ARGONAS

Industry Report Casting & Die Casting (Update)

August 2023

AGENDA

1_ Key Trends and Drivers

German casting and die casting industry and current M&A market

Challenging industry environment and M&A market

Market Dynamics & Current Market Environment I

- Production of raw aluminum declined by -12% in Q1/2023 compared to the previous year and amounted to only approx. 783,000 tons
 - The primary aluminum smelters recorded a decline for the sixth consecutive quarter and, with a production volume of 48,400 tons, were -62% below the level before the energy crisis (Q1 2021)

Production volume in the processing of aluminum semi-finished products also decreased by -8% in Q1/2023 and amounted to only 610,000 tons The production volume for manufacturers of extruded products decreased by -13% to approx. 142,000 tons compared to

Market Dynamics & Current Market Environment II

M&A Trends I

-12%

65%

The multiple challenges in the German aluminum and foundry industry are also reflected in M&A market. **65%** of the M&A transactions in German aluminum industry in the last 5 years (2018 – April 2023) were related to insolvency or restructuring situations

M&A Trends II

2x

 Both in insolvency / restructuring situations and in non-restructuring situations, strategic investors acted as buyers in 2/3 of the transactions - and thus 2x as often as financial investors - which underlines the relevance of strategic investors in this sector as potential buyers

-7% for producers of rolled

products (approx. 469,000 tons)

The German foundry industry comprises around 600 companies from the ferrous, steel and nonferrous metal foundry sectors. The industry sector is predominantly medium-sized, with only 9% of the companies in the German foundry industry being large companies with more than 500 employees

- Although the foundry industry accounts only for 1% of the total production of the manufacturing industry, the economic relevance of the industry is much greater due to its supplier function
- Aluminum casting accounts for 85% of nonferrous metal casting production, which means that aluminum casting and aluminum die-casting are particularly importance for the sector.
 Magnesium components for light metal casting applications accounts for additional 3%. Each cast non-ferrous metal products cast copper and cast zinc accounted for additional 6% of total production volume
- Due to the persistently weak demand, especially from the construction and mechanical engineering industries, aluminum production in Germany continued to decline in Q1/2023, which further decreased the utilization and profitability of the German foundries and factories. This effect is additionally intensified by increasing competition and import pressure from countries with lower energy costs. Already around 60% of the world's aluminum is produced in China
- The industry has been facing structural, production-related, macroeconomic and environmental challenges (including the energy crisis, "Green Deal" / "CO² footprint") for some time

A 3



In an overview of selected indices, the DAX outperformed other benchmarks by realising a positive return of 19.1% over the past 12 months

General Market Update | August 2022 - August 2023





Interest Rates

EURIBOR	3-Months	3.82%	6 Months	3.95%	12 Months	4.08%
German Gov. Bonds	2-Years	3.08%	5-Years	2.59%	10-Years	2.56%
Euro Swap Rate	2-Years	3.70%	5-Years	2.22%	10-Years	2.11%
Central Bank Rates	European Central Bank (ECB)	3.75%	Federal Reserve Rate (FED)	5.08%	Bank of England (BoE)	4.5%

Key Market Indicators

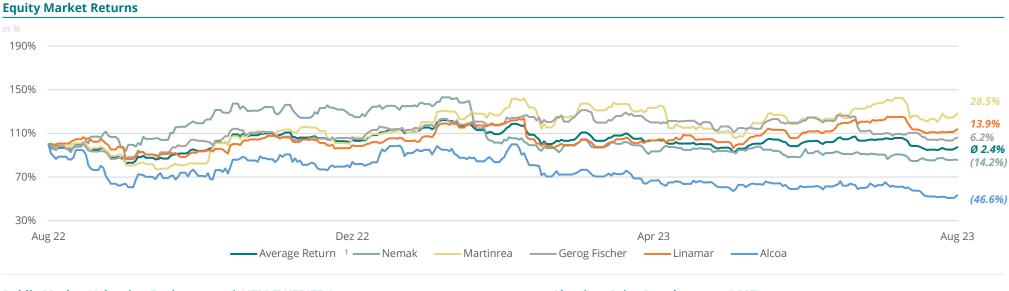
IFO Business Climate Index	\mathbf{C}
Gross Domestic Product (GDP)	\bigcirc
Index of Production	\bigcirc
Producer Prices	0
Consumer Prices	0
Labour Costs	0

