

Precious Metal Products



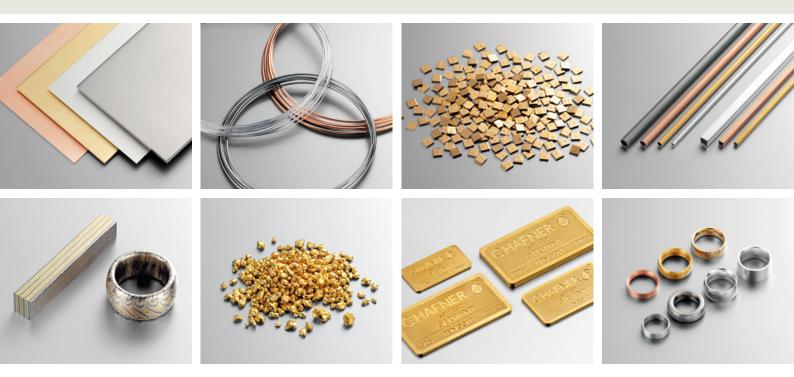




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C.HAFNER. Precious metal technology.

Founded in 1850, C.HAFNER is now one of Europe's leading product and service providers in the field of precious metal technology. As a family-run business already in its 5th generation, we pride ourselves on our innovative and cost-efficient products, our strong customer focus and our stringent environmental standards – because that is true to our tradition and philosophy.



High-quality precious metal products

As a leading manufacturer of precious metal products, C.HAFNER offers a full range of high-quality materials and semi-finished products. This includes casting materials, sheets, wires, tubes, solders and brazing pastes, as well as our unique range of creative semi-finished products. We always have a broad range of products available from stock for unique and small series manufacturers.

Customised solutions. For industry and craftsmen.

In addition to the distribution of standard products, C.HAFNER sees itself as a provider of customised solutions for processing precious metals. These include, for example, modern CNC/EM technologies. C.HAFNER produces precision parts from precious metals for various markets in the jewellery and watch-making sector, involving standard products and unique pieces for demanding industrial applications.

We set new standards time and time again by developing high performance alloys, such as PlatinGold – all for the benefit of our customers.

PlatinGold

The innovative platinum alloy PlatinGold by C.HAFNER has rewritten the history of platinum: Platingold sets new standards with its unprecedented and fascinating composition, superb material properties, excellent workability, brilliant white colour and a precious metal content of 97.3%. It brings together the advantages of all previous Pt alloys and eliminates the disadvantages. PlatinGold is the new platinum standard.



Certified security

With a proud tradition as a family-owned company stretching back more than 165 years, naturally C.HAFNER upholds the strictest standards of ethical conduct. This includes our responsibility to use natural resources in a sustainable manner.



LBMA

C.HAFNER has the coveted Good Delivery status awarded by the London Bullion Market Association (LBMA). Gold enjoying this status comes from sources that commit no human rights violations and are not complicit in criminal activity. In addition, the reconditioned gold is guaranteed to be of the highest purity.



RJC

The Responsible Jewellery Council (RJC) is an international association of jewellery and watchmaking companies and their suppliers. Its code of practices (CoP) binds companies to the basic principles of the RJC. Furthermore, the Chain of Custody Standard (CoC) ensures heightened standards of ethical and environmental business practices across the supply chain.



Urban Mining

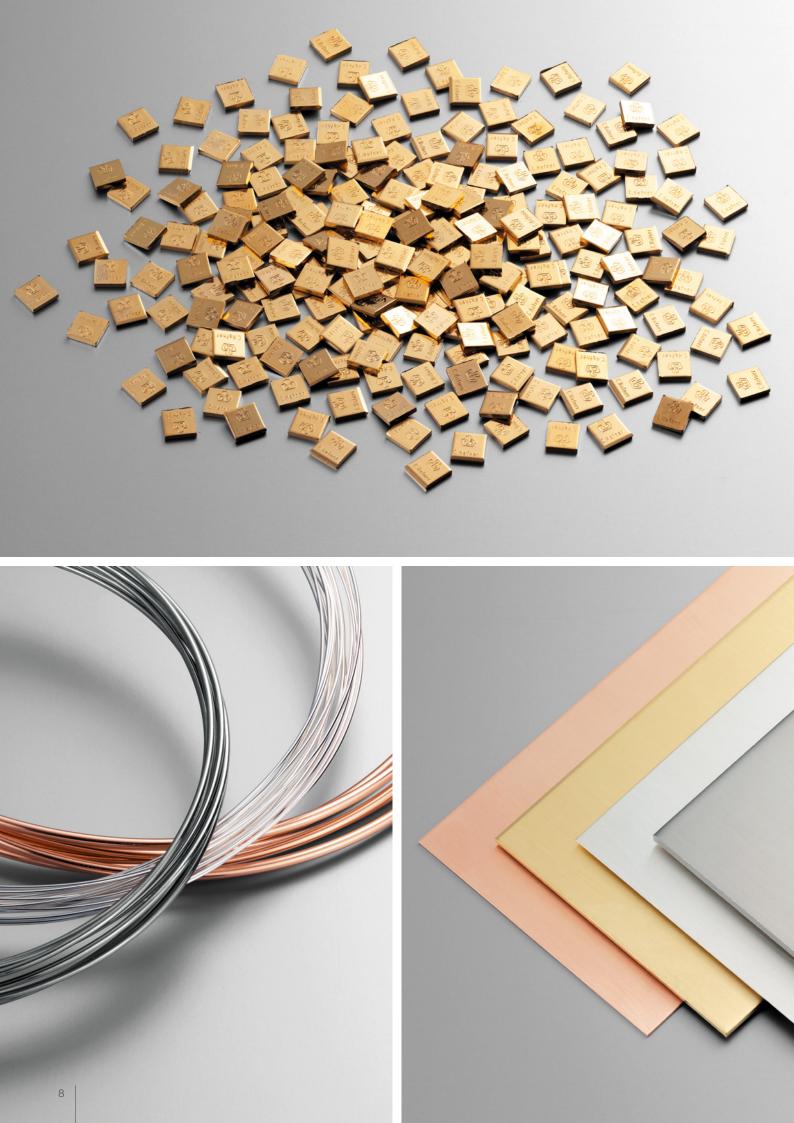
C.HAFNER has been a member of Urban Mining e.V. since 2015. Urban Mining deals with the dismantling, demolition and recycling of raw materials. This also includes precious metals. C.HAFNER's Urban Mining

