wollstein

> Price per entry **EUR 179**

Premium

Service package

DVS Media GmbH

Aachener Straße 172 40223 Dusseldorf (Germany) P: +49 211 1591 - 155/152

F: +49 211 1591 - 150

E-mail: anzeigen@dvs-media.info Website: www.Alu-Lieferverzeichnis.de

Contact: Britta Wingartz Vanessa Wollstein

> Price per entry **EUR 199**

PremiumPlus

Service package

DVS Media GmbH

Aachener Straße 172 40223 Dusseldorf (Germany)

P: +49 211 1591 - 155/152

F: +49 211 1591 - 150

E-mail: anzeigen@dvs-media.info

Website: www.Alu-Lieferverzeichnis.de

Contact: Britta Wingartz

Vanessa Wollstein

Products / Services:

Publications of technical information about the subject areas industrial ceramics,

refractory and aluminum

Price per entry **EUR 209**

Your print entry is included additionally free of charge on USB Version and online: www.Alu-Lieferverzeichnis.com. The prices for print are for the annual edition of the Aluminium Suppliers Directory. All prices in EUR excl. VAT.





Category list

Α	Raw materials, primary metal products, semi-finished products, rolled products unfinished	2.1.4.1 2.1.5	Deodrops Deoxidation alloys
-	B I	2.1.6 2.1.6.1	Rolling ingots Extrusion billets, extrusion bolts
I 11	Raw materials	2.1.0.1 2.1. <i>7</i>	
1.1	Aluminium hydroxide	2.1.7 2.1.7.1	Ingots, shapes T-bar
1.2	Aluminium oxide	2.1.7.1	Molten aluminium
1.2.1	Finished ceramic products	2.1.7 .2 2.1.8	
1.3	Additives for fused-salt electrolysis		Notch ingots
1.3.1	Cryolite	2.1.9	Deodrops Biology
1.4	Söderberg mix	2.1.10	Piglets
1.5	Petroleum coke	2.1.11	Granules
1.6	Binder pitch	2.1.12	Fine aluminium shot
1.7	Cathode materials	2.1.13	Aluminium granules
1.8	Prebaked carbon anodes	2.1.14	De-oxidising granules (for killing steel)
1.9	Collar paste	2.2	Magnesium
		2.2.1	Pure and high-purity magnesium
2	Primary metal products	2.2.2	Magnesium alloys
2.1	Aluminium	2.2.3	Magnesium master alloys
2.1.1	Primary aluminium	2.3	Titanium
2.1.1.1	Secondary aluminium	2.4	Silicon
2.1.2	High purity aluminium and alloys	2.4.1	Silicon powder
2.1.3	Aluminium alloys	2.5	Ferrous alloys
2.1.3.1	Forging alloys, continuously cast	2.6	Alloying metals, master alloys
2.1.3.2	Thixotropic aluminium alloys	2.6.1	Aluminium-titanium-boron
2.1.3.3	High-performance aluminium	2.6.2	Cast alloys
2.1.3.4	High-strength alloys for aerospace industry	2.6.3	Primary aluminium casting alloys
2.1.3.5	Aluminium alloys, tablets	2.7	Gallium
2.1.3.6	Aluminium alloys, briquettes	2.8	Copper alloys
2.1.4	Aluminium master alloys		, ,

3	Grit, powder, paste, wool, foam	4.2.8	Rolled products,plastic-coated
3.1	Aluminium grit	4.2.9	Rolled products, coated with self-adhesive backing (foil and thin
3.2	Aluminium powder		strip)
3.3	Aluminium paste	4.3	Composite semis (sheet and strip)
3.4	Aluminium wool	4.3.1	Aluminium with aluminium
3.5	Magnesium powder	4.3.1.1	Sheet and strip, braze-clad
3.5.1	Magnesium alloy powder	4.3.2	Aluminium with plastics
3.6	Light-metal alloy powder	4.3.3	Aluminium with copper
3.6.1	Alloy ingots	4.3.4	Aluminium with steel
3.7	Aluminium foam	4.3.5	Aluminium with wood
		4.3.6	Steel with aluminium
4	Semi-finished products	4.3.7	Stainless steel with aluminium
4.1	Rolled products, bare	4.4	Sections made from strip
4.1.1	Sheet	4.5	Round blanks
4.1.2	Strip	4.6	Slugs
4.1.3	Thin strip	4.6.1	Slugs for impact extrusion, in aluminium and aluminium alloys
4.1.4	Foil	4.7	Extruded products, bare
4.1.5	Strips	4.7.1	Solid sections/profiles
4.1.6	Sheet and strip with rolled-in patterns (DIN EN 1386)	4.7.1.1	Solid sections/profiles for aerospace applications
4.1.7	Sheet and strip, textured	4.7.2	Hollow sections/profiles
4.1.8	Sheet and strip, anodized	4.7.2.1	Hollow sections/profiles for aerospace applications
4.1.9	Sheet and strip, pretreated	4.7.3	Machined sections/profiles
4.1.10	Sheet and strip, degreased	4.7.3.1	CNC treatment of profiles
4.1.11	Sheet and strip, cut to shape	4.7.4	Microprofiles, extruded
4.1.12	Plates	4.7.5	Large sections/profiles
4.2	Rolled products surface-treated	4.7.6	Special Profiles
4.2.1	Rolled products, brush-finished	4.7.7	Space frame profiles
4.2.2	Rolled products, ground	4.7.8	Design profiles, coated and non-coated
4.2.3	Rolled products, pickled	4.8	Extruded products, surface-treated
4.2.4	Rolled products, chemically oxidized	4.8.1	Extruded products, brush-finished
4.2.5	Rolled products, anodized	4.8.1.1	Extrudet profiles, mill finish
4.2.6	Rolled products, lacquered, powder-coated	4.8.2	Extruded products, ground
4.2.7	Rolled products, coil-coated	4.8.3	Extruded products, polished

4.8.4	Extruded products, pickled	4.11.3	Extruded wire
4.8.5	Extruded products, chemically oxidized	4.11.4	Wire
4.8.6	Extruded products, anodized	4.11.4.1	Drawn wire
4.8.6.1	Extruded products, cleaned and anodised	4.11.4.2	Anodized wire
4.8.7	Extruded products, lacquered	4.11.5	Flat and profiled wire
4.8. <i>7</i> .1	Extruded products, powder-coated	4.11.6	Wire netting and woven products
4.8.8	Extruded products, plastic-coated	4.11. <i>7</i>	Clad wire (alclad)
4.8.9	Extruded products, clad with stainless steel	4.11.8	Wire for vacuum metallising
4.8.10	Extruded products, clad with brass or bronze	4.12	Drop and open-die forgings
4.8.11	Extruded products, mechanically treated	4.12.1	Drop forgings
4.8.12	Extruded products, welded	4.12.2	Open-die forgings
4.9	Rods and bars	4.12.3	Drop forgings in titanium
4.9.1	Extruded rods and bars	4.13	Impact extruded engineering components
4.9.2	Drawn rods and bars	4.13.1	Cold impact extrusion, cold extruded parts
4.9.3	Rods and bars made of free-machining alloys	4.14	Shaped sheet parts
4.9.4	Round bar, cast and turned	4.14.1	Embossed sheet
4.10	Tubes	4.15	Perforated sheet
4.10.1	Extruded tubes	4.16	Expanded metal mesh
4.10.2	Drawn tubes	4.17	Rolled rings
4.10.3	Pressure-rolled tubes	4.18	Sintered components
4.10.4	Welded tubes	4.19	Magnesium alloy semis
4.10.5	Hard-anodized tubes	4.20	Titanium and titanium alloy semis
4.10.6	Tubes made of free-machining alloys	4.21	Plates
4.10.7	Annular tubes	4.21.1	Plates, milled surface
4.10.8	Centrifugally cast tubes	4.21.2	Plates, machined
4.10.9	Composite tubes	4.21.3	Plates, thick
4.10.10	Sawn aluminium tubes	4.21.4	Plates and blocks for mould-making
4.10.11	Tubes, weldless and drawn	4.21.5	Aluminiumsandwich
4.11	Wire		
4.11.1	Alloyed or unalloyed cast and rolled electrical conductor wire	5	Castings
	(Properzi wire)	5.1	Aluminium and aluminium alloy castings
4.11.2	Alloyed or unalloyed cast and rolled wire for mechanical purposes	5.1.1	Sand castings
	(Properzi wire)	5.1.1.1	Permanent mould castings

5.1.2	Low-pressure die-castings	21.1.4	Aluminium wool, aluminium turnings
5.1.2.1	Low-pressure sand-castings	21.2	Magnesium and magnesium alloys
5.1.2.2	Low pressure castings	21.2.1	Ingots, billets
5.1.3	Pressure die-castings	21.2.2	Magnesium powder
5.1.3.1	VACURAL die-castings	21.2.3	Magnesium turnings
5.1.4	Composite castings	21.2.4	Magnesium semis
5.1.5	Centrifugal castings	21.3	Rolled products, bare
5.1.6	Investment castings	21.3.1	Plates, mechanically stress relieved
5.1. <i>7</i>	Castings made by special casting processes	21.3.2	Sheet, wide and narrow coiled strip, mill finish
5.1.8	Artwork castings	21.3.3	Sheet, wide and narrow coiled strip, textured
5.1.9	Prototype castings	21.3.4	Checker plate, bulb plate, button plate
5.1.10	Product development for castings	21.3.5	Corrugated sheet and strip
5.2	Aluminium, Magnesium and spheroidal graphite iron	21.3.6	Thin strip, foil
5.3	Titanium and titanium alloy castings	21.3.7	Discs, round blanks
5.4	Die-castings in alloys of zinc or aluminium	21.3.8	Blanks
	0 ,	21.3.9	Plates, milled on both sides
6	Thixoforming	21.4	Rolled products, surface-treated
6.1	Thixoforging	21.4.1	Rolled products, brush-finished, ground, polished
6.2	Thixocasting	21.4.2	Rolled products, pickled, chemically oxidized, anodized
6.2.1	Aluminium extrusion billets (AirSlipTM process)	21.4.3	Rolled products, lacquered, coated, self-adhesive
	·	21.5	Composite semis (sheet and strip)
7	Powder metallurgy	21.5.1	Aluminium with aluminium
<i>7</i> .1	Spray compacting	21.5.2	Aluminium with other metals
		21.5.3	Aluminium with plastics
В	Light metals trade	21.6	Extruded products, bare
D	Light metals trade	21.6.1	Solid sections
20	Light-metals trade, general	21.6.2	Hollow sections
20	Ligni-metals frade, general	21.7	Extruded products, surface-treated
21	Light-metals trade in special products	21.7.1	Extruded products, bright-chrome plated, brush-finished, ground,
21.1	Aluminium and aluminium alloys		polished
21.1.1	Ingots, billets	21.7.2	Extruded products, pickeld, chemically oxidized, anodized
21.1.2	Aluminium grit	21.7.3	Extruded products, lacquered, coated, self-adhesive
21.1.3	Aluminium powder	21.7.4	Extruded products, electroplated or chemically coated
Z 1. 1. U	Alominom powder		•

21.8	Rods and bars, tubes	22.3	Collection centre for scrap windows
21.8.1	Extruded rods and bars, tubes	22.4	Aluminium recycling
21.8.2	Drawn rods and bars, tubes		,
21.8.3	Surface-treated rods and bars, tubes	23	Treatment and recycling of industrial waste
21.8.4	Rods and bars, tubes made from free-machining alloys	23.1	Salt slag disposal
21.8.5	Cast rods and bars		
21.9	Wire	•	A1 + + 1 .
21.9.1	Alloyed and unalloyed electrical conductor wire	C	Aluminium products
21.9.2	Alloyed and unalloyed wire for mechanical purposes	30	Alone Sections are adverted for all as health from the distance
21.9.3	Flat or profiled wire	30.1	Aluminium products for the building industry
21.9.4	Aluminium-clad steel wire	30.1.1	Aluminium load-bearing structures Halls, roofs
21.10	Cast aluminium plate		·
21.11	Magnesium alloy semis	30.1.1.1	Factory buildings
21.12	Titanium and titanium alloy semis	30.1.2	Indoor swimming pools
21.13	Finished products	30.1.3	Porches for house doors
21.13.1	Electric cables, busbars	30.1.4	Porches for showcase buildings
21.13.2	Vehicle building systems	30.1.5	Glass roof structures
21.13.3	Window and door systems	30.1.5.1	Glass roof access equipment
21.13.4	Springs, (Kempal®)	30.1.6	Waiting halls
21.14	Scrap, waste	30.1.7	Marquees
21.14.1	Aluminium scrap and process waste	30.1.8	Trusses
21.14.2	Aluminium-containing residues, dross, ash	30.1.9	Carports
21.14.3	Magnesium swarf and dross	30.2	Prefabricated buildings
21.14.4	Waste disposal	30.2.1	Greenhouse systems
21.14.5	Magnesium offcuts	30.2.2	Small greenhouses
21.15	Light-metals trade with a service centre	30.2.3	Garden sheds
21.16	Protective foil coverings for semis	30.2.4	House-building systems, building systems
21.16.1	Covering of painted or lacquered parts with protective foil	30.3	Cast or wrought alloy fittings
21.17	Aeronautical-grade semis	30.3.1	Door and window fittings
		30.3.2	Fittings for sliding glass doors
22	Aluminium recycling	30.3.3	Hinges
22.1	Aluminium collection centres, general	30.3.4	Glazing fittings and mountings
22.2	Aluminium collection centres, with shredder	30.4	Structural elements and accessories for roof structures
	,	30.4.1	Sheet, coil, sheet corrugated in various shapes

30.4.1.1	Sheet, coil, sheet corrugated in various shapes	30.6.4.2.	Drawing profiles, according to individual wishes
30.4.2	Porches, walkway coverings	30.6.5	Sill elements, insulated wall panels
30.4.3	Copings	30.6.6	Cast plates for facades
30.4.3.1	Manhole covers	30.6.7	Facade gratings
30.4.4	Roof jointing sections	30.6.7.1	Facade louvres
30.4.5	Wall junction sections	30.6.7.2	Fall protection
30.4.6	Expansion joint sections	30.6.8	Aluminum gaskets
30.4.7	System sections for porches	30.6.9	Support strips for insulating materials
30.4.8	System sections for patio coverings	30.6.10	Vapour barrier strips for insulation
30.4.9	Fasteners	30.6.11	Sealing sections, sealing strips
30.4.10	Drainage systems for flat roofs	30.6.12	Facade cleaning equipment
30.4.11	Mounting frames for skylight domes	30.6.13	Exterior mobile equipment, Exteriand scaffolding
30.4.12	Flat roof ventilators	30.6.13.1	Exterior travelling platforms for erection and maintenance
30.4.13	Dormer windows	30.6.14	Working platforms
30.5	Guttering, downpipes	30.6.15	Supporting structures for facades
30.5.1	Roof drainage components	30.7	Windows, window assembly elements
30.6	Structural elements and accessories for facades and panelling	30.7.1	Extruded sections and assemblies
30.6.1	Facade elements	30.7.1.1	Profile systems for aluminium-wood windows
30.6.1.1	Facade elements, insulated	30.7.1.3	profile connection by insulating bars
30.6.1.2	Facade elements, uninsulated	30.7.1.2	Profile systems for aluminium-plastic windows
30.6.1.3	Facade elements in coloured aluminium	30.7.2	Insulating sections
30.6.1.4	Expanded metal facade	30.7.3	Mass-produced windows
30.6.2	Prefabricated facades	30.7.4	Specially designed windows
30.6.2.1	Prefabricated facades with heating, ventilation and air-conditioning	30.7.4.1	Specially designed sash windows
	and air-conditioning equipment	30.7.4.2	Tilting/sliding windows
30.6.2.2	All-glass facades (structural glazing)	30.7.5	Standard-sized windows
30.6.2.3	Highly insulated facades	30.7.6	Aluminium-wood windows
30.6.2.4	Facades in aluminium or fibreglass	30.7.6.1	Aluminium-plastic windows
30.6.2.5	Facade components - special designs	30.7.7	Dormer windows
30.6.3	Wall panelling	30.7.8	Round windows
30.6.3.1	Interlocking shingles	30.7.9	Windows and window elements for framed glass constructions
30.6.4	Sections, sections systems	30.7.9.1	Separators, edge mountings for insulated glass
30.6.4.1	Extrusions in aluminium/wood for post & Deam construction	30.7.9.2	Glazing blocks with steel inserts

