



**Industrials and Energy**

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**Barnes Group Inc**  
NYSE: B

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# Investment Narrative

Industrials and Energy Committee – Barnes Group Pitch



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INVESTMENT MANAGEMENT GROUP

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# Barnes Group: Ready for Takeoff

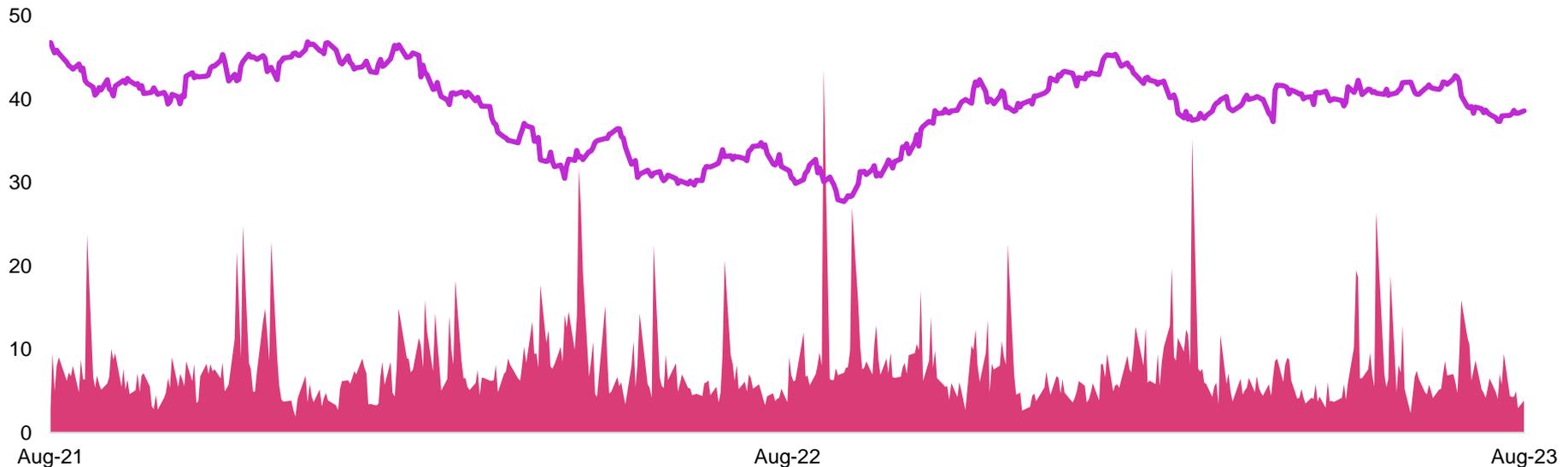


Market Cap	\$1.955 B
9/8 Close	\$36.55
Average Volume	0.14 M
52 Week Range	\$27.93 – \$47.36
NTM EV/EBITDA	9.28x
EBITDA Margin	18.8%

- Recommendation: **BUY** with a **PT of \$53.10**, representing an upside of 45% from 9/8/23 close – **5.0% weight**

### Investment Thesis Introduction

1. The MB Aerospace acquisition enhances both product variety and efficiency, allowing Barnes to focus on both GE's LEAP engine and IAE's V2500 engine concurrently.
2. Congress' extension of the Boeing 737 Max lifespan provides a steady stream of aftermarket revenue, while ageing fleet life keeps a healthy amount of OEM production in the pipeline.
3. Industrials segment remains underappreciated, with Barnes potentially being able to capture new opportunities in Europe.



\*\*Disclaimer – Does not show performance before August-21, does not show future performance



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# Company Overview



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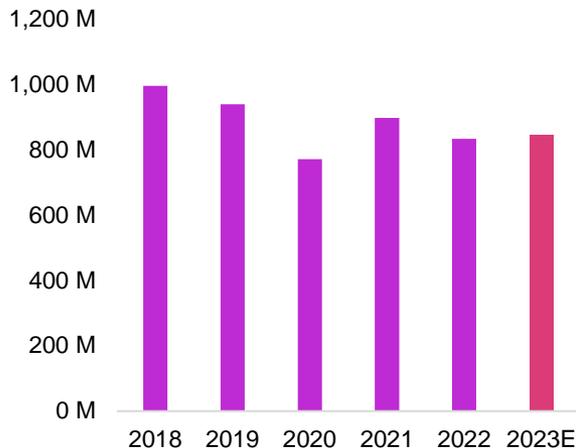
Industrials and Energy Committee – Barnes Group Pitch