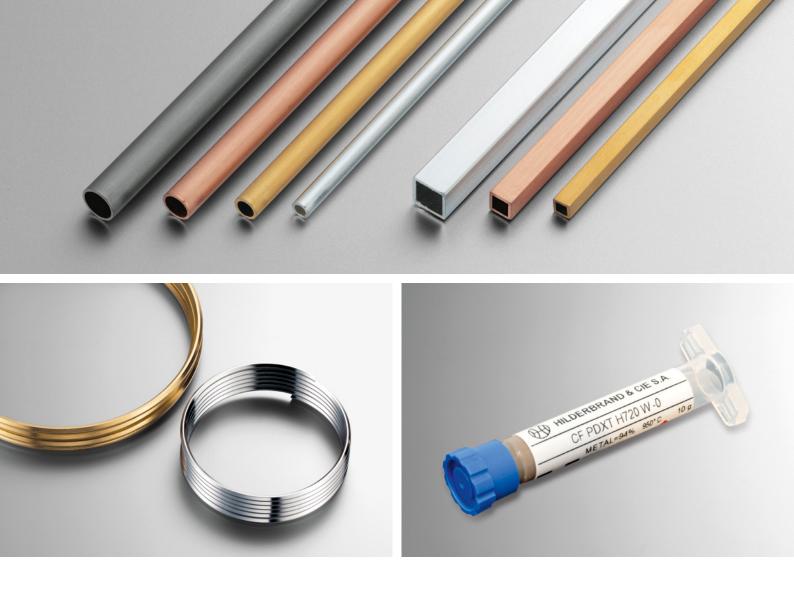
e.V. membership reiterates its active efforts towards sustainability and ethically orientated practices.

More information: urban-mining-verein.de

Responsibility with conviction

Our customers can be reassured: no one's human rights have been violated (such as through child labour or slavery), no criminal activity has been aided and abetted (such as by money laundering or tax evasion) and the environment is not harmed to produce C.HAFNER's gold. Neither today nor in the future.





Semi-finished parts - Stock range

High-quality semi-finished products made of precious metal – even in very small quantities. C.HAFNER's stock programme of semi-finished products is perfect for goldsmiths, designers and producers of one-off pieces of jewellery who mainly produce unique items or small-scale series. This selection not only includes traditional semi-finished products, but also solders, brazing pastes and dispensing devices.

Casting, Sheets, Wire, Tube

						D	elivery fo	rms	
Fineness -/000	Colour	Density (g /cm ³)	Hard- ness HV 5/30 soft	Melting range (C°)	Casting	Wire 1,0/2,0/3,0/ OW 5,3 mm	Sheets 0,5 mm	Sheets 1,0/2,0/ 4,0 mm	Tube round OD 3,0/4,0/ 5,0/6,0 mm WT 0,5 mm
8 carat coloured gold a	lloys								
333 GG 11	yellow	10,9	110	850 - 810	-				
333 GG 15	yellow	10,8	110	915 – 830		■ OW			
14 carat coloured gold	alloys								
585 GG 13 Zn-free	pale yellow	14,1	135	880 - 820					
585 GG 15	pale yellow	14,1	125	880 - 835					
585 GG 18	deep yellow	13,3	140	825 – 790					
585 GG 19	"Hamilton"	13,7	160	850 - 810					
585 RS 28	rosé	13,2	120	910 – 875		OW			
585 RT 29	red	12,9	100	935 – 920					
18 carat coloured gold	alloys								
751 GG 14 Zn-free	yellow 2N	15,4	130	920 - 880					
751 GG 16	yellow 2N	15,4	130	920 - 880					
751 GG 21 Zn-free	deep yellow 3N	15,3	145	900 - 880					
751 GG 24	deep yellow 3N	15,3	140	900 - 880					
751 RS 30	rosé 4N	14,9	170	880 - 860					
751 RT 32	red 5N	15,4	180	900 - 875					
Coloured gold alloys >	760/-								
900 GG 10	deep yellow	17,6	65	990 - 950					
917 GG 10	deep yellow	17,6	70	990 - 950		OW			
1000 FG 10	fine gold	19,3	25	1063					

All listed alloys are also available in a wide range of other shapes and sizes. All items are subject to our standard tolerances. We would be delighted to advise you. Sheet width: Au/Pt/Pd 10-90 mm, Ag 10-140 mm

Solders, brazing pastes

Solders, brazing pastes

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Can be ordered in our online portal on c-hafner.de/en

Solder soft	-		Solder medium		Solder hard		Brazing pa extra-soft	stes	Brazing pa soft	astes	Brazing pa medium	astes	Brazing pa hard	istes
Solder No.		AT (C°)	Solder No.	AT (C°)	Solder No.	AT (C°)	Solder No.	AT (C°)	Solder No.	AT (C°)	Solder No.	AT (C°)	Solder No.	AT (C°)
2410		725	2420	730	2400	750	х		CF 8KYS	695	CF 9KYM	720	CF 9KYH	742
2410		725	2420	730	2400	750	х		CF 8KYS	695	CF 9KYM	720	CF 9KYH	742
2450		740	2440	775	2430	815	CF 14KYES4	610	CF 14KYS	720	CF 14KYM	760	CF 14KYH	785
2450		740	2440	775	2430	815	CF 14KYES4	610	CF 14KYS	720	CF 14KYM	760	CF 14KYH	785
	x		2450	740	2440	775	CF 14KYES4	610	CF 14KYS	720	CF 14KYM	760	CF 14KYH	785
	х		2450	740	2440	775	CF 14KYES4	610	CF 14KYS	720	CF 14KYM	760	CF 14KYH	785
	x		х		х		х		CF 14KPS	730	х		CF 14KRH	780
	х		х		х		х		CF 14KPS	730	х		CF 14KRH	780
2480		740	2470	790	2460	815	CF 18KYES2	630	CF 18KYS	735	CF 18KYM	763	CF 18KYMH	800
2480		740	2470	790	2460	815	CF 18KYES2	630	CF 18KYS	735	CF 18KYM	763	CF 18KYMH	800
2480		740	2470	790	2460	815	CF 18KYES2	630	CF 18KYS	735	CF 18KYM	763	CF 18KYMH	800
2480		740	2470	790	2460	815	CF 18KYES2	630	CF 18KYS	735	CF 18KYM	763	CF 18KYMH	800
	х		х		х		х		CF 18KPS	710	CF 18KRM2	790	х	
	x		1100	800	1090	880	х		CF 18KPS	710	CF 18KRM2	790	х	
	x		23022	870	23021	915	x		CF 22KYES	810	x		х	
	x		23022	870	23021	915	×		CF 22KYES	810	x		х	
	х		23022	870	23021	915	×		х		×		x	