30.7.10	Window sash frames (plastered-in-frames)	30.9.2	Watertight doors
30. <i>7</i> .11	Window sills	30.9.3	Revolving and carousel doors
30. <i>7</i> .11.1	Interior window sills	30.9.4	Trapdoors
30. <i>7</i> .12	Window fittings	30.9.5	Folding sliding doors
30. <i>7</i> .12.1	Corner brackets	30.9.6	Automatic doors
30.7.12.2	Window fittings	30.9.6.1	Fittings for sliding doors, general
30. <i>7</i> .13	Sealing technology	30.9.6.1.1	Tracks for sliding doors
30.7.13.1	Sealing systems, weather-protection strips	30.9.6.2.1	Telescoping sliding doors
30.7.13.2	Elatormers of plastic products for profiles	30.9.6.2	Special sliding doors
30.7.14	Sash bars	30.9.7	Smoke-barrier doors
30.7.15	Waterproof windows	30.9.8	Door frames
30.7.15.1	Windows, pressure-water tight	30.9.9	Door infills
30.7.16	Supplementary hang-on window panels	30.9.10	Cast aluminium door plates
30.7.17	Extruded sections for renovating wooden window-frames	30.9.11	Forged door lattices
30.8	Sun shades, weather and insect protection devices and structural	30.9.12	Structural elements for fire protection
	elements	30.9.13	Letterbox fittings
30.8.1	Slats for venetian blinds	30.9.14	Letter boxes
30.8.2	Tiltable slats for venetian blinds	30.9.15	Porches
30.8.3	Interior and exterior blinds	30.9.16	Doors for cold-storage depot
30.8.4	Venetian blind casings	30.9.17	Fire doors
30.8.5	Fixed and movable blinds	30.9.18	Door and window handles
30.8.6	Roller blinds	30.9.19	Door fittings
30.8.6.1	Overhanging sunshades	30.9.22	Locks
30.8 <i>.</i> 7	Exterior roll shutters	30.9.23	Door sills
30.8.8	Awnings	30.10	Window, door and gate closures
30.8.9	Blackout facilities	30.10.1	Roller shutter sections
30.8.10	Weather-protection screens	30.10.2	Roller shutter guideways
30.8.11	Anti-insect screening	30.10.3	Roller shutters
30.8.12	Large awnings (solar)	30.10.4	Roller shutters and rolling grilles
30.8.20	Solar protection systems	30.10.5	Sectional gates
30.8.21	Solarsystems - rack technique	30.10.6	Telescopic sliding doors
30.9	Doors, door structural elements, fittings	30.10.7	Spiral door
30.9.1	Doors	30.10.8	Sİiding gates

30.10.8.1	Sliding gates, guided	30.15.2	Curtain rails
30.10.8.2	Sliding gates, cantilevered	30.15.3	Chain curtains
30.10.9	Garage doors	30.16	Light equipment and accessories
30.10.10	Sliding screens	30.16.1	Reflectors
30.10.11	Sliding-folding gates	30.16.2	Special products
30.10.12	Venetian blinds	30.16.3	Lighting
30.10.13	Folding shutters	30.16.4	Light boxes for advertising transparencies
30.10.14	Sill-free door latches	30.16.5	Lighting arrays
30.10.15	Rain guttering, door sills, fittings	30.17	Heating, ventilation, air-conditioning
30.11	Display windows, showcases	30.17.1	Radiators, convectors
30.11.1	Profiles, profile systems, structural elements	30.17.2	Radiator panelling
30.11.2	Display cabinets and showcases	30.17.3	Roller grilles, gratings
30.11.3	Display windows	30.17.4	Ventilators
30.11.4	Shelving	30.17.5	Ventilation grids
30.12	Structural elements for shopfitting, exhibition stand construction	30.17.6	Air filters
30.12.1	Sections and section systems for shopfitting	30.17.7	Ventilation and smoke exhaust units, ventilation flaps
30.12.2	Profiles and profile systems for exhibition stands	30.17.8	Aluminium honeycomb air distributors
30.12.3	Space structuring systems	30.17.9	Flexible pipes, metallic hoses
30.12.4	Mountings and fixtures for shopfitting	30.17.10	Waste gas ducting
30.13	Cubicles, partition walls and structural elements,	30.17.11	Casings for air-conditioning and cooling
30.13.1	Sections, section systems	30.18	Sanitary equipment and fittings
30.13.2	Prefabricated partition walls	30.18.1	Shower cabinets
30.13.3	Meeting booths with aluminium-section frames	30.18.2	Wall cabinets, mirror cabinets
30.13.4	Devices for transferring cash and goods at cash-desks	30.19	Conservatories, verandas, glass structures, glass roof structures
30.14	Ceiling panels, acoustic ceilings and structural elements	30.18.2	Wall cabinets, mirror cabinets
30.14.1	Coffer ceilings	30.20	Stairs, balustrades, fencing, gratings
30.14.2	Strip ceilings	30.20.1	Sections, section systems
30.14.3	Aluminium strip ceilings	30.20.1.1	Extruded sections and systems
30.14.4	Grid ceilings, ceiling grids	30.20.2	Stairs, walkways, landings
30.14.5	Acoustic ceilings, -elements	30.20.2.1	Treads for escalators
30.15	Cloakroom, interior fittings and accessories	30.20.3	Spiral staircases
30.15.1	Claokroom systems	30.20.4	Loft ladders, flat roof exits
30.15.1.1	Cloakroom hooks	30.20.5	Balustrades

30.20.5.1	Panelling for balustrades	31	Aluminium traffic structures and guide systems
30.20.5.2	Pipe connectors	31.1	Bridges, balustrades
30.20.6	Rod elements, forged	31.1.1	Footbridges
30.20.7	Walkway and stair gratings	31.1.2	Bridge balustrades
30.20.8	Non-skid gratings	31.1.3	Bridge-laying systems
30.20.8.1	Safety gratings, safety stairs	31.2	Masts
30.20.9	Lighting and ventilation gratings	31.2.1	Lattice towers
30.20.10	Fencing and fencing systems	31.2.2	Tubular masts
30.20.11	Balcony balustrades	31.2.3	Telescopic masts
30.20.12	Extended balconies	31.2.4	Lighting poles
30.20.13	Prefabricated balconies and balcony systems	31.2.5	Flagpoles
30.20.14	Carport construction kits	31.2.6	Post tubes for traffic signs
30.21	General welded structures	31.3	Guidance systems
30.22	Shuttering systems	31.3.1	Guide rails, guide palings
30.23	Sandwich elements	31.3.2	Traffic sign gantries
30.23.1	Aluminium honeycombs	31.3.3	Traffic signs
30.24	Aluminium chains	31.3.4	Road signs
30.25	Alternative energy systems and structural elements	31.3.5	Level-crossing gates, barriers
30.25.1	Solar collector panels	31.4	Noise-reduction installations
30.25.2	Solar collectors	31.4.1	Noise barriers
30.25.3	Energy roof systems		
30.25.4	Energy fence systems	32	Aluminium products for electrical engineering and electronics
30.25.5	Energy-extraction systems with absorbers and brine-water-heat	32.1	Conductor wire, heavy grid cables
	pumps	32.1.1	Conductor wire, bare
30.25.6	Other energy utilisation systems	32.1.2	Conductor wire, varnished
30.26	Measuring and alignment equipment	32.1.3	Conductor wire, plastic-insulated
30.26.1	Measuring and alignment equipment, general	32.1.3.1	Conduct-wire, anodized
30.26.2	Straight edges	32.1.4	Sector cables
30.26.3	Levellig boards	32.2	Busbars, accessories
30.26.4	Spirit levels	32.2.1	Extruded busbar sections
30.26.5	Lasers for facades, windows and interior decoration	32.2.2	Extruded tubular busbars
		32.2.3	Continuously-cast busbars
		32.2.4	Electroplated busbars

32.2.5	Anodized busbars	32.7.2.1	Cabinets
32.2.6	Ready-to-assemble busbars	32.7.3	Casing systems
32.2.7	Ready-to-assemble busbars	32.7.4	Front panels, scales
32.2.8	Busbars	32.7.5	Adjustment knobs
32.3	Overhead cables, accessories	32.7.6	Heat sink sections
32.3.1	E-Al overhead cables	32 <i>.</i> 7 <i>.</i> 7	Heat sinks
32.3.2	E-AIMgSi overhead cables	32. <i>7.7</i> .1	High power heat sinks
32.3.3	Aluminium and steel overhead cables	32. <i>7</i> .8	High-frequency screening
32.3.4	Aluminium-clad steel cables	32.8	Switch cabinets, accessories
32.3.5	Insulated overhead cables	32.8.1	Switch cabinets of sheet-metal
32.3.6	Screw clamps	32.8.2	Switch cabinets made of sheet metal and extruded sections
32.4	Cables, accessories	32.8.3	Fittings for electronic cabinets
32.4.1	Cable foil	32.8.4	Equipment racks made of aluminium sections
32.4.2	Cable strip	32.8.5	Windows for switch cabinets
32.4.3	Low-voltage cable	32.9	Installation accessories
32.4.3.1	Flexible cable connectors	32.9.1	Wall-mounted conduits
32.4.4	Medium and high-voltage cable	32.9.2	Cable supports
32.4.5	Cable sheathing	32.9.3	Switches with aluminium ornamental plates
32.4.6	Screw clamps	32.9.4	Aluminium cable clips
32.4.7	Cable ducting	32.9.5	Lightning protection systems and accessories
32.5	Coiling strip	32.10	Communications and telecommunications
32.5.1	Bare coiling strip	32.10.1	Antenna reflectors
32.5.2	Anodized coiling strip	32.10.2	Antenna support (masts): special extrusions e.g. for electric motor
32.5.3	Coiled narrow strip made from anodized coil		housings, castings and forgings
32.6	Aluminium elements for capacitors		
32.6.1	Capacitor foil, bare, rolled	33	Aluminium products for apparatus and container construction
32.6.2	Starting material for capacitor cans	33.1	Pressurized containers, general
32.6.3	Capacitor cans	33.1.1	Chemical apparatus
32.7	Electronic components	33.1.2	Flat-floored silos
32. <i>7</i> .1	Electronic components, general	33.1.3	Silos with outlet chutes
32. <i>7</i> .1.1	Electronic cabinets	33.1.4	Fixed large-capacity tanks
32.7.1.2	Mounting kits for electronics	33.1.5	Transportable large-capacity containers
32.7.2	Casings	33.1.6	Mixing silos

33.2	Transport containers	33.5.3	Flanges
33.2.1	Transport containers for bulk products	33.5.4	Welding collars
33.2.2	Transport containers for liquids	33.5.5	Ball valves (fittings)
33.2.3	Transport bottles	33.5.6	Corrosion-protected strip for flexible tubes
33.2.4	Spare tanks for motor vehicles	33.5.7	Piping components clad with polyamide, ready-to-mount
33.3	Pressure vessels	33.6	Heat insulation and structural components
33.3.1	Pressure vessels, general	33.6.1	Aluminium strip and systems for insulating pipes and tanks
33.3.2	Compressed gas bottles	33.6.2	Aluminium strip for moisture-barrier insulation
33.3.3	Bases for pressure vessels	33.6.3	Insulating materials
33.4	Heat exchangers and components	33.7	Noise insulation and structural components
33.4.1	Strip for coiled fins		·
33.4.2	Strip for cooling fins	34	Aluminium products for factory equipment and transport
33.4.3	Corrosion-protected strip for heat-exchanger elements	34.1	Boxes for storage and transport, cases
33.4.4	Tube plates (roll-bond-plates)	34.1.1	General-purpose boxes
33.4.5	Brazing strip and sheet	34.1.2	Boxes for the food processing
33.4.6	Finned tubes (integral fins)	34.1.3	Boxes for the textile industry and for laundries
33.4.7	Tubes for ring-shaped heat exchangers	34.1.4	Stackable boxes
33.4.7.1	Multi-chamber hollow sections for ring heat exchangers	34.1.5	Folding boxes
33.4.7.2	Extruded multi-chamber hollow sections for ring heat exchangers	34.1.6	Transport baskets and cages
33.4.8	Welded and braze-clad tubes	34.1.7	Equipment cases
33.4.9	Special tubes, welded	34.1.8	Cases for industrial use
33.4.9.1	Spirally welded tubes	34.1.9	Trunks and cases for transport (general)
33.4.9.2	Tubes for pneumatic cylinder	34.2	Trolleys
33.4.10	Oil and gas coolers, vacuum-brazed	34.2.1	General-purpose trolleys
33.4.11	Heat exchangers for air-conditioning units	34.2.2	Trolleys for food processing
33.4.12	Evaporators for refrigerators and deep-freezers	34.2.3	Trolleys for the textile industry and for laundries
33.4.13	Coolers for compressors	34.2.4	Hospital trolleys
33.4.14	Coolers for hydraulic plant, vacuum-brazed	34.3	Pallets, racks
33.4.15	Heat exchangers for the chemical industry	34.3.1	Flat pallets
33.4.16	Vacuum-brazed heat exchangers for the gas industry	34.3.2	Flat pallets, collapsible
33.5	Pipes and structural components	34.3.3	Box pallets
33.5.1	Pipes	34.3.4	Tank pallets
33.5.2	Pipe elbows	34.3.5	Pallets for air transport

34.3.6	Transport racks	34. <i>7</i>	Signs, lettering, displays
34.3.7	Tank wagons	34. <i>7</i> .1	Plate for engraving
34.4	Containers, tanks	34.7.2	Etched signs
34.4.1	Small containers	34.7.3	Engraved signs
34.4.2	Large containers	34.7.4	Printed signs
34.4.3	Containers for liquids	34.7.4.1	Business cards made of aluminium
34.4.4	Containers for bulk goods	34.7.5	Cast signs
34.4.5	Containers for air transport	34.7.6	Photographically coated nameplates
34.4.6	Transport tanks	34.7.7	Decorative articles in offset or screen printing
34.4.7	Aluminium fermentation tanks	34.7.8	Letters and numerals, cast
34.4.8	Aluminium gas tanks	34.7.9	Letters and numerals, cut from sheet
34.4.9	Container accessories	34.7.10	Anodized and coloured signs
34.4.9.1	Corner fittings for containers	3 <i>4.7.</i> 11	Self-adhesive signs, all types
34.5	Transport aids	34.7.12	Folding display screens
34.5.1	Gantries	34.8	Printing accessories
34.5.2	Access ramps	34.8.1	Aluminium printing inks
34.5.3	Loading rails	34.8.2	Starting material for printing plates
34.5.4	Conveyors made of aluminium extruded sections	34.8.3	Machines for producing offset printing plates
34.6	Aluminium ladders, working platform, scaffolding	34.8.4	Printing plates
34.6.1	Stepladders	34.8.5	Screen printing frames
34.6.2	Builder´s ladders, indoor ladders	34.8.6	Embossed aluminium foil
34.6.3	Fire ladders	34.8.7	Aluminium foil, anodized and coloured
34.6.3.1	Portable fireman's ladders	34.9	Structural elements for clarification plant
34.6.4	Quickfit scaffolding	34.9.1	Motor-driven weirs, locks
34.6.4.1	Scaffolding frames	34.9.3	Raking units, skim gates
34.6.4.2	Scaffolding steps	34.9.4	Gratings
34.6.5	Mobile scaffolding	34.9.5	Slide-bars, barriers mobile
34.6.5.1	Façade scaffolding	34.10	Flood protection
34.6.6	Machinery inspection walkways	34.10.1	Dam beams
34.6.6.1	Walkways		
34.6.7	Working platforms	35	Aluminium products for motor vehicle
34.6.7.1	Industrial platforms	0.51	construction
34.6.8	Cat ladders (for emergencies)	35.1	Cars
	-		

35.1.1	Spaceframe structures	35.1.23	Suspension and steering
35.1.2	Bumpers	35.1.23.5	Drop and open-die forgings
35.1.2.1	Profiles for bumpers	35.1.30	Engine
35.1.2.2	Bumper centre beams	35.1.30.1	Cast parts for cars
35.1.3	Sheet and strip for bodywork and interior fittings	35.1.30.1.	Piston
35.1.3.1	Sheet and strip (also surface treated)	35.1.30.2	Components for internal combustion engines
35.1.3.2	Shaped sheet parts / float forming (also surface treated)	35.1.30.2.1	Cylinder sleeves
35.1.3.3	Large-size (aluminium) stampings	35.1.30.2.2	Cylinder heads
35.1.3.4	Entry ledges	35.1.30.2.3	Cylinder blocks
35.1.3.5	Structural components	35.1.30.3	Connecting rods, pins
35.1.10	Decorative trim and parts	35.1.30.4	Blank velves
35.1.10.1	Decorative trim and parts	35.1.30.5	Valve springs, valve spring retainers
35.1.10.1.1	Cover	35.1.30.6	Heat shielding panels
35.1.10.1.2	Rearview-mirror housing	35.1.40	Air conditioning
35.1.10.1.3	Profiles for covering	35.1.40.1	Heat exchanger profiles
35.1.10.1.4	Protective side moulding	35.1.40.2	Radiators
35.1.11	Window frames	35.1.40.3	Oil coolers
35.1.11.1	Profiles for window frames	35.1.40.4	Charge air coolers
35.1.20	Chassis and steering	35.1.41	Air conditioners
35.1.20.1	Wheels, wheel rims	35.1.41.1	Evaporators for air conditioners
35.1.20.3.	Heat protection tubes	35.1.41.2	Condensers for air conditioners
35.1.20.2	Chassis	35.1.41.3	Tubing for air conditioners
35.1.20.2.1	Parts for wheel/axle suspension, Axles	35.1.50	Fuel technology
35.1.20.3	Heat shielding panels for exhaust systems	35.1.50.1	Fuel pumps
35.1.20.4	Steering	35.1.50.2	Fuel coolers
35.1.20.4.1	Steering cardan shafts	35.1.50.3	Fuel filter housings
35.1.20.4.6	Machined and assembled components	35.1.50.4	Fuel pressure regulators
35.1.20.4.2	steering columns	35.1.60	Safety
35.1.20.4.3	adjustable steering column	35.1.60.1	Airbag deflectors
35.1.20.4.4	drive shafts	35.1.60.2	Underride guards
35.1.20.4.5	Drop and open-die forgings	35.1.60.3	Extrusions for side impact protection
35.1.21	Suspension and steering	35.1.60.4	Heat protection tubes
35.1.21.1	Parts for wheel/axle suspension	35.1.60.5	Restraint systems

