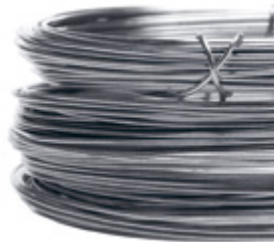


VDM Metals

A company of ACERINOX

Service Center



Materials for the future.

Tough demands are our business

Founded in 1930, VDM Metals developed into a world market leader for high-performing metallic materials covering the widest product and service portfolio in the industry. VDM Metals has been part of the Acerinox Group since 2020. Selected stainless steels from Acerinox can be purchased via the Service Center. The quality of our products and services bases on our integrated production chain in Germany and the United States and a sales network that spans the globe servicing the most demanding industries and backed by a strong R&D and Application Engineering force.

VDM Metals produces high-performance materials for use in extreme environments. Our materials are able to withstand heavy mechanical, thermal and chemical stresses, sometimes all three simultaneously.

We meet new challenges

New technologies and the ever more stringent requirements that are to be satisfied by material properties pose new challenges on a regular basis. Working together with our customers, we develop optimum solutions for their specific needs. Our materials often assist in turning new ideas and concepts into reality. In this way, our alloys create possibilities for future-oriented, resource-saving and environmentally-friendly construction and solutions.

Premium quality materials

Each of our alloys has a unique combination of its properties, depending on their chemical composition and manufacturing process. Our materials are available as plate and sheet, strip, rod and bar or wire. In addition, we also manufacture filler metals, forgings and shapes.

Experienced and well-trained people are employed at our production sites and work with modern machines. Thanks to our integrated production network, we ensure that all important production steps are in our own hands – an important prerequisite for a robust and stable production process. The result of our efforts: maximum purity, homogeneity, reproducibility and optimum further processing characteristics of our materials.

VDM Metals materials pass through especially stringent quality controls. At a very early stage, we established quality assurance as the overriding principle and developed it into a quality management system with in-process checks and inspections.

Customer proximity is what distinguishes us

VDM Metals has a large distribution network with subsidiaries and agents on all continents. Reliable delivery of small quantities at short notice around the globe – this encapsulates the challenge and task of our Service Centers. In Europe, Asia and Australia, we offer you a broad range of materials, diverse product forms, as well as a variety of different finishing options.

Tailor-made solutions



Wherever you are
at any time.

We meet the highest demands in terms of service quality and reliability. We offer individually customized services, from the right choice of material for your requirements to swift supplies of stock quantities from our Service Centers in Germany, China, Korea and Australia.

From these four Service Centers we can offer you a wide and varied portfolio of high-performance alloys with outstanding resistance to corrosion and heat, as well as nickel, cobalt and zirconium alloys as well as special stainless steels from Acerinox.

Our portfolio comprises the broad range of VDM products: sheet and plate, rods and bars, wire (welding consumables and heat resistance wire) and billet/forging stock (pre-material).

The Service Centers are, of course, also equipped with ultra-modern cutting facilities which enable us to offer solutions truly tailored to our customers' needs.

Our Service Centers work in close cooperation. The employees at all three locations know what is in stock where, and can therefore offer each customer the solution best suited to their requirements.

Our experienced sales team will be at your side – from the consulting stage through to product delivery.

The world of VDM Metals





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VDM Metals

A company of ACERINOX



1 Oil and gas production

Supply and control lines on the depths of the seafloor: whether it's water millions of years old, sulfurous sediments or, of course, oil – our materials ensure their reliable and eco-friendly extraction.

2 Ship engines

Modern diesel exhaust valves can measure up to two metres high, and they are exposed to ever higher temperatures as engine outputs increase. VDM materials defy heat and heavy oil – thanks to their corrosion resistance.

3 Refineries

Distillation columns separate crude oil into various high-grade products. Alloys from VDM Metals protect tanks and piping systems from the highly aggressive mixtures at temperatures up to 400 °C.

4 Chemical process industry (CPI)

Corrosion and heat-resistant alloys find a wide range of application in the chemical process industry – as classic semi-finished products in apparatus and pressure vessel construction, in tube and pipe manufacturing and in powder form for the additive manufacturing of special components.