# A 165-Year-Old Industrial Conglomerate

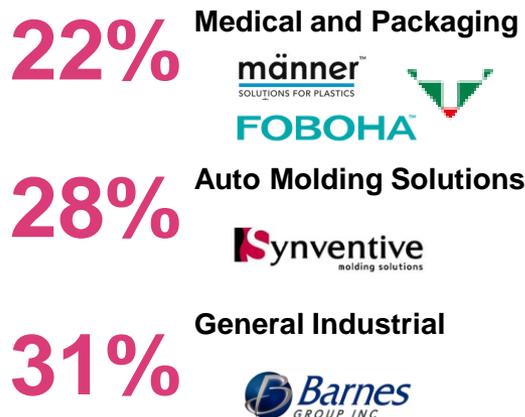


## Industrial – Molding Solutions Overview

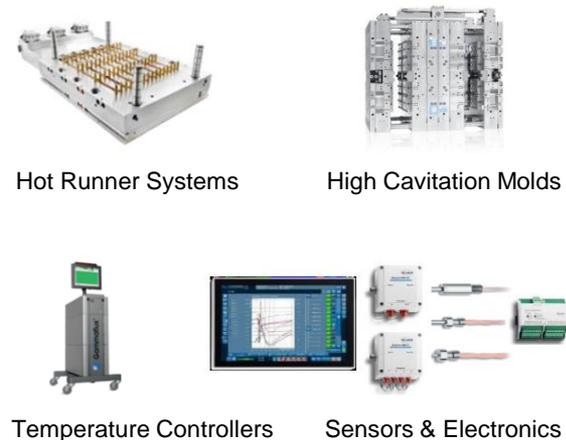
Industrial Annual Revenue<sup>(1)</sup>



Industrial End Markets

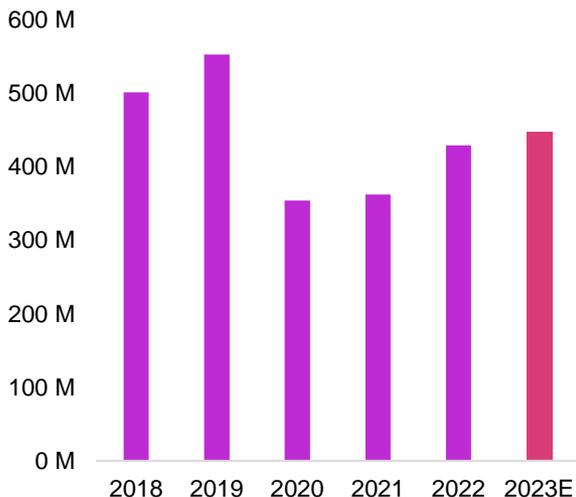


Product Examples

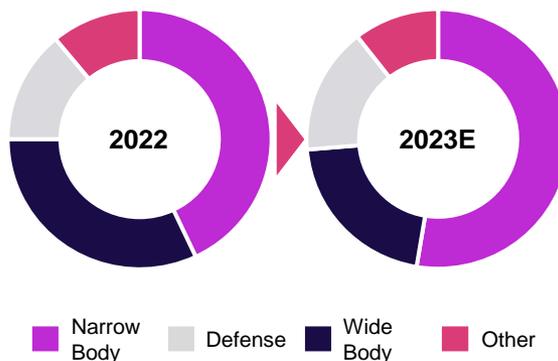


## Aerospace – OEM SBU Overview

Aerospace Annual Revenue<sup>(1)</sup>



By Platform Type



Narrow Body expected to grow to 50% of Revenues by 2025

Product Examples

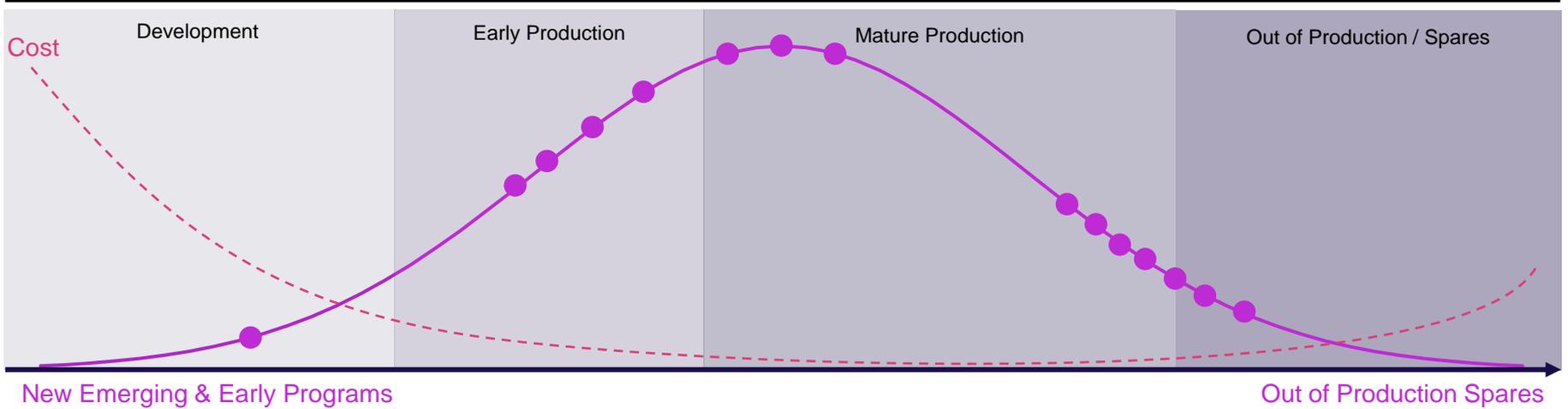


(1) Barnes Group Research, InE Model

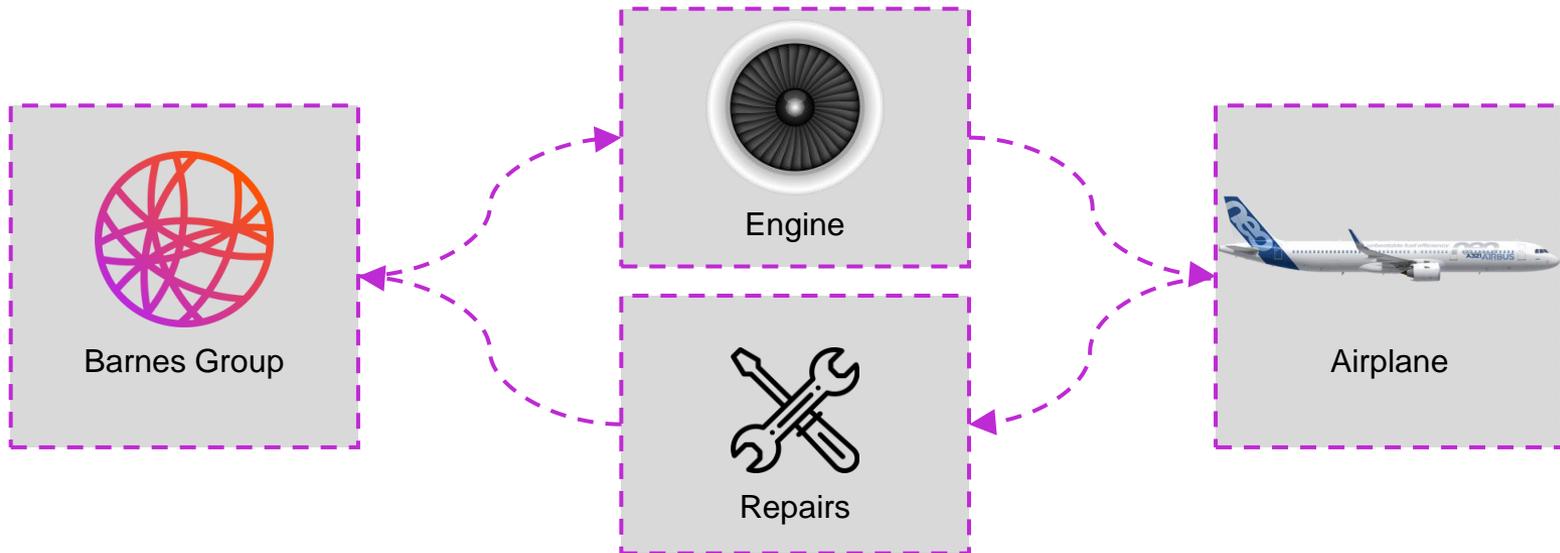


## Portfolio of Products in All Stages of the Lifecycle

Current Aerospace Segment Lifecycles<sup>(1)</sup>



## Aerospace Production Flywheel



(1) Barnes Group Research



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# Industry Overview

Industrials and Energy Committee – Barnes Group Pitch



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# A Recovery From COVID-19 is in Sight for the Industry

