



FY22 Annual Results

for the year to 30th September 2022

This document is being made available for information purposes only and neither it nor any oral presentation made in connection with it constitute or form part of, and should not be construed as, an offer, invitation or inducement to purchase or subscribe for any securities or to enter into investment activity in any jurisdiction nor shall it or any part of it form the basis of, or be relied upon in connection with, any contract or commitment whatsoever nor in making any investment decision.

This document does not constitute either advice or a recommendation regarding any securities of the Company. Any person who is in any doubt about the subject matter of this document should consult an authorised person in their applicable jurisdiction. This document does not purport to contain all the information that a recipient may want or require in investigating the Company. Any party must rely upon its own inquiries and investigations.

Unless specifically attributed to another source, any targets, forecasts, estimates and projections contained in this document have been prepared by the management of the Company and involve elements of subjective judgement and analysis which may or may not be correct. In addition, certain statements contained in this document or in documents referred to in it or in any presentation made in connection with it are or may be forward-looking statements. Actual results may differ from those expressed in such statements, depending on a variety of factors. Any forward-looking information contained in this document or in any presentation has been prepared on the basis of a number of assumptions that may prove to be incorrect, and accordingly, actual results may vary. Certain percentages appearing in this document may also have been rounded and accordingly, may not add up to the precise sum of the totals expressed. Certain financial data has also been rounded and, as a result, the totals of data presented may vary slightly from the actual arithmetic totals.

The information set out herein (or the entire document itself) may be subject to updating, completion, revision and amendment and such information may change materially or even be permanently withdrawn. Accordingly, it must not be (in whole or in part) reproduced, distributed, stored or introduced into a retrieval system of any nature.

Neither the Company nor its advisers nor any of their respective directors or employees or any other person makes any representation or warranty, express or implied, as to the accuracy or completeness of the contents of this document or any accompanying presentation. In particular, but without limitation, no representation or warranty is given as to the achievement or reasonableness of, and no reliance should be placed on, any assumptions, targets, forecasts, projections, estimates or prospects with regard to the anticipated future performance of the Company. No responsibility or liability is accepted by any such person for any errors, misstatements or omissions in this document or any other such document or information. The exclusions set out in this paragraph do not extend to an exclusion of liability for, or remedy in respect of, fraudulent misrepresentation. Neither the Company nor its respective advisers or any of their respective directors or employees nor any other person shall be obliged to provide the recipient with any further information or to update this document or correct any inaccuracies that become apparent.

This document has not been nor will it be approved by an authorised person in accordance with section 21(2)(b) of the Financial Services and Markets Act 2000 and is accordingly only directed at (i) persons having professional experience in matters relating to investments, being investment professionals as defined in Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended) ("FPO"), (ii) persons falling within Article 43 of the FPO (including existing members of the Company), (iii) persons falling within Article 49(2)(a) to (d) of the FPO (including high net worth companies and unincorporated associations), (iv) (where lawful in the recipient's applicable jurisdiction) persons outside of the United Kingdom pursuant to Article 12(1)(b) of the FPO and/or (v) persons to whom communication may otherwise be lawfully made, (together "relevant persons"). This document must accordingly not be acted on or relied upon in any way by any persons who are not relevant persons. By accessing and reading this document and attending any presentation, each recipient warrants, represents, acknowledges and agrees that it is a relevant person.

Neither this document nor anything contained herein shall form the basis of, be relied on or act as an inducement in connection with, any offer or commitment whatsoever and is not directed at, nor intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation or which would require any registration or licensing within such jurisdiction. In particular, this document and the information contained herein are not for publication or distribution to persons in the United States (within the meaning of Regulation S under the U.S. Securities Act of 1933, as amended) nor in Australia, Canada, Japan, the Republic of Ireland, the Republic of South Africa or any other jurisdiction where to do so may be prohibited. Recipients of, or persons otherwise accessing this document or any accompanying presentation in, jurisdictions outside the United Kingdom should inform themselves about and observe any applicable legal requirements. Any failure to comply with these restrictions may constitute a violation of the laws of the relevant jurisdiction.