35.1.70	Interior	35.2.20.1	Wheels, wheel rims
35.1.70.1	Slide rails for seats	35.2.20.2.1	Parts for wheel/axle suspension, Axles
35.1.70.2	Decorative parts	35.2.20.3.	Heat protection tubes
35.1.70.3	Sheet and strip	35.2.20.2	Chassis
35.1.80	Top/roof	35.2.20.3	Heat shielding panels for exhaust systems
35.1.80.1	Hood (bonnet) components	35.2.20.4	Steering
35.1.80.2	Material mounting bracket	35.2.20.4.1	Steering cardan shafts
35.1.80.3	Decorative roof trim	35.2.20.4.6	Machined and assembled components
35.1.80.4	Roof struts and beams	35.2.20.4.2	steering columns
35.1.80.5	Railing systems	35.2.20.4.3	adjustable steering column
35.1.90	Accessories	35.2.20.4.4	drive shafts
35.1.90.1	Miscellaneous	35.2.20.4.5	Drop and open-die forgings
35.2	Trucks / commercial vehicles	35.2.30	Engine
35.2.1	Body	35.2.30.1	Cast engine parts
35.2.1.1	Spaceframe structures	35.2.30.1.1	Aluminium pistons for car engines
35.2.1.2.1	Profiles for bumpers	35.2.30.2.7	Cylinder liners
35.2.1.3.1	Sheet and strip (also surface treated)	35.2.30.2	Components for internal combustion engines
35.2.1.2	Bumpers	35.2.30.2.6	Cylinder heads
35.2.1.2.2	Bumper centre beams	35.2.30.2.5	Cylinder blocks
35.2.1.3.2	Shaped sheet parts / float forming (also surface treated)	35.2.30.3	Blank velves
35.2.1.3	Sheet and strip for bodywork and interior fittings	35.2.30.2.4	Connecting rods, pins
35.2.1.3.3	Large-size (aluminium) stampings	35.2.30.4	Valve springs, valve spring retainers
35.2.1.3.4	Entry ledges	35.2.30.5	Heat shielding panels
35.2.1.4	Structural components	35.2.40	Air conditioning
35.2.10	Decorative trim and parts	35.2.40.1	Heat exchanger profiles
35.2.10.1	Decorative trim and parts	35.2.40.2	Radiators
35.2.10.1.1	Cover	35.2.40.3	Oil coolers
35.2.10.1.2	Rearview mirror housing	35.2.40.4	Charge air coolers
35.2.10.1.3	Profiles for covering	35.2.41	Air conditioners
35.2.10.1.4	Protective slide moulding	35.2.41.1	Evaporators for air conditioners
35.2.11	Window frames	35.2.41.2	Condensers for air conditioners
35.2.11.1	Profiles for window frames	35.2.41.3	Tubing for air conditioners
35.2.20	Chassis and steering	35.2.50	Fuel technology

35.2.50.1	Fuel pumps	35.2.80.9.2	Aluminum fuel tank
35.2.50.2	Fuel coolers	35.2.80.10	Superstructures for transporting beverages in liquid form
35.2.50.3	Fuel filter housings	35.2.80.11	Equipment for service vehicles
35.2.50.4	Fuel pressure regulators	35.2.95	Accessories
35.2.60	Safety	35.2.95.1	Gas bottles
35.2.60.1	Airbag deflectors	35.3	Trailers
35.2.60.2	Underride guards	35.3.1	Transport trailers
35.2.60.3	Extrusions for side impact protection	35.3.2	Boat trailers
35.2.60.4	Heat protection tubes	35.3.3	Horse box trailers
35.2.60.5	Restraint systems	35.4	Boats, ships and accessories
35.2.70	Interior	35.4.1	Lightweight construction elements for boats, ships
35.2.70.1	Slide rails for seats	35.4.8	gangways, hangar doors and winch systems
35.2.70.4	mobile-home equipment	35.4.2	Sailing boat and windsurfer masts
35.2.70.2	Decorative parts	35.4.2.1	Sailing boat and windsurfer mast sections
35.2.70.3	Sheet and strip	35.4.3	Ships' windows
35.2.80	Superstructures	35.4.4	Cast engine parts
35.2.80.1	Tank and silo vehicles	35.4.4.1	Aluminium pistons for big engines (e.g. marine)
35.2.80.2.	Swap tanks	35.4.5	Hatch covers for ocean-going vessels and for inland waterway
35.2.80.3.	Tipper trucks		vessels
35.2.80.5.	Profiles for cold-storage van	35.4.6	Gangways
35.2.80.6.	Van body systems	35.4.7	Floating jetties
35.2.80.8.1	Tailboards, ready to fit	35.5	Rail vehicles and accessories
35.2.80.2	Tank wagon bodies	35.5.1	Heavy sections for railway carriages
35.2.80.8.2	Overlapping side on tail boards	35.5.2	Windows for railed vehicles
35.2.80.3	Tipper truck bodies	35.5.3	Superstructures for railed vehicles
35.2.80.8.	Tailboards, ready to fit	35.5.3.1	Railway carriage superstructures
35.2.80.4	Cattle transporter bodies	35.5.3.2	Tank bodies
35.2.80.5	Refrigerated truck bodies	35.5.4	Braking systems for rail vehicles
35.2.80.6	Box bodies	35.5.5	Accessories
35.2.80. <i>7</i>	Rolling shutters for vehicle bodies	35.5.5.1	Waste bins, ashtrays
35.2.80.8	Tailboard systems	35.5.6	Lighweight construction elements for railway carriages
35.2.80.9	Aluminium containers for commercial vehicles	35.6	Aircraft components
35.2.80.9.1	Aluminum compresses-air reservoir	35.6.1	Special semis

35.6.2	Castings	36.1.3.3	Foil laminated with cellulose film
35.6.2.1	Aluminium pistons	36.1.3.4	Foil laminated with three or more layers
35.6.3	Drop and open-die forgings	36.1.3.5	Cigarette foil (laminated, metallized)
35.6.4	Sandwich panels with aluminium honeycomb cores	36.1.10	Thin aluminium strip (0.021 to 0.25 mm thick)
35.6.5	Wheels for sporting aircraft	36.1.10.1	Bare thin strip
35.6.6	Precision parts for aviation and aerospace	36.1.11	Thin strip with surface treatment, general
35.6.7	Tubes for kites	36.1.11.1	Thin strip with surface treatment, lacquered or painted
35.7	Bicycles / motorcycles	36.1.11.2	Thin strip with surface treatment, coated
35.7.1	Bicycles	36.1.11.3	Thin strip with surface treatment, printed
35.7.1.1	Bicycle parts	36.1.11.4	Thin strip with surface treatment, brush-finished one side
35.7.1.2	Bicycle frames	36.1.11.5	Thin strip with surface treatment, brush-finished both sides
35.7.1.3	Bicycle carriers	36.1.11.6	Embossed thin strip with a surface finish
35.7.2	Motorcycles	36.1.12	Composite material (laminated)
35.8	Equipment for handicapped people	36.1.12.1	Push-through packaging
35.8.1	Wheelchairs	36.20	Aluminium packaging sheet
35.8.1.1	Wheelchair parts	36.20.1	Packaging sheet, general
35.8.2	Rehabilitation equipment	36.20.2	Packaging sheet, bare and untreated
		36.20.3	Packaging sheet, lacquered or painted
36	Packaging with aluminium	36.20.4	Packaging sheet, coated
36.1	Packaging materials	36.20.5	Packaging sheet, printed
36.1.1	Aluminium foil	36.20.6	Packaging sheet, degreased and surface treated
36.1.1.1	Bare foil	36.25	Other packaging materials
36.1.1.2	Aluminium foil from 4 to 20 microns thick	36.25.1	Plastic film metallized with aluminium
36.1.1.3	Aluminium foil from 5 to 20 microns thick	36.25.2	Paper metallized with aluminium
36.1.2	Foil with a surface treatment, general	36.50	Packaging materials, packaging aids, transportable containers
36.1.2.1	Foil with a surface treatment, lacquered or painted	36.50.1	Packaging made of foil or thin strip
36.1.2.2	Foil with a surface treatment, printed	36.50.1.1	Wrappers, general
36.1.2.3	Foil with a surface treatment, coated	36.50.1.2	Wrappers for baked goods and sweets
36.1.2.4	Foil with a surface treatment, embossed	36.50.1.3	Wrappers for dairy products
36.1.2.5	Self-adhesive foil	36.50.1.4	Wrappers for coffee, tea and cacao
36.1.3	Composite foil (laminated), general	36.50.1.5	Wrappers for food
36.1.3.1	Foil laminated with paper	36.50.1.6	Wrappers for edible fats (margarine etc.)
36.1.3.2	Foil laminated with plastic	36.50.1.7	Wrappers for industrial chemical products
			•

36.50.2	Foil pouches, general	36.60.2	Tube closures
36.50.2.1	Sterilisation pouches	36.60.3	Free-standing bags and pouches
36.50.3	Foil labels, general	36.60.4	Aerosol cans, general
36.50.3.1	Simple foil labels	36.60.4.1	One-piece cans
36.50.3.2	Self-adhesive foil labels	36.60.4.2	Two-chamber pressure packs
36.50.3.3	Botle neck foil	36.60.4.3	Pressure vessels
36.50.4	Capsules, general	36.60.5	Small aluminium shells and tubes, general
36.50.4.1	Bottle caps	36.60.5.1	Small tubes for tablets
36.50.4.2	Tailored capsules	36.60.5.2	Cigar tubes
36.50.4.3	Wrapping material for bottle tops	36.60.5.3	Sliding sleeves
36.50.5	Light rigid containers in aluminium (e.g. for baking trays, TV dinners,	36.60.5.4	Other impact-extruded containers
	delicatessen, specialty foodstuffs)	36.60.5.5	Cartridges
36.50.6	Foil stampings	36.60.5.6	Aluminium shells
36.50.7	Laminate tubes	36.60.5 <i>.</i> 7	Two-component cartridges
36.55	Aluminium cans	36.60.6	Aluminium bottles, general
36.55.1	Aluminium cans (rigid design, all-aluminium), general	36.65	Aluminium closures
36.55.1.1	Beverage cans	36.65.1	Bottle closures for still drinks, general
36.55.1.2	Fish cans	36.65.1.1	Bottle caps for milk and milk drinks
36.55.1.3	Meat cans	36.65.1.2	Tear-off caps (centre or edge tabs)
36.55.2	Aluminium cans (semi-rigid design, aluminium-plastic composite)	36.65.1.3	Push-through caps
36.55.2.1	Fish cans	36.65.1.4	Pilfer-proof closures
36.55.2.2	Meat cans	36.65.1.5	Screw closures
36.55.2.3	Other food cans	36.65.1.6	Closures for wide-necked containers
36.55.2.4	Beverage packaging	36.65.2	Bottle closures for fizzy drinks, general
36.55.3	Deep-drawn aluminium cans, general, for food and non-food	36.65.2.1	Roll-on closures
36.55.4	Cans for cosmetic and pharmaceutical creams	36.65.2.2	Tear-off closures
36.55.5	Other cans	36.65.3	Closures for use with preserving jars on a commercial scale, gene-
36.55.5.1	Jewel boxes		ral
36.55.6	Boxes with sliding trays	36.65.3.1	Vacuum closures
36.55.7	Powder compacts	36.65.4	Can closures
36.55.8	Aerosol cans	36.65.4.1	Seamed lids
36.60	Impact extruded packaging	36.65.4.2	Tear-off lids
36.60.1	Tubes	36.65.4.3	Sealing membranes

36.65.4.4	Heat-sealable container lids	37.1.6	Tableware
36.70	Wire for use in packaging	37.1.7	Baking dishes, baking hoods
36.70.1	Wire for use in packaging, general	37.1.8	Drinking mugs
36.70.2	Wire for PVD (physical vapour deposition)	37.1.9	Trays
36.70.3	Stitching wire (e.g. for tea-bags)	37.1.10	Camping utensils
36.70.4	Wire for clips (e.g. for packaging sausage and cheese)	37.1.10.1	Beverage bottles
36.70.5	Binding wire	3 <i>7</i> .1.11	Water bottles
36.70.6	Fine wire for braiding and decorative cords	37.1.12	Lunchboxes and storage tins
36.75	Heavy packaging	37.1.13	Kitchen utensils, general
36.75.1	Transport boxes and chests, all-aluminium, general use	37.1.13.1	Shakers
36.75.1.1	Transport boxes and chests, all-aluminium, special construction for	37.1.14	Equipment for large-scale kitchens and butcher's shops
	particular equipment	37.1.15	Cooking-fat filters
36.75.1.2	Folding boxes	37.1.16	Champagne cooler
36.75.1.3	Inserts for boxes and chests, machine parts	37.1.17	Field kitchens, mobile cooking equipment
36.75.2	Composite transport boxes and chests (aluminium and plastic)	37.1.18	Equipment and systems for catering, cafeterias and canteens
36.75.3	Barrels and drums	37.2	Household goods
36.75.3.1	Transport barrels and drums	37.2.1	Kitchen foil
36.75.4	Pots, big bottles	37.2.2	Aluminium cases
36.75.4.1	Other pots for transport	37.2.3	Camera cases
36.75.4.2	Big bottles	37.2.4	Picture rails and frames
36.75.5	Cuboidal containers	37.2.5	Household goods, general
36.75.5.1	Cuboidal containers for granules	37.2.6	Camp beds
36.75.6	Composite bags and pouches, general	37.2.7	Equipment handles for cleaning systems
36.75.7	Toggle-type closures for boxes, chests and drums	37.3	Garden goods
		37.3.1	Garden furniture
37	Aluminium products for the kitchen, household, garden, hospital	37.3.2	Large retractable hoods and shades
	and rescue ware	37.3.3	Handles for gardening equipment
37.1	Kitchen equipment	37.4	Hospital requisites, ergotherapy an rehab equipment
37.1.1	Catering cutlery	37.4.1	Stretchers for rescue and for general hospital use
37.1.2	Cookware	37.4.2	Access ramps, Bridging Spans
37.1.3	Pressure cookers	37.10	Interior decoration
37.1.4	Frying pans	37.10.1	Furniture making
37.1.5	Roasting pans	37.10.1.1	Aluminium furniture systems

37.10.2	Furniture design	40.2.3	Spraying and stoving applications
37.10.3	Lighting fixtures made of aluminium	40.3	Colour anodizing, immersion dyeing
		40.3.1	Dip colouring
38	Aluminium sporting equipment and components	40.3.2	Electrolytic colouring
38.1	Goalposts	40.3.4	Combination colouring
38.2	Tennis rackets	40.3.5	chemical black paint of copper and brass
38.3	Umpires`chairs	40.4	Hard anodizing
38.4	Sticks	40.4.1	Partial hard anodizing
38.4.1	Ski sticks	40.4.2	Hard coat / slip coat
38.4.2	Walking-/ Nordic walking sticks	40.5	Chromium plating
38.5	Equipment for equestrian events	40.5.1	Black chrome-plating
38.6	Trainer's rooms	40.5.2	Matt chrome-plating
38. <i>7</i>	Grandstands	40.5.3	Bright chrome-plating
		40.5.4	Hard chromium plating
39	Aluminium components for engineering, precision mechanics, optics	40.5.5	Velour-chrome plating
39.1	V-belt pulleys	40.6	Partial electroplating
39.2	Aluminium honeycomb impact-absorption elements	40.7	Chemical (non electrical) nickel plating
39.3	Systems and components for supports and devices for machines	40.7.1	Partial chemical (non-electrolytic) nickel-plating
39.3.1	Milled parts (to drawing)	40.7.2	Chemical (electroless) nickel-plating and annealing
39.3.2	Aluminium profiles	40.8	Coating
39.3.3	protection device for mechanical engineering	40.8.1	Lacquering and painting
39.4	Linear bearings, shafts and tables, roller-gear tables, positioning	40.8.4	Liquid painting
	elements	40.8.5	CDP-coating
39.4.1	Jigs and fixtures for holding workpieces	40.8.2	Metallic coatings
39.5	Compressed air distribution systems	40.8.3	chrome-free passivating
39.6	Hydraulic and pneumatic tubes	40.9	Enamelling
39. <i>7</i>	Piston rods for hydraulic and pneumatic systems (Kempal)	40.10	Treatment in drums (electroplating)
40		40.11	Treatment in drums (anodizing)
40	Special surface treatment for aluminium products	40.12	Lubricating coating
40.1	Brightening	40.13	Non-stick coatings
40.2	Anodizing	40.13.1	Mould coatings
40.2.1	Protective anodizing	40.14	Composite coating
40.2.2	Chromic acid anodizing	40.14.1	Multi-purpose coatings