5 Concentrated Solar Power (CSP)

CSP (Concentrated Solar Power) plants have thousands of mirrors arranged around an absorber. Its pipe system can heat up to 1,000 °C, and liquid salt is frequently used as the heat-transferring medium.

6 Electrolysis / Solid Oxid Fuel Cell

Solid Oxide Electrolyzer Cells (SOEC) or alkaline electrolyzers produce valuable hydrogen from electricity and water. The Solid Oxide Fuel Cell (SOFC) takes the opposite approach: it generates electrical energy from hydrogen and atmospheric oxygen.

7 Hydrogen utilization

Processing hydrogen into synthesis gas, e-fuels or e-chemicals requires the use of heat and corrosion-resistant alloys.

8 Hydraulics

VDM Engineered Solutions is specialized, among other things, in the development and design of special brass components for axial piston pumps, such as those to be found in excavators, forklifts or cranes.

9 Burners in gas heating systems

Modern gas heating systems generate lots of heat from very little gas. Our high-temperature resistant alloys ensure prime efficiency over a long service life.

10 Energy-saving fluorescent lamps

Energy-saving lamps are eco-friendly – as long as they remain sealed. When heated, our materials expand at exactly the same rate as the ceramic bulb socket. So current – but no air – reaches the noble gas.

11 Household appliances

In toasters, ceramic hobs, hairdryers and wherever the going gets hot: protective oxide layers on filaments made from our alloys ensure trouble-free operation throughout a long service life.

12 Spark plugs and glow plugs

No combustion engine can run without a spark plug or a glow plug – or without wires like those from VDM. They provide reliable and efficient ignition in central electrodes and glow plugs.

13 Engines and exhaust systems

Turbo chargers make engines lighter and more fuel-efficient – but also much hotter. With our high-temperature alloys we support more eco-friendly vehicle construction.

14 Piezo electric injectors

Piezo electric injectors in diesel engines allow faster and more precise timing control. Made from our materials, they reduce fuel consumption while maintaining the level of engine performance.

15 Catalytic converters

Catalytic converters made from extremely thin foils: short warm-up phases for immediate function, low exhaust backpressure for full engine performance – and our high-temperature alloys for a long service life.

16 Tank trucks

Acids and bases, often at high temperatures: the transportation of these products requires tanks with the highest possible corrosion resistance. We supply the materials it takes.

17 Aircraft

Extremely strong and as light as possible: with our materials, flying becomes safer, more eco-friendly and more efficient.

