



DMK

H I G H - P E R F O R M A N C E M E T A L S

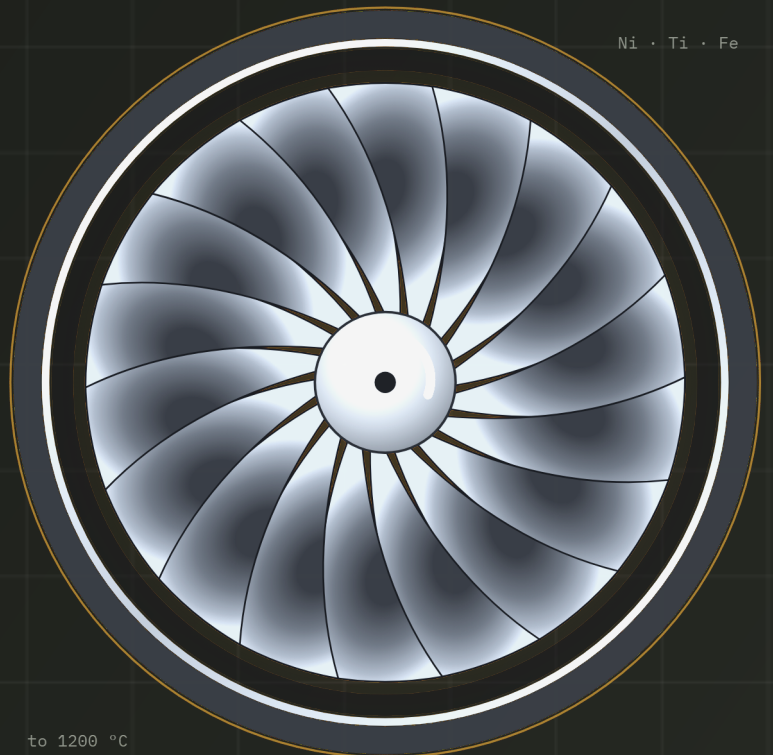
-- MOSCOW • EXPORT-ORIENTED MANUFACTURER

Product Catalogue

Nickel-base superalloys, titanium alloys and special steels — components and blanks manufactured under a single technological sequence, from melt to semi-finish machining.

2026 EDITION • DMKALLOYS.COM

Ni • Ti • Fe



to 1200 °C

Eight decades of metallurgy, aimed at tomorrow's machines

DMK Alloys is an expert manufacturer of parts and components for hi-tech industries, carrying the experience and know-how of more than 80 years of metallurgical practice. Our mission is to be a reliable partner for global industrial leaders — producing materials to the highest standards of the industry at competitive cost.

Each production line runs a uniform technological sequence — from starting-blank melting to semi-finish machining of the final product — so quality is built in at every operation, with modern methods of inspection and testing targeting Russian and international standards.

80+

years of metallurgical
experience

3

core alloy families
manufactured

384

grade datasheets online

118

specification cross-
references

Tradition

The know-how of over eight decades of superalloy and special-steel metallurgy.

Teamwork

The success of every member of our staff is the recipe for the company's success.

Development

Sustainable progress in equipment, methods and people — introduced directly into serial production.

Nickel-base superalloys

Heat-resistant components and blanks for the hottest, highest-stress positions in a machine — including complex-contour parts produced by powder metallurgy. Beyond the documented grades below, the supply range covers 60+ nickel and high-temperature designations.

Documented grades — full datasheets at dmkalloys.com/alloys/

GRADE	UNS	W.NR	KEY SPECIFICATIONS
Alloy 718	N07718	2.4668	AMS 5662 / 5663 / 5664 · AMS 5596 / 5597
Alloy 625	N06625	2.4856	AMS 5666 · AMS 5599 · AMS 5837
Alloy X-750	N07750	2.4669	AMS 5667 / 5668 / 5670 / 5671 · AMS 5598
Alloy 600	N06600	2.4816	AMS 5665 · AMS 5540
Alloy 601	N06601	2.4851	AMS 5870
Alloy 80A	N07080	2.4952	AMS 5766
Alloy 90	N07090	2.4632	BS HR 2 · 2.4632 · NiCr20Co18Ti
Alloy 263	N07263	2.4650	AMS 5872 · AMS 5886
Alloy X	N06002	2.4665	AMS 5536 · AMS 5754
Alloy C-276	N10276	2.4819	ASTM B574 · ASTM B575

- Forged discs & blanks
- Bars & billets
- Rings
- Near-net-shape PM
- Machined to drawing

Typically specified for: gas-turbine discs, blades and casings, combustion hardware, high-temperature fasteners and springs, furnace equipment.