40.15 40.15.1 40.15.2 40.15.2.1 40.15.2.2 40.15.3 40.15.3.1 40.15.3.2 40.15.3.3 40.15.4 40.15.5	Rack processing Rack processing (up to 800mm) Electroplating (nickel) Electroplating (nickel), very bright Electroplating (nickel), matt Tin plating Tin plating, bright Tin plating, matt (highly solderable) Tin-Cobalt (chrome-substitute) Copper plating Brass-plate glossy + ground brass-plate	60.2.1 60.2.2 60.2.3 60.2.4 60.2.5 60.2.6 60.2.7 60.2.8 60.2.9 60.2.10 60.2.11 60.2.12	Computer systems for production control Potroom operating equipment Pot charging devices Electrolysis plant Anode and cathode manufacturing plant Prebaked anode manufacturing plant Conveyor and cleaning plant for electrodes Plant and equipment for packaging prebaked anodes Cathode- and side-blocks Ramming and sealing paste Luting compounds and binders Cathodes Conveyor systems for bulk goods
D	Plant, machines and auxiliary equipment for, extracting, forming and finishing aluminium, tolling jobs	60.2.14 60.2.15 60.2.16 60.2.17	Anode breakers and stripping equipment Break-out machines for old pots Suction-type metal collectors Melt purification devices
60.1 60.1 60.1.2 60.1.2.1 60.1.2.2 60.1.3 60.1.4 60.1.5 60.1.5.1 60.1.6 60.1.7 60.1.8 60.2	Equipment and accessories for raw materials processing and aluminium extraction Aluminium oxide fabrication Conveyor systems for bulk goods Dust extraction systems Industrial aspirators Installations for filtering swarf Bauxite mills, sieves and mixers Pumps Filtering plant Installations for filtering swarf Calcining kilns Thickeners for red mud and hydrates Silos for aluminium oxide Primary aluminium production	60.2.18 60.2.19 60.2.20 60.2.21 60.2.22 60.2.23 60.2.24 60.2.25 60.3 60.3.1 60.3.2 60.3.3 60.3.4 60.3.4.1 60.3.4.2 60.3.5	Cast-iron block moulds Aluminium-melt testers Pig casting machines, carousel type Ingot stacking machines Compressors and fans of all types Rotary blowers Temperature-measuring devices Block transport clamps Secondary aluminium production, recycling Dross preparation plant Shredders Drying plant for aluminium swarf Processing plants, swarf mills Recycling plant for aluminium swarf Recycling plant for aluminium dross Baling presses

60.3.6	Briquetting machines for swarf	61.2	Melt treatment, melt transport
60.3 <i>.</i> 7	Equipment for recycling beverage cans	61.2.1	Equipment for rabbling dross
60.3.8	Ingot casting machines	61.2.2	Melt treatment devices
60.3.9	Shears	61.2.3	Gas injection lances and gas distributors
		61.2.4	Degassing containers
61	Equipment and accessories for melting,	61.2.5	Filters and filter materials for melts
	casting and heat treatment	61.2.5.1	Sintered metal filters
61.1		61.2.6	Ceramic filters
61.1.1	Building and conversion of industrial furnaces	61.2.7	Woven filters
61.1.1.1	Automation and control systems	61.2.8	Refining, fluxing and covering salts
61.1.2	Melting furnaces	61.2.9	Exothermic products
61.1.3	Burnout furnaces	61.2.10	Degassing and purification agents
61.1.4	Holding furnaces	61.2.11	Modifiers and grain refiners
61.1.5	Casting furnaces	61.2.12	Melt testing equipment
61.1.5.1	Dosing furnaces	61.2.13	Dosing and transport equipment for aluminium melts
61.1.6	Heat treatment furnaces and equipment	61.2.13.1	Flexible laundar joint
61.1.6.1	Annealing furnaces	61.2.14	Transport containers for molten aluminium
61.1.6.2	Ageing furnaces and equipment	61.2.15	Insulating covers for molten metal containers
61.1 <i>.7</i>	Scrap pre-heating systems	61.2.16	Wear-resistant pumps for NF metals
61.1.8	Furnace charging equipment	61.2.17	Nitrogen-fed agitators for NF-metals
61.1.9	Electric heating elements	61.2.18	Injection machines for metal powder, alloying method
61.1.10	Blowers for casting furnaces	61.2.19	Cooling, general
61.1.11	Industrial burners	61.3	Shape casting
61.1.12	Refractory engineering	61.3.1	Continuous casting machines
61.1.13	Refractory bricks	61.3.2	Strip-casting machines
61.1.14	Ramming, casting, gunning and repair compounds	61.3.3	Strip casters
61.1.15	Insulating bricks and slabs	61.3.4	Continuous casting lubricants
61.1.16	Gunning machines for heat-resistant compounds	61.3.4.1	Bone ash
61.1.17	Thermo elements	61.3.4.2	Charcoal
61.1.17.1	Heating coils	61.3.4.3	Lauric acid
61.1.18	Energy recovering units	61.3.5	Spray-compacting units
61.1.19	Process control for industrial furnaces	61.3.6	Metal level control systems for automatic billet casting machines
61.1.20	Refractory insulating products/insulating materials	61.3.7	Block transport clamps

61.3.8	Rotary casters for narrow strip	61.4.20	Pressure die-casting mould release agents and lubricants
61.3.9	Roll-casters for wide strip	61.4.21	Pressure die-casting piston lubricants
61.3.10	Equipment for casting pigs and sows	61.4.22	Semi- and fully automatic lubricant spraying equipment for pressure
61.3.11	DC casting moulds and tables		die-casting moulds and pistons
61.4	Mould casting	61.4.22.1	Dust and fume extraction equipment for pressure die-casting machi-
61.4.1	Melting crucibles and furnaces		nes die-casting machines
61.4.2	Pouring ladles	61.4.23	Toolmaking, construction of equipment, dies and moulds
61.4.3	Heating equipment for pouring ladles	61.4.24	CAD/CAM systems for casting-mould production
61.4.4	Moulding machines and equipment for sand casting	61.4.25	Hot-working steels for die-making
61.4.5	Core moulding machines and equipment	61.4.25.1	Cold work steels
61.4.5.1	Decoring machines	61.4.26	Ejector pins
61.4.6	Parting agent spraying equipment for moulding and core moulding	61.4.27	Temperature measuring equipment
	machines	61.4.27.1	Protective tubes for thermocouples
61.4. <i>7</i>	Binders for mould and core materials	61.4.28	Aluminium-melt testers
61.4.8	Sand conditioning and reconditioning plants	61.4.28.1	Equipment for measuring the hydrogen content of aluminium melts
61.4.8.1	Equipment for testing sand cores	61.4.28.2	Equipment for measuring the cleanliness of aluminium melts in alumi-
61.4.8.2	Core gas measuring instrument		nium melts
61.4.9	Permanent mould casting machines and carousels	61.4.29	Equipment for fettling castings
61.4.10	Low-pressure die-casting machines	61.4.30	Equipment for impregnating castings
61.4.10.1	Moulds	61.4.31	Dust removal and filtering equipment
61.4.11	Casting dies and moulds	61.4.32	Software for solidification simulation
61.4.11.1	Cleaning units for foundry tools and moulds	61.4.33	Casting sealing compounds
61.4.11.2	Foundry accessories	61.4.34	Fluxes
61.4.12	Riser tubes for low-pressure die-casting machines	61.4.35	Afterburning of noxious gases resulting from production processes
61.4.12.1	Dosing riser tubes	61.4.36	Flaring devices
61.4.12.2	Dosing systems	61.4.37	Installation for cooling castings
61.4.13	Die and mould washes	61.4.38	Resistance thermometer
61.4.14	Pressure die-casting machines	10	
61.4.15	Pistons and components for pressure die-casting machines	62	Equipment and accessories for rolling mill technology
61.4.16	Equipment for vacuum die-casting	62.1	Hot-rolling mills
61.4.17	Automation equipment	62.28.1	Transporters for coils and sheet
61.4.18	Flash trimming equipment	62.2	Cold-rolling mills
61.4.19	Mould cooling equipment	62.2.1	Continuous strip treatment lines

62.2.2	Inductive strip heating plant	62.28	Coils storage systems
62.3	Foil mills		• ,
62.4	Wire mills	63	Equipment and accessories for extrusion and drawing
62.5	Rolls	63.1	CAD/CAM systems for die production
62.5.1	Foil rolling	63.1.1	Pickling equipment for extrusion dies, integrated into the production
62.5.2	Engraved embossing rolls		line
62.6	Embossing calenders	63.2	Inductive heating equipment
62.7	Electrical equipment	63.2.1	Rapid magnetic heating equipment
62.7.1	Mechanical equipment	63.2.2	Die heating
62.8	Electric and hydraulic control equipment	63.3	Fuel-fired heating equipment
62.9	Thickness gauges	63.3.1	Ingot transport equipment
62.10	Ingot scalping machines	63.3.2	Ingot storage installations
62.11	Ingot saws	63.4	Extrusion, extrusion presses
62.12	Slab saws	63.4.1	Billet containers
62.13	Edge-trimming, cropping and chopping machines	63.4.2	Billet containers heatings
62.13.1	Cutting knives for slitters and cut-to-length lines	63.5	Hot billet shears
62.14	Levellers for sheet and coil	63.6	Extrusion dies
62.14.1	Sheet and plate stretchers	63.6.1	Equipment for splitting extrusion tooling
62.15	Slitters and cut-to-length lines	63.6.2	Nitriding of extrusion dies
62.16	Foil-cutting equipment	63. <i>7</i>	Automatic polishing machines for extrusion dies
62.17	Packing machines for sheet and coils	63.8	Run-out tables
62.18	Hydraulic coilers	63.9	Pullers
62.19	Róll grinding machines	63.10	Cutting equipment, trimming saws, billet saws
62.20	Filtering plant for rolling oils and emulsions	63.10.1	Precision circular saws for metals
62.20.1	Filter media (Paper & Aids)	63.11	Transfer devices
62.21	Automation equipment	63.12	Roller guideways
62.22	Roll cooling equipment	63.13	Stretchers
62.23	Measurement and testing systems	63.14	Straightening machines for tubes and sections
62.24	Control systems and automation	63.15	Straightening equipment for wire, rod and strip
62.25	Rolling oils	63.16	Cut-to-length saws
62.26	Used rolling mill equipment	63.17	Conform plants
62.27	Cooling, general	63.18	Dies for Conform plant
62.27.1	Coolant filtration	63.19	Drawing machines (rods and bars, wire)

63.20	Dies		fixtures
63.20.1	Drawing dies		
63.20.2	Extrusion dies	65	Equipment and accessories for sheet forming
63.20.2.1	Coated Extrusion dies	65.1	Production lines for ready-to-use sheet metal components
63.21	Cutting equipment on drawing machines	65.2	Mechanical and hydraulic sheet shears
63.22	Transfer devices on drawing machines	65.3	Circular shears
63.23	Drawing lubricants	65.4	Bending presses
63.24	Drawing die orifices	65.4.1	Folding and bending tooling
63.25	Electrical and hydraulic controls	65.5	Serial stamping machines
63.25.1	Water hydraulics / hfa	65.6	Cutting and stamping tools
63.26	Automation equipment	65.7	Press bending machines
63.27	Conveyors for collecting baskets	65.8	Roller bending and sheet bending machines
63.28	Pointing machines	65.9	Strip profiling machines
63.29	Billet-insertion machines	65.9.1	Roll-forming plant
63.30	Used extrusion and deep-drawing equipment	65.10	Section bending machines
63.31	Layer coiler(s) for aluminium tube	65.11	Metal spinning machines
63.32	Homogenising plants	65.12	Hydraulic deep-drawing presses
63.33	Extrusion Process Automation	65.13	Mechanical deep-drawing presses
		65.14	Multi-stage presses
64	Equipment and accessories for forging and impact extrusion	65.15	Trimming machines for deep-drawn components
64.1	Inductive heating equipment	65.16	Strip coiling machines
64.2	Crank and knuckle-joint presses	65.16.1	Coil grabs
64.3	Screw presses	65.16.2	Coil storage systems
64.4	Hydraulic presses	65.17	Standard parts for moulds and tooling
64.5	Impact extrusion presses	65.18	Lubricants for deep drawing
64.6	Forging dies and accessories	65.19	Punching and nibbling machines
64.7	Impact extrusion press tooling, accessories	65.20	CAD/CAM systems
64.8	Lubricants for cold impact extrusion	65.21	Used sheet-forming equipment
64.9	Lubricants for hot forming	65.22	Cutting systems
64.10	Handling equipment and manipulators	65.22.1	Tube and section stamping machines
64.11	Used forging and impact extrusion equipment	65.22.2	Tube and section cropping machines
64.12	Cable-sheathing presses, cable sheath corrugators		11 0
64.13	Spraying equipment and equipment for constructing jigs and		
	1 / 5 1 1 1 1 1 1 1 1 1		

66	Equipment and accessories for sawing and cutting	67.1.11	Sawing plants
66.1	Circular saws	67.2	Tools
66.2	Metal slitters	67.2.1	lathe tools
66.3	Circular saw blades	67.2.2	Milling tools
66.4	Band saws for metals	67.2.3	Drills
66.4.1	Bandsaws for slitting	67.2.4	Taps and dies for thread-cutting
66.4.2	Ingot bandsaws for casthouses	67.2.5	Precision-finishing tools
66.4.3	Horizontal bandsaws	67.2.6	Carbide-tipped cutting tools
66.5	Saw blades	67.2.7	Diamond-tipped cutting tools
66.5.1	Bandsaw blades	67.2.8	High-speed steel cutting tools
66.6	Parting shears	67.2.9	Shredding systems
66.7	Parting machines using abrasive discs	67.3	Machining aids
66.8	Strip slitters with multiple circular knives	67.3.1	Cooling lubricants
66.9	Shear blades and knives	67.3.1.1	Coolant cleaning equipment
66.10	Solid lubricants for sawing	67.3.2	Special accessories
66.11	Ingot saws	67.3.3	Low-dose lubricating systems and high performance lubricants
66.12	Water-jet cutting equipment	67.3.4	Materials for the care of tools
66.13	Laser cutting equipment	67.4	Clamping devices and components
66.14	Minimal-lubrication systems for saws	67.5	NC programming and control systems
66.15	Spray lubricants		
		68	Equipment and accessories for metal fabricators
67	Equipment and accessories for machining	68.1	CAD systems
67.1	Machines	68.2	Portable circular saws for metal
6 <i>7</i> .1.1	Lathes and automatic lathes	68.3	Fixed circular bevelling saw
67.1.2	Drilling and boring machines	68.3.1	Double mitre saws
6 <i>7</i> .1.3	Milling machines	68.4	Copy milling of extruded sections
67.1.4	Grinding machines	68.5	Release devices, mechanical
67.1.5	Precision-finishing machines	68.6	Release devices, hydraulic
67.1.6	Special-purpose machines	68.7	Drilling and combined drilling/milling machines
67.1 <i>.</i> 7	High-speed machine tools	68.8	Corner jointing machines
6 <i>7</i> .1.8	Machining centres, CNC	68.9	Combined drilling and stamping machines
67.1.9	Dust and fume exhaust systems for scalpers and saws	68.9.1	Tube stamping machines
67.1.10	Machining software	68.10	Tools