Delivery forms – gold and platinum solders: Sheet 0,3 mm Delivery forms – silver solders: Sheet 0,4 mm Delivery forms - brazing pastes: Cartridges with 8 g capacity

Casting, Sheets, Wire, Tube

						D	elivery fo	rms	
Fineness -/000	Farbe	Density (g /cm³)	Hard- ness HV 5/30 soft	Melting range (C°)	Casting	Wire 1,0/2,0/3,0/ OW 5,3 mm	Sheets 0,5 mm	Sheets 1,0/2,0/ 4,0 mm	Tube round OD 3,0/4,0/ 5,0/6,0 mm WT 0,5 mm
14 carat white gold allo	ys								
585 WG 11 10% Pd content		14,9	80	1130 - 1050		■ OW			
585 WG 30 16% Pd content		14,6	135	1090 - 890					
590 WG 10 15% Pd content		14,5	170	1075 - 1000					
18 carat white gold allo	ys								
751 WG 23 7% Pd content	champagne	15,9	130	1050 – 945		OW			
751 WG 19 10% Pd content		16,0	100	1180 - 1050					
751 WG 14 13% Pd content		15,7	125	1080 - 1040					
751 WG 11 14% Pd content		16,1	180	1090 - 1020					
751 WG 38 16% Pd content	grey gold	15,8	135	1140 - 1060					
Palladium alloys cehapa	all®								
500 PD 10	dark grey	11,1	90	1280 - 1200					
950 PD 10	grey	11,7	85	1400 - 1340					
950 PD 12	silver grey	12,0	100	1660 - 1565		■ OW			
Platinum alloys									
800 PT 10 (lr)		21,7	190	1830–1815		■ OW			
950 PT 10 (Co)		20,2	150	1740 - 1730					
950 PT 11 (W)		21,3	155	1845 –1830		■ OW			
960 PT 10 (Cu)		20,3	110	1745 –1730					
950 PT 24	PlatinGold	20,6	160	1680 - 1640					
950 PT 25	PlatinGold	20,6	160	1680 - 1640					
Silver alloys									
935 AG 11		10,3	75	900 - 800					

All listed alloys are also available in a wide range of other shapes and sizes. All items are subject to our standard tolerances. We would be delighted to advise you.

10,5

25

960

Sheet width: Au/Pt/Pd 10-90 mm, Ag 10-140 mm

OW

fine silver

1000 AG 10

Solders, brazing pastes

Solders, brazing pastes

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Can be ordered in our online portal on c-hafner.de/en

Solder soft		Solder medium		Solder hard		Brazing pase extra-soft	stes	Brazing passoft	stes	Brazing pase medium	stes	Brazing pa hard	astes
Solder No.	AT (C°)	Solder No.	AT (C°)	Solder No.	AT (C°)	Solder No.	AT (C°)	Solder No.	AT (C°)	Solder No.	AT (C°)	Solder No.	AT (C°)
15500*	740	15450*	770	15530	815	CNF 14KWES	710	CNF 14KWS2	730	CNF 14KWM	770	CNF 14KWH	810
15500*	740	15450*	770	15530	815	CNF 14KWES	710	CNF 14KWS2	730	CNF 14KWM	770	CNF 14KWH	810
15500*	740	15450*	770	15530	815	CNF 14KWES	710	CNF 14KWS2	730	CNF 14KWM	770	CNF 14KWH	810
15720	800	15800*	880	15650*	895	CNF 18KWES	750	CNF 18KWS2	770	CNF 18KWM	820	CNF 18KWH	870
15720	800	15800*	880	15650*	895	CNF 18KWES	750	CNF 18KWS2	770	CNF 18KWM	820	CNF 18KWH	870
15720	800	15800*	880	15650*	895	CNF 18KWES	750	CNF 18KWS2	770	CNF 18KWM	820	CNF 18KWH	870
15720	800	15800*	880	15650*	895	CNF 18KWES	750	CNF 18KWS2	770	CNF 18KWM	820	CNF 18KWH	870
15720	800	15800*	880	15650*	895	CNF 18KWES	750	CNF 18KWS2	770	CNF 18KWM	820	CNF 18KWH	870
16740*	740	16720	950	16710	1110	х		CF PDAG	880	CF PD	900	CF PDA	1000
16740*	740	16720	950	16710	1110	Х		CF PDAG	880	CF PD	900	CF PDA	1000
x		16720	950	16710	1110	х		CF PDAG	880	CF PD	900	CF PDA	1000
16640	950	16630	1080	16620	1235	х		CF PTS	880	CF PTM	920	CF PDA	1000
16640	950	16630	1080	16620	1235	х		CF PTS	880	CF PTM	920	CF PDA	1000
16640	950	16630	1080	16620	1235	х		CF PTS	880	CF PTM	920	CF PDA	1000
16640	950	16630	1080	16620	1235	х		CF PTS	880	CF PTM	920	CF PDA	1000
16640	950	16630	1080	16620	1235	х		CF PTS	880	CF PTM	920	CF PDA	1000
16640	950	16630	1080	16620	1235	х		CF PTS	880	CF PTM	920	CF PDA	1000
additional ex	tra-ha	rd platinum s	older:	16665	1250	х		CF PTS	880	CF PTM	920	CF PDA	1000
40130	650	40010	740	40000	790	CF 56	650	CF 65	690	CF 70	730	CF 75	770
х		х		40000	790	CF 56	650	CF 65	690	CF 70	730	CF 75	770

Delivery forms – gold and platinum solders: Sheet 0,3 mm Delivery forms – silver solders: Sheet 0,4 mm **Delivery forms – brazing pastes:** Cartridges with 8 g capacity * contains nickel as an alloy component

Brazing pastes

Simple and efficient brazing





HILDERBRAND brazing pastes are a homogenous mixture of brazing alloy powder with a binder and, in certain cases, with a flux, depending on the heating technique. The alloy powder has the function of melting at the desired temperature, filling the gap by capillarity and assuring the joint strength after solidification. The binder assures easy and consistent dispensing and decomposes upon heating without leaving a residue. A flux is added when the parts to be brazed are heavily oxidized or when heating is done in air.