This document, and any matter or dispute (whether contractual or non-contractual) arising out of it or out of any oral presentation made in connection with it, shall each be governed by and construed in accordance with English law and the English courts shall have exclusive jurisdiction in relation to any such matter or dispute.

Highlights: FY22

- ✓ Full year revenue £5.0m: 39% higher than FY21
- ✓ EBITDA loss reduced to £0.9m from £1.5m
- ✓ Trading in Q1 FY23 ahead of same quarter last year



Energy sector revenue up 72% including Oil & Gas up by 54%

Fundraise of £0.5m in Sept 2022



Six fold increase in power generation revenue

Full Leonardo Helicopter approval and first orders received



Industrial sector revenue up by 10%

Regular Airbus orders now being received



Aerospace sector revenue up by 24%

Two major orders for power generation turbine blades completed



Financial Key Points FY22

Increasing revenue across all sectors; up by 39% overall

EBITDA loss reduced to
£0.9m
(FY21 loss £1.5m)

Gross Margin increased
to 37%
(FY21 36%)

Gross Profit £1.9m
(FY21 £1.3m)

Fundraise of £0.5m in
September 2022

Cash at Bank £0.7m
(FY21 £1.5m)

Post year-end cash
injection of £0.5m from
US property deal

Cash outflow from
operations £1.0m
(FY21 £1.9m)

Net assets: £5.5m
(FY21 £6.9m)

Capex £0.3m
(FY21 £0.3m)

Two-stage strategy agreed following Board review:

