



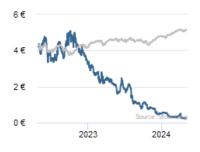
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Opinion	Buy
Upside (%)	250
Price (€)	0.24
Target Price (€)	0.83
Bloomberg Code	ALGAU FP
Market Cap (€M)	10.5
Enterprise Value (€M)	55.2

Momentum	NEGATIVE
Sustainability	3/10
Credit Risk	BBa

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Gaussin, Price (€)
 STOXX 600 (net return),
 Price(Rebased)

Conflicts of interest	
Corporate broking	No
Trading in corporate shares	No
Analyst ownership	No
Advice to corporate	No
Research paid for by corporate	Yes
Corporate access	No
Brokerage activity at AlphaValue	No
Client of AlphaValue Research	No

Gaussin

Pioneer in green-powered closed space mobility but troubled by operational scares

PROS

- First mover in the sustainable (electric and hydrogen) off-road vehicle space (autonomous and manned) with a broad and modular product portfolio that offers reliability and a shorter payback period versus competitors
- Significant upside through the licensing model which will not only allow Gaussin to expand with limited capital but also drive profitability
- Vast market demand across logistics and ports end-markets that are key to decarbonising the transport sector as well as increasing productivity and safety

CONS

- In the near-term, as the operations ramp-up, increased working capital and capex requirements will lead to capital infusion(s)
- With an imminent scale-up of operations, production execution will be key to ensuring timely delivery
- As the peers catch-up on technology, competition will increase across geographies (e.g. China) and may lead to price wars

KEY DATA	12/21A	12/22A	12/23E	12/24E	12/25E
Adjusted P/E (x)	-28.6	-4.28	ns	4.74	2.32
Dividend yield (%)	0.00	0.00	0.00	0.00	0.00
EV/EBITDA(R) (x)	67.4	-11.6	7.82	2.97	2.12
Adjusted EPS (€)	-0.29	-1.09	-0.02	0.05	0.10
Growth in EPS (%)	n/a	n/a	n/a	n/a	104
Dividend (€)	0.00	0.00	0.00	0.00	0.00
Sales (€M)	74.5	73.4	84.7	118	148
EBIT margin (%)	-9.49	-42.0	1.00	3.30	5.10
Attributable net profit (€M)	-7.31	-29.7	-0.86	2.29	6.16
ROE (after tax) (%)	-33.4	-205	-27.9	49.6	48.1
Gearing (%)	51.9	425	1,906	421	199



Detailed financials at the end of this report

Key Ratios		12/22A	12/23E	12/24E	12/25E
Adjusted P/E	х	-4.28	ns	4.74	2.32
EV/EBITDA	х	-11.6	7.82	2.97	2.12
P/Book	х	28.0	44.7	1.89	0.83
Dividend yield	%	0.00	0.00	0.00	0.00
Free Cash Flow Yield	%	-21.6	-7.69	-34.9	-0.99
ROE (after tax)	%	-205	-27.9	49.6	48.1
ROCE	%	-80.4	2.34	7.74	11.4
Net debt/EBITDA	х	-1.72	2.38	1.91	1.36
Consolidated P&L		12/22A	12/23E	12/24E	12/25E
Sales	€M	73.4	84.7	118	148
EBITDA	€M	-14.1	12.7	18.6	26.1
Underlying operating profit	€M	-30.7	0.85	3.88	7.57
Operating profit (EBIT)	€M	-30.9	0.65	3.68	7.37
Net financial expenses	€M	-1.56	-1.50	-1.50	-1.50
Pre-tax profit before exceptional items	€M	-32.4	-0.85	2.18	5.87
Corporate tax	€M	0.00	-0.01	0.11	0.29
Attributable net profit	€M	-29.7	-0.86	2.29	6.16
Adjusted attributable net profit	€M	-29.5	-0.66	2.49	6.36
Cashflow Statement		12/22A	12/23E	12/24E	12/25E
Total operating cash flows	€M	-16.8	4.19	5.75	11.7
Capital expenditure	€M	-10.4	-7.62	-9.41	-10.4
Total investment flows	€M	-10.4	-8.62	-9.41	-10.4
Dividends (parent company)	€M				
New shareholders' equity	€M	8.96	0.00	0.00	0.00
Total financial flows	€M	22.7	24.0	-3.50	-6.50
Change in net debt position	€M	-18.1	-5.93	-5.16	-0.15
Free cash flow (pre div.)	€M	-28.7	-4.93	-5.16	-0.15
Balance Sheet		12/22A	12/23E	12/24E	12/25E
Goodwill	€M	7.07	7.07	7.07	7.07
Total intangible	€M	7.07	7.07	7.07	7.07
Tangible fixed assets	€M	17.7	12.7	15.3	17.8
WCR	€M	2.12	5.62	13.6	23.2
Total assets (net of short term liabilities)	€M	36.4	37.1	48.6	58.8
Ordinary shareholders' equity (group share)	€M	4.75	1.43	7.80	17.8
Provisions for pensions	€M		0.00	0.00	0.00
Net debt / (cash)	€M	24.3	30.3	35.4	35.6
Total liabilities and shareholders' equity	€M	36.4	37.1	48.6	58.8
Gross Cash	€M	10.2	29.7	22.6	17.4
Per Share Data		12/22A	12/23E	12/24E	12/25E
Adjusted EPS (bfr gwill amort. & dil.)	€	-1.09	-0.02	0.05	0.10
Net dividend per share	€	0.00	0.00	0.00	0.00
Free cash flow per share	€	-1.06	-0.15	-0.10	0.00
Book value per share	€	0.17	0.04	0.13	0.29
Number of diluted shares (average)	Mio	27.2	32.8	49.6	62.1



Contents

Businesses & Trends	4
Money Making	9
/aluation	12
DCF	13
NAV/SOTP	14
Debt	15
North Knowing	16
Sustainability	17
Governance & Management	18
Environment	19
Social	21
Staff & Pension matters	22
Jpdates	23
Target Price & Opinion	25
Graphics	26
Financials	29
Methodology	37



Businesses & Trends

Gaussin is a family-owned company dating back more than a century. Founded in 1880 by Eugène Gaussin, it is currently headed by Christophe Gaussin. It is essentially an engineering company that designs, assembles, and sells innovative products and services in the transport and logistics sectors. The company's know-how spans across off- and on-road vehicles, manned as well as autonomous, with valuable expertise in the integration of all types of batteries, particularly electric and hydrogen fuel cells. With more than 50,000 vehicles worldwide, Gaussin enjoys a strong reputation in four fast-expanding fields: Port terminals, Airports, Logistics and People Mobility. The company also owns an important subsidiary in Metalliance, which specialises in the design and construction of industrial and mobile equipment used in infrastructure in the transport sector (road, rail, underground rail) and the energy sector (oil and gas, gas and steam, etc.). Over the years, the company has positioned itself well to tackle the sustainable transport space and leads the way with its innovation, diverse customer base, and an established partner network.

Meeting an important need

Being in the industry for so long, the company's CEO Mr Christophe Gaussin had the foresight to assess the demand for sustainable transport in off-road vehicles early on. Consequently, since 2018, the company has fully shifted its focus on the production and sale of electric vehicles. The company's product offerings are based on various key differentiators such as:

- proprietary modular platform design with or without the cab; manned or autonomous
- energy-agnostic platform with the flexibility to be battery electric or hydrogen electric
- energy diversity with battery swap and/or fast charging
- end-to-end offering including turnkey solutions such as autonomous driving and robotics

With these advantages, the company proposes holistic offerings to its customers covering energy generation, storage, charging, refuelling, and autonomous driving/fleet management software. Additionally, Gaussin's modular platform makes its vehicles suitable for a variety of applications in different end-markets such as Logistics (Industrial and Traditional), Seaports, Airports, Mobility, and Marine. From a near-term perspective, the company believes that the Logistics and Seaports markets are where the transition to emission-free vehicles (autonomous or manned) is the fastest growing. With the Transport and Logistics sectors accounting for about one-fifth of global carbon emissions, the players in these sectors are investing heavily to shift to zero-emission vehicles to fulfil their ESG targets and meet net-zero commitments on various levels. Furthermore, there is also a push from governments across the world to meet similar targets. Thus, Gaussin is ideally placed to capitalise on this crucial need across these sectors to decarbonise themselves fully at most by 2050.



With large addressable markets

According to various market reports, the global terminal tractor market stood at c. \$700m in 2020 and is expected to grow to \$1.05bn by 2027 at a CAGR of 6%. The company's main markets are Logistics, Seaports, Airports, and Mobility, with the first two markets being the key addressable markets in the near term. Within Logistics, there are about 150,000 warehouses globally with a third located within EU and the US. An average warehouse uses 2-10 vehicles for movement within the premises and assuming a conversion rate of 10% from diesel to electric vehicles, the case for demand is solid. The second key market, Ports, is also a lucrative market as the number of containers is expected to grow. Additional capacity will also be added from various greenfield projects and, given that this particular market suffered from driver shortages, there is a conducive environment for autonomous sustainable transport. The remaining two markets offer similar opportunities but it may be some time before that demand comes through. Lastly, given the increased emphasis on sustainability by corporations and governments across the globe, we postulate that the conversion rate will be higher than anticipated. Assuming this is true, the electric vehicle sub-segment within this market will grow at a faster pace, whereas growth in diesel vehicles will moderate.

Innovation driven

Gaussin is one of those organisations where innovation sits at the heart of what it does. The company has been consistently investing in R&D for many years and has spent about €22m in this area between 2017 and 2022. It uses this R&D budget not only to innovate but to also show its customers its wide range of capabilities. Consequently, owing to this intent to innovate, Gaussin has c. 100 patents on key strategic technologies that are still valid (under patent protection). On average, the company files 10 patents per year. These patents focus on important areas such as robotics, modular design, and energy management software for electric & hydrogen-powered vehicles, etc. Lastly, given Gaussin's steadfast commitment to innovation, we believe that the company will continue to invest in R&D, which in turn will give it more levers to grow.