Pack sizes

All pastes are available in the following container sizes: 3 cc, 5 cc, 10 cc, 30 cc, large cartridges and pots.

Benefits and characteristics

- Improved production rate, time and material saving
- Very precise deposit of brazing alloy
- Brazing alloy and flux application in one step
- Easy to use
- All brazing pastes are cadmium-free
- The process can easily be automatized
- Complete range of manual and automatic dispensing devices available

INFO-SERVICE Precious Metal Products

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Dispensing equipment

Manual dispenser MK3



The MK3 is the perfect dispensing device for goldsmiths. It is recommended for manual dosing application of brazing paste and other non-flowing fluids such as oil, grease, lacquer, glue.

Easy-to-use, it ensures a precise dispensing and is perfectly suited for trials and small series.

Features and benefits

- Easy-to-use
- Very precise application
- Economical solution
- Usable with any 3 cc syringes of HILDERBRAND brazing pastes and non-flowing fluids. Empty syringes available
- No electrical and no compressed air needed

Available as

- Bulk
- Ready-to-use kit including CF 56 silver brazing paste and needles
- Complete case including CF 56 silver brazing paste, needles, torch and ceramic board

Pneumatic dispenser PERFORMUS X100



The easy-to-use PERFORMUS X100 dispenser reduces costs and improves productivity by delivering precise, repeatable brazing paste or non-flowing fluids deposits.

The convenient "Teach" function makes it simple to set initial shot size, to record it and to reproduce it automatically.

The PERFORMUS X100 features vacuum control, time or steady operation and a digital time /pressure display that makes it the perfect dispenser for applications that requires a high degree of process control.

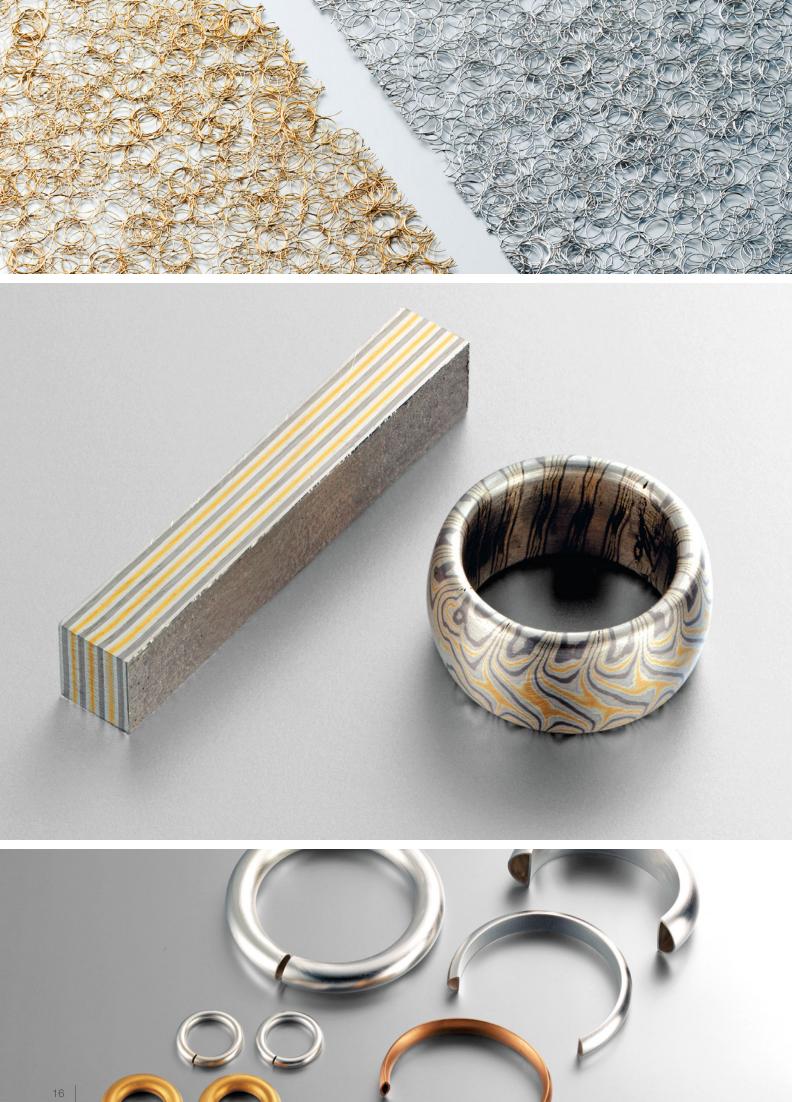
Features and benefits

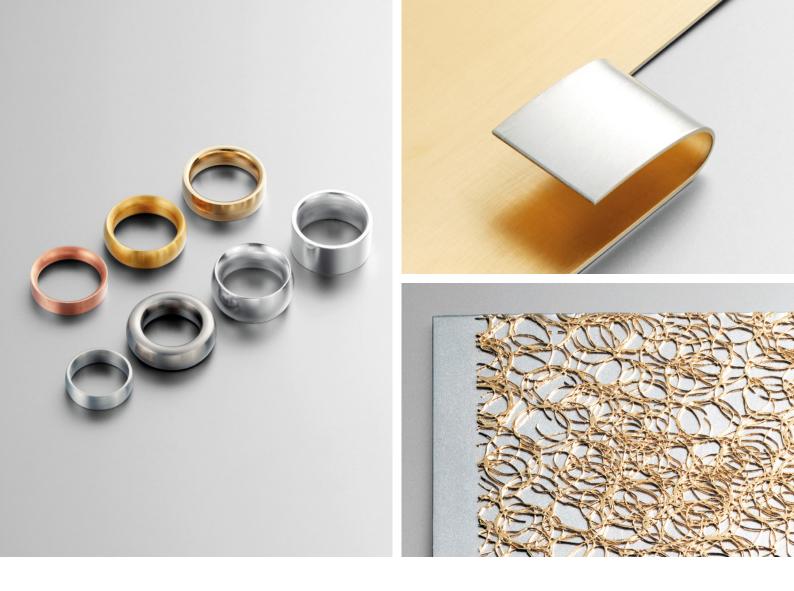
- Consistent dots and fills, and neat beads
- Digital time/pressure display
- Deposit time range 0-99.9 sec.
- Air pressure range 0-7 bar (0-100 psi)
- Teach function
- Steady or timed modes of operation
- Vacuum control keeps thin fluids from dripping between cycles
- Compact design
- Foot pedal initiation
- Metal chassis increases physical protection of the dispenser

The PERFORMUS X15 features a 0-15 psi (0-1 bar) pressure regulator that provides greater control when dispensing thin fluids. This dispenser is available on request.