## Industrial Portfolio Aligned with Several Long-term Macro Drivers<sup>(1)</sup>



Demand for skilled labor exceeding capacity

Increased access to healthcare

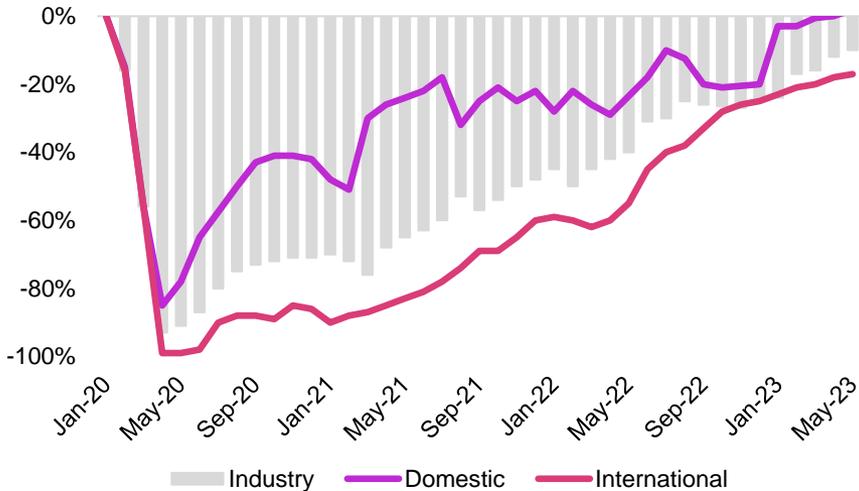
OEMs accelerated plans to convert new product platforms to EV by 2030

Broader preference for sustainable products and purpose-driven brands

Consumer behavior and digital innovation

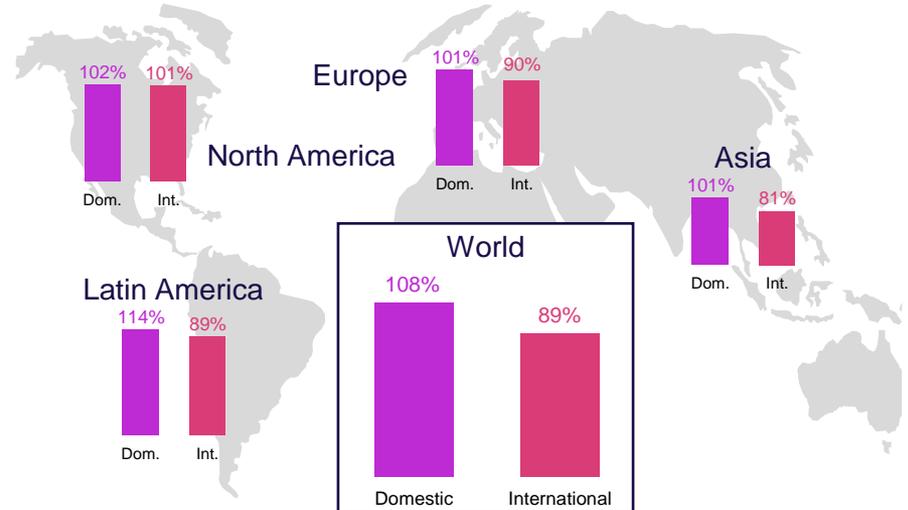
## Coupled with a Recovering Aerospace Segment

Aerospace Recovery Through May 2023<sup>(2)</sup>



## Capacity has Recovered Quickly as Restrictions Lifted

ASKs Compared to 2019 Level<sup>(3)</sup>



(1) Barnes Investor Relations (2) International Air Transport Association (3) Airbus Research



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# Investment Thesis

Industrials and Energy Committee – Barnes Group Pitch



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# MB Aerospace Enhances an Already Good Business

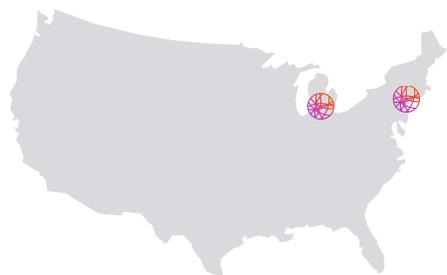


## Global Provider of Products, Technology and Solutions Serving a Broad Range of End Markets and Customers<sup>(1)</sup>

America – 2 Facilities

Europe – 6 Facilities

Asia – 2 Facilities



**Key Stats**

- 735,000+ sq ft
- 650+ machines
- ~1,450 employees



**Primary Customers**

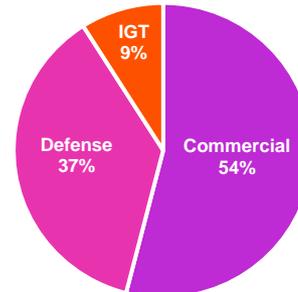
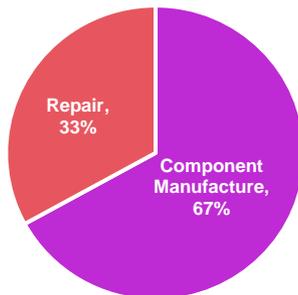
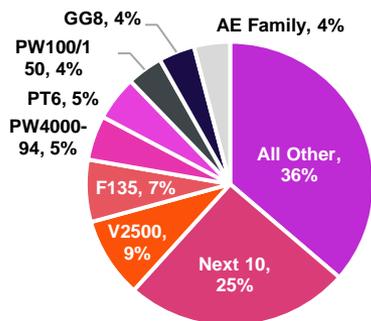
## Attractive Revenue Mix with Significant Sole-Source Exposure<sup>(1)</sup>