68.11	Assembly aids	69.1.5	Facade cleaning products
68.11.1	Adjustment keys, glazing blocks, rebated inserts of tempered safety	69.1.6	Low-temperature ovens for drying
	glass	69.1 <i>.</i> 7	Drying plant
68.11.2	Machines and equipment for assembling windows and windows	69.2	Mechanical surface treatment
	elements	69.2.1	Grinding and polishing machines
68.11.3	PUR foam in spray cans	69.2.1.1	Centrifugal grinding machines
68.12	Plate saws	69.2.1.2	Drag finishing machines
68.13	Bending equipment	69.2.2	Grinding and polishing machines for strip
68.14	Straightening machines	69.2.3	Grinding and polishing compounds
68.15	Tube flaring machines	69.2.4	Polishing pastes
68.16	Tube bending machines	69.2.5	Fibre-tufted round brushes
68.16.1	End-machining units	69.2.6	Discs and brushes, deburring brushes
68.16.2	End-bending units	69.2.7	Contact discs
68.17	Cast glass, fire-resistant glass, insulating and safety glass	69.2.8	Polishing rings
68.19	Sponge rubber	69.2.9	Drum equipment and plant
68.19.1	Seals and sealing	69.2.10	Vibratory machines
68.20	Equipment and accessories for roofing work	69.2.11	Drum polishing materials
68.20.1	Inclined hoists	69.2.12	Brushing machines
68.20.2	Hoists	69.2.13	Marbling tools
68.20.3	Working platforms	69.2.14	Grinding discs
68.20.4	Mobile cranes	69.2.15	Satin-finishing discs and belts
68.20.5	Skylights giving access to the roof	69.2.16	Endless abrasive belts
68.20.6	Roof ladders	69.3	Sand- and shot-blasting
68.20.7	Chimney scaffolding	69.3.1	Blasting equipment, processes
68.21	Storage systems	69.3.1.1	Sandblasting cabins
		69.3.1.2	Dry ice blasting equipment
69	Equipment and accessories for surface treatment	69.3.2	Blasting abrasives
(01	and corrosion protection	69.3.2.1	Stainless steel blasting grit
69.1	Surface cleaning and degreasing	69.3.3	Auxiliary materials
69.1.1	Cleaning equipment and materials	69.4	Flame spraying
69.1.2	Degreasing equipment and materials	69.4.1	Spray wire
69.1.3	Ultrasonic cleaning equipment	69.4.2	Sprayed coatings on aluminium (for wear protection)
69.1.4	Plant and processes for improving adhesion	69.4.3	Sprayed aluminium-on-steel coatings

69.5	Chemical conversion coating, chromating, phosphating	69.9.8.1	Multi-purpose jigs
69.5.1	Equipment	69.9.8.2	Jig elements
69.5.1.1	Equipment integrated into the production line	69.9.8.3	Wheels
69.5.2	Processes	69.9.9	Touch-ups and sprays for improving anodized surfaces
69.5.3	Auxiliary materials	69.10	Electroplating
69.6	Pickling, etching	69.10.1	Equipment
69.6.1	Equipment	69.10.1.1	Low-temperature ovens for drying
69.6.1.1	Equipment integrated into the production line	69.10.1.2	Electrical rectifying equipment
69.6.2	Processes	69.10.2	Processes
69.6.3	Auxiliary materials	69.10.3	Auxiliary materials
69.7	Brightening, chemical and electrochemical	69.10.3.1	Hoods for covering electroplating baths
69. <i>7</i> .1	Equipment	69.10.3.2	Guides for wire
69. <i>7</i> .1.1	Equipment integrated into the production line	69.11	Painting, stove enamelling, coating
69.7.1.2	Electrical rectifying equipment	69.11.1	Equipment, processes
69.7.2	Processes	69.11.1.1	Coil coating units
69.7.3	Accessories	69.11.2	Priming, wash primers
69.8	Deburring	69.11.2.1	Mixing and dosing equipment
69.8.1	Equipment and processes for mechanical deburring	69.11.3	Paints, lacquers
69.8.2	Equipment and processes for chemical or electrochemical deburring	69.11.3.1	Packaging lacquers
69.8.3	Equipment and processes for thermal deburring	69.11.4	Coating powders
69.8.4	Auxiliary materials	69.11.5	Coil coating paints
69.9	Anodic oxidation, colour anodizing, combination colouring	69.11.6	Anti-friction coatings
69.9.1	Equipment	69.11. <i>7</i>	Chemicals, auxiliary materials
69.9.1.1	Electrical rectifying equipment	69.11.8	Dipping paints and varnishes, clear and pigmented
69.9.1.2	Process control, colour appliances and rectifier for aluminium ano-	69.11.9	Drying ovens
	disation	69.11.10	Paint dosing pumps
69.9.2	Processes	69.12	Enamelling
69.9.3	Pre-treatment materials	69.12.1	Equipment and processes
69.9.4	Dyes, finishing materials	69.12.2	Auxiliary materials
69.9.5	Scale inhibitors	69.13	Non-metallic coatings of rubber, synthetic resin, etc.
69.9.6	Electrical equipment	69.13.1	Equipment, processes
69.9.7	Clamps	69.13.2	Auxiliary materials
69.9.8	Jigs	69.14	Vapour deposition of aluminium

69.14.1	Wire for PVD (physical vapour deposition)	70.4	Fusion welding
69.15	Other accessories for surface treatment	70.4.1	Equipment and apparatus for fusion welding
69.15.1	Protective foil	70.4.1.1	Welding fume extraction, extractor hoods
69.15.2	Disinfectants and germicides	70.4.2	Welding transformers, generators and rectifiers
69.15.3	Peel-off protective films	70.4.2.1	Welding generators
69.15.4	Metal marking equipment	70.4.2.2	Welding rectifier
69.16	Plant engineering for hard anodizing and electroless nickel-plating	70.4.3	Inert gas shielded welding equipment (MIG-MAG, WIG)
69.16.1	Hard anodizing, plants	70.4.4	Plasma cutting and welding equipment
69.16.2	Non-electrolytic nickel-plating plant	70.4.5	Fluxes
	,	70.4.6	Welding rods for gas and TIG welding
70	Equipment and accessories for joining	70.4.7	Wire electrodes for MIG welding
70.1	Adhesive bonding	70.4.8	Aluminium electrodes for manual arc welding
70.1.1	Equipment and devices for applying adhesives	70.4.9	Tungsten electrodes
70.1.2	Adhesives for metals	70.4.10	Burner gases, oxygen
70.1.3	Adhesives for joining metals to non-metallic materials	70.4.11	Inert gases
70.1.4	Hot-melt type adhesives	70.4.12	Personal protective gear for welding
70.1.5	Pressure-sensitives adhesives, adhesive foils	70.4.12.1	Protective curtains for welding
70.1.6	Coating adhesives	70.4.12.2	Welding helmets
70.1.7	Plasma pre-treatment for adhesive bonding techniques without	70.4.12.3	Safety glasses for welding
	CHC/CFC	70.4.12.4	Protective gloves for welding
70.1.8	Refractory adhesives	70.4.13	Welding Burner
70.2	Insulation, sealing	70.5	Pressure welding
70.2.1	Equipment and auxiliary materials for processing sealants	70.5.1	Pressure welding machines with magnetically traversed arc
70.2.2	Sealing compounds	70.5.2	Friction welding machines
70.2.3	Sealing sections and moulded seals	70.5.3	Friction stir-welding maschines
70.2.4	Sealing brushes	70.6	Resistance welding
70.2.5	Insulating materials and compounds	70.6.1	Spot, seam, and projection welding machines
70.2.6	Sealing strips	70.6.2	Flash butt welding machines
70.3	Brazing, soldering	70.6.3	Electrodes and electrode materials
<i>7</i> 0.3.1	Fluxes	70.6.4	Strip welding equipment, coil-to-coil
70.3.2	Brazing furnaces	70.7	Electron and laser beam welding, general
70.3.3	Brazing solders	70.7.1	Electron beam welding equipment
70.3.4	Soft solders	70.7.2	Laser beam welding equipment

70.7.3	Laser-Hybrid welding technology	70.13.2	Stainless steel joining and fastening elements
70.7.4	Tandem welding technology	70.13.3	Plastic joining and fastening elements
70.7.5	Cold Process-Technology	70.13.4	Magnetic systems
70.8	Stud welding	70.13.5	Special dovetail blocks and special nuts
<i>7</i> 0.8.1	Stud welding machines	70.13.6	Fastenings of stainless steel, aluminium and plastic for photovoltaic
70.8.2	DC arc welding machines (lift ignition)		and solarthermics
70.8.3	Condenser discharge machines (point ignition)	70.14	Joining by forming
70.8.4	Weld studs	70.14.1	Equipment, machines
70.9	Manufacturing equipment	70.14.2	Equipment and tools for clinching
<i>7</i> 0.9.1	Welding robots	70.14.3	Complete tool and die sets
70.9.2	Welding lines	70.14.4	Portable tools and dies
70.9.3	Welding benches	70.15	Press-in fasteners
70.9.4	Tube-welding machines	<i>7</i> 0.15.1	Beading machines
70.10	Rivets	70.15.2	Beading tools
70.10.1	Solid and hollow rivets	70.15.3	Bolts, step bolts, nuts, pins, bushes, sleeves, sleeves nuts
70.10.2	Tools for blind riveting	70.15.4	Riveting nuts
70.10.3	Riveting machines		•
	Die Leite		
70.10.4	Blind rivets	7 1	Equipment and accessories for foil processing, foil conversion and
70.10.4 70.10.5	Blind rivets Integral rivets	/1	packaging
		<i>7</i> 1.1	• • •
70.10.5	Integral rivets	71.1 71.1.1	packaging
70.10.5 70.10.6	Integral rivets Tool for integral rivets Screw fasteners	<i>7</i> 1.1	packaging Pretreatment and converting machines for foil and strip
70.10.5 70.10.6 70.11	Integral rivets Tool for integral rivets	71.1 71.1.1	packaging Pretreatment and convertimg machines for foil and strip Strip winding machines for transformers
70.10.5 70.10.6 70.11 70.11.1	Integral rivets Tool for integral rivets Screw fasteners Mechanical screwing equipment	71.1 71.1.1 71.1.2 71.1.3 711.4	packaging Pretreatment and converting machines for foil and strip Strip winding machines for transformers Chemical conversion plants
70.10.5 70.10.6 70.11 70.11.1 70.11.2	Integral rivets Tool for integral rivets Screw fasteners Mechanical screwing equipment Aluminium screws	71.1 71.1.1 71.1.2 71.1.3 71.1.4 71.1.5	packaging Pretreatment and convertimg machines for foil and strip Strip winding machines for transformers Chemical conversion plants Anodizing equipment
70.10.5 70.10.6 70.11 70.11.1 70.11.2 70.11.3	Integral rivets Tool for integral rivets Screw fasteners Mechanical screwing equipment Aluminium screws Stainless and chromium-nickel plated steel screws	71.1 71.1.1 71.1.2 71.1.3 711.4	packaging Pretreatment and convertimg machines for foil and strip Strip winding machines for transformers Chemical conversion plants Anodizing equipment Turning and winding machines
70.10.5 70.10.6 70.11 70.11.1 70.11.2 70.11.3 70.11.4	Integral rivets Tool for integral rivets Screw fasteners Mechanical screwing equipment Aluminium screws Stainless and chromium-nickel plated steel screws Titanium screws	71.1 71.1.1 71.1.2 71.1.3 71.1.4 71.1.5 71.1.6 71.1.8	packaging Pretreatment and converting machines for foil and strip Strip winding machines for transformers Chemical conversion plants Anodizing equipment Turning and winding machines Foil coating machines
70.10.5 70.10.6 70.11 70.11.1 70.11.2 70.11.3 70.11.4 70.12	Integral rivets Tool for integral rivets Screw fasteners Mechanical screwing equipment Aluminium screws Stainless and chromium-nickel plated steel screws Titanium screws Nails, pins, cotter pins	71.1 71.1.1 71.1.2 71.1.3 71.1.4 71.1.5 71.1.6	packaging Pretreatment and converting machines for foil and strip Strip winding machines for transformers Chemical conversion plants Anodizing equipment Turning and winding machines Foil coating machines Laminators
70.10.5 70.10.6 70.11 70.11.1 70.11.2 70.11.3 70.11.4 70.12 70.12.1	Integral rivets Tool for integral rivets Screw fasteners Mechanical screwing equipment Aluminium screws Stainless and chromium-nickel plated steel screws Titanium screws Nails, pins, cotter pins Nails	71.1 71.1.1 71.1.2 71.1.3 71.1.4 71.1.5 71.1.6 71.1.8	packaging Pretreatment and converting machines for foil and strip Strip winding machines for transformers Chemical conversion plants Anodizing equipment Turning and winding machines Foil coating machines Laminators Foil printing machines
70.10.5 70.10.6 70.11 70.11.1 70.11.2 70.11.3 70.11.4 70.12 70.12.1 70.12.2	Integral rivets Tool for integral rivets Screw fasteners Mechanical screwing equipment Aluminium screws Stainless and chromium-nickel plated steel screws Titanium screws Nails, pins, cotter pins Nails Aluminium cotter pins	71.1 71.1.1 71.1.2 71.1.3 71.1.4 71.1.5 71.1.6 71.1.8	packaging Pretreatment and converting machines for foil and strip Strip winding machines for transformers Chemical conversion plants Anodizing equipment Turning and winding machines Foil coating machines Laminators Foil printing machines Vacuum metallizing machines for depositing aluminium on paper
70.10.5 70.10.6 70.11 70.11.1 70.11.2 70.11.3 70.11.4 70.12 70.12.1 70.12.2 70.12.3	Integral rivets Tool for integral rivets Screw fasteners Mechanical screwing equipment Aluminium screws Stainless and chromium-nickel plated steel screws Titanium screws Nails, pins, cotter pins Nails Aluminium cotter pins Stainless steel cotter pins	71.1 71.1.1 71.1.2 71.1.3 71.1.4 71.1.5 71.1.6 71.1.8 71.1.9	packaging Pretreatment and converting machines for foil and strip Strip winding machines for transformers Chemical conversion plants Anodizing equipment Turning and winding machines Foil coating machines Laminators Foil printing machines Vacuum metallizing machines for depositing aluminium on paper and plastic Machines for producing brushed and matt finishes High voltage corona treatment
70.10.5 70.10.6 70.11 70.11.1 70.11.2 70.11.3 70.11.4 70.12 70.12.1 70.12.2 70.12.3 70.12.4	Integral rivets Tool for integral rivets Screw fasteners Mechanical screwing equipment Aluminium screws Stainless and chromium-nickel plated steel screws Titanium screws Nails, pins, cotter pins Nails Aluminium cotter pins Stainless steel cotter pins Chromium-nickel steel cotter pins	71.1 71.1.1 71.1.2 71.1.3 71.1.4 71.1.5 71.1.6 71.1.8 71.1.9 71.1.10 71.1.11	packaging Pretreatment and converting machines for foil and strip Strip winding machines for transformers Chemical conversion plants Anodizing equipment Turning and winding machines Foil coating machines Laminators Foil printing machines Vacuum metallizing machines for depositing aluminium on paper and plastic Machines for producing brushed and matt finishes
70.10.5 70.10.6 70.11 70.11.1 70.11.2 70.11.3 70.11.4 70.12 70.12.1 70.12.2 70.12.3 70.12.4 70.12.5	Integral rivets Tool for integral rivets Screw fasteners Mechanical screwing equipment Aluminium screws Stainless and chromium-nickel plated steel screws Titanium screws Nails, pins, cotter pins Nails Aluminium cotter pins Stainless steel cotter pins Chromium-nickel steel cotter pins Stainless steel spring cotter pins	71.1 71.1.1 71.1.2 71.1.3 71.1.4 71.1.5 71.1.6 71.1.8 71.1.9	packaging Pretreatment and converting machines for foil and strip Strip winding machines for transformers Chemical conversion plants Anodizing equipment Turning and winding machines Foil coating machines Laminators Foil printing machines Vacuum metallizing machines for depositing aluminium on paper and plastic Machines for producing brushed and matt finishes High voltage corona treatment