Accessories

- Large selection of different needles.
- Adaptor for 3 cc, 5 cc, 10 cc, 30 cc cartridges.





Creative semi-finished parts and semi-finished products

Creative semi-finished parts from C.HAFNER are unique in the jewellery sector and are aimed at goldsmiths, designers and producers of one-off pieces of jewellery. Our creative range includes gold and silver fibre mats as well as fibre sheets, multi-coloured gold or Mokume-gane (multi-layered sheets based on a Japanese technique).

Semi-finished products from C.HAFNER stand for economical jewellery fabrication. Thanks to their high level of prefabrication, they greatly reduce the cost and time needed to produce an intermediary product, so allowing the jewellery-maker to concentrate on the real creative process.

Fibre mats

Special semi-finished products

The basic material comprises fibres of 750/ yellow gold or 935/silver, which are made into fibre mats using a special process. Visually stunning, they combine lightness and transparency. Fibre mats can be cut into pieces, sawn, bent and moulded. They can also be soldered or laser-welded. Jewellery made from fibre mats has a unique look, and the light weight means lower material costs.

Fibre mats made of 751/-gold



Mat size approx. 150 x 100 mm/weight approx. 45 g Order No. 39794

Mat size approx. 75 x 100 mm/weight approx. ca. 23 g Order No. 39793

Mat size approx. 75 x 50 mm/weight approx. ca.12 g **Order No. 48725**

Quattro fibre mats made of 751/-gold



Mat size approx. 150 x 100 mm/weight approx.28 g Order No. 51354

Mat size approx. 75 x 100 mm/weight approx. 14 g Order No. 51355

Mat size approx. 75 x 50 mm/weight approx. 7 g **Order No. 51356**

Fibre mats made of 935/-silver



Mat size approx. 150 x 100 mm/weight approx. 40 g Order No. 39791

Mat size approx. 75 x 50 mm/weight approx.10 g **Order No. 46998**

Quattro fibre mats made of 935/-silver



Mat size approx. 150 x 100 mm/weight approx. 17 g Order No. 50095

Mat size approx. 75 x 100 mm/weight approx.9 g **Order No. 50096**

Mat size approx. 75 x 50 mm/weight approx. 4,5 g **Order No. 50098**

Rondo fibre mats made of 751/-gold



Mat size approx. 150 x 100 mm/weight approx. 17 g Order No. 50095

Mat size approx. 75 x 100 mm/weight approx.9 g **Order No. 50096**

Mat size approx. 75 x 50 mm/weight approx. 4,5 g **Order No. 50098**

Rondo fibre mats made of 935/-silver



Mat size approx. 150 x 100 mm/weight approx. 17 g Order No. 49991

Mat size approx. 75 x 50 mm/weight approx. 4,5 g **Order No. 49993**

Rondo fibre sheet



Standard sheet thickness: 1,8 mm/width 60 mm 935/- silver sheet 1,5 mm 751/- Rondo fibre mat (top and bottom edge 5 mm) **Order No. 51358**

Standard sheet thickness: 1,3 mm/width 60 mm 935/- silver sheet 1,0 mm 751/- Rondo fibre mat (top and bottom edge 5 mm) **Order No. 51628**

Fascinating finish

A Rondo gold fibre mat, produced by a special process, is welded to a sheet of silver. The fibre sheet offers a wide range of exciting and attractive design options.

Benefits and characteristics

- Innovative, fascinating and high-contrast visual effect
- Versatile in use
- Low gold content
- Price advantage due to material savings

Creative semi-finished parts

Layer sheet

Layer sheet made of 900/- gold and 935/- silver



Standard sheet thickness: 1 mm Width: 90 mm Thickness of gold layer: 0,13 mm **Order No. 39996**

Standard sheet thickness: 2 mm Width: 90 mm Thickness of gold layer: 0,26 mm **Order No. 51105**

Layer sheet made of 500/- palladium and 935/- silver



Standard sheet thickness: 1 mm Width: 90 mm Thickness of palladium layer: 0,13 mm **Order No. 40425**

Layer tube

Layer tube made of 900/- gold and 935/- silver

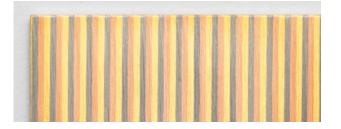


Outside diameter: 5 mm Standard wall thickness: 0,5 mm Thickness of gold layer: 0,2 mm **Order No. 49128**

Outside diameter: 3 mm Standard wall thickness: 0,5 mm Thickness of gold layer: 0,2 mm **Order No. 49316**

Strip gold

Strip gold made of 750/- gold, continuous tricolour (yellow/white/red)



Standard sheet thickness: 1 mm Width: 65 mm Versions: 0,50–0,99 mm Width of colour strip: 1 mm **Order No. 39780**

Strip gold made of 750/- gold, continuous tricolour (yellow/white/red)



Standard sheet thickness: 1 mm Width: 65 mm Versions: 0,50–0,99 mm Width of colour strip: 2 mm **Order No. 39779**

Strip gold made of 750/- gold, continuous bicolour (yellow/white)



Standard sheet thickness: 1 mm Width: 65 mm Versions: 0,50–0,99 mm Width of colour strip: 1,5 mm **Order No. 39782**

> Find out more on page 32 or online ^{C-hafner.de/en}

PRECIOUS METALS RECYCLING

Efficient processes and reliable processing are the hallmarks of precious metal recycling at C.HAFNER. We ensure a highly accurate calculation of the precious metal value of your separated material using the highest technological standards – and ensure prompt payment or settlement of your semi-finished product order!