Wide and burgeoning customer base

Following a sustained development in R&D and testing, Gaussin is now scaling up its operations. Even before entering into purchase contracts with Amazon and UPS, Gaussin's customer base comprised of global, regional and national customers. To date, it has signed contracts with more than 60 customers across various sectors including Logistics, Seaports, and Airports. Such a diverse base with a stream of steady orders minimises customer concentration risk and ensures a stable revenue stream. Additionally, this diversified customer base offers resilience under volatile demand environments. Please see the image below highlighting some of Gaussin's customers. (Please read Money Making for details about the Licensing business model.)





Entrenched yet diverse partner network

Over numerous years of operations, Gaussin has developed a number of collaborative partnerships including ecosystem partners, suppliers, and strategic stakeholders. With the help of its ecosystem partners, Gaussin can fulfil the majority of its customers' requirements and facilitate the ease of transition as the latter increasingly opt for sustainable solutions. These partners include companies such as Plug Power, McPhy, Lhyfe, HRS, etc., to support the hydrogen-run products to names such as ABB, and EDN for charging solutions. In addition to its ecosystem partners, Gaussin also has several partners to ensure the supply of critical components and technologies. These include NVIDIA, Meritor, Plastic Omnium, Faurecia, Bosch, and more. In other words, Gaussin has a minimum of two or three suppliers for most of its inputs so that supply-chain risk is well diversified. This dual or triple sourcing strategy also helps purchasing power and delivery assurance. Overall, these partners not only provide Gaussin access to the latest technologies, resources and expertise to enhance its offerings and establish a strong platform for future growth across the global market, but they also help the company become a one-stop-shop for its customers.





A leg up on the competition

Thanks to its well-rounded portfolio, wide network of partners (suppliers as well as strategic partners), and investments in innovation, Gaussin has an edge over its peers. At a time when Gaussin is offering modular end-to-end solutions for sustainable transport systems, its peers are still mainly selling diesel-run systems and are only in the early stages of developing sustainable alternatives. Moreover, with more than 50,000 vehicles (mostly diesel) and equipment in operation already, its products have been validated by its customers and can operate even in challenging conditions. Some of Gaussin's peers are Terberg, Kalmar, Sany, etc.

But execution risk remains

Gaussin plans to scale-up its deliveries immensely in 2023 and most of these deliveries are in the US for Amazon. The company has the manufacturing capacity to fulfil this order in France but doing so would require increased investments in working capital and manpower. While the company aims to expand Gaussin's commercial and production footprint in North America, there have been no definitive indications yet of a potential licensee. Without such an arrangement, we see a potential execution risk, which could make things tricky for future large orders.

Divisional Breakdown Of Revenues

	O. atau	0	40/005 4	40/045	10/055	Change 23E/22		Change 24E/23E	
	Sector	12/22A	12/23E	12/24E	12/25E	€M	of % total	€M	of % total
Total sales		73.4	84.7	118	148	11+	100%	33*	100%
Product Sales	Engineering-Heavy Constr.	51.3	53.8	76.2	96.5	3 ↑	22%	22*	67%
Services	Engineering-Heavy Constr.	0.95	0.86	1.39	1.85	0*	-1%	1+	2%
Licensing	Engineering-Heavy Constr.	0.32	10.0	20.0	30.0	10 ↑	86%	10 ↑	30%
Other		20.8	20.0	20.0	20.0	-1❖	-7%	0+	0%



Key Exposures

	Revenues	Costs	Equity
Dollar	90.0%	5.0%	0.0%
Emerging currencies	15.0%	0.0%	0.0%
Long-term global warming	0.0%	0.0%	0.0%

Sales By Geography

Other	75.0%
France	25.0%

We address exposures (eg. how much of the turnover is exposed to the \$) rather than sensitivities (say, how much a 5% move in the \$ affects the bottom line). This is to make comparisons easier and provides useful tools when extracting relevant data.

Actually, the subject is rather complex on the ground. The default position is one of an investor managing in €. An investor in £ will obviously not react to a £ based stock trading partly in € as would a € based investor. In addition, certain circumstances can prove difficult to unravel such as for eg. a € based investor confronted to a Swiss company reporting in \$ but with a quote in CHF... Sales exposure is probably straightforward but one has to be careful with deep cyclicals. Costs exposure is a bit less easy to determine (we do not allow for hedges as they can only be postponing the day of reckoning). How much of the equity is exposed to a given subject is rarely straightforward but can be quite telling In addition, subjects are frequently intertwined. A \$ exposure may encompass all revenues in \$ pegged currencies and an emerging currency exposure is likely to include \$ pegged

currencies as well.

Exposure to global warming issues is frequently indirect and may require to stretch a bit imagination.



Money Making

Business model

Gaussin's business model centres around the design, manufacture, and sale of electric (manned and autonomous) vehicles for a variety of industries, including Logistics, Seaports, Airports, and People Mobility. The company has a proprietary modular design approach which allows for the efficient development and manufacture of a wide range of vehicles with a reduced number of variants. This approach also enables rapid training for licensing and localisation programmes, shorter learning curves for assembly processes, and faster integration of alternative suppliers or technologies. Gaussin's engineering department designs several proprietary vehicle components and software, such as vehicle bodies, harnesses, and control systems. These components are either manufactured in-house or sourced from qualified best-in-class suppliers, ensuring high-quality and cost-effective production.

In addition to the sales of vehicles, Gaussin also generates recurring revenue through after-sale services, upselling of sold products, and licensing fees. The company has a robust licensing strategy that targets key geographic areas such as North America and the Middle East, with the aim of granting new Exclusive Master Licensees within 2023 to accelerate the distribution of its products.

Gaussin's revenue stream comes from three main sources, sale of products, licensing, and services. In the products category, the company generates revenues from the sale of its innovative modular vehicles and underground works (Metalliance). The second category, i.e. licensing, is the most recently developed and has become a key pillar for the company's growth over the last four years. This category capitalises on the strengths of the company and is a lucrative avenue for future growth (please see below for a detailed description). Finally, there is services whose scope covers the potential opportunities arising from aftersales across its deployed fleet. Currently small, this category holds potential for expansion.

Vehicles will dominate

Historically, revenues from Metalliance have, on average, made up more than half of Gaussin's revenues with a lower contribution coming from vehicle sales. However, moving forward the company expects this trend to reverse. In fact, it will happen in 2023. Until now, Gaussin was primarily focused on R&D and testing of its vehicle portfolio but it is now ready to scale up. Including Amazon's order of more than 300 vehicles in the US, the company is already guiding for delivery of more than 400 vehicles this year and expects to cross €100m in sales. In other words, more than 70% of 2023 total revenues will come from vehicle sales. Beyond 2023, the company believes its deliveries will surpass those of 2023 and sees vehicles sales contributing c. 90% to the total revenues on a regular basis.

Lucrative licensing model

Gaussin's licensing strategy is currently in its initial phase and was originally driven by opportunities that arose at the time. For example, ST Engineering



Singapore approached Gaussin to acquire its electric autonomous AGV Performance licence to participate in a large tender with PSA Singapore. Similarly, AMTC in Qatar and Nexport in Australia decided to choose Gaussin technology to complement their activities with zero-emission vehicles and address new markets. The company is now in the process of a stringent assessment of potential Exclusive Master Licensees for the MENA, US, and Asia markets to accelerate its global expansion. This is because these key areas have high potential and the success of the deployment in these territories will require a well-established and connected regional partner that shares the same vision and ambition to become a regional leader in the field. For this purpose, Gaussin is in discussion with sovereign entities, industrial partners, and investors in these geographies. At the same time, these partnerships will be carefully selected and vetted to ensure they align with Gaussin's vision and goals and have the capability to become regional champions in the field of electric and autonomous vehicles.

Financially, this is the most valuable revenue stream for the company as the conversion of revenues into profits is substantial. Generally, the average licence duration is 20 years, and it involves an upfront payment (entry fee), royalties, and profit sharing (in the case of a joint venture with the licensee, in this case royalties are eliminated). The value of the licence depends on the products, territory, exclusivity, and duration of the contract. From 2023 onwards, Gaussin aims to generate at least €30m in licensing revenues per year. Eventually, as the company grants more licences, the revenue from direct sales by Gaussin within the territory will decrease. As this transpires, the company's large production capacity in France will enable a smooth transition to a new model whereby Gaussin will receive substantial revenue from activities that do not require working capital financing (as it will be handled by the licensee). This future model will enable Gaussin to self-finance its continuous R&D and open a new cycle of licensing for future technologies.

Future growth from aftersales

Another aspect worth highlighting is the future potential of aftersales. Gaussin has access to extensive telemetry of each vehicle it sells. The company can monitor remotely the state of various parameters such as battery life, oil levels, component wear, etc. By leveraging this data, the company can offer its customers predictive maintenance and repair, thus, generating recurring revenues. In terms of numbers, this area can grow in line with vehicle sales as aftersales make up about 3% of a vehicle's selling price each year.

Focused on improving profitability

Despite an increase in licensing revenues in the recent past and their strong drop-down to profitability, Gaussin has been unable to break-even consistently at the EBIT level. Moving forward, Gaussin is determined to change this by pulling various levers. First, as the end-markets become more conducive, Gaussin will be selling significantly more units per annum than it has done in the recent past. Very recently, the company indicated that, in 2023, it will sell over 400 units compared to only 30 units in 2022. This will improve the unit economics as the company will have more purchasing power due to increased



scale. Secondly, being a first mover in its markets, the company can, and will, execute planned price increases to generate stronger revenue growth. Finally, it is dedicated to improving margins by reining in discretionary spend (some marketing expenses, prototyping expenses, etc.) by c. €3m per year. Going forward, provided proper execution, these levers will help Gaussin become a consistently profitable company.