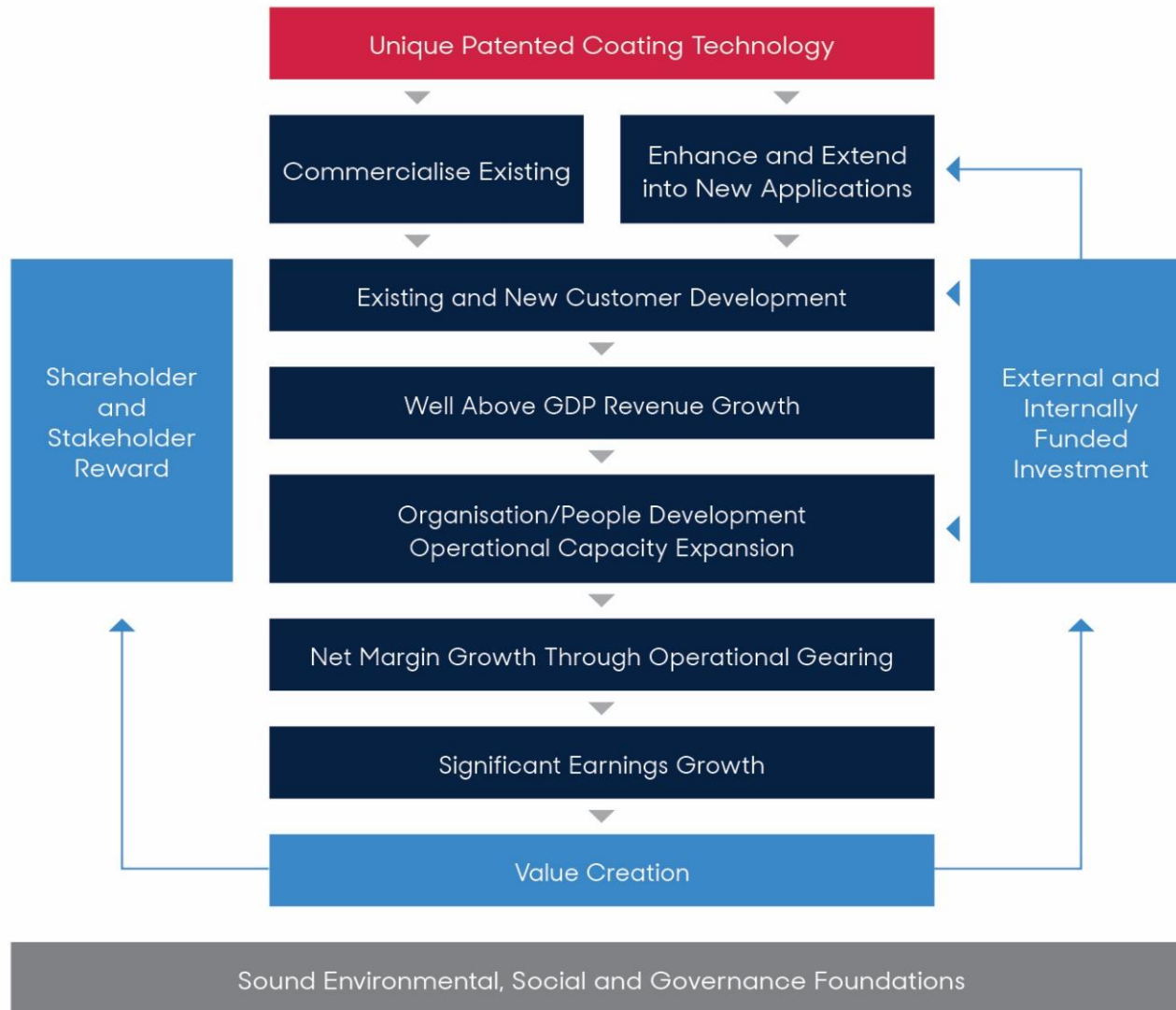


(a) Focus on becoming profitable and cash generative. This will be driven mainly by increased sales to existing and new customers, utilising proven coating technology and existing production capacity, thereby benefiting from the Group's strong operational gearing;

