



High-Quality Tool Steel
Made in Germany

Multiblocks are a special product of our company. These are hot-work steels, made by the ESR-route, with large cross-sections offering identical property values of the highest level in all directions (isotropy). These permit production of desired square or flat dimensions through saw cutting as needed.



Our specialty: Multiblocks
in large dimensions up to
62.9 in. x 23.6 in. x 196.8 in.

We Are Driven by Precision and Perfectionism

Saarschmiede GmbH Freiformschmiede is specialized on the manufacture of high-quality forgings of various dimensions. We take a leading position in the field of forging technology and are one of the world's top suppliers of power generation machinery, special alloys, general machinery and tool steel.

PRODUCTION FACILITIES

- 2 forging presses up to 120 MN
- One of the world's largest electro-slag remelting facilities (ESR)
- Various annealing facilities
- Extensive machinery – for workpieces up to a maximum of 330,693 lbs. finished weight and 85.3 ft. in length

SERVICES / PRODUCTS

- Tailored solutions following customer requests
- Specialized expertise
- Competent technical advice
- Cutting of material with bandsawing machines (cutting range of max. \varnothing 129.9 in.)



Our Facilities Are a Guarantee for State-of-the-Art Technology



Electro-Slag Remelting Facilities (ESR)

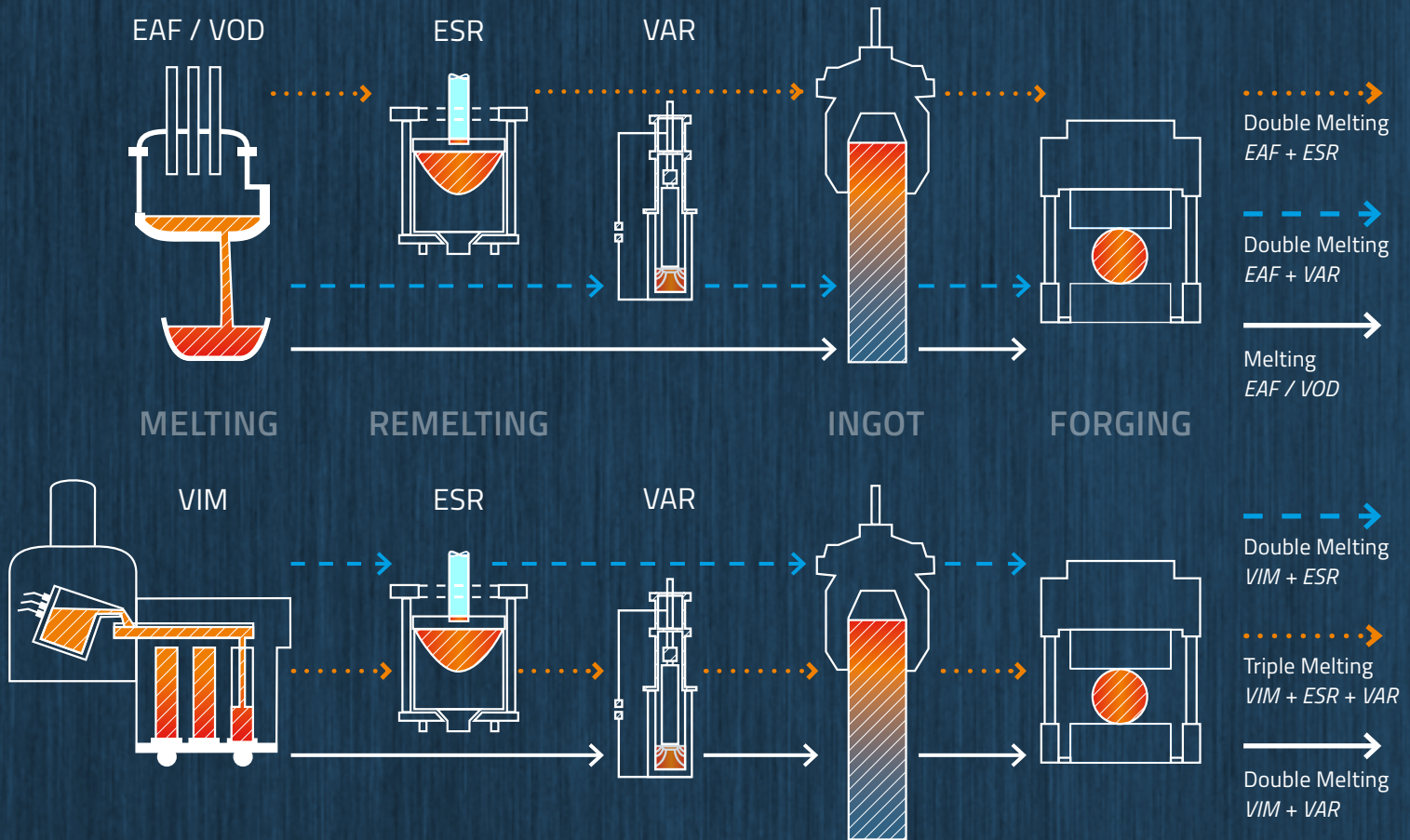


120-MN Press

Our Daily Routine: Melting and Forging

Saarschmiede has the complete production line at its disposal – from melting, forging and heat treatment through to machining on CNC-controlled equipment. We thus have the ideal basis for controlled and reproducible quality, starting from the raw material and ending with the finished product.

The broad range of facilities and the processing techniques for producing various steel grades are outstanding. Additionally, we are constantly investing in our facilities, guaranteeing our customers state-of-the-art technology. VIM, VAR and ESR qualities as well as triple melting qualities form the basis of our cutting edge materials.