Platform (Total 2023B-2028E)

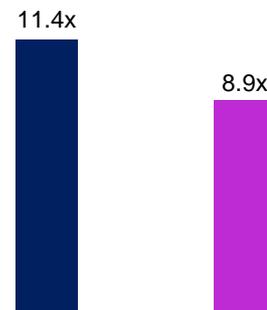
2022 Capabilities

2022 Sector Breakdown

Avg Acquisition Multiples



**\$18M of Cost Savings Projected**



Diversified Product Base

Serving the Full-Product Lifecycle

Balanced End-Market Exposure & Attractive Secular Tailwinds

EBITDA Purchase    Post Synergies

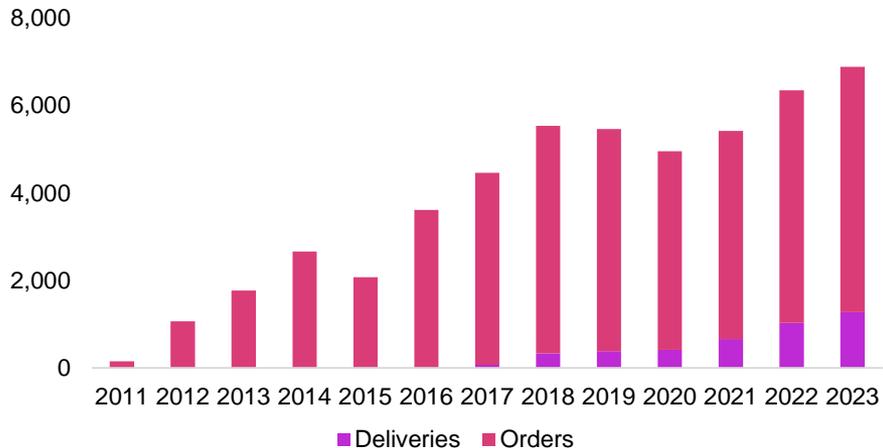
(1) Barnes Investor Relations

# Aerospace Segment Primed for Growth



## Continuation of 737 Max

Cumulative Boeing 737 MAX Orders and Deliveries<sup>(1)</sup>



## Leap – 1B Engines for Single-Aisle Commercial Jets

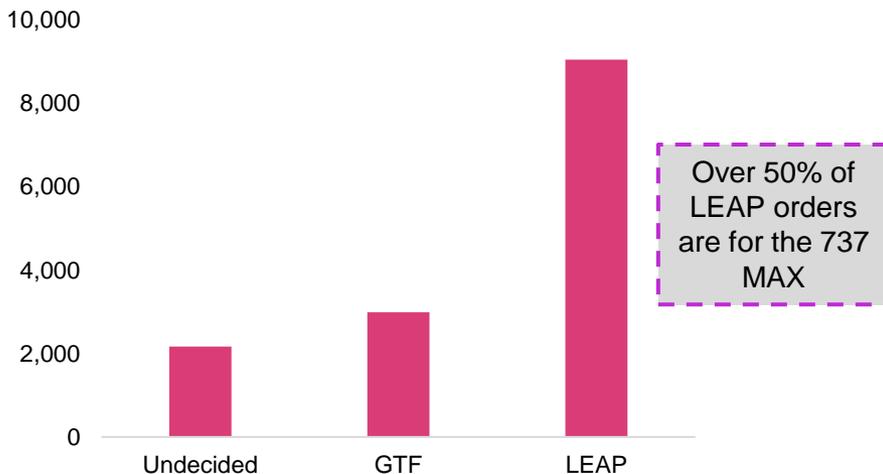


“Examples of these are the 737 MAX work that we won where Boeing was a new customer, and we won it from competition.”

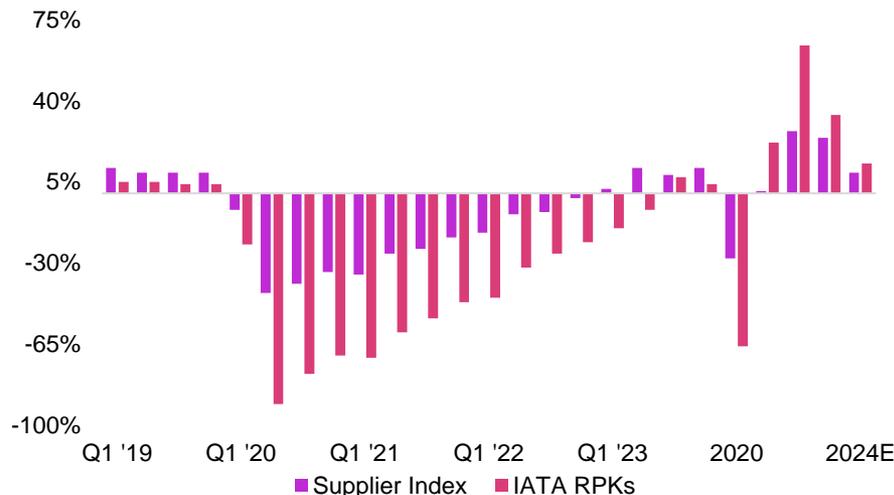
-Michael Andrew Beck, Senior VP & President of Barnes<sup>(2)</sup>

## Paired with General Aviation Trends

Future Plane Orders by Engine Type<sup>(3)</sup>



Aftermarket Revenues Heavily Correlated to Air Traffic<sup>(3)</sup>



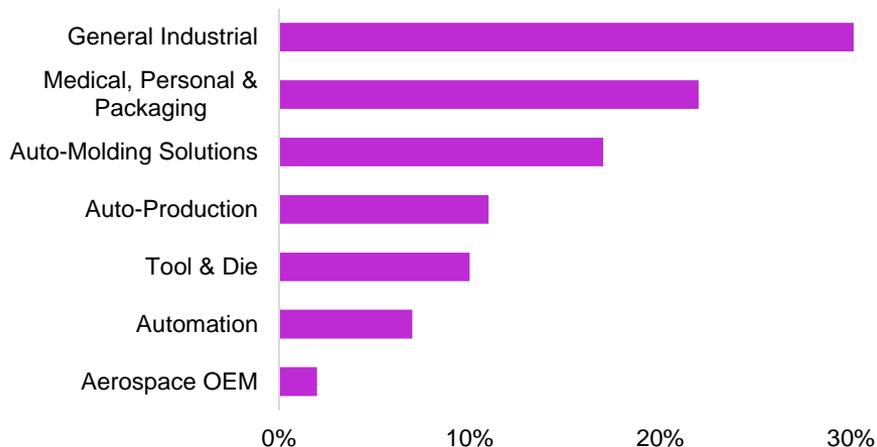
(1) Boeing Commercial Market Research (2) Barnes Group Earnings Call (3) Jefferies Research, Cole Reynolds