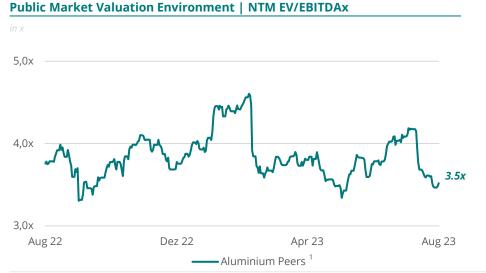
Source: CapitalIQ (as of 29-Aug-2023), Bloomberg, Bank of England, European Central Bank



In general, aluminium companies realised an average equity return of 2.4% over the past 12 months

Industry Market Update | April 2022 – April 2023





Alumium Price Development (LME)



1) Constitutes of Alcoa, Arconic, Georg Fischer, Linarmar, Martinrea and Nemal

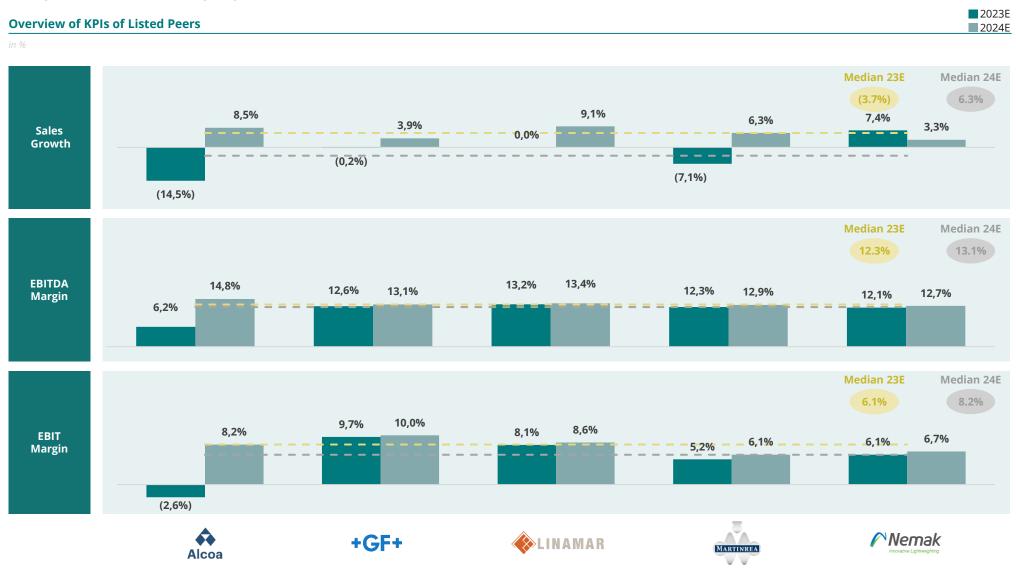
Listed peers in the aluminium sector are traded at a median EV/EBITDA of 3.8x in 2023

Comparable Public Company Valuation



Listed peers in the aluminium sector are expected to have a median EBITDA margin of 12.3% in 2023

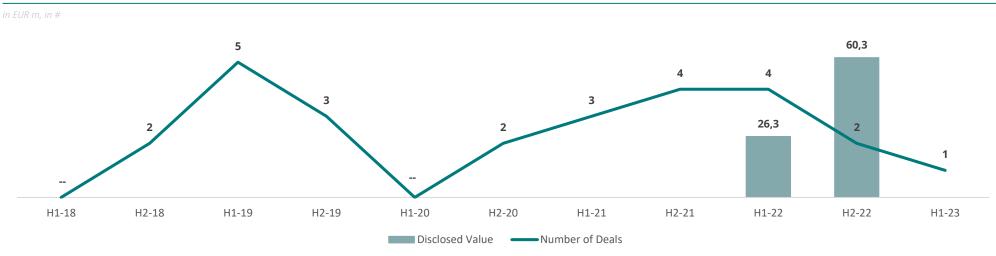
Comparable Public Company Valuation





26 transactions took place in the aluminium sector in Germany since 2018, however, no meaningful valuation levels can be derived due to a lack of public information

Transaction Actvity in Germany | 2018 - August 2023



Overview of Disclosed Transaction Values and Number of Deals

Overview of Multiples (LTM)

КРІ	Unit
Total Transactions	#26
Transaction with Disclosed Value	#2
Transaction with Multiples	#2
EV / Sales Median	n.m.
EV / EBITDA Median	n.m.