18 Electric locomotives

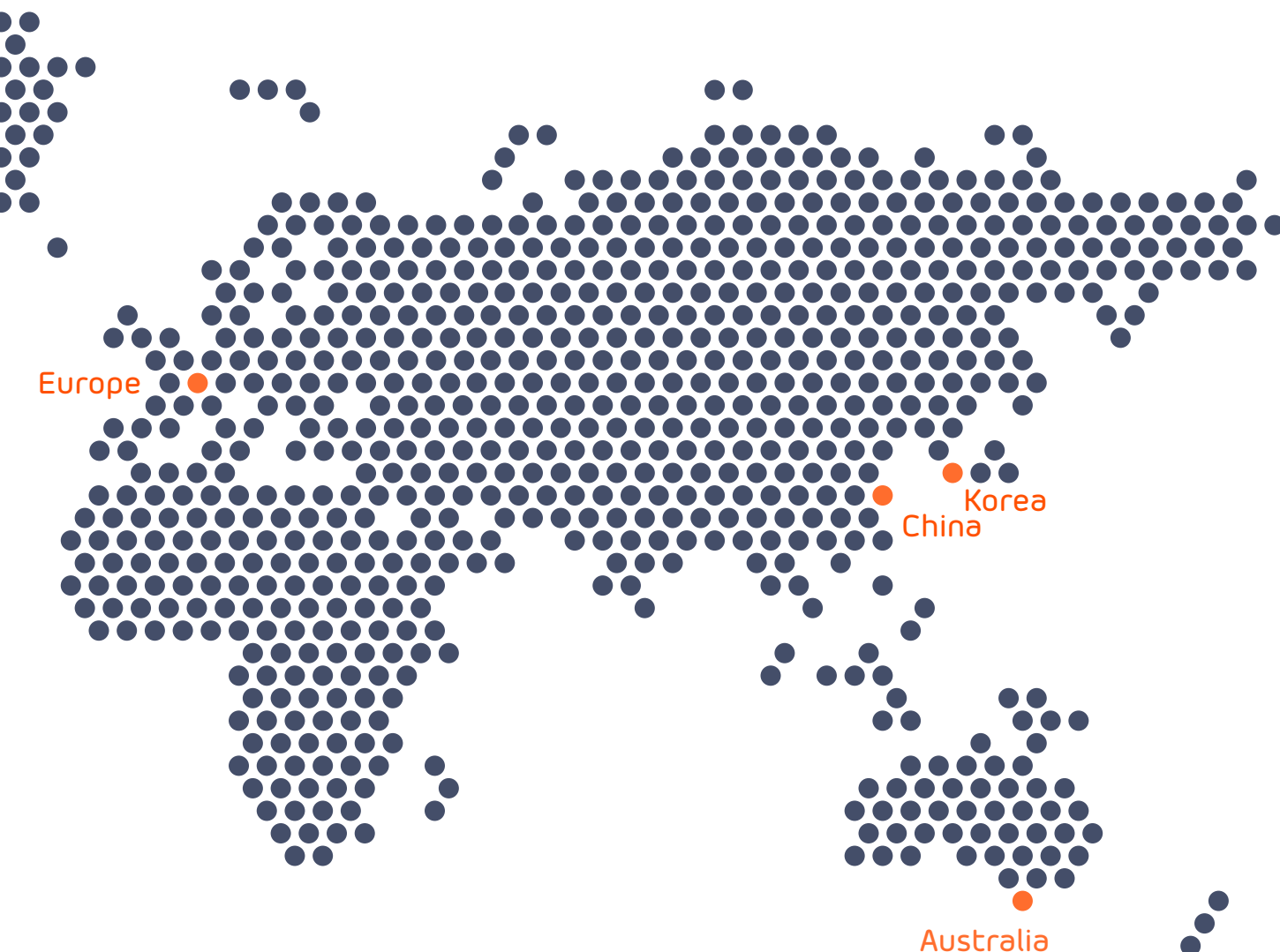
Overhead lines carrying 15,000 Volt: too much for the starting phase. Starting resistors from VDM alloys reduce the charge and make for a gentle start to your journey.

19 Overhead power lines

As the charge increases, high-voltage cables heat up and can begin to sag badly. But not when they are made from our materials: they transport current safely and even improve the line efficiency.

20 Geothermal energy

The deeper, the hotter and often also the saltier: the challenges in sourcing geothermal energy are extreme. Tubes made from our corrosion-resistant nickel alloys bring this energy to the surface – safely and continuously.



Service Center Europe

The Service Center Europe is located in Werdohl, at the headquarters of VDM Metals Group. It was set up in 2002, with a focus on resistance wire. In 2008, sheet, plate, rods and bars were added to the portfolio.

From our Service Center Europe we offer our worldwide customers a comprehensive range of products and services: continuously replenished stocks and availability at short notice of over 800 tonnes of high-performance alloys, plus state-of-the art cutting facilities.

Should you require other materials or other sizes, we can manufacture these especially for you and cut or machine them to your specifications, store them at our facilities and ship partial deliveries to you in any required quantity.

This is how we understand timely fulfilment of your individual specific needs.

Service Center Europe

VDM Metals International GmbH
Service Center
Plettenberger Straße 2
58791 Werdohl / Germany
Phone +49 (0) 2392 55-4129
christian.kortmann@vdm-metals.com

Service Center China

dan.wang.vdm@outlook.com

Service Center Korea / Gimje

dhasom.choi@vdm-metals.com

Service Center Australia / Mulgrave

lutz.toriedt@vdm-metals.com



ACERINOX A ASTM-A-240
ACERINOX A-240

Nickel alloys and stainless steel

One-stop shop

In order to offer its customers an even more comprehensive service, VDM Metals has added a number of typical stainless steel grades to the stock range of its Service Center. For this, VDM Metals uses products from the Acerinox production facility in Spain.



In particular customers in the field of apparatus and mechanical engineering for the chemical process industry and the oil and gas industry are expected to benefit from this expanded range of materials, as projects often involve the use of different materials. The extended portfolio will enable VDM Metals to offer its customers an even more wide-ranging customer service from a single source.