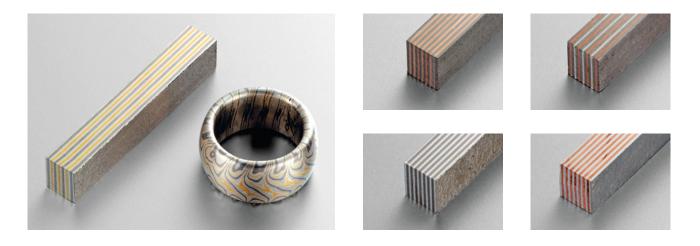
Mokume gane

Semi-finished products based on a time-honoured Japanese technique

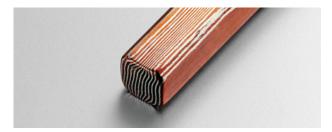
Mokume (wood grain) and gane (metal) is a Japanese metal processing technique with a more than 400-year tradition. The special technique of bonding together different precious, and some non-precious, metal to form solid "billets", and the subsequent process of cutting and flattening creates a range of surface patterns of highly organic character that are reminiscent of moving water or wood grain.

Mokume gane blocks

Our mokume gane blocks are available in a range of alloys. These can be surface-welded and converted into patterned sheets by milling, cutting, forging and rolling the material to individual requirements.



Mokume gane octagonal wire silver/copper



27 layers Thickness: 9,5 mm **Order No. 40977**

	Mokume gane blocks							
Description	Size	Weight	Order No.					
Fine silver/copper – 15 layers	x 0.5 mm							
Block 1	approx. 45 x 8,5 x 7,5 mm	approx. 26,8 g	40051					
Block 2	approx. 90 x 8,5 x 7,5 mm	approx. 54,0 g	40052					
Block 3	approx. 90 x 17 x 7,5 mm	approx. 119,9 g	40053					
Rolled profile	approx. 70 x 6,5 x 6,5 mm	approx. 30 g	58547					
Silver 935/palladium 500 – 15 l	ayers x 0.5 mm							
Block 1	approx. 45 x 8,5 x 7,5 mm	approx. 31,1 g	40060					
Block 2	approx. 90 x 8,5 x 7,5 mm	approx. 61,5 g	40061					
Block 3	approx. 90 x 17 x 7,5 mm	approx. 138,1 g	40062					
Rolled profile	approx. 70 x 6,5 x 6,5 mm	approx. 32 g	58526					
Silver 935/gold 917 – 8 layers >	x 0.5 mm, 7 layers x 0.5 mm							
Block 1	approx. 45 x 8,5 x 7,5 mm	approx. 40,56 g	40063					
Silver 935/palladium 950 / gold	1 917 – 15 layers x 0.5 mm							
Block 1	approx. 45 x 8,5 x 7,5 mm	approx. 34,1 g	51687					
Rolled profile	approx. 70 x 6,5 x 6,5 mm	approx. 37 g	58527					
Palladium 500/red gold 585/sil	ver 935 – 15 layers x 0.5 mm							
Block 1	approx. 45 x 8,5 x 7,5 mm	approx. 32,1 g	46757					
Rolled profile	approx. 70 x 6,5 x 6,5 mm	approx. 33,2 g	58530					
Palladium 500/red gold 585 – 1	5 layers x 0.5 mm							
Block 1	approx. 45 x 8,5 x 7,5 mm	approx. 33,7 g	50330					
Rolled profile	approx. 70 x 6,5 x 6,5 mm	approx. 35 g	58531					
Palladium 500/yellow gold 750	– 15 layers x 0.5 mm							
Block 1	approx. 45 x 8,5 x 7,5 mm	approx. 38,4 g	43456					
Rolled profile	approx. 70 x 6,5 x 6,5 mm	approx. 38 g	58533					
Silver 935/white gold 585 – 15	layers x 0.5 mm							
Block 1	approx. 45 x 8,5 x 7,5 mm	approx. 34,5 g	51679					
Green gold 751/palladium 500/	/silver 935							
Block 1	approx. 45 x 8,5 x 7,5 mm	approx. 36 g	54854					
Fine silver / shibuichi / copper	– 15 layers x 0.5 mm							
Block 1	approx. 45 x 8,5 x 7,5 mm	approx. 28,1 g	57258					
Rolled profile	approx. 70 x 6,5 x 6,5 mm	approx. 30 g	58534					
Fine silver / shibuichi – 15 laye	ers x 0.5 mm							
Block 1	approx. 45 x 8,5 x 7,5 mm	approx. 28,1 g	44627					
Rolled profile	approx. 70 x 6,5 x 6,5 mm	approx. 30 g	58544					
Fine silver / shakudo – 15 laye	rs x 0.5 mm							
Block 1	approx. 45 x 8,5 x 7,5 mm	approx. 28,1 g	44626					
Rolled profile	approx. 70 x 6,5 x 6,5 mm	approx. 30 g	58543					
Shibuichi / shakudo / Ag1000 -	- 15 layers x 0.5 mm							
Block 1	approx. 45 x 8,5 x 7,5 mm	approx. 28,1 g	44629					
Rolled profile	approx. 70 x 6,5 x 6,5 mm	approx. 30 g	58535					

Mokume gane sheets

The redy-to-use Mokume gane sheets are available in a range of different coloured layers and can be hand-

worked to create totally unique items of jewellery.

Mokume gane JAZZ 935/- silver/copper/shakudo/shibuichi



Sheet thickness: 0,52 mm/Width: 76 mm Order No. 39795

Mokume gane WOOD 935/- silver/copper



Sheet thickness: 0,52 mm/Width: 76 mm Order No. 46069

Mokume gane WAVES 935/- silver/copper/shibuichi



Sheet thickness: 0,52 mm/Width: 76 mm Order No. 46071

Mokume gane RANDOM 935/- silver/copper



Sheet thickness: 0,52 mm/Width: 76 mm Order No. 39796

Mokume gane SUMMERRAIN 935/- silver/copper



Sheet thickness: 0,52 mm/Width: 76 mm Order No. 46070

Patina solution



The patina is a special solution for our mokume gane metal combinations. **Order No. 52280**

All the mokume gane patterned sheets shown above are multi-layer.