# Industrials: The Year of Efficiency



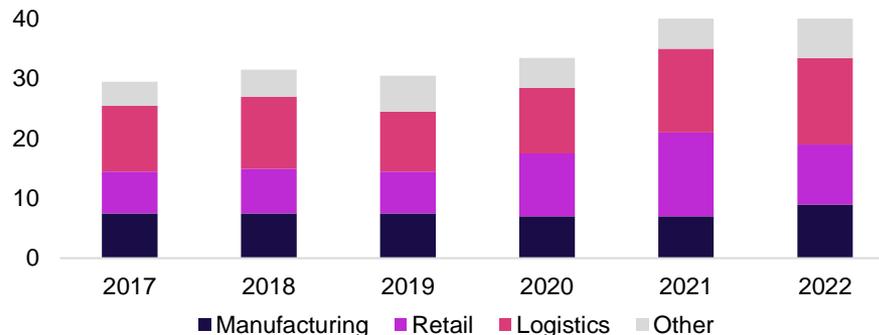
## Diverse End Markets

Barnes Group Industrial End Markets (FY22)<sup>(1)</sup>



## Manufactures Acquire Property as Demand Declines

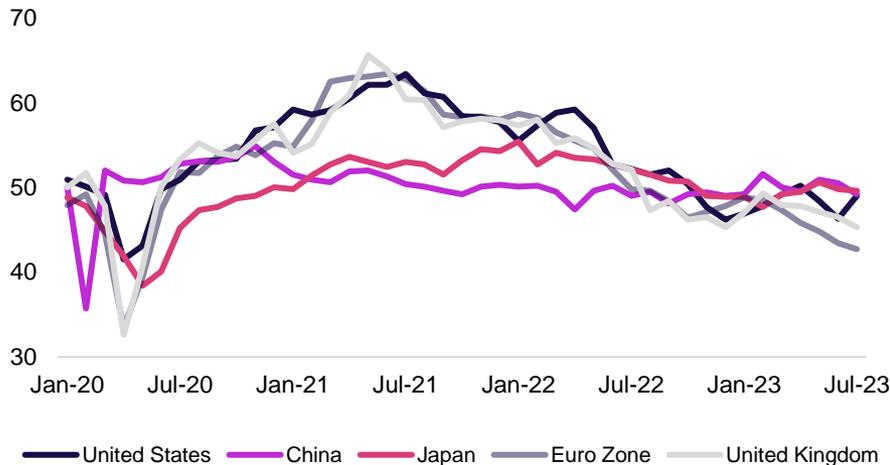
European Industrial Space Acquisition (Millions of Sq. Meters)<sup>(2)</sup>



“[Our clients] are being told, ‘if you want to continue supplying us, we prefer you do it from Europe instead of China’,” – Tim Crighton, Head of European Industrials at Cushman & Wakefield

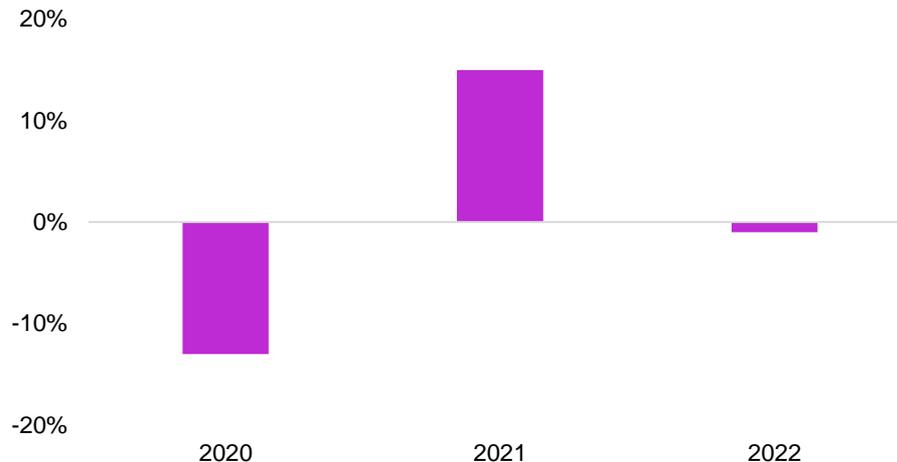
## Net Positive Effect of Aerospace Business Gains

PMI in Developed and Emerging Countries<sup>(3)</sup>



## Organic Sales Difference

Y/Y Industrial Segment Revenue Change<sup>(4)</sup>



(1) Barnes Group Research (2) Cushman & Wakefield, Financial Times, EU (3) Institute for Supply Management (4) Barnes 10-K Filings 2020-2022, Above figures are organic  
Culverhouse Investment Management Group – Industrials and Energy Committee