71.1.13.1	Machines for printing on cartons, boxes, cans, packages, webs and	71.2.4.6	Machines for producing easy-open lids
	similar things	71.2.5	Feeding equipment and methods
71.1.13.2	Installations for marking packaging	71.2.5.1	Electronic feeding devices
71.1.13.3	Metallizing machines for depositing aluminium on plastic foil	71.2.6	Transportation and storage systems
71.1.14	Equipment and auxiliary materials for the surface treatment of cans	<i>7</i> 1.3	Auxiliary materials for converting packaging materials
<i>7</i> 1.1.14.1	Degreasing and pickling	<i>7</i> 1.3.1	Paints and lacquers
71.1.14.2	Equipment	71.3.2	Equipment
<i>7</i> 1.1.15	Paints for interior and exterior use	71.3.2.1	Rolls for rotogravure and pattern printing
<i>7</i> 1.1.15.1	Paints for interior and exterior use, general	<i>7</i> 1.3.3	High voltage corona treatment
71.1.16	Electronic optical monitoring equipment	71.3.4	Wire for PVD (physical vapour deposition)
<i>7</i> 1.1.16.1	Crack detection devices	71.4	Manufacture of cans, bottles, aerosol cans
<i>7</i> 1.2	Machines for processing foil and thin strip	<i>7</i> 1.4.1	Complete plants
<i>7</i> 1.2.1	Separators	71.4.2	Extrusion moulding machines and tooling
<i>7</i> 1.2.1.1	Slitter rewinder for aufoil	71.4.3	Beading and folding machines
71.2.2	Multiblade slitting shears	71.4.4	Can lacquering and printing machines
71.2.3	Wrapping machines	71.4.5	Can seaming machines
71.2.3.1	Coilers and uncoilers	71.4.6	Machines for producing aerosol cans
71.2.3.2	Rewind reels for separators	71.4.7	Aerosol can trimming machines
71.2.3.3	Foil doubling payoff	71.4.8	Hoop-casing machines for aerosol cans
71.2.3.4	Wrapping machines for palettes	71.4.9	Machines for necking the tops of aerosol cans
71.2.3.5	Recoilers	71.4.10	Canmaking machines
71.2.3.6	Turret winders	71.4.11	Can crimping machines
71.2.3.7	Strip winding machines for transformers	71.4.12	Can necking-in machines
71.2.3.8	Wrapping mandrel	71.4.13	Combination cans
71.2.3.9	Web speed and tension control	71.5	Filling, dosing and sealing machinery
71.2.3.10	Aluminium cores for foil	71.5.1	Plant in general
71.2.4	Forming machines	71.5.2	Plant for liquids
71.2.4.1	Mechanical drawing presses	71.5.3	Plant for pasty and viscous fillings
71.2.4.7	Embassing machine for alufoil	71.5.4	Sealing machines for roll-on caps (incl. pilfer-proof)
71.2.4.2	Aluminium lid stamping machines	71.5.5	Can filling and sealing machines for tear-off lids
71.2.4.3	Machine for making bottle caps	<i>7</i> 1.5. <i>7</i>	Pouch-making,-filling and sealing machines
71.2.4.4	Stretching equipment for aluminium foil and strip	<i>7</i> 1.5.8	Bottle filling machines for roll-on closures
71.2.4.5	Machines for producing can closures with security foil	<i>7</i> 1.5.9	Tub filling and sealing machines

71.5.10 Can filling and sealing machines 71.5.11 Machine for filling aluminium tubes with viscous pastes 71.5.12 Folding machine for lumpy goods 71.5.13 Forming and overwrapping machines 71.5.14 Forming and overwrapping machines for individual solid parts 71.5.15 Packing machines for tubes 71.5.14 Sealing and welding machines 71.5.14.1 Machines for sealing and filling for cans from sheet metal or cardboard 71.5.14.2 Machines for sealing and welding foils 71.5.15 Machines for sealing and welding foils 71.5.16 Machines for sealing preserving jars 71.5.17 Heat sealing equipment 71.5.18 Special single-purpose machines and devices 71.5.18 Special single-purpose machines and devices 71.5.16 Machines for sealing and devices 71.5.17 Heat sealing equipment 71.5.18 Special single-purpose machines and devices 71.5.16 Machines for sealing legisland folls 71.5.17 Heat sealing equipment 71.5.18 Special single-purpose machines and devices 71.5.16 Machines for sealing legisland folls 71.5.17 Heat sealing equipment 71.5.18 Special single-purpose machines and devices 71.5.16 The mal and catalytic incineration plant	
71.5.12 Folding machine for lumpy goods 71.5.13 Forming and overwrapping machines 71.5.13.1 Forming and overwrapping machines for individual solid parts 71.5.13.2 Packing machines for tubes 71.5.14 Sealing and welding machines 71.5.14.1 Machines for sealing and welding pouches 71.5.14.2 machines for sealing and filling for cans from sheet metal or cardboard 71.5.14.3 Machines for sealing and welding foils 71.5.15 Machines for sealing TV dinners 71.5.16 Machines for sealing preserving jars 71.5.17 Heat sealing equipment 71.5.18 Special single-purpose machines and devices 71.5.18 Special single-purpose machines and devices 71.5.14 Steel stamps, marking tools and equipment 71.9 Adhesives 71.9 Adhesives, general 71.9.1 Polyurethane laminating adhesives 71.9.2 Polyurethane laminating adhesives 72.1 Air and exhaust gas purification 72.1 Filters 72.1 Filters 72.1 Scrubbers 72.1.2 Scrubbers 72.1.3 Mechanical precipitators (cyclones) 72.1.4 Wet precipitators 72.1.5 Electrostatic precipitators 72.1.5 Electrostatic precipitators 72.1.5 Thermal and catalytic incineration plant	
71.5.13 Forming and overwrapping machines 71.9 Adhesives 71.5.13.1 Forming and overwrapping machines for individual solid parts 71.9.1 Adhesives, general 71.5.13.2 Packing machines for tubes 71.9.2 Polyurethane laminating adhesives 71.5.14 Sealing and welding machines 71.5.14.1 Machines for sealing and welding pouches 72 Equipment and accessories for environmental protection 71.5.14.2 machines for sealing and filling for cans from sheet metal or cardboard 72.1 Air and exhaust gas purification 71.5.14.3 Machines for sealing and welding foils 72.1.1 Filters 71.5.15 Machines for sealing TV dinners 72.1.3 Mechanical precipitators (cyclones) 71.5.16 Machines for sealing preserving jars 72.1.4 Wet precipitators 71.5.17 Heat sealing equipment 72.1.5 Electrostatic precipitators 71.5.18 Special single-purpose machines and devices 72.16 Thermal and catalytic inciperation plant	
71.5.13.1 Forming and overwrapping machines for individual solid parts 71.5.13.2 Packing machines for tubes 71.5.14 Sealing and welding machines 71.5.14.1 Machines for sealing and welding pouches 71.5.14.2 machines for sealing and filling for cans from sheet metal or cardboard 71.5.14.3 Machines for sealing and welding foils 71.5.15 Machines for sealing TV dinners 71.5.16 Machines for sealing preserving jars 71.5.17 Heat sealing equipment 71.5.18 Special single-purpose machines and devices 71.5.18 Adhesives, general 71.9.1 Adhesives, general 71.9.2 Polyurethane laminating adhesives 71.9.1 Aidhesives, general 71.9.2 Polyurethane laminating adhesives 72.1 Air and exhaust gas purification 72.1 Filters 72.1.1 Filters 72.1.2 Scrubbers 72.1.3 Mechanical precipitators (cyclones) 72.1.4 Wet precipitators 72.1.5 Electrostatic precipitators 72.1.5 Electrostatic precipitators 72.1.5 Thermal and catalytic incineration plant	
71.5.13.2 Packing machines for tubes 71.5.14 Sealing and welding machines 71.5.14.1 Machines for sealing and welding pouches 71.5.14.2 machines for sealing and filling for cans from sheet metal or card-board 71.5.14.3 Machines for sealing and welding foils 71.5.15 Machines for sealing TV dinners 71.5.16 Machines for sealing preserving jars 71.5.17 Heat sealing equipment 71.5.18 Special single-purpose machines and devices 71.5.14 Sealing and welding foils 71.5.15 Packing machines for tubes 71.5.16 Packing machines for sealing protection 72.1 Polyurethane laminating adhesives Fully requirement and accessories for environmental protection 72.1 Air and exhaust gas purification 72.1.1 Filters 72.1.2 Scrubbers 72.1.3 Mechanical precipitators (cyclones) 72.1.4 Wet precipitators 72.1.5 Electrostatic precipitators 72.1.5 Electrostatic precipitators 72.1.6 Thermal and catalytic incineration plant	
71.5.14.1 Sealing and welding machines 71.5.14.1 Machines for sealing and welding pouches 71.5.14.2 machines for sealing and filling for cans from sheet metal or card-board 71.5.14.3 Machines for sealing and welding foils 71.5.15 Machines for sealing TV dinners 71.5.16 Machines for sealing preserving jars 71.5.17 Heat sealing equipment 71.5.18 Special single-purpose machines and devices 72 Equipment and accessories for environmental protection 72.1 Air and exhaust gas purification 72.1. Filters 72.1.2 Scrubbers 72.1.3 Mechanical precipitators (cyclones) 71.5.16 Wet precipitators 71.5.17 Heat sealing equipment 72.1.5 Electrostatic precipitators 72.1.5 Electrostatic precipitators 72.1.5 Thermal and catalytic incineration plant	
71.5.14.1 Machines for sealing and welding pouches 71.5.14.2 machines for sealing and filling for cans from sheet metal or card-board 71.5.14.3 Machines for sealing and welding foils 71.5.15 Machines for sealing TV dinners 71.5.16 Machines for sealing preserving jars 71.5.17 Heat sealing equipment 72.1 Air and exhaust gas purification 72.1.1 Filters 72.1.2 Scrubbers 72.1.3 Mechanical precipitators (cyclones) 72.1.3 Wet precipitators 72.1.4 Wet precipitators 72.1.5.17 Electrostatic precipitators 72.1.5.18 Special single-purpose machines and devices 72.1.5 Thermal and catalytic incineration plant	
71.5.14.2 machines for sealing and filling for cans from sheet metal or card-board 71.5.14.3 Machines for sealing and welding foils 71.5.15 Machines for sealing TV dinners 71.5.16 Machines for sealing preserving jars 71.5.17 Heat sealing equipment 72.1 Air and exhaust gas purification 72.1.1 Filters 72.1.2 Scrubbers 72.1.3 Mechanical precipitators (cyclones) 72.1.4 Wet precipitators 72.1.5 Electrostatic precipitators 72.1.5 Electrostatic precipitators 72.1.5 Thermal and catalytic incineration plant	
board 71.5.14.3 Machines for sealing and welding foils 71.5.15 Machines for sealing TV dinners 71.5.16 Machines for sealing preserving jars 71.5.17 Heat sealing equipment 72.11 Filters 72.1.2 Scrubbers 72.1.3 Mechanical precipitators (cyclones) 72.1.4 Wet precipitators 72.1.5 Electrostatic precipitators 71.5.18 Special single-purpose machines and devices 72.1.6 Thermal and catalytic incineration plant	
71.5.14.3 Machines for sealing and welding foils 71.5.15 Machines for sealing TV dinners 71.5.16 Machines for sealing preserving jars 71.5.17 Heat sealing equipment 71.5.18 Special single-purpose machines and devices 72.1.2 Scrubbers 72.1.3 Mechanical precipitators (cyclones) 72.1.4 Wet precipitators 72.1.5 Electrostatic precipitators 71.5.18 Thermal and catalytic incineration plant	
71.5.15 Machines for sealing TV dinners 72.1.2 Scribbers 71.5.16 Machines for sealing preserving jars 72.1.4 Mechanical precipitators (cyclones) 71.5.17 Heat sealing equipment 72.1.5 Electrostatic precipitators 71.5.18 Special single-purpose machines and devices 72.1.6 Thermal and catalytic incineration plant	
71.5.16 Machines for sealing preserving jars 72.1.4 Wet precipitators 71.5.17 Heat sealing equipment 72.1.5 Electrostatic precipitators 71.5.18 Special single-purpose machines and devices 72.1.6 Thermal and catalytic incineration plant	
71.5.17 Heat sealing equipment 72.1.4 vver precipitators 71.5.18 Special single-purpose machines and devices 72.1.5 Electrostatic precipitators 72.1.5 Thermal and catalytic incineration plant	
71.5.18 Special single-purpose machines and devices 72.1.5 Electrostatic precipitators 72.1.5 Thermal and catalytic incineration plant	
71.5.19 Other production equipment and supplies 72.17 Exhaust air cleaning processes	
71.6 Tube manufacturing	
716.1 Complete installations for tube manufacturing // 2.2 Vvasie water purification, water treatment	
716.2 Impact outrusion process to aline	
714.2 Tub a mainting and languaging machines (72.2.1.1 Vyaste water centrifuges	
71.4.4 Available de la constant de l	
717 Sagling and welding machines	
71.7.1 Plant is a special 72.2.4 Filter bags	
717.2 Installations for cone and tube	
717.2.1 Installations for containers made from shoot motal or cardboard 72.3 Irealment, recovery and disposal of non-aqueous waste	
71.7.2 Machines for earling TV dimers	
//3/ Plant for the precipitation and recovery of oils areases and libri	ri-
710 Table	
72.0.1 Disposal of non-aqueous waste	
710.0 / Z.3.3 INOn-destructive naraness measurement instruments	
77.34 UII SKIMMERS	
71.8.3 Shaping tools 72.4 Waste management and treatment	
71.8.4 Embossing rolls, paper rolls, patterning rolls 72.4.1 Mobile treatment plant	
71.8.5 Impact extrusion tooling 72.4.2 Recycling equipment	