The well-known pre-processing and cutting services provided by the company's own laser and waterjet equipment – also according to customer drawings if required – are of course available for all material grades.

The portfolio includes the listed stainless steel grades in the form of sheets in various thicknesses and dimensions.

The materials are characterized throughout by their good corrosion resistance, high strength and very good mechanical properties. Do you have additional requirements? No problem, further material grades, thicknesses and dimensions of the Acerinox Group as well as their cuts are also available on request at short notice via our Service Center.

Portfolio

VDM Metals designation	Range of thickness	Dimensions
1.4571, AISI 316 TI	3, 4, 5, 6, 8, 10, 12, 15, 20 mm	1500 x 3000 mm, 1500 x 6000 mm
1.4404, AISI 316 L	3, 4, 5, 6, 8, 10, 12, 15, 20 mm	1500 x 3000 mm, 1500 x 6000 mm
1.4541, AISI 321	3, 4, 5, 6, 8, 10, 12, 15, 20 mm	1500 x 3000 mm, 1500 x 6000 mm
1.4462, DUPLEX	3, 4, 5, 6, 8, 10, 12, 15, 20 mm	1500 x 3000 mm, 1500 x 6000 mm

Plate and sheet

Our unique range of corrosion and heat resistant alloys, an ultramodern laser cutting unit and a water jet unit ensure that our customers receive the right material in the required quantity right on time.



At our Service Center we stock sheet and plate in all required sizes up to 2,500 mm x 8,000 mm. All the materials are available in thicknesses of 2 mm to 50 mm.

Besides our comprehensive stock program our offering also includes the production of precise blanks to customer specifications which can be carried out with a state-of-the art laser cut-

ting unit (brand: Trumpf) or a water jet unit (brand: Ridder). This includes, for example, round blanks, rings and all kinds of two-dimensional parts made to drawings.

The products are supplied with a mill certificate according to DIN EN 10204-3.1. On request, a 3.2 inspection certificate can of course also be issued for all classifications (TÜV, LRS, GL, DNV, ...).

Over and above this, other tests such as subsequent ultrasonic testing or corrosion testing can be conducted at short notice.

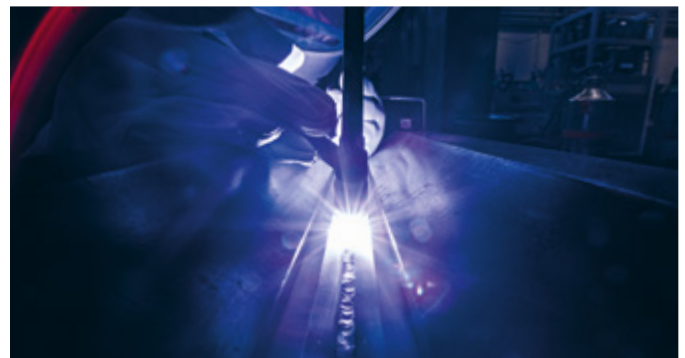


Portfolio

VDM Metals designation	DIN EN	UNS
VDM® Alloy 22	2.4602	N06022
VDM® Alloy 31	1.4562	N08031
VDM® Alloy 59	2.4605	N06059
VDM® Alloy 120	–	N08120
VDM® Alloy 330	1.4886	N08330
VDM® Alloy 400	2.4360	N04400
VDM® Alloy 600	2.4816	N06600
VDM® Alloy 601	2.4851	N06601
VDM Alloy 602 CA®	2.4633	N06025
VDM® Alloy 617	2.4663	N06617
VDM® Alloy 625	2.4856	N06625
VDM® Alloy 699 XA	2.4842	N06699
VDM® Alloy 800 H	1.4876, 1.4958	N08810
VDM® Alloy 825	2.4858	N08825
VDM® Alloy 926	1.4529	N08926
VDM® Alloy C-4	2.4610	N06455
VDM® Alloy C-276	2.4819	N10276
VDM® Nickel 201	2.4068	N02201
VDM® Alloy N10675	2.4600	N10675

Welding consumables

With our comprehensive range of welding consumables, we offer our customers the best way to procure both the sheet or plate and the appropriate filler metals all from a single source.