# Worth More Than “Some” of the Parts

## Net Positive Effect of Aerospace Business Gains<sup>(1)</sup>

OEM

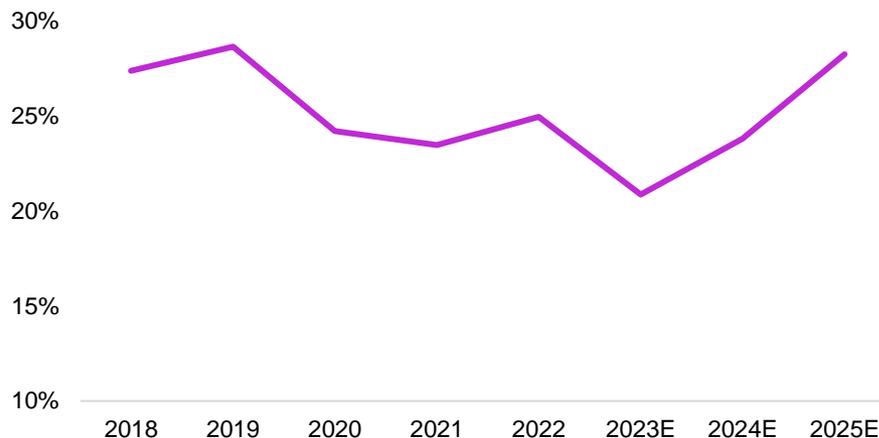


Aftermarket



## Margins Recovering back to Pre-COVID Levels

Aerospace EBITDA Margins<sup>(2)</sup>



## Irenic Capital Management Activist Position



**Adam Katz**  
Co-Founder, Chief Investment Officer

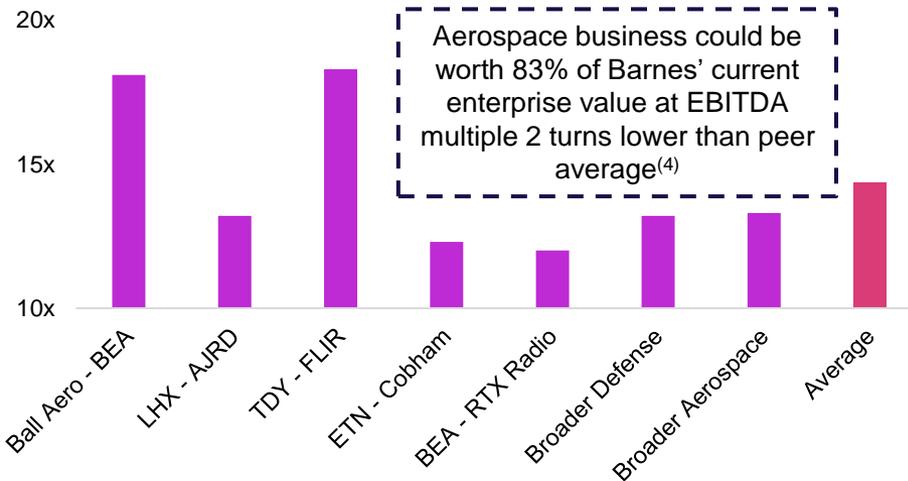


**Andy Dodge**  
Co-Founder, Director of Research

"Irenic is expected to push for board changes and a potential sale of the business, believing the company to be worth \$60/share and the aerospace business to be worth more than the market cap of the company"<sup>(3)</sup>

## Aerospace Alone is Worth a Significant Amount

Comparable Aerospace Transactions NTM EBITDA Multiples<sup>(4)</sup>



(1) Barnes Group Research (2) SEC Filings, Bamsec, InE Model (3) Bloomberg, Quote from October 2022 (4) Barclays, Uses InE Model's 2024E Aerospace EBITDA



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# Valuation



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## Price Target of \$53.10



## Valuation Cover

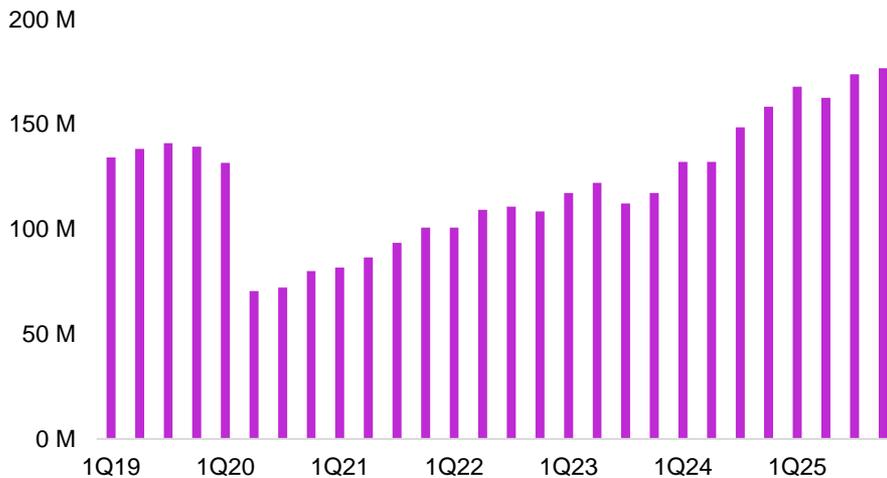
Valuation	
PV of Terminal Value	1,915
PV of Free Cash Flow	1,300
<b>Implied Enterprise Value</b>	<b>3,215</b>
Less: Debt	571
Less: Preferred/ Other	-
Plus: Cash	75
Implied Equity Value	2,719
Diluted Shares Outstanding	51
<b>Implied Share Price</b>	<b>\$ 53.10</b>
Upside / (Downside)	45%

## Sensitivity Table

	8.00%	9.00%	10.00%	11.00%	12.00%
1.00%	\$ 65.61	\$ 56.05	\$ 48.62	\$ 42.69	\$ 37.84
1.50%	\$ 69.57	\$ 58.89	\$ 50.73	\$ 44.29	\$ 39.09
2.00%	\$ 74.19	\$ 62.14	\$ 53.10	\$ 46.08	\$ 40.47
2.50%	\$ 79.65	\$ 65.88	\$ 55.79	\$ 48.08	\$ 42.00
3.00%	\$ 86.20	\$ 70.25	\$ 58.86	\$ 50.33	\$ 43.69

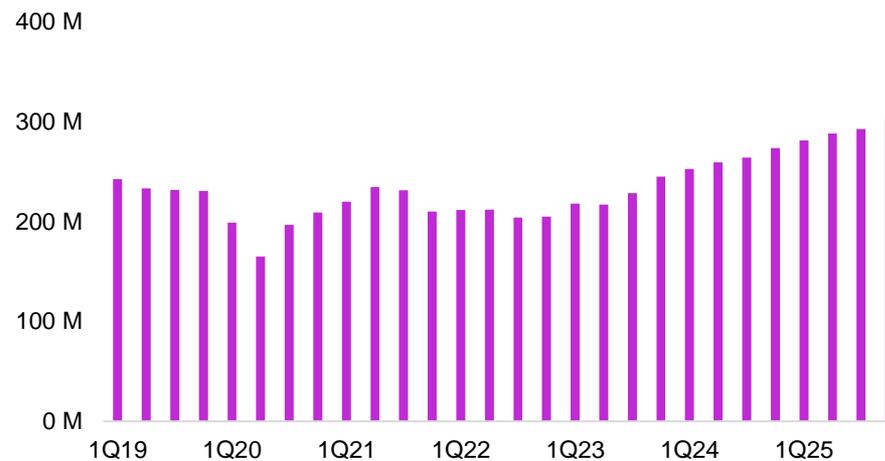
## Rising Aerospace Revenue

Aerospace Revenues



## Strong Industrial End Markets

Industrial Revenues



(1) All figures come from InE Model



# Appendix Table of Contents

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## Main Deck

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- IX. Industrials  
Restructuring
- X. Aerospace
- XI. Valuation