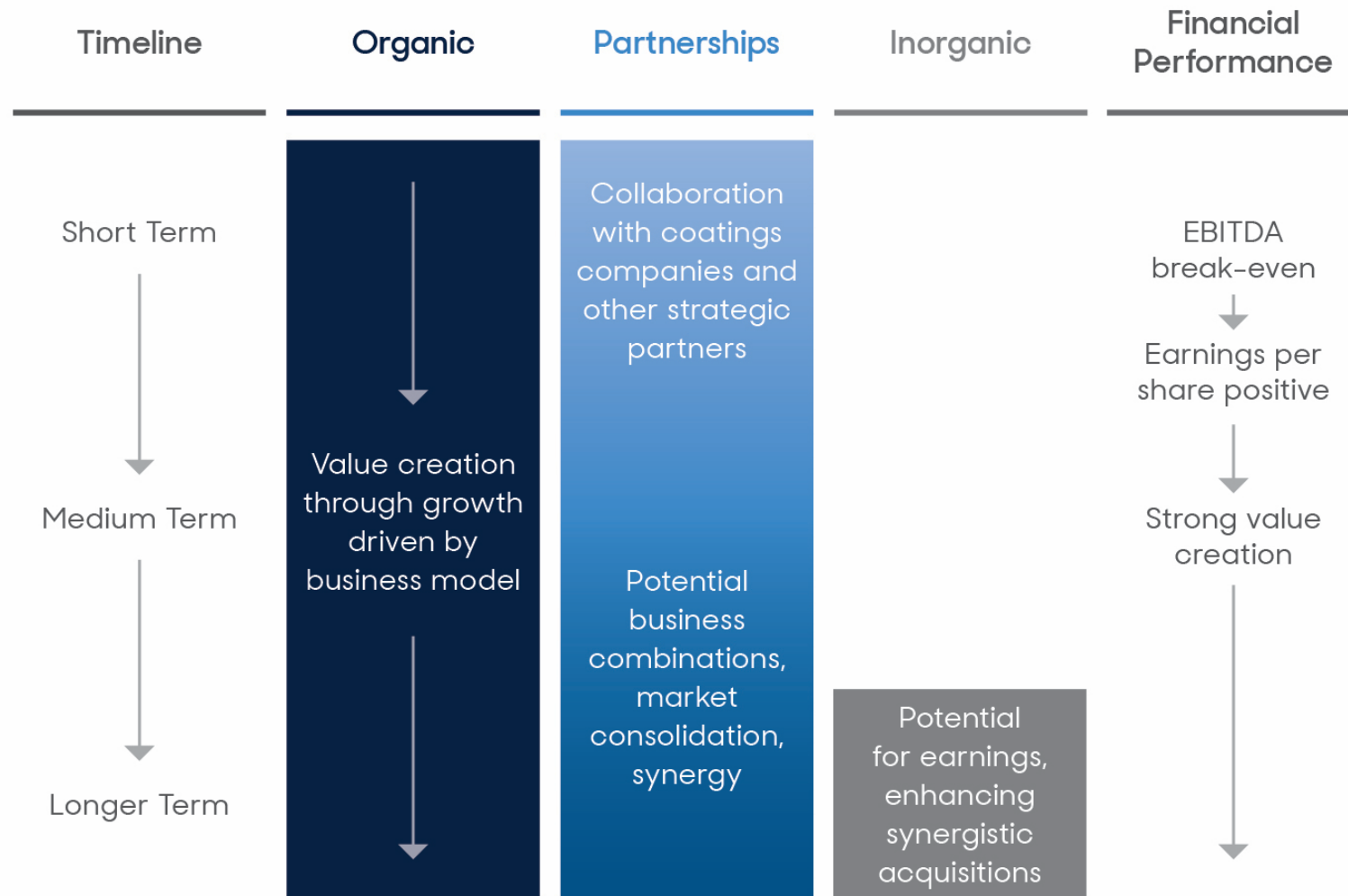


(b) Developing opportunities to drive significant value for shareholders and other stakeholders over the medium to longer term through further development and commercialisation of the Group's unique high performance coatings technology, including co-operation with other coatings companies.

Hardide Business Model

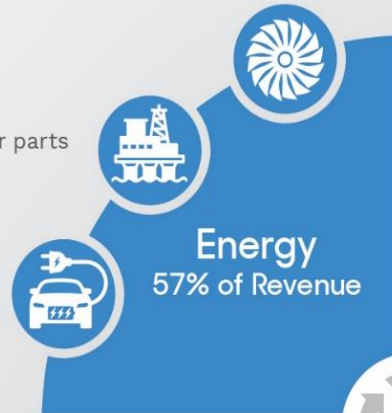


Hardide Strategic Direction



Hardide's applications

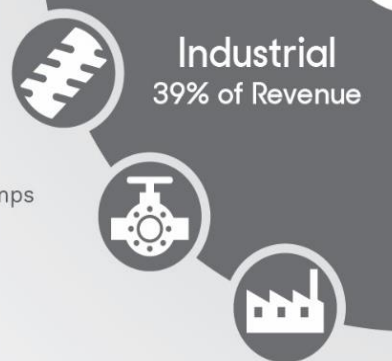
- Oil & gas directional drilling tools
- Well stimulation tools
- Oil & gas production components
- Sand control systems
- Coating of industrial diamonds for wear parts
- Silicon production for solar cells
- Production of EV batteries
- Hydrogen production and storage systems
- Power generation steam and gas turbine blades



- Eurofighter Typhoon canopy locking system
- Airbus wing/flap components
- F35 Joint Strike Fighter components
- Helicopter transmission systems
- Aircraft door and control system actuators
- Undercarriage/landing gear
- General hard chrome replacement



- Injection moulding extrusion feeder screws and dies
- Airport high speed X-ray screening machines
- Severe service valves and pumps
- High volume positive displacement pumps
- Rotors and shafts
- Closed and open face impellers
- Sleeve bearings
- Hydrodynamic bearings
- Complex 3D printed parts