Our permanent stock of welding consumables covers a wide variety of materials in the form of welding wire, welding rods and strips, all available at short notice. The welding wire can be supplied on spools/basket coils (15/25 kg) or in drums (250 kg/450 kg). Welding rods for TIG welding are shipped in 5 kg boxes. Other delivery forms are available on request.

Our welding wires and strips feature optimized cast and helix values for a smooth wire feed in automated welding processes. Our welding consumables are alloyed to extremely tight tolerances.

The products are supplied with a mill certificate according to DIN EN 10204-3.1. On request, a 3.2 inspection certificate can of course also be issued for all classifications (TÜV, LRS, GL, DNV, ...).

In cooperation with our welding laboratory, which is equipped with ultramodern facilities and processes, we offer our customers competent advice and solutions to any welding problem.

Portfolio

VDM Metals designation	DIN EN	UNS
VDM® FM 33	1.4591	R20033
VDM® FM 36 M	1.3990	–
VDM FM 52i®	–	N06056
VDM® FM 55	(2.4560)	W82002
VDM® FM 59	2.4607	N06059
VDM® FM 60	2.4377	N04060
VDM® FM 61	2.4155	N02061
VDM® FM 67	2.0837	C71581
VDM® FM 82	2.4806	N06082
VDM FM 602 CA®	2.4649	N06025
VDM® FM 617	2.4627	N06617
VDM® FM 622	2.4635	N06022
VDM® FM 625	2.4831	N06625
VDM® WS 625	2.4831	N06625
VDM® FM 2120	2.4700	N06058
VDM® FM C-276	2.4886	N10276



Rod and bar

With our broad range of corrosion and heat resistant high-performance alloys and an ultra-modern band saw, we can fulfil all of our customers' requirements, no matter how unique.



Our stock of round bars comprises a wide and varied range of corrosion and heat resistant alloys in standard lengths of 4,000 mm to 6,000 mm and thicknesses of 10 mm to 150 mm.

The products are supplied with a mill certificate according to DIN EN 10204-3.1. On request, a 3.2 inspection certificate can of course also be issued for all classifications (TÜV, LRS, GL, DNV, ...).

Our modern band saw, a Behringer HBM 540 A, enables us to offer you bars cut to your individual needs. Fixed lengths can be supplied from a minimum length of 15 mm upwards.

Furthermore, we offer forging billets with a diameter of 140 to 500 mm on short notice.

Portfolio

VDM Metals designation	DIN EN	UNS
VDM® Alloy 22	2.4602	N06022
VDM® Alloy 31	1.4562	N08031
VDM® Alloy 36	1.3912	K93603, K93600
VDM® Alloy 59	2.4605	N06059
VDM® Alloy 400	2.4360	N04400
VDM® Alloy 600	2.4816	N06600
VDM Alloy 602 CA®	2.4633	N06025
VDM® Alloy 625	2.4856	N06625
VDM® Alloy 718	2.4668	N07718
VDM® Alloy 800 HP	1.4959	N08811
VDM® Alloy C-276	2.4819	N10276

Resistance wire

Besides a comprehensive portfolio of resistance wires, our offering also includes the manufacture of individual heating elements and wire wound resistors.



Round wire is available ex stock in diameters starting from 0.08 mm to 6 mm and is supplied on spools, rings, or in drums.