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- II. H.R.2617
- III. GE LEAP Applications
- IV. IAE V2500 Applications
- V. Disclaimer

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- II. Variance



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# Appendix

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# Industrials Segment Restructuring Visualized

## Completed

- Moving away from high-volume commoditized automotive business
- Closure of automation centers in Russia, Korea and Japan
- Consolidation of Detroit manufacturing

**Savings estimated to be \$26mm**  
**Restructuring charges \$29mm**  
**Run rate savings achieved in 2023**

## In progress

- Consolidation of German facilities
- Closure of Bristol Plant
- \$14mm in capital investment

**Expected run rate savings of \$27mm in 2025**

Phase 1

Phase 2

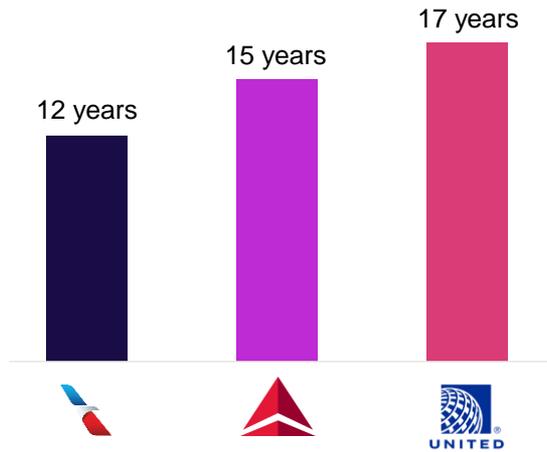
Phase 3

# Other Aerospace Industry Figures

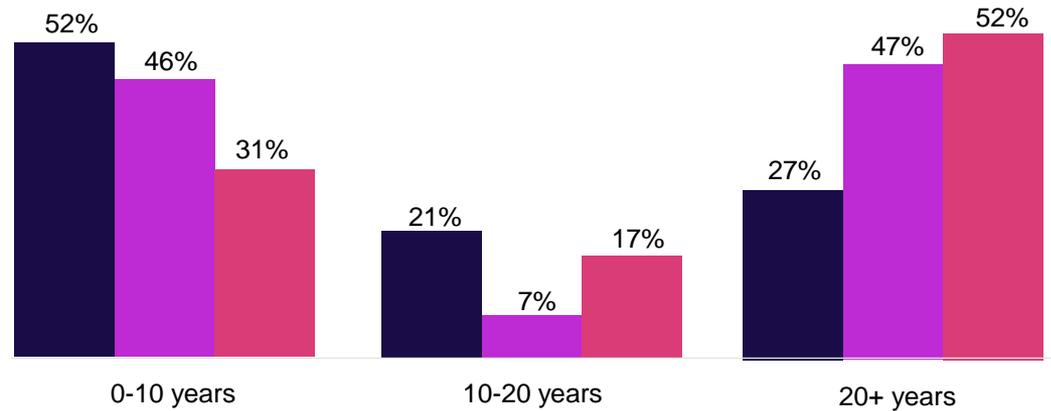


## Industrial – Molding Solutions Overview

Average Fleet Age<sup>(1)</sup>

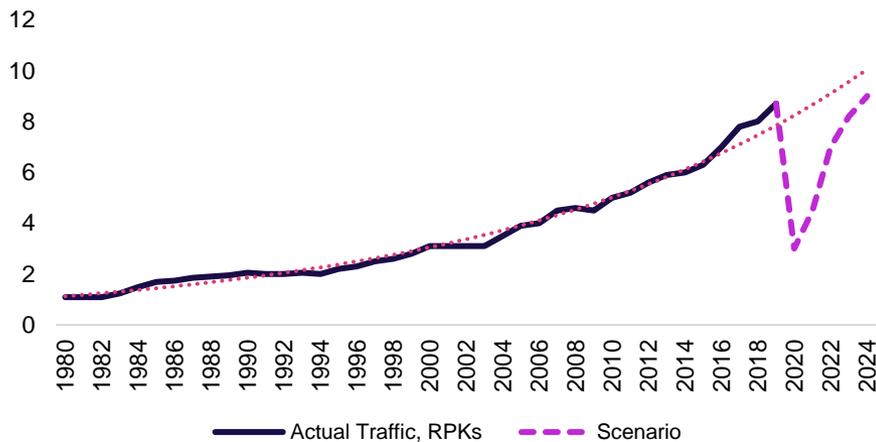


Fleet Breakdown by Age<sup>(1)</sup>



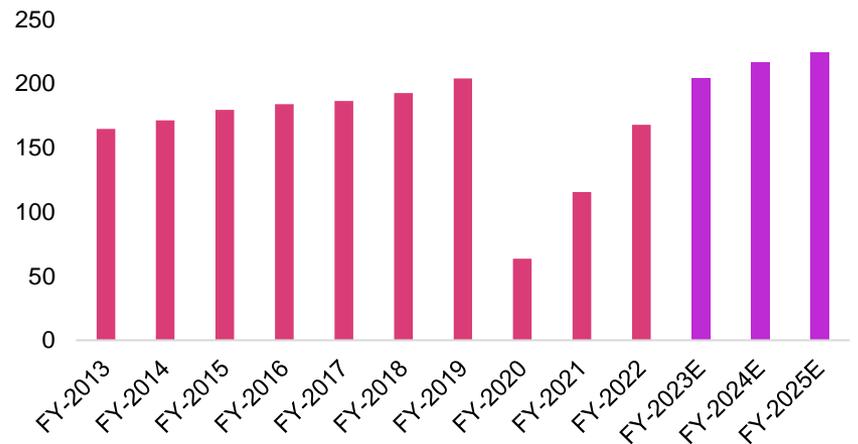
## Air Traffic Coming Back to Prior Estimates