Geographical Areas Served

- North America
- Europe

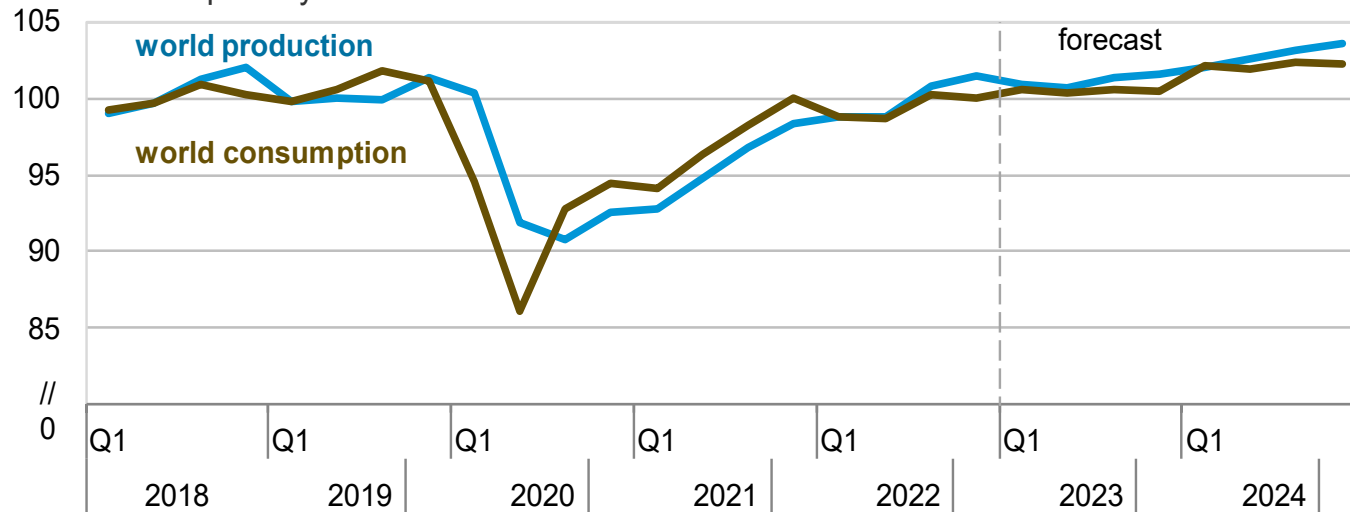


Energy – Oil & Gas (up by 54%)

- O&G market demand returning, but slower than anticipated due to supply chain material shortages
- Forecasts from major oil service companies are very positive for FY23 and beyond
- Multiple new and high value applications currently in testing
- Coating of mesh sand screens a major opportunity due to Hardide's unique ability

World liquid fuels production and consumption balance

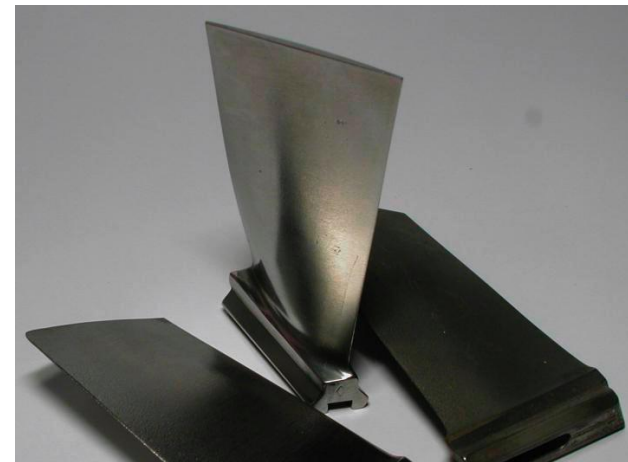
million barrels per day



Source: US Energy Information Administration, Short term Energy Outlook January 2023

Energy- Power Generation (six-fold increase)

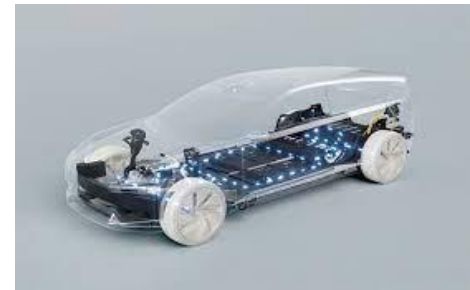
- Two large orders for coating gas turbine blades completed successfully for Ansaldo Energia, Italy – further gas turbine blade orders expected in 2023
- Trials and technical discussions underway with the second largest global manufacturer of turbines
- EDF development still progressing but slowed due to COVID. Expect more progress as EDF buying GE Nuclear Division and will then be a manufacturer of steam turbines