Noise and sound protection, anti-resonance coatings, shielding 74,10 Water additives 72,51 Noise barriers 74,11 Web speed controller 72,52 Sound-proof cubicles 74,12 Roller bearings for forming and foundry equipment 72,53 Noise barrier covers 74,13 Nozzles 74,14 Emulsion separators 74,15 Hardening and tempering fluids 72,55 Sound-absorbers 74,16 Covers for heated dipping baths 72,57 Shielding 74,161 Covers for heated dipping baths 72,57 Shielding 74,161 Covers for heated dipping baths 72,57 Shielding 74,161 Covers for heated dipping baths 72,58 Noise admains phousings for shutter strips 74,17 Pallettzing and packing machines for slugs and round blanks 72,58 Moise admains phousings for shutter strips 74,19 Pallettzing and packing machines for slugs and round blanks 74,20 Equipment and machines for industrial cleaning 74,20 Equipment and machines for industrial cleaning 74,21 Locks, locking systems 74,22 Scales 74,22 Scales 74,22 Scales 74,23 Covers for heated dipping had 74,23 Covers for h	72.4.3	Treatment of process sludges	74.9	Hydraulic oils
72.5.1 Noise barriers 72.5.2 Soundproof cubicles 72.5.3 Noise barrier covers 72.5.4 Sound absorbers 72.5.5 Sound-suppressed ventilation equipment 72.5.6 Noise, sound and resonance protection 72.5.6 Noise, sound and resonance protection 72.5.7 Shielding 72.5.8 Noise-damping housings for shutter strips 72.5.8 Noise-damping housings for shutter strips 72.5.6 Measuring and control equipment for environmental protection 72.5.7 Shielding 72.5.8 Noise and control equipment for environmental protection 72.5.8 Noise and control equipment for environmental protection 72.5.8 Noise and vibration measuring instruments 72.6.1 Emission measuring equipment 72.6.2 Concentration measuring instruments 72.6.3 Noise and vibration measuring instruments 72.6.3 Noise and vibration measuring instruments 72.6.3 Noise and vibration measuring instruments 72.6.1 Emission decoration measuring instruments 72.6.2 Concentration measuring instruments 72.6.3 Noise and vibration measuring instruments 72.6.3 Noise and vibration measuring instruments 72.6.1 Equipment and accessories for tool and mould making 72.6.2 Concentration measuring instruments 72.6.3 Noise and vibration measuring instruments 72.6.4 Equipment and accessories for tool and mould making 73.1 Erosion machines countersink erosion machines 74.2.1 Packaging materials for extrusions 74.2.2 Packaging materials for extrusions 74.2.3 Coles 73.11 Cavity sinking EDM machines 74.2.4 Scales 73.2 Erosion drilling machines 74.2.5 Wear Protection Solutions 73.3 Special alloy steels for making extrusion press components 74.5 Personal protective equipment and clothing 73.4 Steels for making moulds for forming plastic 74.5.0 Personal protective equipment and clothing 74.5 Loud Aluminium safety helmets 75.5 Textiles for high temperature use 76.6 Refractory fibres 76.7 Ferry supply installations 77.5 Ferry supply installations 78.6 Machines for separating aluminium 78.7 Forklift trucks 78.8 Ferry supply installations 79.8 Ferry supply installations 79.8 Ferry supplement 79.8 Ferry supplement 79.8 F	72.5	Noise and sound protection, anti-resonance coatings, shielding	74.10	Water additives
72.5.3 Noise barrier covers 74.18 Nozzles 72.5.4 Sound absorbers 74.15 Hardening and tempering fluids 72.5.5 Sound-suppressed ventilation equipment 74.15 Hardening and tempering fluids 72.5.6 Noise, sound and resonance protection 74.16 Covering hoods for heated dipping boths 72.5.7 Shielding 74.16 Covering hoods for heated dipping boths 72.5.8 Noise-damping housings for shutter strips 74.17 Palletizing and packing machines for slugs and round blanks 72.6.1 Emission measuring equipment 74.18 Stackers 72.6.1 Emission measuring instruments 74.29 Stackers 72.6.2 Concentration measuring instruments 74.20 Equipment and machines for industrial cleaning 73.1 Equipment and accessories for tool and mould making 74.21 Locks, locking systems 73.1 Equipment and accessories for tool and mould making 74.23 Oils and other fluids for head-transfer 73.1 Erosion machines countersink erosion machines 74.24 Scales 73.1 Erosion drilling machines 74.25 Wear Protection Solutions 73.2 <t< td=""><td>72.5.1</td><td></td><td>74.11</td><td>Web speed controller</td></t<>	72.5.1		74.11	Web speed controller
72.5.4 Sound absorbers 74.14 Emulsion separators 72.5.5 Sound-suppressed ventilation equipment 74.15 Hordening and tempering fluids 72.5.6 Noise, sound and resonance protection 74.16 Covers for heated dipping baths 72.5.7 Shielding 74.16.1 Covering hoods for heated dipping baths 72.5.8 Noise-damping housings for shutter strips 74.17 Palletizing and packing machines for slugs and round blanks 72.5.8 Measuring and control equipment for environmental protection 74.18 Stackers Stackers 72.6.1 Emission measuring equipment 74.19 Storage systems for long stock and sheet metal 72.6.2 Concentration measuring instruments 74.20 Equipment and machines for industrial cleaning 74.20 Equipment and machines for industrial cleaning 74.21 Locks, locking systems 74.22 Packaging materials for extrusions 74.23 Oils and other fluids for heat-transfer 74.23 Caption machines countersink erosion machines 74.24 Scales 74.24 Scales 74.25 Prosion machines 74.25 Wear Protection Solutions 74.25 Wear Protection Solutions 74.25 Wear Protection Solutions 74.25 Wear Protection Solutions 74.26 Aluminium alloys for toolmarking applications 74.50 Personal protective equipment and clothing 74.50 Aluminium alloys for toolmarking applications 74.50 Personal protective equipment and clothing 74.50 Refractory fibres Foreign systems 74.50 Personal protective equipment 74.50 Personal protective equipmen	72.5.2	Soundproof cubicles	74.12	Roller bearings for forming and foundry equipment
72.5.5Sound-suppressed ventilation equipment74.15Hardening and tempering fluids72.5.6Noise, sound and resonance protection74.16Covers for hearted dipping boths72.5.7Shielding74.161Covering hoods for heated dipping boths72.5.8Noise-damping housings for shutter strips74.17Palletizing and packing machines for slugs and round blanks72.6Measuring and control equipment for environmental protection74.18Stackers72.6.1Emission measuring equipment74.19Storage systems for long stock and sheet metal72.6.2Concentration measuring instruments74.20Equipment and machines for industrial cleaning72.6.3Noise and vibration measuring instruments74.21Locks, locking systems73Equipment and accessories for tool and mould making74.21Locks, locking systems73.1Erosion machines countersink erosion machines74.24Scales73.1Cavity sinking EDM machines74.24Scales73.2Erosion drilling machines74.25Wear Protection Solutions73.3Special alloy steels for making extrusion press components74.50Personal protective equipment and clothing73.5Aluminium alloys for toolmarking applications74.50Aluminium safety helmets73.5Aluminium alloys for toolmarking applications74.50.2Coveralls to protect against high temperatures74.1Energy supply installations74.50.0Machines for separating aluminium74.2Dust and fume extraction equipment <td>72.5.3</td> <td>Noise barrier covers</td> <td>74.13</td> <td>Nozzles</td>	72.5.3	Noise barrier covers	74.13	Nozzles
72.56 Noise, sound and resonance protection 74.16 Covers for heated dipping baths 72.57 Shielding 74.16.1 Covering hoods for heated dipping baths 72.58 Noise-damping housings for shutter strips 74.17 Palletizing and packing machines for slugs and round blanks 74.17 Palletizing and packing machines for slugs and round blanks 74.17 Palletizing and packing machines for slugs and round blanks 74.18 Stackers 72.6.1 Emission measuring equipment 74.19 Storage systems for long stock and sheet metal 74.20 Equipment and machines for industrial cleaning 74.20 Equipment and machines for industrial cleaning 74.20 Packaging materials for extrusions 74.21 Locks, locking systems 74.22 Packaging materials for extrusions 74.21 Packaging materials for extrusions 74.22 Packaging materials for extrusions 74.24 Scales 73.1 Erosion machines countersink erosion machines 74.24 Scales 74.24 Scales 74.24 Scales 74.24 Scales 74.24 Scales 74.24 Packaging materials for heat-transfer 74.24 Scales 74.25 Wear Protection Solutions 74.26 Personal protective equipment and clothing 74.25 Personal protective equipment and clothing 74.26 Personal protective equipment and clothing 74.50 Personal protective equipment and clothing 74.50 Personal protective equipment 74.50 Personal protective	72.5.4	Sound absorbers	74.14	Emulsion separators
72.57 Shielding 74.16.1 Covering hoods for heated dipping baths 72.58 Noise-damping housings for shutter strips 74.17 Palletizing and packing machines for slugs and round blanks 72.6 Measuring and control equipment for environmental protection 74.18 Stackers 72.6.1 Emission measuring equipment 74.19 Storage systems for long stock and sheet metal 72.6.2 Concentration measuring instruments 74.20 Equipment and machines for industrial cleaning 72.6.3 Noise and vibration measuring instruments 74.21 Locks, locking systems 74.22 Packaging materials for extrusions 74.22 Packaging materials for extrusions 74.22 Packaging materials for heat-transfer 74.23 Oils and other fluids for heat-transfer 74.24 Scales 73.11 Cavity sinking EDM machines 74.24 Scales 74.24 Scales 73.12 Erosion dralling machines 74.24 Scales 74.25 Wear Protection Solutions 74.26 Erosion dralling machines 74.25 Wear Protection Solutions 74.26 Personal protective equipment and clothing 74.50 Personal protective equipment and clothing 74.50 Aluminium alloys for toolmarking applications 74.50.1 Aluminium safety helmets 74.50.1 Aluminium safety helmets 74.50.2 Coveralls to protect against high temperatures 74.50.5 Textiles for high temperature use 74.50.6 Refractory fibres 74.50 Refractory fibres 74.50 Energy supply installations 74.50 Machines for separating aluminium 74.50 CAD/CAM/DNC systems for machine tools 74.30 Iransport equipment 74.80 Machines for separating aluminium 74.50 Energy supply installations 74.50 Embossing machines 74.80.1 Embossing machines 74.80 Folklift trucks 74.80 Packing and palletizing equipment for semis 74.80.2 Track & amp; Track & a	72.5.5	Sound-suppressed ventilation equipment	74.15	Hardening and tempering fluids
Noise-damping housings for shutter strips 74.17 Palletizing and packing machines for slugs and round blanks	72.5.6	Noise, sound and resonance protection	74.16	Covers for heated dipping baths
72.58Noise-damping housings for shutter strips74,17Palletizing and packing machines for slugs and round blanks72.6Measuring and control equipment for environmental protection74,18Stackers72.6.1Emission measuring equipment74,19Storage systems for long stock and sheet metal72.6.2Concentration measuring instruments74,20Equipment and machines for industrial cleaning72.6.3Noise and vibration measuring instruments74,21Locks, locking systems73Equipment and accessories for tool and mould making74,22Packaging materials for extrusions73.1Erosion machines countersink erosion machines74,24Scales73.1.1Cavity sinking EDM machines74,24Scales73.2Erosion drilling machines74,24Digital crane scales73.3Special alloy steels for making extrusion press components74,50Personal protective equipment and clothing73.4Steels for making moulds for forming plastic74,50.1Aluminium safety helmets73.5Aluminium alloys for toolmarking applications74,50.2Coveralls to protect against high temperatures74General factory equipment and accessories74,50.6Refractory fibres74.1Energy supply installations74,60.0Machines for separating aluminium74.2Dust and fume extraction equipment74,80.0Marking systems for machine tools74.3.1Forkliff trucks74,80.1Embossing machines74.4.2Packing and palletizing equipment for semis74,	72.5.7	Shielding	74.16.1	Covering hoods for heated dipping baths
Table	72.5.8	Noise-damping housings for shutter strips	74.17	Palletizing and packing machines for slugs and round blanks
72.6.2 Concentration measuring instruments 74.20 Equipment and machines for industrial cleaning 72.6.3 Noise and vibration measuring instruments 74.21 Locks, locking systems 74.22 Packaging materials for extrusions 74.23 Oils and other fluids for heat-transfer 75.1 Erosion machines countersink erosion machines 74.24 Scales 75.1.1 Cavity sinking EDM machines 74.24 Scales 75.1.2 Erosion drilling machines 74.25 Wear Protection Solutions 75.3 Special alloy steels for making extrusion press components 74.5 Wear Protection Solutions 75.4 Steels for making moulds for forming plastic 74.50.1 Aluminium safety helmets 75.5 Aluminium alloys for toolmarking applications 74.50.2 Coveralls to protect against high temperatures 75.5 Textiles for high temperature use 76.1 Energy supply installations 76.1 Energy supply installations 77.1 Energy supply installations 77.2 Dust and fume extraction equipment 77.3 Transport equipment 77.4 Transport equipment 77.4 Packing and palletizing equipment for semis 77.4 Packing and palletizing equipment for semis 77.4 Packing and palletizing equipment for semis 77.4 Packing and palletizing systems 77.4 Supplement for thermal processes	72.6	Measuring and control equipment for environmental protection	74.18	Stackers
Noise and vibration measuring instruments 74.21 Locks, locking systems 74.22 Packaging materials for extrusions 74.23 Oils and other fluids for heat-transfer 73.1 Erosion machines countersink erosion machines 74.24 Scales 73.11 Cavity sinking EDM machines 74.25 Wear Protection Solutions 73.2 Erosion drilling machines 74.25 Wear Protection Solutions 73.3 Special alloy steels for making extrusion press components 73.4 Steels for making moulds for forming plastic 74.50 Personal protective equipment and clothing 73.5 Aluminium alloys for toolmarking applications 74.50.2 Coveralls to protect against high temperatures 74.50.5 Textiles for high temperature use 74.50.6 Refractory fibres 74.1 Energy supply installations 74.2 Dust and fume extraction equipment 74.2 Dust and fume extraction equipment 74.3 Transport equipment 74.3 Transport equipment 74.3 Forklift trucks 74.80 Marking systems 74.3.2 Fully automatic cranes 74.40 Packing and palletizing equipment for semis 74.50 Load handling attachments 74.50 Automatic lubricating systems 74.50 Load handling attachments 74.50 Equipment for thermal processes	72.6.1	Emission measuring equipment	74.19	Storage systems for long stock and sheet metal
74.22 Packaging materials for extrusions 75.2 Packaging materials for extrusions 75.3 Equipment and accessories for tool and mould making 75.3 Packaging materials for extrusions 75.4 Packaging materials for extrusions 75.5 Packaging materials for	72.6.2	Concentration measuring instruments	74.20	
73Equipment and accessories for tool and mould making74.23Oils and other fluids for heat-transfer73.1Erosion machines countersink erosion machines74.24Scales73.1.1Cavity sinking EDM machines74.24.1Digital crane scales73.2Erosion drilling machines74.25Wear Protection Solutions73.3Special alloy steels for making extrusion press components74.50Personal protective equipment and clothing73.4Steels for making moulds for forming plastic74.50.1Aluminium safety helmets73.5Aluminium alloys for toolmarking applications74.50.2Coveralls to protect against high temperatures74General factory equipment and accessories74.50.5Textiles for high temperature use74.1Energy supply installations74.60Machines for separating aluminium74.2Dust and fume extraction equipment74.70CAD/CAM/DNC systems for machine tools74.3.1Forklift trucks74.80.1Embossing machines74.3.2Fully automatic cranes74.80.2Track & amp; Trace Labels74.4Packing and palletizing equipment for semis74.80.3Barcode Labels74.5Load handling attachments74.6Automatic lubricating systems74.7Equipment for thermal processes	72.6.3	Noise and vibration measuring instruments		
73.1 Erosion machines countersink erosion machines 74.24 Scales 73.11 Cavity sinking EDM machines 74.24.1 Digital crane scales 73.2 Erosion drilling machines 74.25 Wear Protection Solutions 73.3 Special alloy steels for making extrusion press components 74.50 Personal protective equipment and clothing 73.4 Steels for making moulds for forming plastic 74.50.1 Aluminium safety helmets 73.5 Aluminium alloys for toolmarking applications 74.50.2 Coveralls to protect against high temperatures 74.50.5 Textiles for high temperature use 74.1 Energy supply installations 74.50.6 Refractory fibres 74.1 Energy supply installations 74.60 Machines for separating aluminium 74.2 Dust and fume extraction equipment 74.70 CAD/CAM/DNC systems for machine tools 74.3 Transport equipment 74.80 Marking systems 74.3.1 Forklift trucks 74.80.1 Embossing machines 74.3.2 Fully automatic cranes 74.80.2 Track & amp; Trace Labels 74.4 Packing and palletizing equipment for semis 74.80.3 Barcode Labels 74.5 Load handling attachments 74.6 Automatic lubricating systems 74.7 Equipment for thermal processes				
73.1.1 Cavity sinking EDM machines 73.2 Erosion drilling machines 73.3 Special alloy steels for making extrusion press components 73.4 Steels for making moulds for forming plastic 73.5 Aluminium alloys for toolmarking applications 74.50.1 Aluminium safety helmets 74.50.2 Coveralls to protect against high temperatures 74.50.5 Textiles for high temperature use 74.50.6 Refractory fibres 74.1 Energy supply installations 74.2 Dust and fume extraction equipment 74.3 Transport equipment 74.3.1 Forklift trucks 74.3.2 Fully automatic cranes 74.4.4 Packing and palletizing equipment for semis 74.5 Load handling attachments 74.6 Automatic lubricating systems 74.7 Equipment for thermal processes				Oils and other fluids for heat-transfer
73.2 Erosion drilling machines 73.3 Special alloy steels for making extrusion press components 73.4 Steels for making moulds for forming plastic 73.5 Aluminium alloys for toolmarking applications 74.50.2 Coveralls to protect against high temperatures 74.50.5 Textiles for high temperature use 74.50.6 Refractory fibres 74.1 Energy supply installations 74.2 Dust and fume extraction equipment 74.3 Transport equipment 74.3.1 Forklift trucks 74.3.2 Fully automatic cranes 74.3.2 Fully automatic ranes 74.4.4 Packing and palletizing equipments 74.5 Load handling attachments 74.6 Automatic lubricating systems Fquipment for thermal processes				Scales
73.3Special alloy steels for making extrusion press components74.50Personal protective equipment and clothing73.4Steels for making moulds for forming plastic74.50.1Aluminium safety helmets73.5Aluminium alloys for toolmarking applications74.50.2Coveralls to protect against high temperatures74General factory equipment and accessories74.50.6Refractory fibres74.1Energy supply installations74.60Machines for separating aluminium74.2Dust and fume extraction equipment74.70CAD/CAM/DNC systems for machine tools74.3Transport equipment74.80Marking systems74.3.1Forklift trucks74.80.1Embossing machines74.3.2Fully automatic cranes74.80.2Track & Trace Labels74.4Packing and palletizing equipment for semis74.80.3Barcode Labels74.5Load handling attachments74.6Automatic lubricating systems74.7Equipment for thermal processes			74.24.1	Digital crane scales
73.4 Steels for making moulds for forming plastic 73.5 Aluminium alloys for toolmarking applications 74.50.2 Coveralls to protect against high temperatures 74.50.5 Textiles for high temperature use 74.50.6 Refractory fibres 74.1 Energy supply installations 74.2 Dust and fume extraction equipment 74.2 Dust and fume extraction equipment 74.3 Transport equipment 74.3.1 Forklift trucks 74.3.2 Fully automatic cranes 74.3.2 Fully automatic cranes 74.4 Packing and palletizing equipment for semis 74.5 Load handling attachments 74.6 Automatic lubricating systems 74.7 Equipment for thermal processes			74.25	Wear Protection Solutions
Aluminium alloys for toolmarking applications 74.50.2 Coveralls to protect against high temperatures 74.50.5 Textiles for high temperature use 74.50.6 Refractory fibres 74.1 Energy supply installations 74.60 Machines for separating aluminium 74.2 Dust and fume extraction equipment 74.70 CAD/CAM/DNC systems for machine tools 74.31 Transport equipment 74.80 Marking systems 74.3.1 Forklift trucks 74.80.1 Embossing machines 74.3.2 Fully automatic cranes 74.80.2 Track & amp; Trace Labels 74.4 Packing and palletizing equipment for semis 74.5 Load handling attachments 74.6 Automatic lubricating systems 74.7 Equipment for thermal processes				Personal protective equipment and clothing
74.50.5 Textiles for high temperature use 74.50.6 Refractory fibres 74.1 Energy supply installations 74.60 Machines for separating aluminium 74.2 Dust and fume extraction equipment 74.70 CAD/CAM/DNC systems for machine tools 74.3 Transport equipment 74.80 Marking systems 74.3.1 Forklift trucks 74.80.1 Embossing machines 74.3.2 Fully automatic cranes 74.80.2 Track & amp; Trace Labels 74.4 Packing and palletizing equipment for semis 74.80.3 Barcode Labels 74.5 Load handling attachments 74.6 Automatic lubricating systems 74.7 Equipment for thermal processes				Aluminium safety helmets
74General factory equipment and accessories74.50.6Refractory fibres74.1Energy supply installations74.60Machines for separating aluminium74.2Dust and fume extraction equipment74.70CAD/CAM/DNC systems for machine tools74.3Transport equipment74.80Marking systems74.3.1Forklift trucks74.80.1Embossing machines74.3.2Fully automatic cranes74.80.2Track & Trace Labels74.4Packing and palletizing equipment for semis74.80.3Barcode Labels74.5Load handling attachments74.6Automatic lubricating systems74.7Equipment for thermal processes	<i>7</i> 3.5	Aluminium alloys for toolmarking applications		Coveralls to protect against high temperatures
74.1 Energy supply installations 74.60 Machines for separating aluminium 74.2 Dust and fume extraction equipment 74.70 CAD/CAM/DNC systems for machine tools 74.3 Transport equipment 74.80 Marking systems 74.3.1 Forklift trucks 74.80.1 Embossing machines 74.3.2 Fully automatic cranes 74.80.2 Track & amp; Trace Labels 74.4 Packing and palletizing equipment for semis 74.80.3 Barcode Labels 74.5 Load handling attachments 74.6 Automatic lubricating systems 74.7 Equipment for thermal processes				Textiles for high temperature use
74.2 Dust and fume extraction equipment 74.70 CAD/CAM/DNC systems for machine tools 74.3 Transport equipment 74.80 Marking systems 74.3.1 Forklift trucks 74.80.1 Embossing machines 74.3.2 Fully automatic cranes 74.80.2 Track & amp; Trace Labels 74.4 Packing and palletizing equipment for semis 74.80.3 Barcode Labels 74.5 Load handling attachments 74.6 Automatic lubricating systems 74.7 Equipment for thermal processes				
Transport equipment 74.3 Transport equipment 74.3.1 Forklift trucks 74.3.2 Fully automatic cranes 74.4 Packing and palletizing equipment for semis 74.5 Load handling attachments 74.6 Automatic lubricating systems 74.7 Equipment for thermal processes 74.80 Marking systems 74.80.1 Embossing machines 74.80.2 Track & amp; Trace Labels 8 Barcode Labels 8 Barcode Labels 9 Barcode Labels				
74.3.1 Forklift trucks 74.3.2 Fully automatic cranes 74.4 Packing and palletizing equipment for semis 74.5 Load handling attachments 74.6 Automatic lubricating systems 74.7 Equipment for thermal processes		• •		CAD/CAM/DNC systems for machine tools
74.3.2 Fully automatic cranes 74.80.2 Track & Description of the seminary of t				
74.4 Packing and palletizing equipment for semis 74.80.3 Barcode Labels 74.5 Load handling attachments 74.6 Automatic lubricating systems 74.7 Equipment for thermal processes				Embossing machines
74.5 Load handling attachments 74.6 Automatic lubricating systems 74.7 Equipment for thermal processes		,		
74.6 Automatic lubricating systems 74.7 Equipment for thermal processes			74.80.3	Barcode Labels
74.7 Equipment for thermal processes				
/ 4.8 Equipment for making evaporators				
	/4.8	Equipment for making evaporators		