Asset-light scaling

To avoid the need of excessive funding, Gaussin's current distribution strategy is designed to minimise customer concentration risk by utilising its current and future licensee network for large-scale distribution opportunities arising from prospective customer orders. This approach allows the company to have a diverse customer base across different regions and territories without committing large pools of capital and other resources. For areas not covered by its licensees, the company can directly serve its customers through its supply base in France, thus, ensuring a strong presence in key markets while also managing its global customer base. Additionally, this approach allows it to provide high-quality products and services to a wide range of customers while being more adaptable to changing market conditions and customer needs, thereby, enabling it to continue growing and expanding its business over time.

Pricing power and switching costs

Due to their numerous advantages, Gaussin's electric and hydrogen-powered vehicles offer their customers a lower lifetime cost of ownership along with significant cost savings in fuel and maintenance, making them a more attractive option for customers compared to diesel vehicles. As a result of this superior payback period, Gaussin has pricing power across its product portfolio. Moreover, the company's pricing is also 15% less than its early-stage competitors, which currently offer limited features.

In terms of switching costs, the company's solutions offer significant benefits of reduced downtime and increased productivity, making it difficult and costly for customers to switch to other options. Additionally, Gaussin's end-to-end solutions with energy generation, storage, charging, and fleet management create a high level of integration and dependency for its customers, hence, further increasing the barriers to switching.

Divisional EBIT

	12/22A	12/22A 12/23E	12/24E 12/25E	12/25E	Change 23E/22		Change 24E/23E	
					€M	of % total	€M c	of % total
Total	-30.9	0.85	3.88	7.57	32	100%	3 ↑	100%
Group EBIT	-30.9	0.85	3.88	7.57	32	1 00%	3 ↑	100%
Other/cancellations	0.00	0.00	0.00	0.00	0	+ 0%	0+	0%

Divisional EBIT margin



Valuation

After years of investments in innovation, Gaussin is now on the cusp of scaling up its business. The company is now ideally positioned to cater to the demand for sustainable solutions in off-road transport. With the Amazon order of more than 300 vehicles due to be delivered in 2023, the company has a good runway for the near term. Moreover, with the company's strategy to leverage its licensing model, to expand its geographic presence, and to execute operational improvements, we believe Gaussin will be able to accelerate revenue growth and expand EBITDA margins.

Our DCF valuation assumes a sales and EBITDA growth of 8% to correspond with the increasing number of deliveries in the future. For the NAV, we consider three segments, Off-road vehicle sales & Metalliance, Services, and Licensing. We value each segment on EV/sales multiples and apply different multiples to account for their contribution to profitability. We value the first segment at 1x sales as this division is yet to achieve breakeven. For the second segment, we apply a 4x multiple as we believe that the service business can be good profit driver due to attractive margins. Lastly, we value the Licensing business at 6x as most of the revenues translate into profits. Gaussin does not have listed comparable peers so, we pick listed peers from our coverage that align closest with the business model of the company. For this exercise, we pick Kion Group and Jungheinrich, which operate in the material handling sector. We do not assign any premium to Gaussin at the moment as we deem the success of its scaling crucial to doing so.

Valuation Summary

Benchmarks		Values (€)	Upside	Weight
DCF		1.11	368%	35%
NAV/SOTP per share		1.45	507%	20%
EV/Ebitda	Peers	0.48	100%	20%
P/E	Peers	0.48	100%	10%
Dividend Yield	Peers	0.00	-100%	10%
P/Book	Peers	0.20	-17%	5%
Target Price		0.83	250%	

Comparison based valuation

Computed on 18 month forecasts	P/E (x)	Ev/Ebitda (x)	P/Book (x)	Yield(%)
Peers ratios	11.3	3.64	1.04	2.36
Gaussin's ratios	3.24	2.57	1.26	0.00
Premium	0.00%	0.00%	0.00%	0.00%
Default comparison based valuation (€)	0.48	0.48	0.20	0.00
KION Group	11.2	2.70	0.91	2.41
Jungheinrich Pref.	11.5	6.62	1.35	2.28



DCF Valuation Per Share

WACC	%	10.0
PV of cashflow FY1-FY11	€M	39.8
FY11CF	€M	14.8
Normalised long-term growth"g"	%	2.00
Sustainability "g"	%	1.60
Terminal value	€M	175
PV terminal value	€M	67.2
PV terminal value in % of total value	%	62.8
Total PV	€M	107

Avg net debt (cash) at book value	€M	32.8
Provisions	€М	5.00
Unrecognised actuarial losses (gains)	€М	0.00
Financial assets at market price	€М	0.00
Minorities interests (fair value)	€М	0.00
Equity value	€М	69.2
Number of shares	Mio	62.1
Implied equity value per share	€	1.11
Sustainability impact on DCF	%	-4.60

Assessing The Cost Of Capital

Synthetic default risk free rate	%	3.50
Target equity risk premium	%	5.00
Tax advantage of debt finance (normalised)	%	25.0
Average debt maturity	Year	5
Sector asset beta	х	1.14
Debt beta	х	1.00
Market capitalisation	€M	14.8
Net debt (cash) at book value	€M	30.3
Net debt (cash) at market value	€M	20.2

Company debt spread	bp	500
Marginal Company cost of debt	%	8.50
Company beta (leveraged)	x	2.31
Company gearing at market value	%	205
Company market gearing	%	67.2
Required return on geared equity	%	15.1
Cost of debt	%	6.38
Cost of ungeared equity	%	9.21
WACC	%	10.0

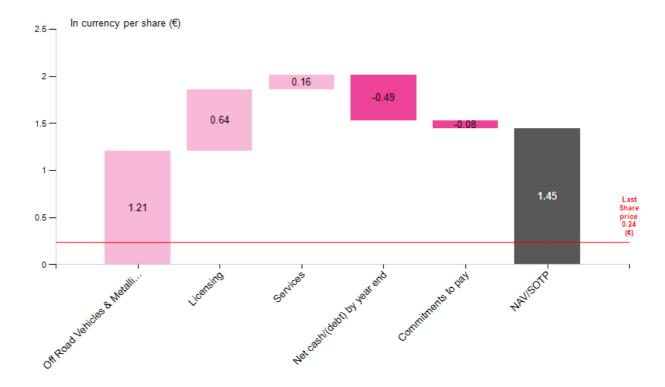
DCF Calculation

		12/22A	12/23E	12/24E	12/25E	Growth	12/26E	12/33E
Sales	€M	73.4	84.7	118	148	7.50%	160	265
EBITDA	€M	-14.1	12.7	18.6	26.1	7.50%	28.1	46.6
EBITDA Margin	%	-19.3	15.0	15.8	17.6		17.6	17.6
Change in WCR	€M	3.40	-3.50	-7.94	-9.67	6.00%	-10.2	-15.4
Total operating cash flows (pre tax)	€M	-16.8	4.20	5.64	11.4		17.8	31.2
Corporate tax	€M	0.00	-0.01	0.11	0.29	5.00%	0.31	0.43
Net tax shield	€М	-0.39	-0.38	-0.38	-0.38	5.00%	-0.39	-0.55
Capital expenditure	€M	-10.4	-7.62	-9.41	-10.4	6.00%	-11.0	-16.6
Capex/Sales	%	-14.1	-9.00	-8.00	-7.00		-6.90	-6.26
Pre financing costs FCF (for DCF purposes)	€M	-27.6	-3.80	-4.03	0.98		6.73	14.5
Various add backs (incl. R&D, etc.) for DCF purposes	€M							
Free cash flow adjusted	€M	-27.6	-3.80	-4.03	0.98		6.73	14.5
Discounted free cash flows	€М	-27.6	-3.80	-3.66	0.81		5.05	5.56
Invested capital	€	28.6	27.1	37.6	49.8		52.8	79.4



NAV/SOTP Calculation

	% owned	Valuation technique	Multiple used	Valuation at 100% (€M)	Stake valuation (€M)	In currency per share (€)	% of gross assets	1. Deferred tax asse
Off Road Vehicles &	100%	EV/Sales	1	75.0	75.0	1.21	60.0%	
Licensing	100%	EV/Sales	2	40.0	40.0	0.64	32.0%	
Services	100%	EV/Sales	2	10.0	10.0	0.16	8.00%	
Other					(1)			
Total gross assets					125	2.01	100%	
Net cash/(debt) by year end					-30.3	-0.49	-24.2%	
Commitments to pay					-5.00	-0.08	-4.00%	
Commitments received								
NAV/SOTP					89.7	1.45	71.8%	
Number of shares net of tre	asury sha	res - year end	l (Mio)		62.1			
NAV/SOTP per share (€)					1.45			
Current discount to NAV/SC	OTP (%)				83.5			





Debt

At the end of 2021, Gaussin had c. €30m in gross debt and €16m in net debt. Of this €30m, €13m was due within a year, €17m between 2-5 years and the remainder after 5 years. By type of borrowing, €22m came from bank borrowings, €2m in lease liabilities, and the remainder in other liabilities. The company also raised about €12m by issuing new shares in June 2022.

Going forward, we expect the company to raise more funds in 2023 to scale up its expansions. This funding is crucial for the company to continue its scaling up and is expected to come from both debt and equity instruments. As these measures will lead to the issuance of new shares, we provisionally allowed for 11.5 new shares issued at €2.7/share (€40m fresh equity).