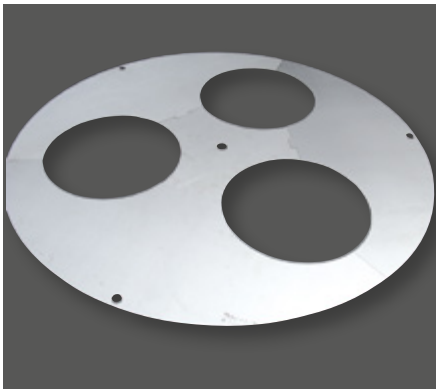
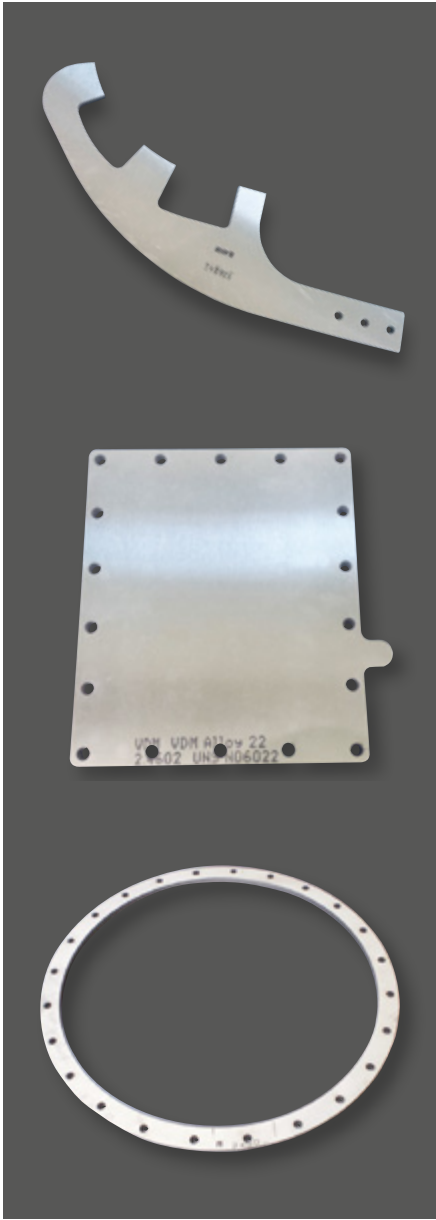
Flat wire rolled from round wire is available in the following dimensions: 0.08 mm x 0.40 mm to 1.50 mm x 5.50 mm.

We also manufacture ready-to-fit heating elements and wire wound resistors for electric furnaces to your specifications and at short notice.

The products are supplied with a mill certificate according to DIN EN 10204-3.1.

Portfolio

VDM Metals designation	DIN EN	UNS
VDM® Alloy HT 30	1.4860	–
VDM® Alloy HT 60	2.4867	N06004
VDM® Alloy HT 80	2.4869	N06003
VDM Konstantan®	2.0842	C72150



Individual solutions

Contact us.

Customized solutions for individual requirements

The product portfolio of our Service Center is versatile; because we understand the ever-changing requirements of our customers, we continuously adapt our range to ensure that we meet your needs.

Our strengths lie in the rapid availability of our products at short notice. We specialize in delivering within 24 hours as well, so you can continue your projects without delay. Whether you need small or large quantities, we are able to meet your needs.

We offer consulting services through our team of experienced application technicians to help you find the right products or solutions for your specific needs.

In addition, we offer agreements for call-off orders for all product forms from VDM Metals. This allows you to procure flexibly and efficiently without having to place each order individually.

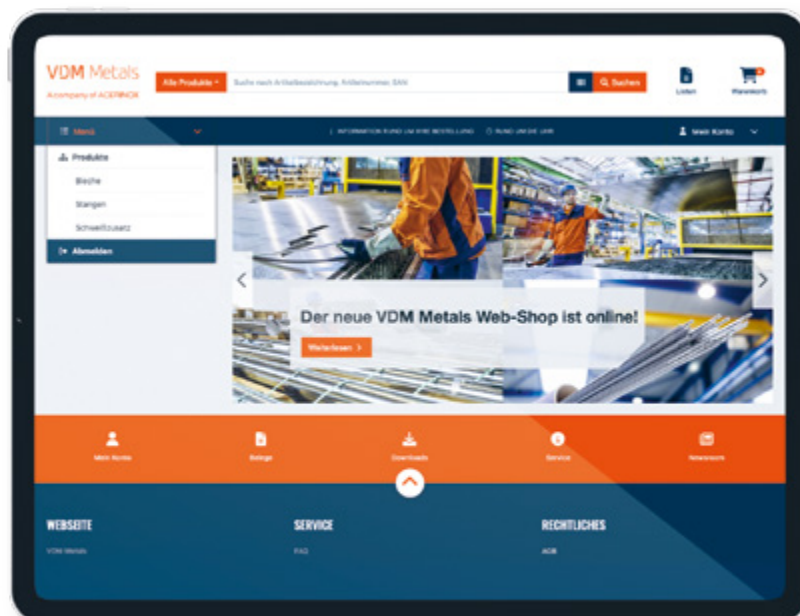
Our services also include sheet and plate cutting through our laser and waterjet units, as well as bar and billet sawing.