Our Melting Facilities

ELECTRO-SLAG REMELTING FACILITIES (ESR)

Ingot format sliding crucible	max. \varnothing 94.5 in. min. \varnothing 39.3 in.
Ingot format stationary crucible	max. \varnothing 51.2 in. min. sq. 13.8 in.
Ingot weight	max. 485,017 lbs.
Year of construction / modernization	2010

ELECTRIC ARC FURNACE (EAF)

Primary extraction	approx. 3,531,466.7 ft ³ /h
Secondary extraction	approx. 2,118,880 ft ³ /h
Ingot weight max.	507,063 lbs.

VACUUM INDUCTION FURNACE (VIM)

Tap weight	17,637 lbs. or 35,274 lbs. (2 crucibles)
Melting performance	max. 3,000 kWh
Pressure	<0.000725 psi
Year of construction	2001

VACUUM ARC REMELTING FURNACES (VAR)

VL 2	max. \varnothing 23.6 in.
Remelting weight	max. 12,125 lbs.
Year of construction	1992
Modernization of the steering	2009
VL 3	max. \varnothing 50.2 in.
Remelting weight	max. 66,139 lbs.
Year of construction	2008

Our Tool Steel Grades Will Meet Your Requirements

GRADE SAARSCHMIEDE	NO. (AISI)	SHORT NAME	C	SI	MN	CR	MO	NI	V	CU	AL
Collex	1.2083 (420)	X40Cr14	0.40	0.40	0.35	13.00					
Collex HQ	1.2083 ESR (420)	X40Cr14	0.40	0.40	0.35	13.00					
Collex HQ	1.2083 VAR (420)	X40Cr14	0.40	0.40	0.35	13.00					
BP 42 Sonder	1.2085 (~420FM)	X33CrS16	0.34	0.30		16.00		0.50			
BP 42 Sonder HQ	1.2085 ESR (~420FM)	X33CrS16	0.34	0.30		16.00		0.50			
MFR	1.2311 (P20)	40CrMnMo7	0.38	0.30	1.50	1.90	0.20				
MFR S	1.2312 (P20 + S)	40CrMnMoS8-6	0.40	0.40	1.50	1.95	0.20				
BP 42	1.2316 (420mod)	X36CrMo17	0.40	0.30	0.60	16.00	1.10	0.45			
BP 42 HQ	1.2316 ESR (420mod)	X36CrMo17	0.40	0.30	0.60	16.00	1.10	0.45			
RDC 2	1.2343 (H11)	X37CrMoV5-1	0.38	1.00	0.35	5.00	1.25		0.45		
RDC 2 (EFS)	1.2343 Micro 900 / BG (H11)	X37CrMoV5-1	0.38	1.00	0.35	5.00	1.25		0.45		
RDC 2 Multibloc HQ	1.2343 ESR Micro 900 / BG (H11)	X37CrMoV5-1	0.38	1.00	0.35	5.00	1.25		0.45		
RDC 2V	1.2344 (H13)	X40CrMoV5-1	0.40	1.00	0.40	5.00	1.30		1.00		
RDC 2V (EFS)	1.2344 Micro 900 / BG (H13)	X40CrMoV5-1	0.40	1.00	0.40	5.00	1.30		1.00		
RDC 2V Multibloc HQ	1.2344 ESR Micro 900 / BG (H13)	X40CrMoV5-1	0.40	1.00	0.40	5.00	1.30		1.00		
RGS 4 Sonder	1.2711 (~L6)	54NiCrMoV6	0.55	0.25	0.70	0.70	0.40	1.60	0.10		
RGS 4	1.2714 (L6)	56NiCrMoV7	0.54	0.25	0.85	1.10	0.50	1.70	0.10		
MFR x 5	1.2738 (P20 + Ni)	40CrMnNiMo8-6-4	0.38	0.25	1.55	2.00	0.23	1.10			
MFR x 5 Sonder	1.2738.02		0.25		1.45	1.30	0.60	1.10	0.10		
MFR x 5 Sonder HQ	1.2738.02 VAR		0.25		1.45	1.30	0.60	1.10	0.10		
MS 40 ESR	1.2743.01 ESR (P20 + Ni mod)		0.12	0.25	1.95		0.35	2.95		1.05	0.9
RABW	1.2767 (6F7)	45NiCrMo16	0.45	0.25	0.35	1.35	0.25	4.00			

Further steel grades available on request

DIMENSIONS

FLAT BARS

Width from approx. 23.6 in. up to 137.8 in.
Thickness from approx. 7.9 in. up to 59 in.
(Ratio width : thickness = max. 10 : 1)

ROUND BARS

Ø from approx.
23.6 in. up to 59 in.

SQUARE BARS

From approx.
19.7 in. up to 59 in.

Further dimensions available on request



Made by Saarschmiede Means "Made in Germany"

For more than 100 years Saarschmiede GmbH Freiformschmiede has been successfully meeting demanding challenges associated with high-quality forgings for various applications. Our technical expertise enables us to manufacture innovative products economically and conserve resources.

In order to constantly improve its processes and products Saarschmiede introduced a quality management system early on, which has gradually been supplemented by a safety

management as well as an environmental and energy management system.

Our current integrated management system (IMS) is certified by independent external bodies, which regularly review and confirm our compliance with the standards ISO 9001, ISO 14001 and ISO 50001. Furthermore, there are customer and industry-specific approvals, confirming the conformity of our IMS with the relevant requirements.

You cannot find your line of business or industry sector in this brochure?

Your applications are not shown?

You have some questions or would like to discuss your requirements with us?

You can obtain further information at
www.saarschmiede.com

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