Titanium alloys

Half the weight of steel with corrosion resistance built in — CP grades through alpha-beta and high-temperature near-alpha alloys, as bars, billets, forged blanks and machined components.

Documented grades — full datasheets at dmkalloys.com/alloys/

GRADE	UNS	W.NR	KEY SPECIFICATIONS
Titanium Grade 2	R50400	3.7035	AMS 4902
Ti-6Al-4V (Grade 5)	R56400	3.7165	AMS 4928 · AMS 4911 · AMS 4967
Ti-6Al-4V ELI (Grade 23)	R56407	3.7165	AMS 4930 · AMS 4907
Ti-6Al-2Sn-4Zr-2Mo	R54620	—	AMS 4975 · AMS 4976 · AMS 4919
Ti-5Al-2.5Sn (Grade 6)	R54520	—	AMS 4926 · AMS 4910
Ti-3Al-2.5V (Grade 9)	R56320	3.7195	AMS 4943 / 4944

- Forged discs & blanks
- Bars & billets
- Rings
- Near-net-shape PM
- Machined to drawing

Typically specified for: airframe structures, compressor blades and discs, hydraulic lines, heat exchangers, marine and implant components.

Special steels

Precipitation-hardening stainless, ultra-high-strength low-alloy, bearing and stabilised grades — manufactured and heat treated to specification, with a full range of 130+ steel designations supplied to order.

Documented grades — full datasheets at dmkalloys.com/alloys/

GRADE	UNS	W.NR	KEY SPECIFICATIONS
17-4PH Stainless	S17400	1.4542	AMS 5643 · AMS 5604
15-5PH Stainless	S15500	1.4545	AMS 5659
300M Alloy Steel	K44220	—	AMS 6257 · AMS 6417 · AMS 6419
4340 Alloy Steel	G43400	—	AMS 6414 · AMS 6415
440C Stainless	S44004	1.4125	AMS 5630 · AMS 5618
321 Stainless	S32100	1.4541	AMS 5510 · AMS 5645

- Forged discs & blanks
- Bars & billets
- Rings
- Near-net-shape PM
- Machined to drawing

Typically specified for: landing-gear-class structures, shafts and gears, valve internals, bearings, exhaust and hot-air systems.

Powder metallurgy & metal powders

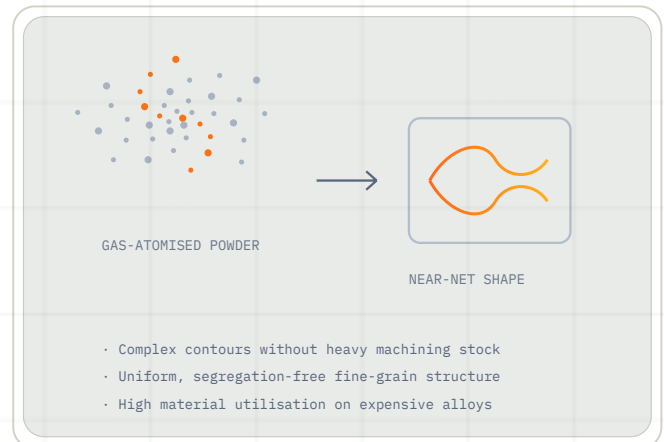
Gas-atomised powder solidifies in microseconds, so every particle carries the same chemistry — no macrosegregation, no property scatter. Consolidation builds complex-contour components near net shape, with uniform fine grain and minimal machining stock on expensive alloys. Powders are also supplied as feedstock, classified to your process window.

Powder grades

GRADE	FAMILY
Alloy 718 (N07718) — ASTM F3055	Nickel superalloy powders
Alloy 625 (N06625) — ASTM F3056 / AMS 7001	Nickel superalloy powders
Alloy X (N06002)	Nickel superalloy powders
304L (S30403)	Stainless & PH steel powders
316L (S31603 / 1.4404) — ASTM F3184	Stainless & PH steel powders
15-5PH (S15500)	Stainless & PH steel powders
17-4PH (S17400) — AMS 7012	Stainless & PH steel powders
H13 (T20813)	Tool & alloy steel powders
Maraging 250 (K92890)	Tool & alloy steel powders
Maraging 300 (K93120) — AMS 6514	Tool & alloy steel powders
4130 (G41300)	Tool & alloy steel powders
4140 (G41400)	Tool & alloy steel powders
Co-Cr (R31537 / F75-type)	Cobalt-chrome powders
Alloy 6 (Co-Cr-W)	Cobalt-chrome powders
Ti-6Al-4V Grade 5 (R56400) — ASTM F2924	Titanium powders
Ti-6Al-4V ELI Grade 23 (R56407) — ASTM F3001	Titanium powders
AlSi10Mg — AMS 7018	Aluminium powders
AlSi7Mg (F357-type)	Aluminium powders