Rely on our service center to meet your needs and assist you with your projects. We look forward to working with you and exceeding your expectations.



Ordering with a click of a mouse

VDM Metals Service Center Europe has its own webshop.



Through this shop we offer an expanded service portfolio for customers and even faster access to the stock range. Through the digital platform, purchasing is possible 24 hours a day, 7 days a week, quickly and easily from anywhere. Our product portfolio of nickel and nickel-based materials in the online store is continuously being expanded and currently includes:

- Sheets and rods in standard and special formats
- Welding wire in the form of 5 kg quivers and 15 kg spools
- Stainless steel sheets

With just one click customers can find out which materials are available in which standard or special dimensions. Filter options and description of items are similar to those of well-known online retailers. Both registration and ordering items are child's play. The current focus of the Service Center business is on the European and Asian markets, but the store is accessible worldwide.

Our webshop has a connection to the customer portal. All orders placed and associated documents (e.g. order confirmations, delivery bills, invoices, certificates) are listed here.

If you would like to order further processing such as laser or waterjet cutting, please contact us by e-mail or telephone, as we will advise you individually and also calculate prices individually.

Orders for large quantities or call-off orders can still be ordered directly from the Service Center or through Sales.

Write to us:
servicecenter.vdm@vdm-metals.com

Visit our online store at:
<https://webshop.vdm-metals.com>



Kontakt

Service Center Europe

VDM Metals International GmbH
Service Center
Plettenberger Straße 2
58791 Werdohl
Germany

Germany

Christian Kortmann
Vice President Service Center

Phone +49 (0) 2392 55-4129
Cell +49 (0) 151 150 36873

christian.kortmann@vdm-metals.com

Benelux

Jos van Lith
Managing Director

Phone +31 (0) 78 631-6966
Cell +31 (0) 6 53 24 0831

jos.vanlith@vdm-metals.com

Italy

Edro Rocca
Managing Director

Phone +39 (0) 2 241-04625
Cell +39 (0) 331 3366670

edro.rocca@vdm-metals.com

Spain

Katja Hilmer
Sales VDM Metals

Phone +34 93 4478723
Cell +34 618 282071

Katja.Hilmer@acerinox.com

France

Eric Vidal
Managing Director

Phone +33 (0) 1 41390423
Cell +33 (0) 6 73 27 20 19

eric.vidal@vdm-metals.com

Austria

Sascha Kremmer
Managing Director

Phone +43 (0) 1 6150600-11
Cell +43 (0) 664 88646897

sascha.kremmer@vdm-metals.com

Scandinavia

Jonas Dahlström
Sales

Phone +46-40-6919432
Cell +46-72-9995839

jonas.dahlstrom@acerinox.com

United Kingdom

Dr. David Munasinghe
Managing Director

Phone +44 (0) 1372 46-7137
Cell +44 (0) 7900 491 564

david.munasinghe@vdm-metals.com

Switzerland

Bernhard Ammon
Leiter Vertrieb Nickellegierungen

Phone +41 (0) 61 205-8450
Cell +41 (0) 791248369

bernhard.ammon@schubarth.ch

Czech Republic

Tomáš Matras
Agent VDM Metals

Phone +420 251 013 036
Cell +420 724 016 627

matras@unionocel.cz

Service Center China

Dan Wang
Head of Stock and Service Center

Phone +86 20 8221 8122
Cell +86 135 0306 0333

dan.wang.vdm@outlook.com

Service Center Korea

Dhasom Choi
Team Leader Service Center

Phone +82 63 542 1583

dhasom.choi@vdm-metals.com

Service Center Australia

Lutz Toriedt
Managing Director

Phone + 61 3 8542 0904
Cell + 61 0 428 508 282

lutz.toriedt@vdm-metals.com

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Portfolio

Our current stock lists

Headquarters

VDM Metals International GmbH
Plettenberger Straße 2
58791 Werdohl
Germany

Phone +49 (0) 2392 55-0
Fax +49 (0) 2392 55-2217

vdm@vdm-metals.com
www.vdm-metals.com