Energy- Alternative (longer term)

Current projects in Alternative Energy industries include:

- **Hydrogen –**
Lab tests underway to provide data on the coating being a good barrier to hydrogen diffusion. A customer currently testing actual components
- **Solar cells –**
Coating production components used in manufacturing process of silicon ingots for solar cells. Customer currently increasing capacity
- **Wind –**
Low friction/wear & corrosion resistance on moving parts
- **EV batteries –**
Coating not detrimental to electrical properties of battery
 - Opportunity with large US-based EV manufacturer is continuing



Industrial (up by 10%)

- Revenue up 39% from main US-based customer of positive displacement pumps used for highly aggressive and corrosive fluids
- More components currently being converted over to Hardide coating which will increase the product range in FY23
- Airport baggage X-ray machine manufacturer revenue down 52% in FY22 due to COVID restrictions on flying
- Production of their X-ray machines now returning – we supply a kit of parts per machine



Aerospace (up by 24%)

Aerospace market now in recovery:

- Passenger numbers and aircraft utilisation increasing
- Airbus increasing production rates, especially on A320 series single aisle aircraft – planning increase from current 50/month to 75/month by 2025
- Regular parts being coated for A320, A330 and A380. An additional, high volume opportunity on A320 currently in trials
- Leonardo Helicopters: full approval received and first orders for transmission components completed successfully
- Maintenance activity very buoyant- bow wave of heavy maintenance and checks due to greater utilisation of fleets
- Ongoing orders for BAE Eurofighter Typhoon



Recovery in demand well underway but mindful of economic headwinds, ongoing cost inflation and supply chain disruptions

Success in recovering cost increases through selling prices

Revenues continue to grow due to increasing adoption of our coatings

Board determined to achieve profitability and be cash generative

Board seeking to drive significant value for shareholders over medium to longer term by further development and commercialisation of our unique, high performance coatings technology, including co-operation with other coating companies

Implemented initiatives to improve working capital and reduce costs by £0.3m/£0.4m in first half of calendar year 2023

Vigorously progressing high value, near and medium term additional sales opportunities which underpin the drive to profitability



Financials

Consolidated Income Statement

£m	2020/21	2021/22	Variance
	FY	FY	
Sales	3.6	5.0	+39%
Gross Profit %	36%	37%	+1 ppt
Overheads	2.8	2.8	-
EBITDA	(1.5)	(0.9)	+40%

Balance Sheet

£m	2020/21	2021/22
	FY	FY
Assets	9.2	9.0
Cash	1.5	0.7
Net working capital	(0.7)	(1.1)
Liabilities & provisions	(3.1)	(3.1)
Capital Employed	6.9	5.5
Equity	22.8	23.3
Losses	(16.0)	(18.2)
Other reserves	0.1	0.4
Shareholders' funds	6.9	5.5

Cash Flow

£m	2020/21	2021/22
	FY	FY
Net Operating Cash	(1.7)	(0.9)
Net Investing Cash	(0.3)	(0.3)
<i>Share Issues</i>	<i>0.8</i>	<i>0.5</i>
<i>Finance Lease</i>	<i>0.1</i>	<i>-</i>
<i>Lease Principal</i>	<i>(0.3)</i>	<i>(0.2)</i>
<i>Loan Changes</i>	<i>0.4</i>	<i>0.1</i>
<i>Grant repaid</i>	<i>(0.2)</i>	<i>-</i>
Net Financing Cash	0.8	0.4
Net Cash At Start	2.7	1.5
Net Cash At End	1.5	0.7



Thank you



Appendix

What Hardide does....