Silver clay

Semi-finished product in the form of a modelling material – Creative freedom in fine silver

In contrast to the rigid form of precious metal, silver clay is a pliable material that can be shaped and moulded into a specific form, either by your hands or using a variety of tools. This opens up a whole new range of creative options and gives considerable artistic freedom when it comes to the design of precious metal.



Clay made of fine silver PMC 3

Sachet approx. 50 g Order No. 54292



INFO-SERVICE

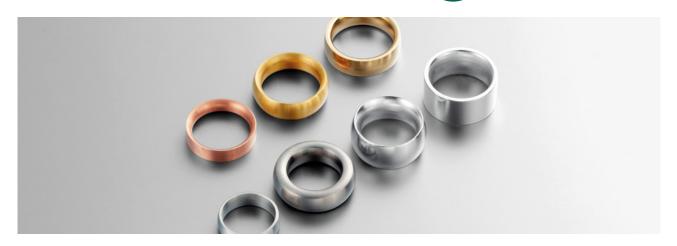
Precious Metal Products

Phone +49 7044 90333-111 edelmetall-produkte@c-hafner.de

Ring blanks



Can be ordered in our online portal on c-hafner.de/en



Ring blanks form the perfect basis for your own inhouse jewellery collections. These blanks can be transformed quickly and cost-efficiently into stunning items of jewellery specifically tailored to individual customer taste or your own unique creative designs. Available in a wide range of profiles, sizes and alloys, C.HAFNER ring blanks are well adapted not only for engagement, wedding and friendship rings, but also for rings crafted to individual designs.

Benefits for the goldsmith

- Reduced workload
- Large selection of profiles, ring sizes, alloys
- Seamless manufacture
- Less working loss
- Low capital investment
- No tool costs

Benefits for the customer

- Selection of 16 different basic profiles
- More than 18 different alloys
- Unique item of jewellery

Product range

Yellow gold	:585/- pale yellow 750/- pale yellow 750/- deep yellow 900/- deep yellow
Rosé gold:	585/- 750/-
Red gold:	585/- 750/-
White gold:	585/- Pd 12% 586/- Pd 19,5% pale 750/- Pd 6,5% champagne 752/- Pd 16%
Silver:	925/- 935/-
Platinum:	950/- PT/W 960/- PT/Cu 950/- PlatinGold
Palladium:	950/- 500/- 950/- Pd/Ru

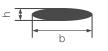
Semi-finished products

Shape 1



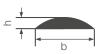
Round

Shape 5



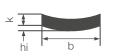
Flat oval

Shape 9



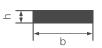
Shallow curvature

Shape 13



Concave outside/ straight edge/ convex inside

Shape 2



Rectangle

Shape 6

Pointed oval/navette

Strong outer curvature/

shallow inner curvature

(same outer and

inner curvature)

Shape 10

Shape 14

Convex outside/

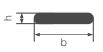
straight edge/

concave inside

hi

ha

Shape 3

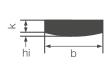


Rectangle/ rounded edge



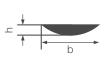
Shallow outer curvature/ strong inner curvature

Shape 11



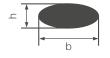
Flat outside/ straight edge/ convex inside

Shape 15



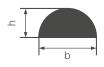
Flat outside/ convex inside

Shape 4



Round oval





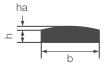
Semi-circular

Shape 12



Convex outside + inside/straight edge

Shape 16



Convex outside/ straight edge/ flat inside



Semi-finished products

Loops

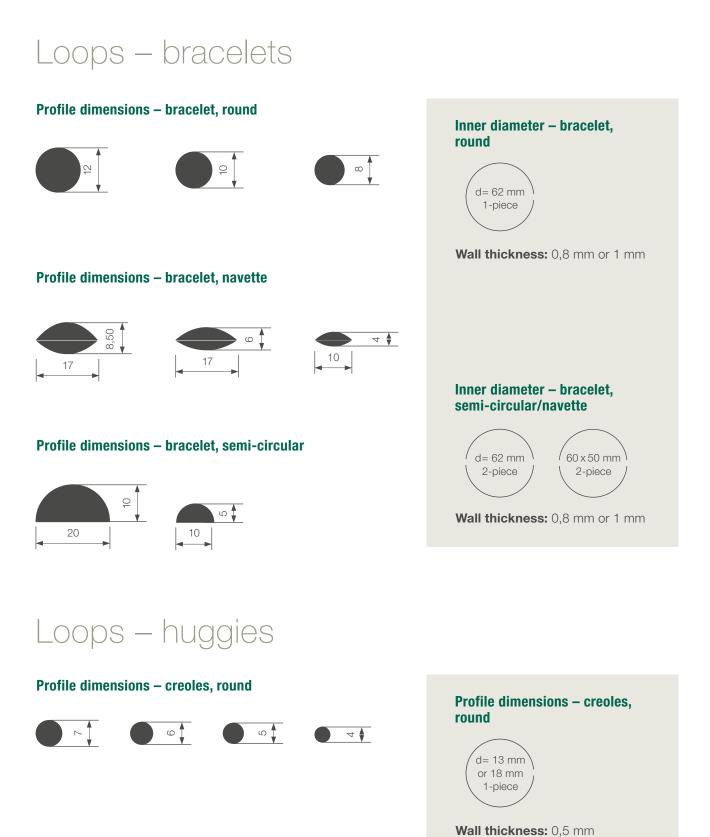


Coils for bangles and ear hoops in different shapes and precious metal alloys

C.HAFNER coils are suitable for a variety of goldsmithing applications. High prefabrication levels reduce the time needed to prepare the preliminary products and the use of materials – processing residues are almost completely eliminated. We can even supply seamless tubing which allows the modern goldsmith to work in a particularly economical way.