Selected Transaction Overview

	Date	Target	Acquirer	Description	Details
	Apr-22	Firmengruppe Wolf	Private Investors	Die-casting specialist	EV: n.a. EV/Sales: n.a. EV/EBITDA: n.a.
	Dec-22	ec-22 HUECK		Manufacturer of aluminium window, door and façade systems	EV: 60.3m EV/Sales: 0.3x EV/EBITDA: 4.6x
Private Equity	Aug-22	ISOLITE	CERTINA	Manufacturer of thermal and acoustic insulation and sealing systems	EV: n.a. EV/Sales: n.a. EV/EBITDA: n.a.
	Jan-22		🍠 ВОНАІ	Manufacturer of aluminium automobile parts	EV: 105.2m EV/Sales: 0.5x EV/EBITDA: 16.2x ²
	Aug-21	c-f-maier		Casting division of CF Maier, producer of cast parts for automotive and industrials	EV: n.a. EV/Sales: n.a. EV/EBITDA: n.a.

Source: Mergermarket

1) Bohai acquried the remaining 25% of trim

2) Due to temporary underperformance (e.g. increased energy and metal costs. Covid 19-effects, etc.

The German aluminium market is predominately characterised by restructuring and insolvency cases

Detailed Overview of Transactions in Germany | 2018 - August 2023

Extensive Transaction Activity in Germany

Date	Target	Acquirer	Classification	Туре	Date	Target	Acquirer	Classification	Туре
Jul-23	Ritter Leichtmetallguss	Weber Automotive	Distressed Situation / Insolvency	Strategic	Mar-21	Wirus Fenster	Indus Holding	Profitable	PE
Apr-23	Regensburger Druckgusswerk Wolf	Private Investors	Distressed Situation / Insolvency	PE	Feb-21	Aluminium Rheinfelden Alloys	United Company RUSAL	Distressed Situation / Insolvency	Strategic
Dec-22	Hueck Industrie Holding	Norsk Hydro	Profitable	Strategic	Nov-20	Schweizer Group (Roding & Plauen)	ae group	Distressed Situation / Insolvency	Strategic
Aug-22	Isolite	Certina Holding	Profitable	PE	Aug-20	PIAD	Breuckmann	Distressed Situation / Insolvency	Strategic
Apr-22	Raeuchle	Winning Group	Distressed Situation / Insolvency	Strategic	Sep-19	Raeuchle	DUBAG Group	Distressed Situation / Insolvency	PE
Mar-22	Hoer Technologie	Magneti Marelli	Distressed Situation / Insolvency	Strategic	Aug-19	noblesse	H. Huttenbrauck Turen	Distressed Situation / Insolvency	Strategic
Feb-22	Real Alloy Europe (German Facilities)	Speira	Profitable	Strategic	Aug-19	Metallgiesserei Karl Scherb	FA Druckguss	Distressed Situation / Insolvency	Strategic
Jan-22	Trimet Automotive Holding	Bohai Automotive Systems	Profitable	Strategic	Mar-19	RMG Metallfachhandel	ST Extruded Products Germany	Profitable	Strategic
Oct-21	Pressmetall Gunzenhausen	LMG Manufacturing	Distressed Situation / Insolvency	Strategic	Mar-19	Aluwerk Hettstedt	ST Extruded Products Germany	Profitable	Strategic
Aug-21	CF Maier Giesserei Scheeff	Thoni Alutec	Distressed Situation / Insolvency	PE	Feb-19	Auer Metallkomponenten	gh Holding	Distressed Situation / Insolvency	PE
Aug-21	Innomotive Systems Hainichen	Mutares	Profitable	PE	Feb-19	Auer Guss	gh Holding	Distressed Situation / Insolvency	PE
Jul-21	Heuschkel Druckguss	Magenwirth Technologies	Distressed Situation / Insolvency	Strategic	Jan-19	SAM Automotive	Fuyao Glass Industry Group	Distressed Situation / Insolvency	Strategic
Apr-21	Finoba Automotive	Hanomag Haertecenter	Distressed Situation / Insolvency	Strategic	Jun-18	MWS Friedrichshafen	Oak Hill Advisors & Perlitz Strategy	Distressed Situation / Insolvency	PE

Contact

Argonas Corporate Finance GmbH

Luisenstraße 41 10117 Berlin **T** +49 (30) 92 27 13 39 **F** +49 (30) 94 04 73 25 info@argonas.de www.argonas.de





Sascha Männel Managing Director / Co-Founder Head of Origination and Market Analysis M +49 (173) 39 38 216 E s.maennel@argonas.de