Detailed financials at the end of this report

Funding - Liquidity

		12/22A	12/23E	12/24E	12/25E
EBITDA	€M	-14.1	12.7	18.6	26.1
Funds from operations (FFO)	€M	-20.9	6.19	12.2	19.9
Ordinary shareholders' equity	€М	4.75	1.43	7.80	17.8
Gross debt	€M	34.5	60.0	58.0	53.0
+ Gross Cash	€M	10.2	29.7	22.6	17.4
= Net debt / (cash)	€М	24.3	30.3	35.4	35.6
Gearing (at book value)	%	425	1,906	421	199
Equity/Total asset (%)	%	13.1	3.86	16.0	30.3
Adj. Net debt/EBITDA(R)	х	-1.72	2.38	1.91	1.36
Adjusted Gross Debt/EBITDA(R)	х	-2.92	5.12	3.39	2.22
Adj. gross debt/(Adj. gross debt+Equity)	%	89.7	97.8	89.0	76.5
Ebit cover	х	-19.7	0.56	2.59	5.05
FFO/Gross Debt	%	-50.5	9.52	19.3	34.3
FFO/Net debt	%	-85.8	20.5	34.4	56.0
FCF/Adj. gross debt (%)	%	-69.5	-7.58	-8.19	-0.25
(Gross cash+ "cash" FCF+undrawn)/ST debt	х	-2.44	2.26	1.74	1.44
"Cash" FCF/ST debt	Х	-3.65	-0.45	-0.52	-0.01



Worth Knowing

Gaussin currently owns three plants in France (one in Hericourt and two in Saint-Vallier) with a total production capacity of 2,000 vehicles per year. Additionally, the company has further capacities in Singapore, Australia, and Qatar through its licensing agreements. The plant in Hericourt is mainly used for working on prototypes and assembly simulations, whereas the two plants in Saint-Vallier cater to European demand with the option to support other regions temporarily as more licensees are brought into the mix. The company is also in the process of localising its production in North America and Asia through new Master Licensees in 2023.

Gaussin's CEO, Mr Christophe Gaussin was elected hydrogen personality of 2022 by the French parliament.

Gaussin SA has been listed on Euronext Growth in Paris since 16 June 2010. Gaussin SA shares have been listed in the E2 trading group (public offering) since 20 July 2012.

Product Catalogue



Shareholders

Name	% owned	Of which % voting rights	% free to float
Christophe Gaussin	6.25%	6.25%	0.00%
Volker Berl	0.88%	0.88%	0.00%
Apparent free float			92.9%



Sustainability

Sustainability score

Sustainability is made of analytical items contributing to the E, the S and the G, that can be highlighted as sustainability precursors and can be combined in an intellectually acceptable way. This is the only scale made available

	Score	Weight	
Governance			
Independent directors rate	3/10	25%	
Board geographic diversity	5/10	20%	
Chairman vs. Executive split	×	5%	
Environment			
CO ² Emission	1/10	25%	
Water withdrawal	1/10	10%	
Social			
Wage dispersion trend	0/10	5%	
Job satisfaction	7/10	5%	
Internal communication	10/10	5%	
Sustainability score	2.8/10	100%	



Governance & Management

Keeping its growth ambitions in mind, Gaussin has bolstered its governance with changes to its executive committee. The company has appointed a new administrative and financial director, a HR director, and a project director to chisel the organisation including improved planning and financial management.

Governance score

Company (Sector)	Ind	dependent b	ooard		
4.6 (7.3)		No			
Parameters	Company	Sector	Score	Weight	
Number of board members	4	8	10/10	5.0%	
Board feminization (%)	0	30	1/10	5.0%	
Board domestic density (%)	75	65	5/10	5.0%	
Average age of board's members	60	60	5/10	5.0%	
Type of company : Small cap, not controlled			10/10	25.0%	
Independent directors rate	25	46	3/10	20.0%	
One share, one vote			×	5.0%	
Chairman vs. Executive split			×	5.0%	
Chairman not ex executive			×	5.0%	
Full disclosure on mgt pay			×	5.0%	
Disclosure of performance anchor for bonus trigger			×	5.0%	
Compensation committee reporting to board of directors			×	5.0%	
Straightforward, clean by-laws			✓	5.0%	
Governance score			4.6/10	100.0%	

Management

Name		Function	Birth date	Date in	Date out	Compensation Cash	on, in k€ (year) Equity linked
Christophe GAUSSIN	М	CEO		1994		(2016)	(2016)
Jean-François STURMEL	М	CFO					
Tariq OUAGUENOUNI	М	COO					
Olivier MERMILLOD	М	Head of Human Resources					
Simon KLEIN	М	СТО					
Aziz AZOUGAGH	М	Executive Officer					
Jean-Claude BAILLY	М	Executive Officer					
Olivier CRAMATTE	М	Executive Officer					
Patrick DUBREUILLE	М	Executive Officer					
William LEE	М	Executive Officer					
Gary PATTERSON	М	Executive Officer					

Board of Directors

Name		Indep	. Function	Completion of current mandate	Birth date	Date in	Date out	Fees / indemnity, in k€ (year)	Value of holding, in k€ (year)
Volcker BERL	M	×	Member	2017		2006		(2016)	(2016)
Christophe GAUSSIN	М	ı X	Member	2018		1995		(2016)	(2016)
Martial PERNICENI	М	■ ✓	Member		1964			(2016)	(2016)
Damien PERSONENI	М	ı X	Member			2008		(2016)	(2016)



Environment

Gaussin's environment score is burdened by the lack of data that acts as input to our scoring methodology. This is not a negative comment as all smaller-sized companies fall into the same category. In fact, we believe that Gaussin's portfolio is well-aligned to help its customers decarbonise and the reporting on this area will improve in the future.

Environmental score

Data sets evaluated as trends on rolling calendar, made sector relative

Parameters	Score	Sector	Weight
CO ² Emission	1/10	6/10	30%
Water withdrawal	1/10	5/10	30%
Energy	1/10	5/10	25%
Waste	1/10	5/10	15%
Analyst's Joker View	50%		&
Environmental score	1.5		100%

Company (Sector)

1.5 (5.4)

Environmental metrics

Comp	ıny
2023	2024
1.5	1.5

Sector figures

Company	Country	Environment score	Energy (total, in GJ)	CO2 Emissions (in tons)	Water Withdrawal (in m3)	Waste (total, (in tons)
Datwyler		5/10	1,145,210	90,116	1,782,699	21,488
Dürr		8/10	485,377	21,269	177,373	13,208
KION Group	_	8/10	2,212,046	183,286	553,000	101,934
NORMA Group		8/10	453,852	5,064	171,943	11,456
SFS Group	•	5/10	1,218,740	95,000		21,249
VAT Group	+	8/10	161,713	14,456	114,081	4,876
Siemens Energy	_	8/10	5,797,000	215,000	6,910,000	139,000
Nel	+	6/10	52,200	1,624		
Landis+Gyr Group AG	•	10/10	134,999	13,107	95,836	3,809
AutoStore	+	3/10		8,119		
Siemens	_	9/10	9,802,000	582,000	12,900,000	257,000
ABB	+	9/10	5,101,200	224,000	2,815,000	182,000
Schneider Electric		9/10	4,324,594	229,347	1,921,569	131,402
Alstom		8/10	3,211,200	179,000	1,412,000	65,869
Atlas Copco	-	10/10	1,865,000	108,000	403,000	39,112
Sandvik	-	10/10	3,745,000	303,000	4,040,000	421,765
Vestas Wind Systems	==	9/10	2,307,600	100,000	341,000	47,000
Schindler	+	7/10	2,467,083	149,681	651,100	46,147
Kone	+	6/10	1,953,720	126,800	239,800	39,000
GEA Group		9/10	876,593	33,018	347,972	13,437
Metso Corporation	+	7/10	1,645,000	127,206	381,000	77,455
Alfa Laval	-	10/10	1,125,889	23,129	739,000	27,574
Wärtsilä	+	6/10	1,171,000	77,334	13,897,000	13,043
Prysmian		4/10	9,971,915	665,104	7,761,474	234,406
IMI	×	7/10	569,605	40,480	193,547	387,000
FLSmidth & Co	-	6/10		36,767	178,064	
Sulzer	+	1/10	878,109	81,339	987,576	19,546



Legrand		9/10	1,688,400	118,000	792,000	61,000
Bilfinger	_	8/10	795,017	52,191	108,283	5,229
Quadient		10/10	60,707	9,299	20,770	1,127
Nexans		4/10	4,226,392	224,274	1,766,973	70,736
OC Oerlikon	+	7/10	1,547,640	145,000	769,300	22,974
Nordex SE	_	7/10	583,967	27,665	133,500	26,051
Georg Fischer	+	6/10	3,394,000	214,000	2,105,000	91,000
Elecnor	£.	3/10		77,732		35,904
ANDRITZ		5/10	2,194,175	134,229	1,678,832	54,905
Heidelberger Druck	_	7/10	795,600	65,717	165,224	35,264
Aalberts	=	5/10	4,062,000	254,000	1,505,000	
Rieter	+	6/10	448,000	50,000	287,000	12,750
Danieli & Co	•	2/10	7,314,724	762,507	2,135,000	165,758
Bekaert		3/10	17,596,800	1,606,581	8,402,000	101,530
Bucher Industries	+	4/10	1,366,776	81,962	0	
Vossloh	_	6/10	678,293	42,332	182,988	
Krones	_	7/10	422,157	24,298	189,878	1,963
Jungheinrich Pref.	_	8/10	1,062,407	85,700	293,000	24,014
Burckhardt Compression	•	7/10	212,785	20,070	78,687	3,530
HUBER+SUHNER	•	7/10	190,314	7,735	677,027	4,221
RATIONAL	_	9/10	48,802	2,397	19,846	1,762
Semperit	=	5/10	2,652,746	225,796	4,800,000	17,820
Koenig & Bauer	_	8/10	121,995	20,752	52,366	9,371
Komax	+	9/10	96,872	5,686	42,060	1,042
Schweiter Technologies	+	4/10	1,201,568	93,030		18,678
Jenoptik	_	9/10	242,917	5,032	92,444	1,312
Bossard	+	7/10	81,202	5,692		1,548
Interroll	•	6/10	11,178,000	9,531	43,000	4,286
Rosenbauer	_	8/10	206,661	11,942	80,858	3,963
ITM Power	ZE	5/10	15,723	184	0	129
CNH Industrial N.V.	=	3/10	6,742,689	252,804	1,467,000	148,074
Gaussin		2/10				
Ocado Group PLC	*	5/10	8,526	118,299		