Product range

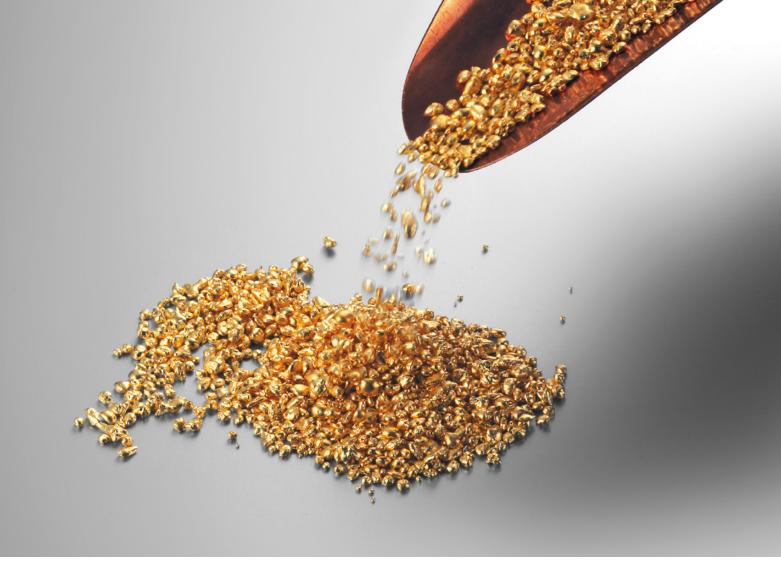
Yellow gold: 750/-White gold: 752/- Pd 16% Silver: 935/-Platinum: 960/- PT/Cu











Services in the field of precious metals

C.HAFNER precious metal recycling offers you the opportunity to recondition your precious metal wastes very quickly and effectively. Your precious metals are reimbursed in no time as a credit to your precious metal account, as a cheque – or you can invest by purchasing C.HAFNER semi-finished or precious metal bars.

In many regards, C.HAFNER Precious Metal Trading forms the backbone of our range of products and services. From traditional buying and selling of precious metals and management of the precious metal accounts to trading in precious metal bullion, we offer support on all aspects of the product and the "currency of precious metal".

Precious Metal Recycling. "Green" and efficient.



Transparency creates trust

Where high value is concerned, trust is a key factor. This is why C.HAFNER relies on maximum transparency during the entire recycling process: Every detail of this process is documented for customers in a simple understandable manner, from sampling and analysis to final settlement.

Settlement

Full homogenisation forms the backround for subsequent analysis and billing. This is followed by prompt settlement of your precious metal in any requested form.

You can choose here between the following options:

- Credit to your precious metal account
- Payment by cheque
- Purchase of semi-finished parts –
- see C.HAFNER Back & Buy
- C.HAFNER bullion

Transport containers

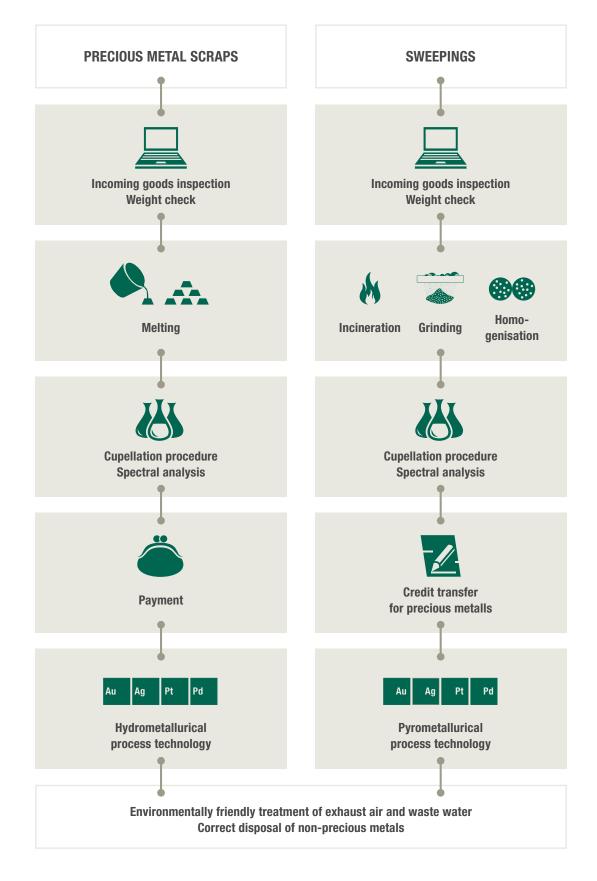
You can hire the required containers from us free of charge. Choose between special containers for sweepings and waste in large quantities, or separated material containers for waste that contains precious metals. Request our collection service or ask us for containers.



Collection service

The pick up service offered by C.HAFNER is the quickest and most convenient way of turning your refinery scrap or sweepings back into cash. Just contact us by telephone, e-mail or fax. We will pick up your refinery scrap or sweepings free of charge from anywhere in Germany within 24 hours, on requested date. We insure your recycling material while it is on road to us. You will get a notice of receipt as soon as your recycling material reaches our company.

Recycling process



C.HAFNER Fine gold bars

Uniquely aesthetics. Made in Germany.

As a gold and silver refinery, C.HAFNER consciously and exclusively processes secondary material. The LBMA's Good Delivery status guarantees the processed gold is of the highest purity and is environmentally safe and ethically sound. In addition, C.HAFNER's precious metal ingots are impressive with their unique appearance and "Made in Germany" label, which makes them an individual and unique investment.

Benefits and characteristics

- Good-Delivery-Status
- Made in Germany
- Guaranteed purity of 999.9
- Marketable worldwide and without markdowns
- Made exclusively of secondary material
- Ethically and ecologically harmless



Delivery forms

- C.HAFNER Fine gold bars, embossed: 1 g, 2 g, 5 g, 10 g, 20 g, 1 oz, 50 g, 100 g
- C.HAFNER Fine gold cast ingots: 1 oz, 50g, 100 g, 250 g, 500 g, 1.000 g



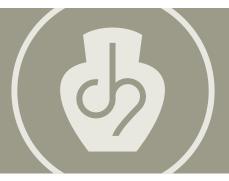
PRECIOUS · METAL · TECHNOLOGY



C.HAFNER is one of Europe's leading providers of products and services in the field of precious metals technology. Our family-run company has stood for the highest quality and reliability ever since 1850. **c-hafner.de/en**







Precious metal technology. For over 165 years.

C.HAFNER is one of Europe's leading suppliers of products and services in the field of precious metals technology. As a familyrun business, we focus on innovative und cost-effective products, close personal contact to our customers and uncompromising environmental standards – out of conviction and true to our tradition.

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