Particle-size cuts

PROCESS	WINDOW
Laser powder-bed fusion (L-PBF)	15 – 45 µm
Electron-beam melting (EBM)	45 – 106 µm
Directed energy deposition (DED)	45 – 150 µm
Hot isostatic pressing (HIP)	< 150 / < 300 / < 500 µm



One supplier for the whole bill of materials

Alongside the core manufactured lines, an extended range is supplied to order against your governing specification — every designation with its own datasheet at dmkalloys.com/alloys/.

Aluminium alloys

80+ designations

1000–8000 series & Al-Li: airframe plate, marine sheet, structural extrusions, thin-wall tube to 170 mm, British L-numbers.

Magnesium alloys

36 designations

Wrought AZ grades, casting compositions, rare-earth WE43/WE54, tooling plate.

Copper alloys

50+ designations

Conductivity coppers, beryllium copper, phosphor & nickel-aluminium bronzes (C63000), sintered bronze.

Electronic & low-expansion

6 groups

Invar 36 and Kovar-class sealing alloys, Mu-metal shielding, pure nickel, OF copper, Ta / W / Mo.

Special products

9 product groups

Foil to 5 µm, precision wire, tube from 0.15 mm OD, welding consumables, ground bar h6–h8, implant grades, polymers.

Services

7 programmes

Priority expediting, export logistics, certification & documentation, in-house processing, technical support, export packing.

Sized for the products we sell

Melting, powder production, hot working, heat treatment, machining and a laboratory that backs every certificate with a measurement.

01 - Primary melting

- Vacuum induction melting (VIM) furnaces
- Vacuum arc remelting (VAR) stations
- Electroslag remelting (ESR) stations
- Air induction melting

02 - Powder production & consolidation

- Inert-gas atomisation tower
- Powder classification & sieving line
- Powder blending & handling under inert gas
- Hot isostatic press (HIP)

03 - Hot working & forming

- Open-die hydraulic forging press
- Forging hammers
- Ring-rolling mill
- Bar and section rolling mill

04 - Heat treatment

- Vacuum heat-treatment furnaces
- Controlled-atmosphere furnaces
- Precision ageing ovens
- Quench systems — water, polymer, oil

05 - Machining & finishing

- CNC turning centres
- Multi-axis CNC milling centres
- Centreless grinding line
- Band saws and plate saws

06 - Laboratory & inspection

- Optical emission & XRF spectrometry
- Universal testing machines (incl. elevated temperature)
- Creep and stress-rupture frames
- Hardness & impact testing (HB / HRC / HV, Charpy)

Datasheets, tools and the route to a quotation

Alloy database

384 searchable grade datasheets
— chemical composition, typical
properties and UNS / AMS / ASTM
/ EN-W.Nr cross-references, each
printable as a branded PDF.

dmkalloys.com/alloys/

Weight calculator

Theoretical mass for bars, plates,
sheets, tubes, hex and rings with
grade-specific densities for every
documented alloy.

dmkalloys.com/calculator.html

Your RFQ

State grade and governing
specification, form, dimensions
with tolerances, quantity, heat
treatment and testing / certification
requirements. Drawings welcome
— answered in English and
Russian.

export@dmkalloys.com

Material data in this catalogue is typical and for reference only; certified values are established per order against the governing specification. Designations may correspond to trade names of their respective owners.



DMK

H I G H - P E R F O R M A N C E M E T A L S

Send us the drawing. We'll answer with a route.

Grade, specification, form, dimensions, quantity — email the export team and get a manufacturer's answer, not a stocklist lookup.

EMAIL export@dmkalloys.com

PHONE +7 495 937 96 72

ADDRESS Bolshaya Akademicheskaya Street 5/4, Moscow 127299, Russia

WEB dmkalloys.com