Social score

Company (Sector)

5.5 (6.5)

Quantitative metrics (67%)

Set of staff related numerical metrics available in AlphaValue proprietary modelling aimed at ranking on social/HR matters

Parameters	Score	Weight
Staffing Trend	10/10	20%
Average wage trend	1/10	35%
Share of added value taken up by staff cost	7/10	25%
Share of added value taken up by taxes	1/10	20%
Wage dispersion trend	0/10	0%
Pension bonus (0 or 1)	0	
Quantitative score	4.3/10	100%

Qualitative metrics (33%)

Set of listed qualitative criterias and for the analyst to tick

Parameters	Score	Weight
Accidents at work	10/10	25%
Human resources development	7/10	35%
Pay	7/10	20%
Job satisfaction	7/10	10%
Internal communication	10/10	10%
Qualitative score	8.0/10	100%

AlphaValue analysts tick boxes on essential components of the social/HR corporate life. Decision about ticking Yes or No is very much an assessment that combines the corporate's communication on relevant issue and the analyst's better judgment from experience.

Qualitative score

Parameters Accidents at work	Yes 샟 / No 🗶	Weight 25%
		25%
Set targets for work safety on all group sites?	¥.	
Are accidents at work declining?	<u> </u>	15.0%
Human resources development		35%
Are competences required to meet medium term targets identified?	✓.	3.5%
Is there a medium term (2 to 5 years) recruitment plan?	✓	3.5%
Is there a training strategy tuned to the company objectives?	×	3.5%
Are employees trained for tomorrow's objectives?	×	3.5%
Can all employees have access to training?	✓	3.5%
Has the corporate avoided large restructuring lay-offs over the last year to date?	✓.	3.5%
Have key competences stayed?	✓	3.5%
Are managers given managerial objectives?	✓	3.5%
If yes, are managerial results a deciding factor when assessing compensation level?	✓.	3.5%
Is mobility encouraged between operating units of the group?	×	3.5%
Pay		20%
Is there a compensation committee?	×	6.0%
Is employees' performance combining group AND individual performance?	✓	14.0%
Job satisfaction		10%
Is there a measure of job satisfaction?	✓	3.3%
Can anyone participate ?	✓	3.4%
Are there action plans to prop up employees' morale?	×	3.3%
Internal communication		10%
Are strategy and objectives made available to every employee?	✓	10.0%
Qualitative score	8.0/10	100.0%



Staff & Pension matters

At the end of 2021, Gaussin employed on average 274 people across its operations in Hericourt and Saint-Vallier. The former employed 86 people, of whom c. 50 people were deployed in R&D dedicated to renewables, autonomous driving, and robotics. The remainder of the workforce was deployed at Saint-Vallier, which focuses on manufacturing and procurement. During the year, the company spent c. €15m on personnel costs, including €4m in salary-related benefits. Regarding pension expenses, the company has no exposure to liabilities from defined benefit plans.

In the future, given the increasing demand for Gaussin's products, the company has a hiring plan to increase significantly its workforce across the area of manufacturing and assembly, which may lead to the doubling of its existing workforce. Thus, the company is preparing itself for growth and expansion in the field of sustainable transport and mobility.



Recent updates

01/12/2023 Opinion change, due to market moves, from Add to Buy

03/11/2023

Factoring in the dilution from CSG and a deterioration in the 2023 performance

Change in Opinion

Reduce vs Buy

Change in EPS

2023 : € -0.02 vs 0.03 ns 2024 : € 0.05 vs 0.11 -55.4%

We have trimmed our EPS estimates after the group withdrew its sales guidance. With sales now expected to be lower than €100, we believe that there is a threat to licensing revenues, which directly add to profits. Additionally, vehicle sales could also be impacted, which would lead to underabsorption of costs and further reduce profits. Lastly, we take into account the potential dilution from existing shares by the issue of 25m additional shares from the loans given to the company by CSG which will increase the share count from 37m to 62m shares.

Change in NAV

€ 1.45 vs 5.30 -72.7%

For the NAV calculation, we have cut our multiples for the licensing and the Service business. Moreover, we have also cut our anticipated sales figures used to derive the valuation of the Vehicles and Licensing businesses. Finally, our NAV also takes on board the impact of the potential dilution looming over the company.

Change in DCF

€ 1.23 vs 4.45 -72.4%

Our DCF valuation is impacted by the increased share count as well as the reduction in our short-term forecasts for the group. We now expect profitability to be lower in 2024 and 2025, and believe that the group will need to revamp its strategy to become profitable on a sustainable basis.

04/05/2023

An opportunistic addition but integration will be key M&A /Corp. Action

Gaussin in partnership with Macnica has acquired Navya, the Lyon-based start-up that develops autonomous shuttles. This is an opportunistic transaction in two ways. First, Gaussin has taken over only the assets of the business, and second, this acquisition offers growth avenues for both companies.

Gaussin and Macnica acquire the assets of Navya for €1.4m

Analysis



Gaussin and Macnica have together acquired 100% of Navya, with Gaussin holding 51% and Macnica the remaining 49%. The consortium paid €1.4m for Navya and has agreed to a €25m financing plan over the next three years. Of this financing plan, €15m is already secured with one-third coming from Gaussin for its 51%. In addition, the group will also take on 149 of Navya's 209 employees, while the remainder will be offered redeployment to Gaussin's production site in Saint-Vallier. The new entity will be headed by Mr. Jean-Claude Bailly, currently the Executive Head of Europe at Gaussin SA.

A symbiotic transaction for both parties

Navya has made a name for itself in autonomous driving and battery technology. The company can already deliver Level 4 automation driving software, which is a step-up when compared to Gaussin's own technology and can help accelerate Gaussin's off-road vehicle development. Moreover, through Navya, Gaussin can also enter into the shuttle business without having to outlay cash that would have been needed to develop a novel platform. Furthermore, Navya can benefit from Gaussin's reach and market exposure (geographical as well as end-markets) to expand its own business. So, we believe that this addition to Gaussin will benefit both companies.

About Macnica

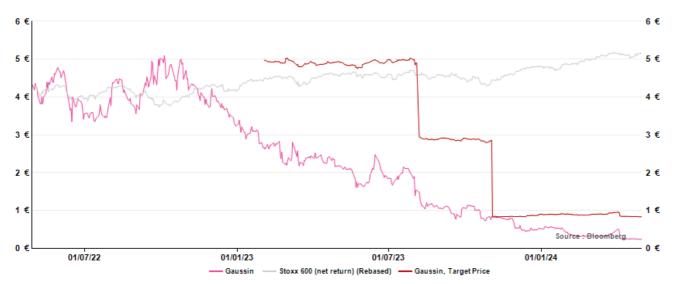
Macnica, is a Japanese listed entity involved in semiconductors, cybersecurity and IoT. Macnica is and also has been a customer for Navya's shuttles.

Impact

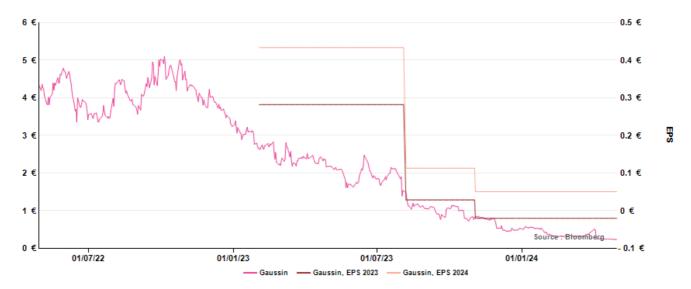
Our estimates are under review as Navya will be consolidated in the group accounts. Additionally, there will also be some adjustments to Gaussin's numbers excluding Navya. Lastly, the funding requirements for the group remain crucial and, with the Amazon order (329 trucks) ramp-up, we believe that funds will need to be raised via equity or debt or both.



Stock Price and Target Price



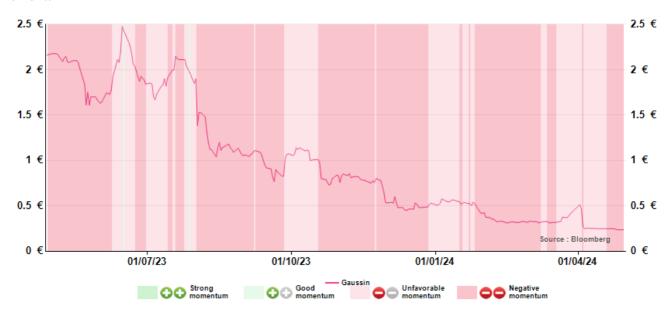
Earnings Per Share & Opinion







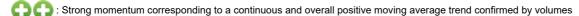
Momentum



Momentum analysis consists in evaluating the stock market trend of a given financial instrument, based on the analysis of its trading flows.

The main indicators used in our momentum tool are simple moving averages over three time frames: short term (20 trading days), medium term (50 days) and long term (150 days). The positioning of these moving averages relative to each other gives us the direction of the flows over these time frames. For example, if the short and medium-term moving averages are above the long-term moving average, this suggests an uptrend which will need to be confirmed. Attention is also paid to the latest stock price relative to the three moving averages (advance indicator) as well as to the trend in these three moving averages - downtrend, neutral, uptrend - which is more of a lagging indicator.