75	Equipment and accessories for measurement	75.6.2	Instruments for checking the hydrogen content
	and testing	75.6.3	Aluminium-melt testers
<i>75</i> .1	Laboratory equipment	75.6.4	Thermal analysis equipment for aluminium melts
<i>75</i> .2	Measurement and control equipment	75.7	Equipment for metallographic specimen preparation
<i>75</i> .2.1	Laser and optical measuring instruments for construction of win-	75.8	Test equipment for special tests
	dows and facades	75.9	Accessories and materials for testing techniques of all types
<i>75</i> .3	Testing of anodic and varnish films	75.10	Standard CAD software
<i>75</i> .3.1	Film thickness measuring instruments	<i>75</i> .11	Analytical equipment for identifying aluminium alloys
75.3.2	Sealing quality test instruments	75.12	Non-contact measuring systems
75.3.3	Colour testers	<i>75</i> .12.1	Speed and length measuring systems
75.3.4	Surface inspection	<i>75</i> .13	Systems for measuring extruded sections
75.4	Nondestructive testing of materials	75.17	Tyristor-Power converters/sitches
<i>75.</i> 4.1	General non-destructive materials testing	-,	
75.4.2	Eddy current and impedance test instruments	76	Contract manufacturing
75.4.3	Surface roughness testers	76.1	Heat treatment
75.4.3.1	Hole detectors	76.1.1	Stress relieving, homogenizing
75.4.4	Crack test instruments	76.1.2	Hardening
75.4.5	Penetrant dyes for crack testing	76.1.3	Heat-treament of aluminium castings
75.4.6	Noise emission test instruments	76.2	Forming, machining, cutting
75.4.7	X-ray test equipment	76.2.1	Folding
75.4.8	Ultrasonic testing equipment	76.2.2	Bending of tubes and sections
75.4.9	Electrical conductivity measuring instruments	76.2.3	Spinning
75.4.10	Non-destructive hardness measurement instruments	76.2.4	Deep drawing
<i>75</i> .4.11	Industrial computer tomografhy	76.2.5	Cold pressing, upsetting
75.4.12	,	76.2.6	Machining
75.5	Destructive testing of materials	76.2.7	Profile turning
<i>75.</i> 5.1	Tensile and compressive testing machines	76.2.7.1	High-speed machining
75.5.2	Universal testing machines	76.2.8	Stamping, cutting
75.5.3	Notched bar impact test machines	76.2.9	Sawing, cutting-to-length, blanking
75.5.4	Hardness testing machines	76.2.10	Sheet cutting
75.5.5	Deep-drawing and cup-testing machines	<i>7</i> 6.2.11	Fine blanking
75.6	Equipment and instruments for melt testing	76.2.12	Strip slitting
<i>75</i> .6.1	Temperature-measuring equipment	76.2.13	Hot stamping

76.2.14	Bending of aluminium	<i>7</i> 6.4.1.1	Deburring in general
76.2.15	Hot isostatic pressing (HIP)	76.4.1.2	Polishing
76.2.16	Laser cutting	76.4.1.3	Grinding
76.2.17	Water-jet cutting	76.4.2	Blasting
<i>7</i> 6.2.18	Milling	<i>7</i> 6.4.2.1	Sandblasting
<i>7</i> 6.2.19	EDM (electro-discharge machining)	76.4.2.2	Shot peening
76.2.20	Hydroforming	76.4.2.3	Shot-blasting for structuring
<i>7</i> 6.2.21	Plasma cutting	76.4.2.4	Blasting with glass beads and corundum
76.2.22	CNC machining	76.4.2.5	Dry-ice blasting
76.2.23	Mechanical machining	76.4.3	Vibratory grinding
76.2.24	Drilling and boring	76.4.3.1	Drum polishing
76.2.25	Machining and processing of aluminium extrusions	76.4.4	Pickling, etching
76.2.26	Tuning	76.4.5	Chemical conversion coating
76.3	Joining	<i>7</i> 6.4.5.1	Chromating
<i>7</i> 6.3.1	Brazing, soldering	76.4.5.3	Chromium free pre-treatment
76.3.2	Fusion welding	76.4.5.2	Phosphating
76.3.2.1	Electron beam welding	76.4.6	Brightening
76.3.2.2	Plasma welding	76.4.7	Anodizing
76.3.3	Butt welding	<i>7</i> 6.4.7.1	Hard anodizing
76.3.4	Resistance spot welding	76.4.8	Electroplating
76.3.5	Thermite welding	<i>7</i> 6.4.8.1	Silver-plating
76.3.6	Friction welding	76.4.8.2	Gold-plating
76.3.7	(Cold-) pressure welding	76.4.8.3	Alodine process
<i>7</i> 6.3. <i>7</i> .1	Explosion welding/impact welding	76.4.8.4	Black-pearl (black-Nickel)
76.3.8	Adhesive bonding	76.4.9	Colour anodizing
76.3.9	Repair and restorative welding	<i>7</i> 6.4.9.1	Dip colouring
<i>7</i> 6.3.9.1	Welding aluminium pressure die-castings	76.4.9.2	Electrolytic colouring
76.3.10	Joing using Tox® system	76.4.9.3	Colour anodizing
76.3.10.1	Clinching by Tox® system	<i>7</i> 6.4.10	Combination colouring
76.3.11	Laser-beam welding	<i>7</i> 6.4.11	Lacquering, coating
<i>7</i> 6.3.12	Clinching	76.4.11.1	Liquid painting
76.4	Surface treatment	76.4.11.2	KTL-coating
76.4.1	General mechanical surface treatment	76.4.12	Batch coating
			<u> </u>

76.4.13	Coil coating	76.5.5	Construction and fitting of partition walls
76.4.13.1	Coatings to improve reflectivity	76.5.6	Facade maintenance and cleaning
76.4.14	Non-metallic coatings	76.5.7	Metal construction work, general
76.4.15	Enamelling	76.5.7.1	Aluminium structures in accordance with DIN 4113
76.4.16	Aluminizing	76.5.8	Greenhouse manufacture
76.4.17	Covering with protective foil	76.5.9	Industrial structures
76.4.18	Patterning	76.10	Contract packaging
76.4.19	Delacquering	76.10.1	Contract packaging, general
76.4.20	Printing	76.10.2	Export packaging
76.4.21	Impregnation and sealing of castings	76.10.3	Long-term protection
76.4.21.1	Processes for sealing castings	<i>7</i> 6.11	Erection and construction work
76.4.22	Coating with decorative finish	<i>7</i> 6.11.1	Erection and assembly of sub-assemblies
76.4.23	Powder coating	76.12	Special Constructions
76.4.23.1	Pre-anodizing for avoiding filiform corrosion	<i>7</i> 6.11.1	Erection and assembly of sub-assemblies
76.4.24	Anti-condensation coating	76.12.1	Special Constructions
76.4.24.1	Anti-resonant coatings		·
76.4.24.2	Non-stick, self-lubricating coatings	77	Software for process simulation, computer programs
76.4.25	Electrochemical machining		
76.4.25.1	Electrochemical machining/ceramizing	78	Metal goods, general
76.4.26	Laser surface welding		
76.4.27	Laser surface alloying	80	Personnel service
76.4.28	Laser dispersion	80.1	Examined welder for aluminium (AÜG/Werksvertrag)
76.4.28.1	Laser engraving		
76.4.28.2	Laser lettering	E	Canadamay average animiana information
76.4.29	Polyurethane coating	E	Consultancy, expert opinions, information
76.4.30	PVD coating (physical vapour deposition)	90	Consultancy
76.4.31	Vapour deposition of aluminium	90.1	General consultancy
76.4.32	Deffiniert to oil	90.1.1	Service company
76.4.33	wash, etching, conversion coating	90.1.2	Translation services (technical and commercial)
76.5	Building works	90.2	Consultancy on special applications and process technology
<i>7</i> 6.5.1	Construction of aluminium roofing	90.2.1	Environmental protection
76.5.2	Facade construction work	90.2.2	Surface treatment technology
76.5.3	Shop window construction	90.2.3	Facade construction and facade construction technology
76.5.4	Metal construction work for shopfitting and exhibitions	7U.Z.J	racade construction and racade construction reciliology
	1 0		

Samplers Planning, design, software Plant

Factory equipment
Software for the metal construction industry

91.4 91.5 91.5.1 91.5.2 91.5.2.1

Facade cleaning	91.5.2.2	Software for the roofing industry
	91.5.2.3	Software for metal coating processes
	91.5.3	Building projects
• • • • • • • • • • • • • • • • • • • •	91.6	Laboratory services
	91.6.1	X-ray testing services
		, 0
	92	Information
	92.1	Associations, professional organisations, schools
	92.3.1	Special technical information services
	92.2	Quality assurance bodies
	92.3.2	Technical journalists and publicists
Materials databanks	92.3	Specialist literature, services
Contract research	92.3.3	Marketing, sales promotion, direct advertising
Engineering	92.4	Fairs, exhibitions, events
1 1 71 0	93	Technology transfer
Advice on trade shows and exhibitions	94	Training and further development
	94.1	Off-site training institutes
Experts opinions		
Testing institutes		
Assessors		
	Moulding, casting and melting technology Heat treatment technology, furnace optimisation Forming High-speed machining Conform technology Prediction of ambient air quality Brazing procedure Studies for applications of memory metal Technical consultation with construction and development Energy supply Materials databanks Contract research Engineering Rapid prototyping technology Design Advice on design, layout, shape and form. Advice on trade shows and exhibitions Experts opinions Testing institutes	Moulding, casting and melting technology Heat treatment technology, furnace optimisation Forming Forming High-speed machining Conform technology Prediction of ambient air quality Brazing procedure Studies for applications of memory metal Technical consultation with construction and development Finergy supply Materials databanks Contract research Fingineering Rapid prototyping technology Design Advice on design, layout, shape and form. Advice on trade shows and exhibitions Testing institutes



Order form

The ADVERTORIAL

- 1/4 page 4-coloured (Text max. 180 characters including spaces) **EUR 490**
- 1/2 page 4-coloured (Text max. 380 characters including spaces) **EUR 820**
- 1/1 page 4-coloured (Text max. 750 characters including spaces) EUR 1,590

The PRINT + ONLINE COMBINATION

Cover pages 2, 3, 4 $(117 \text{ mm} \times 172 \text{ mm})$ + Skyscraper each EUR 2,300

> + Skyscraper EUR 2,420

1/1 page 4c $(112 \text{ mm} \times 172 \text{ mm})$ + Skyscraper **EUR 2,150**

+ Skyscraper

EUR 2,750

4-sided bound-in-insert

1/2 page 4c (117 mm x 84 mm) + Skyscraper **EUR 1,380**

EUR 2,200

Bookmark + Skyscraper

Booking costs (complete delivery)

- 1/4 page 4c + Skyscraper
- (58 mm x 85 mm) EUR 1,050

Contact:

Company

- The COMPANY ENTRY PRINT + ONLINE COMBINATION
- **KomfortPlus** Price per entry for 1 year

EUR 179

2-sided bound-in-insert

- Premium Price per entry for 1 year **EUR 199**

PremiumPius
Price per entry for 1 year
EUR 209

Your print entry is included additionally free of charge on USB Version and online: www.Alu-Lieferverzeichnis.de/en

Address		
Postcode, City, Country		
Phone:		
ax:		
E-Mail:		
nternet:		
Contact:		
	1.	6.
No.:	2.	7.
	3.	8.
	4.	9.
	5.	10.
City/Date:		



Our Representatives

Bavaria, Berlin, Brandenburg, Bremen, Hamburg, Lower Saxony, Mecklenburg-Western Pomerania, North Rhine-Westphalia, Saxony, Saxony-Anhalt, Schleswig-Holstein, Thuringia, Belgium, The Netherlands, Luxembourg, France, Austria, Switzerland, Scandinavia, Great Britain

Astrid Kehr DVS-Verlagsrepräsentanz Hauptstraße 7 57644 Hattert (Germany)

- **2** +49 2662 9696640
- **49** 26 62 949 107 2
- □ Astrid.Kehr@dvs-ad.de

Baden-Württemberg, Hesse, Rhineland-Palatinate, Saarland

Reinhard Nühlen

Verlags- und Mediaservice BDV Postfach 2043, 55510 Bad Kreuznach Franziska-Puricelli-Str. 36c 55543 Bad Kreuznach (Germany)

- **2** +49 671 64 118
- **49 67169756**
- **49 171 202 70 77**
- □ reinhard@nuehlen.org

U.S./Canada, Asia

Detlef Fox
D.A. Fox Advertising Sales Inc.
5 Penn Plaza, 19th Floor
New York, NY 10001 (USA)

1 212 896 3881

- **+12126293988**
- \boxtimes detleffox@comcast.net

Italy/Portugal/Spain

MEDIAPOINT & COMMUNICATIONS SRL Corte Lambruschini Corso Buenos Aires, 8 V° piano - interno 7 16129 Genova (Italy)

- **2** +39 010 570 49 48
- **439 010 553 00 88**
- ⊠ daniela.chiusa@mediapointsrl.it

DVS Media GmbH

Postfach 10 19 65 • 40010 Düsseldorf Aachener Straße 172 • 40223 Düsseldorf (Germany)

2 +49 211 15 91-142/-152/-155 • **4** +49 211 15 91-150



Contact persons:

 $Markus\ Winterhalter {\ oxdotsing}\ markus.winterhalter {\ @dvs-media.info}$

Vanessa Wollstein 🖂 vanessa.wollstein@dvs-media.info

Britta Wingartz 🖂 britta.wingartz@dvs-media.info