Air Traffic<sup>(2)</sup>



## Investors Confident Airline Passengers Will Recover

Delta Passengers Carried per Year (M)<sup>(3)</sup>



(1) Source 1 (2) Barnes IR (3) CIMG Aerospace, Defense, and Transportation Committee Estimates

Syntax<sup>(1)</sup>

## Implication

## TITLE V--SAFETY ENHANCEMENTS

## SEC. 501. AMENDMENTS TO THE FLIGHT CREW ALERTING REQUIREMENTS.

(a) In General. Beginning on December 27, 2022, the Administrator may not issue a type certificate for a transport category airplane unless such airplane incorporates a flight crew alerting system that, at a minimum--

(1) displays and differentiates among warnings, cautions, and advisories; and

(2) includes functions to assist the flight crew in prioritizing corrective actions and responding to systems failures.

(b) Limitation. The prohibition in subsection (a) shall not apply to any application for an original or amended type certificate that was submitted to the Administrator prior to December 27, 2020.

(c) Safety Enhancements.--

(1) Restriction on airworthiness certificate issuance.--

Beginning on the date that is 1 year after the date on which the Administrator issues a type certificate for the Boeing 737-10, the Administrator may not issue an original airworthiness certificate for any Boeing 737 MAX aircraft unless the Administrator finds that the type design for the aircraft includes safety enhancements that have been approved by the Administrator.

(2) Restriction on operation.—

Beginning on the date that is 3 years after the date on which the Administrator issues a type certificate for the Boeing 737-10, no person may operate a Boeing 737 MAX aircraft unless--

(A) the type design for the aircraft includes safety enhancements approved by the Administrator; and

(B) the aircraft was--

(i) produced in conformance with such type design; or

(ii) altered in accordance with such type design.

- The Boeing 737 Max is no longer grounded providing that:
  - Airlines utilize a flight crew alerting system
  - Airlines install necessary safety enhancements
- Aircraft must be re-certified every 3 years

Despite the recent challenges facing the 737 Max, Congress stands behind Boeing. With the installation of safety enhancements and flight crew alert systems, the aircraft is expected to be safe and continue to operate.

(1) H.R.2617 Page 136 STAT. 5230

# GE Aerospace LEAP Engine Applications



A321neo



Boeing 737 MAX



COMAC C919



# International Aero Engines V2500 Applications





This Presentation Contains Forward-looking Statements. Forward-looking statements are made based upon CIMG's Industrials & Energy Committee's good faith expectations and beliefs concerning future developments and their potential effect upon the Company being presented. These forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those expressed in the forward-looking statements, including the risks and uncertainties set forth under our full disclosure located on this slide. Any forward-looking statements speak only as of the date on which it is made, and the CIMG Industrials & Energy Committee assumes no obligation to update our forward-looking statements. References to adjusted financial results are non-GAAP measures. "EBITDA" refers to Earnings before Interest, Taxes, Depreciation, Amortization, and any other adjustments deemed necessary by the CIMG Industrials & Energy Committee.\*

\*This inclusion of this disclosure serves to protect the InE Committee from any potential ridicule that may arise should Barnes drop 50% following the presentation of this pitch



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# Model Appendix

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Calender ended	18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	30-Jun	23-Dec	24-Dec	25-Dec	31-Mar	30-Jun	30-Sep	31-Dec	31-Mar
	2018	2019	2020	2021	2022	2023	2023	2024	2025	2026	2027	2028	2029	2030
Fiscal Year Ended	FY18	FY19	FY20	FY21	FY22	FY23	FY23E	FY24E	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E
	A	A	A	A	A	A	E	E	E	E	E	E	E	E
<b>Revenue</b>	1496	1491	1124	1259	1262	674	703	1621	1846	1905	1965	2031	2101	2155
Cost of Sales	964	944	721	804	838	443	477	1079	1190	1203	1228	1260	1283	1312
<b>Gross Profit</b>	532	547	403	455	424	231	226	542	656	702	737	772	818	842
SGA	297	304	244	288	275	143	159	360	397	401	409	420	428	437
<b>EBIT</b>	235	243	159	167	149	88	67	182	260	301	327	352	390	405
Taxes	41	48	38	28	25	9	11	33	50	59	64	69	77	81
<b>NOPAT</b>	194	195	121	139	124	80	56	149	210	243	263	282	313	325
D&A	94	99	88	91	92	47	48	98	99	89	86	83	71	59
Capex	(57)	(53)	(41)	(34)	(35)	(22)	(19)	(44)	(51)	(52)	(54)	(56)	(57)	(59)
(Increase) Decrease in NWC	(38)	(25)	42	(33)	(36)	(40)	22	(28)	(25)	(25)	(25)	(25)	(25)	(25)
UFCF							107	175	233	255	271	284	301	299
Discounted UFCF							105	159	193	192	185	177	170	153
Discount Period							0.25	1.00	2.00	3.00	4.00	5.00	6.00	7.00
Drivers:														

## Variance



Calendar Ended	23-Mar	23-Jun	23-Sep	23-Dec	24-Mar	24-Jun	23-Dec	24-Dec
Fiscal Year Ended	2023		2024				2023	2024
	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24	FY23	FY24
	E	E	E	E	E	E	E	E
<i>Revenue</i>								
Model	335	339	341	362	385	392	1,291	1,621
Street	345	352	350	354	360	365	1,371	1,440
Variance	-3%	-4%	-3%	2%	7%	7%	-6%	13%
<i>Gross Profit</i>								
Model	109	117	127	129	138	147	457	542
Street	119	123	122	123	128	129	466	506
Variance	-9%	-5%	4%	5%	8%	14%	-2%	7%
<i>Gross Profit-Margin</i>								
Model	32%	35%	37%	36%	36%	38%	35%	33%
Street	35%	35%	35%	35%	35%	35%	34%	35%
Variance	-6%	-1%	7%	2%	1%	6%	4%	-5%
<i>EBITDA - Nominal</i>								
Model	56	60	65	66	72	79	251	280
Street	70	71	70	72	75	76	269	292
Variance	-20%	-16%	-7%	-9%	-4%	4%	-7%	-4%



&