The trend indications derived from the flows through moving averages and stock prices must be confirmed against trading volumes in order to confirm the signal. This is provided by a calculation based on the average increase in volumes over ten weeks together with a buy/sell volume ratio.

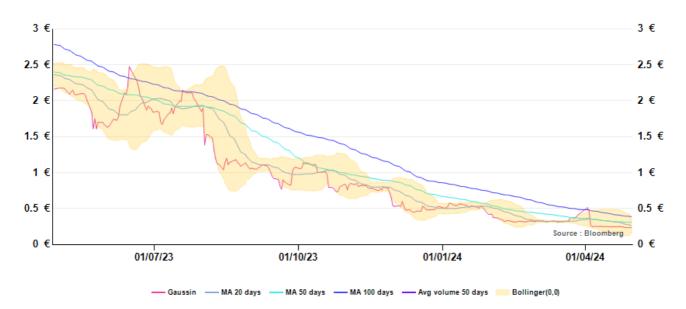


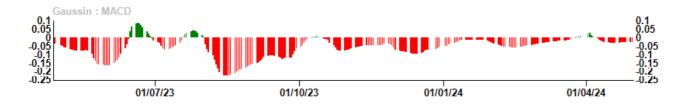
: Relatively good momentum corresponding to a positively-oriented moving average, but offset by an overbought pattern or lack of confirmation from volumes

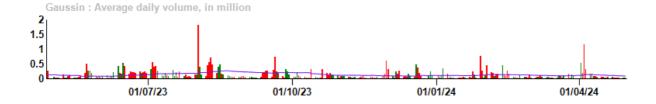
: Relatively unfavorable momentum with a neutral or negative moving average trend, but offset by an oversold pattern or lack of confirmation from volumes



Moving Average MACD & Volume

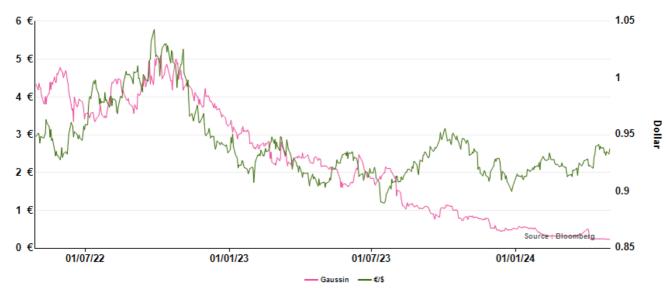




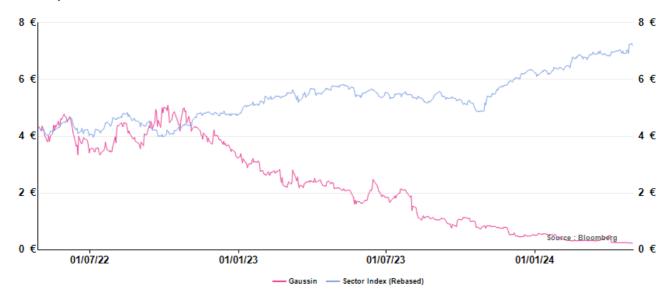




€/\$ sensitivity



Sector Capital Goods





Detailed Financials

Valuation Key Data		12/22A	12/23E	12/24E	12/25E
Adjusted P/E	х	-4.28	ns	4.74	2.32
Reported P/E	х	-4.47	-74.3	6.45	2.40
EV/EBITDA(R)	х	-11.6	7.82	2.97	2.12
EV/EBIT	х	-5.35	ns	14.2	7.31
EV/Sales	х	2.24	1.17	0.47	0.37
P/Book	х	28.0	44.7	1.89	0.83
Dividend yield	%	0.00	0.00	0.00	0.00
Free cash flow yield	%	-21.6	-7.69	-34.9	-0.99
Average stock price	€	4.66	1.73	0.24	0.24



Consolidated P&L		12/22A	12/23E	12/24E	12/25E
Sales	€M	73.4	84.7	118	148
Sales growth	%	-1.46	15.3	38.9	26.2
Sales per employee	€th	227	238	254	246
R&D costs as % of sales	%	0.00	0.00	0.00	0.00
Staff costs	€М	-17.6	-19.6	-25.5	-33.1
Operating lease payments	€M				
Cost of sales/COGS (indicative)	€M	-69.1	-59.3	-76.4	-89.0
EBITDA	€M	-14.1	12.7	18.6	26.1
EBITDA(R)	€M	-14.1	12.7	18.6	26.1
EBITDA(R) margin	%	-19.3	15.0	15.8	17.6
EBITDA(R) per employee	€th	-43.6	35.6	40.1	43.4
Depreciation	€M	-10.1	-7.20	-8.82	-11.1
Depreciations/Sales	%	13.8	8.50	7.50	7.50
Amortisation	€M	-6.44	-4.66	-5.88	-7.42
Underlying operating profit	€M	-30.7	0.85	3.88	7.57
Underlying operating margin	%	-41.8	1.00	3.30	5.10
Other income/expense (cash)	€M				
Impairment charges/goodwill amortisation	€M	-0.18	-0.20	-0.20	-0.20
Operating profit (EBIT)	€M	-30.9	0.65	3.68	7.37
Interest expenses	€M	-0.66	-0.70	-0.70	-0.70
of which effectively paid cash interest expenses	€M	-0.66			
Financial income	€M	0.28	0.20	0.20	0.20
Other financial income (expense)	€M	-1.18	-1.00	-1.00	-1.00
Net financial expenses	€M	-1.56	-1.50	-1.50	-1.50
of which related to pensions	€M		0.00	0.00	0.00
Pre-tax profit before exceptional items	€M	-32.4	-0.85	2.18	5.87
Exceptional items and other (before taxes)	€M	2.70	0.00	0.00	0.00
Current tax	€M	0.00	-0.01	0.11	0.29
Deferred tax	€M				
Corporate tax	€M	0.00	-0.01	0.11	0.29
Tax rate	%	0.00	-1.31	-4.58	-4.84
Net margin	%	-44.2	-1.02	1.95	4.15
Equity associates	€M	0.00	0.00	0.00	0.00
Actual dividends received from equity holdings	€M				
Minority interests	€M	0.00	0.00	0.00	0.00
Income from discontinued operations	€M				
Attributable net profit	€M	-29.7	-0.86	2.29	6.16
Impairment charges/goodwill amortisation	€M	0.18	0.20	0.20	0.20
Other adjustments	€M				
Adjusted attributable net profit	€M	-29.5	-0.66	2.49	6.36
Fully diluted adjusted attr. net profit	€M	-29.5	-0.66	2.49	6.36
NOPAT	€M	-23.0	0.63	2.91	5.68



Cashflow Statement		12/22A	12/23E	12/24E	12/25E
EBITDA	€M	-14.1	12.7	18.6	26.1
Change in WCR	€M	3.40	-3.50	-7.94	-9.67
of which (increases)/decr. in receivables	€M	4.99	-5.49	-8.12	-7.60
of which (increases)/decr. in inventories	€M	-0.98	-2.86	-8.46	-6.22
of which increases/(decr.) in payables	€M	4.56	-2.73	5.64	4.14
of which increases/(decr.) in other curr. liab.	€M	-5.18	7.59	3.00	0.00
Actual dividends received from equity holdings	€M	0.00	0.00	0.00	0.00
Paid taxes	€M		-0.01	0.11	0.29
Exceptional items	€M				
Other operating cash flows	€M	-6.07	-5.00	-5.00	-5.00
Total operating cash flows	€M	-16.8	4.19	5.75	11.7
Capital expenditure	€M	-10.4	-7.62	-9.41	-10.4
Capex as a % of depreciation & amort.	%	62.7	64.3	64.0	56.0
Net investments in shares	€M		-1.00		
Other investment flows	€M	0.00	0.00	0.00	0.00
Total investment flows	€M	-10.4	-8.62	-9.41	-10.4
Net interest expense	€M	-1.56	-1.50	-1.50	-1.50
of which cash interest expense	€M	-0.66	-1.50	-1.50	-1.50
Dividends (parent company)	€M				
Dividends to minorities interests	€M	0.00	0.00	0.00	0.00
New shareholders' equity	€M	8.96	0.00	0.00	0.00
of which (acquisition) release of treasury shares	€M	-0.03	0.00	0.00	0.00
Change in gross debt	€M	13.7	25.5	-2.00	-5.00
Other financial flows	€M	0.66	0.00	0.00	0.00
Total financial flows	€M	22.7	24.0	-3.50	-6.50
Change in scope of consolidation, exchange rates & other	€M	0.08	0.00	0.00	0.00
Change in cash position	€M	-4.44	19.6	-7.16	-5.15
Change in net debt position	€M	-18.1	-5.93	-5.16	-0.15
Free cash flow (pre div.)	€M	-28.7	-4.93	-5.16	-0.15
Operating cash flow (clean)	€M	-16.8	4.19	5.75	11.7
Reinvestment rate (capex/tangible fixed assets)	%	58.6	60.0	61.5	58.3



Balance Sheet		12/22A	12/23E	12/24E	12/25E
Goodwill	€M	7.07	7.07	7.07	7.07
Total intangible	€M	7.07	7.07	7.07	7.07
Tangible fixed assets	€M	17.7	12.7	15.3	17.8
Financial fixed assets (part of group strategy)	€M	1.73	1.70	1.70	1.70
Other financial assets (investment purpose mainly)	€M	0.00	0.00	0.00	0.00
WCR	€M	2.12	5.62	13.6	23.2
of which trade & receivables (+)	€M	15.4	20.9	29.0	36.6
of which inventories (+)	€M	26.4	29.2	37.7	43.9
of which payables (+)	€M	22.2	19.5	25.1	29.3
of which other current liabilities (+)	€M	17.4	25.0	28.0	28.0
Other current assets	€M	7.74	10.0	11.0	9.00
of which tax assets (+)	€M	0.00	0.00	0.00	0.00
Total assets (net of short term liabilities)	€M	36.4	37.1	48.6	58.8
Ordinary shareholders' equity (group share)	€M	4.75	1.43	7.80	17.8
Minority interests	€M	0.44	0.40	0.40	0.40
Provisions for pensions	€M		0.00	0.00	0.00
Other provisions for risks and liabilities	€M	6.86	5.00	5.00	5.00
Deferred tax liabilities	€M				
Other liabilities	€M				
Net debt / (cash)	€M	24.3	30.3	35.4	35.6
Total liabilities and shareholders' equity	€M	36.4	37.1	48.6	58.8
Gross Cash	€M	10.2	29.7	22.6	17.4
Average net debt / (cash)	€M	20.2	27.3	32.8	35.5

EV Calculations		12/22A	12/23E	12/24E	12/25E
EV/EBITDA(R)	x	-11.6	7.82	2.97	2.12
EV/EBIT	x	-5.35	ns	14.2	7.31
EV/Sales	x	2.24	1.17	0.47	0.37
EV/Invested capital	х	5.73	3.67	1.47	1.11
Market cap	€M	133	64.0	14.8	14.8
+ Provisions (including pensions)	€M	6.86	5.00	5.00	5.00
+ Unrecognised actuarial losses/(gains)	€M	0.00	0.00	0.00	0.00
+ Net debt at year end (ex Right-of-use from 2019)	€M	24.3	30.3	35.4	35.6
+ Right-of-use (from 2019)/Leases debt equivalent	€M	0.00	0.00	0.00	0.00
- Financial fixed assets (fair value) & Others	€M				
+ Minority interests (fair value)	€M				
= Enterprise Value	€М	164	99.3	55.2	55.3



Per Share Data		12/22A	12/23E	12/24E	12/25E
Adjusted EPS (bfr gwill amort. & dil.)	€	-1.09	-0.02	0.05	0.10
Growth in EPS	%	n/a	n/a	n/a	104
Reported EPS	€	-1.04	-0.02	0.04	0.10
Net dividend per share	€	0.00	0.00	0.00	0.00
Free cash flow per share	€	-1.06	-0.15	-0.10	0.00
Operating cash flow per share	€	-0.62	0.13	0.12	0.19
Book value per share	€	0.17	0.04	0.13	0.29
Number of ordinary shares	Mio	28.5	37.1	62.1	62.1
Number of equivalent ordinary shares (year end)	Mio	28.5	37.1	62.1	62.1
Number of shares market cap.	Mio	28.5	37.1	44.0	44.0
Treasury stock (year end)	Mio	0.00	0.00	0.00	0.00
Number of shares net of treasury stock (year end)	Mio	28.5	37.1	62.1	62.1
Number of common shares (average)	Mio	27.2	32.8	49.6	62.1
Conversion of debt instruments into equity	Mio				
Settlement of cashable stock options	Mio				
Probable settlement of non mature stock options	Mio				
Other commitments to issue new shares	Mio				
Increase in shares outstanding (average)	Mio	0.00	0.00	0.00	0.00
Number of diluted shares (average)	Mio	27.2	32.8	49.6	62.1
Goodwill per share (diluted)	€	0.01	0.01	0.00	0.00
EPS after goodwill amortisation (diluted)	€	-1.09	-0.03	0.05	0.10
EPS before goodwill amortisation (non-diluted)	€	-1.09	-0.03	0.05	0.10
Payout ratio	%	0.00	0.00	0.00	0.00
Capital payout ratio (div +share buy back/net income)	%	-0.09	0.00	0.00	



Funding - Liquidity		12/22A	12/23E	12/24E	12/25E
EBITDA	€M	-14.1	12.7	18.6	26.
Funds from operations (FFO)	€M	-20.9	6.19	12.2	19.9
Ordinary shareholders' equity	€M	4.75	1.43	7.80	17.
Gross debt	€M	34.5	60.0	58.0	53.0
o/w Less than 1 year - Gross debt	€M	7.62	11.0	10.0	12.0
o/w 1 to 5 year - Gross debt	€М	19.9	24.0	25.0	21.0
o/w Beyond 5 years - Gross debt	€M	6.98	25.0	23.0	20.0
+ Gross Cash	€M	10.2	29.7	22.6	17.4
= Net debt / (cash)	€M	24.3	30.3	35.4	35.
Bank borrowings	€M	17.8	20.0	20.0	20.0
Issued bonds	€M	5.78	22.0	21.0	19.0
Financial leases liabilities	€M	9.26	8.00	8.00	8.00
Other financing	€M	1.64	10.0	9.00	6.00
Cooring (at book value)	%	425	1 006	421	199
Gearing (at book value)	%		1,906		
Equity/Total asset (%)		13.1	3.86 2.38	16.0	30.3
Adj. Net debt/EBITDA(R)	X	-1.72		1.91	1.3
Adjusted Gross Debt/EBITDA(R)	χ	-2.92	5.12 97.8	3.39	2.22
Adj. gross debt/(Adj. gross debt+Equity)	%	89.7		89.0	76.8
Ebit cover FFO/Gross Debt	х %	-19.7 -50.5	0.56 9.52	2.59 19.3	5.08 34.3
FFO/Net debt	%	-85.8	20.5	34.4	56.0
	%	-69.5	-7.58	-8.19	-0.2
FCF/Adj. gross debt (%)		-09.5	2.26	1.74	1.4
(Gross cash+ "cash" FCF+undrawn)/ST debt "Cash" FCF/ST debt	X X	-2.44	-0.45	-0.52	-0.0
Cash 1 Ci731 debt	*	-5.05	-0.43	-0.32	-0.0
ROE Analysis (Dupont's Breakdown)		12/22A	12/23E	12/24E	12/25E
Tax burden (Net income/pretax pre excp income)	х	0.92	1.01	1.05	1.05
EBIT margin (EBIT/sales)	%	-42.0	0.76	3.13	4.9
Assets rotation (Sales/Avg assets)	%	181	231	274	276
Financial leverage (Avg assets /Avg equity)	x	2.79	11.9	9.28	4.19
ROE	%	-205	-27.9	49.6	48.
ROA	%	-115	2.55	10.2	15.3
Shareholder's Equity Review (Group Share)		12/22A	12/23E	12/24E	12/25
Y-1 shareholders' equity	€M	-1.97	-22.7	1.43	7.80
+ Net profit of year	€M	-29.7	-0.86	2.29	6.16
- Dividends (parent cy)	€M	0.00	0.00	0.00	0.00
+ Additions to equity	€M	8.96	0.00	0.00	0.00
o/w reduction (addition) to treasury shares	€М	-0.03	0.00	0.00	0.00
- Unrecognised actuarial gains/(losses)	€M	0.00	0.00	0.00	0.00
+ Comprehensive income recognition	€M		25.0	4.08	3.88
= Year end shareholders' equity	€M	-22.7	1.43	7.80	17.8



Staffing Analytics		12/22A	12/23E	12/24E	12/25E
Sales per staff	€th	227	238	254	246
Staff costs per employee	€th	-54.3	-55.0	-55.0	-55.0
Change in staff costs	%	15.5	11.5	30.0	30.0
Change in unit cost of staff	%	-2.33	1.37	0.00	0.00
Staff costs/(EBITDA+Staff costs)	%	511	60.7	57.8	55.9
Average workforce	unit	324	356	463	602
Europe	unit	324	356	463	602
North America	unit	0.00	0.00	0.00	0.00
South Americas	unit	0.00	0.00	0.00	0.00
Asia	unit	0.00	0.00	0.00	0.00
Other key countries	unit	0.00	0.00	0.00	0.00
Total staff costs	€M	-17.6	-19.6	-25.5	-33.1
Wages and salaries	€M	-17.6	-19.6	-25.5	-33.1
of which social security contributions	€M	-4.53	-5.88	-7.64	-9.94
Pension related costs	€M		0.00	0.00	0.00
Divisional Breakdown Of Revenues		12/22A	12/23E	12/24E	12/25E
Total sales	€M				
Total sales Product Sales	€M	73.4	84.7	118	148
Product Sales	€M	73.4 51.3	84.7 53.8	118 76.2	148 96.5
Product Sales Services	€M	73.4 51.3 0.95	84.7 53.8 0.86	118 76.2 1.39	148 96.5 1.85
Product Sales	€M	73.4 51.3	84.7 53.8	118 76.2	148 96.5 1.85 30.0
Product Sales Services Licensing Other	€M €M	73.4 51.3 0.95 0.32 20.8	84.7 53.8 0.86 10.0 20.0	118 76.2 1.39 20.0 20.0	148 96.5 1.85 30.0 20.0
Product Sales Services Licensing Other Divisional Breakdown Of Earnings	€M €M	73.4 51.3 0.95 0.32	84.7 53.8 0.86 10.0	76.2 1.39 20.0	148 96.5 1.85 30.0 20.0
Product Sales Services Licensing Other Divisional Breakdown Of Earnings EBIT Analysis	€M €M €M	73.4 51.3 0.95 0.32 20.8	84.7 53.8 0.86 10.0 20.0	118 76.2 1.39 20.0 20.0	148 96.5 1.85 30.0 20.0
Product Sales Services Licensing Other Divisional Breakdown Of Earnings EBIT Analysis Group EBIT	€M €M €M	73.4 51.3 0.95 0.32 20.8 12/22A	84.7 53.8 0.86 10.0 20.0 12/23E	118 76.2 1.39 20.0 20.0 12/24E	148 96.5 1.85 30.0 20.0 12/25E
Product Sales Services Licensing Other Divisional Breakdown Of Earnings EBIT Analysis Group EBIT Other/cancellations	€M €M €M €M	73.4 51.3 0.95 0.32 20.8 12/22A -30.9 0.00	84.7 53.8 0.86 10.0 20.0 12/23E 0.85 0.00	118 76.2 1.39 20.0 20.0 12/24E 3.88 0.00	148 96.5 1.85 30.0 20.0 12/25E 7.57
Product Sales Services Licensing Other Divisional Breakdown Of Earnings EBIT Analysis Group EBIT	€M €M €M	73.4 51.3 0.95 0.32 20.8 12/22A	84.7 53.8 0.86 10.0 20.0 12/23E	118 76.2 1.39 20.0 20.0 12/24E	148 96.5 1.85 30.0 20.0 12/25E 7.57 0.00 7.57 5.10
Product Sales Services Licensing Other Divisional Breakdown Of Earnings EBIT Analysis Group EBIT Other/cancellations Total EBIT margin	€M €M €M €M	73.4 51.3 0.95 0.32 20.8 12/22A -30.9 0.00	84.7 53.8 0.86 10.0 20.0 12/23E 0.85 0.00 0.85	118 76.2 1.39 20.0 20.0 12/24E 3.88 0.00 3.88	148 96.5 1.85 30.0 20.0 12/25E 7.57 0.00 7.57
Product Sales Services Licensing Other Divisional Breakdown Of Earnings EBIT Analysis Group EBIT Other/cancellations Total EBIT margin Revenue Breakdown By Country	€M €M €M €M €M €M	73.4 51.3 0.95 0.32 20.8 12/22A -30.9 0.00 -30.9 -42.0	84.7 53.8 0.86 10.0 20.0 12/23E 0.85 0.00 0.85 1.00	118 76.2 1.39 20.0 20.0 12/24E 3.88 0.00 3.88	148 96.5 1.85 30.0 20.0 12/25E 7.57 0.00 7.57
Product Sales Services Licensing Other Divisional Breakdown Of Earnings EBIT Analysis Group EBIT Other/cancellations Total EBIT margin Revenue Breakdown By Country EMEA	€M €M €M €M €M €M €M	73.4 51.3 0.95 0.32 20.8 12/22A -30.9 0.00 -30.9 -42.0 12/22A 0.00	84.7 53.8 0.86 10.0 20.0 12/23E 0.85 0.00 0.85 1.00 12/23E 0.00	118 76.2 1.39 20.0 20.0 12/24E 3.88 0.00 3.88 3.30	148 96.5 1.85 30.0 20.0 12/25E 7.57 0.00 7.57
Product Sales Services Licensing Other Divisional Breakdown Of Earnings EBIT Analysis Group EBIT Other/cancellations Total EBIT margin Revenue Breakdown By Country EMEA Asia	€M €M €M €M €M €M ••••••••••••••••	73.4 51.3 0.95 0.32 20.8 12/22A -30.9 0.00 -30.9 -42.0 12/22A 0.00 0.00	84.7 53.8 0.86 10.0 20.0 12/23E 0.85 0.00 0.85 1.00 12/23E 0.00 0.00	118 76.2 1.39 20.0 20.0 12/24E 3.88 0.00 3.88 3.30	148 96.5 1.85 30.0 20.0 12/25E 7.57 0.00 7.57
Product Sales Services Licensing Other Divisional Breakdown Of Earnings EBIT Analysis Group EBIT Other/cancellations Total EBIT margin Revenue Breakdown By Country EMEA Asia Americas	€M €M €M €M €M €M %	73.4 51.3 0.95 0.32 20.8 12/22A -30.9 0.00 -30.9 -42.0 12/22A 0.00 0.00 0.00	84.7 53.8 0.86 10.0 20.0 12/23E 0.85 0.00 0.85 1.00 12/23E 0.00 0.00	118 76.2 1.39 20.0 20.0 12/24E 3.88 0.00 3.88 3.30	148 96.5 1.85 30.0 20.0 12/25E 7.57 0.00 7.57
Product Sales Services Licensing Other Divisional Breakdown Of Earnings EBIT Analysis Group EBIT Other/cancellations Total EBIT margin Revenue Breakdown By Country EMEA Asia Americas Europe	€M €M €M €M €M €M %	73.4 51.3 0.95 0.32 20.8 12/22A -30.9 0.00 -30.9 -42.0 12/22A 0.00 0.00 0.00 0.00	84.7 53.8 0.86 10.0 20.0 12/23E 0.85 0.00 0.85 1.00 12/23E 0.00 0.00 0.00	118 76.2 1.39 20.0 20.0 12/24E 3.88 0.00 3.88 3.30	148 96.5 1.85 30.0 20.0 12/25E 7.57 0.00 7.57
Product Sales Services Licensing Other Divisional Breakdown Of Earnings EBIT Analysis Group EBIT Other/cancellations Total EBIT margin Revenue Breakdown By Country EMEA Asia Americas	€M €M €M €M €M €M %	73.4 51.3 0.95 0.32 20.8 12/22A -30.9 0.00 -30.9 -42.0 12/22A 0.00 0.00 0.00	84.7 53.8 0.86 10.0 20.0 12/23E 0.85 0.00 0.85 1.00 12/23E 0.00 0.00	118 76.2 1.39 20.0 20.0 12/24E 3.88 0.00 3.88 3.30	148 96.5.30.0 20.0 12/25E 7.57 0.00 7.57



ROCE		12/22A	12/23E	12/24E	12/25E
ROCE (NOPAT+lease exp.*(1-tax))/(net) cap employed adjusted	%	-80.4	2.34	7.74	11.4
CFROIC	%	-100	-18.2	-13.7	-0.29
Goodwill	€M	7.07	7.07	7.07	7.07
Accumulated goodwill amortisation	€M	0.00	0.00	0.00	0.00
All intangible assets	€M	0.00	0.00	0.00	0.00
Accumulated intangible amortisation	€M	0.00	0.00	0.00	0.00
Financial hedges (LT derivatives)	€M	0.00	0.00	0.00	0.00
Capitalised R&D	€M	0.00	0.00	0.00	0.00
Rights of use/ Capitalised leases	€M	0.00	0.00	0.00	0.00
Other fixed assets	€M	17.7	12.7	15.3	17.8
Accumulated depreciation	€M	0.00	0.00	0.00	0.00
WCR	€M	2.12	5.62	13.6	23.2
Other assets	€M	1.73	1.70	1.70	1.70
Unrecognised actuarial losses/(gains)	€M	0.00	0.00	0.00	0.00
Capital employed after deprec. (Invested capital)	€М	28.6	27.1	37.6	49.8
Capital employed before depreciation	€M	28.6	27.1	37.6	49.8
Divisional Breakdown Of Capital Employed		12/22A	12/23E	12/24E	12/25E
Group EBIT	€M				
Other	€M	28.6	27.1	37.6	49.8
Total capital employed	€M	28.6	27.1	37.6	49.8



Fundamental Opinion

It is implicit that recommendations are made in good faith but should not be regarded as the sole source of advice.

Recommendations are geared to a "value" approach.

Valuations are computed from the point of view of a secondary market minority holder looking at a medium term (say 6 months) performance.

Valuation tools are built around the concepts of transparency, all underlying figures are accessible, and consistency, same methodology whichever the stock, allowing for differences in nature between financial and non financial stocks. A stock with a target price below its current price should not and will not be regarded as an Add or a Buy.

Recommendations are based on target prices with no allowance for dividend returns. The thresholds for the four recommendation levels may change from time to time depending on market conditions. Thresholds are defined as follows, ASSUMING long risk free rates remain in the 2-5% region.

Recommendation	Low Volatility 10 < VIX index < 30	Normal Volatility 15 < VIX index < 35	High Volatility 35 < VIX index
Buy •	More than 15% upside	More than 20% upside	More than 30% upside
Add •	From 5% to 15%	From 5% to 20%	From 10% to 30%
Reduce •	From -10% to 5%	From -10% to 5%	From -10% to 10%
Sell •	Below -10%	Below -10%	Below -10%

There is deliberately no "neutral" recommendation. The principle is that there is no point investing in equities if the return is not at least the risk free rate (and the dividend yield which again is not allowed for).

Although recommendations are automated (a function of the target price whenever a new equity research report is released), the management of AlphaValue intends to maintain global consistency within its universe coverage and may, from time to time, decide to change global parameters which may affect the level of recommendation definitions and /or the distribution of recommendations within the four levels above. For instance, lowering the risk premium in a gloomy context may increase the proportion of positive recommendations.



Valuation

Valuation processes have been organized around transparency and consistency as primary objectives.

Stocks belong to different categories that recognise their main operating features: Banks, Insurers and Non Financials.

Within those three universes, the valuation techniques are the same and in relation to the financial data available.

The weighting given to individual valuation techniques is managed centrally and may be changed from time to time. As a rule, all stocks of a similar profile are valued using equivalent weighting of the various valuation techniques. This is for obvious consistency reasons.

Within the very large universe of Non Financials, there are in effect 4 sub-categories of weightings to cater for subsets: 1) 'Mainstream' stocks; 2) 'Holding companies' where the stress is on NAV measures; 3) 'Growth' companies where the stress is on peer based valuations; 4) 'Loss making sectors' where peers review is essentially pointing nowhere (ex: Bio techs). The bulk of the valuation is then built on DCF and NAV, in effect pushing back the time horizon.

Valuation Issue	Normal industrials	Growth industrials	Holding company	Loss runners	Bank	Insurers
DCF	35%	35%	10%	40%	0%	0%
NAV	20%	20%	55%	40%	50%	15%
PE	10%	10%	10%	5%	10%	20%
EV/EBITDA	20%	20%	0%	5%	0%	0%
Yield	10%	10%	20%	5%	10%	15%
Book	5%	5%	5%	5%	10%	10%
Banks' instrinsic method	0%	0%	0%	0%	10%	0%
Embedded Value	0%	0%	0%	0%	0%	40%
Mkt Cap/Gross Operating Profit	0%	0%	0%	0%	10%	0%