- Produces a unique, patented nano-structured tungsten carbide surface coating that protects critical metal components used in aggressive environments
- Increases working life by typically 3-5x and up to 100x
- Coating created by chemical reaction of specialist gasses inside Chemical Vapour Deposition (CVD) reactors, and grows directly onto the component

UK & US facilities

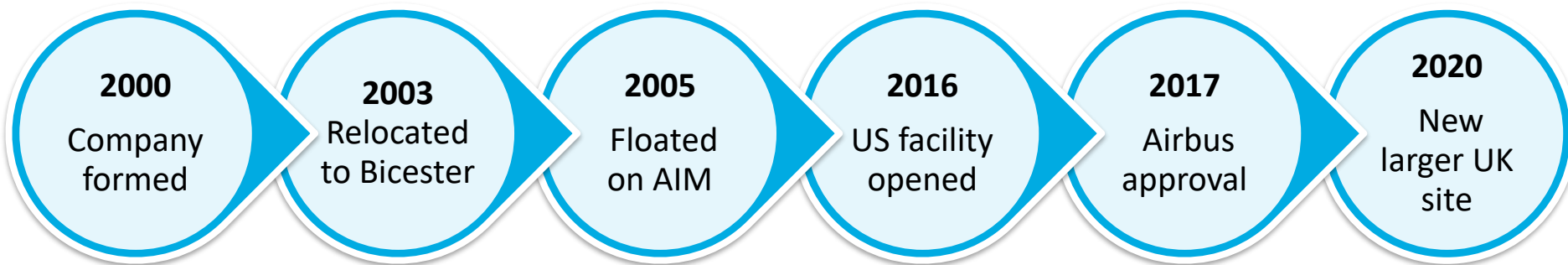
- HQ, technical centre and 22,000 sq.ft production facility in Bicester, Oxon, UK





- 25,000 sq.ft production facility in Martinsville, Virginia, USA



History of Hardide



 **Leading global innovator** and developer of advanced Tungsten Carbide based metal coatings

 **Strong IP portfolio:** 6 patents registered since incorporation with a new patent granted for coating turbine blades



Hardide developed and commercialised a patented CVD tungsten carbide nano-structured coating with a unique combination of properties

The coating does what others can't: coating complex shapes, both inside and outside and non-line of sight areas

Provides B2B coating service from sites in Bicester, UK and Virginia, USA

Customers and developments: all major oil service companies, Airbus, BAE Systems, Leonardo Helicopters, Ansaldo Energia, EDF Energy



Listed on AIM since 2005

Hardide's family of coatings

Coating hardness/toughness/thickness can be tailored to a specific application requirements

Type	Hardness	Toughness	Thickness	Applications
Hardide-H "Ultra-Hard"	3000 – 3500 Hv	Satisfactory	5...10 µm	Self-sharpening blades
Hardide-T "Tough"	1100 – 1600 Hv	Excellent	Typically 50 µm	Oil tools, pumps, valves, actuators
Hardide-A "Aerospace"	800 – 1200 Hv	Excellent	50-100 µm	Hard chrome replacement
Hardide-W	400 Hv	Excellent	Up to 300 µm	X-ray Anodes

Hardide coating technology

Nano-structured, tungsten carbide metal-matrix coatings that significantly extends the life of critical parts and tools

Coating is crystallised atom-by-atom from gases by Chemical Vapour Deposition (CVD)

Hardide does what other coatings can't: uniformly coats complex shapes, both internal and external surfaces, including non-line-of-sight areas

250x greater wear resistance than steel

Protects against corrosion, acids and sour oil H_2S

Coated parts typically last 3-5x times longer- and up to 100x times!!



Hardide enables high-value manufacturers to make globally competitive products, differentiated in terms of quality, performance and life-cycle costs

Hardide CVD coating reactor



Coats internal surfaces and complex shapes





 Environmental standard: **ISO 14001:2015**



A unique coating technology that fills a major gap in the range of other coating companies:

Coats uniformly where others cannot:

- complex shapes
- internal as well as external surfaces

Proven technology with coating facilities in UK and USA

Enables blue-chip engineering companies make globally competitive products

Strong revenue growth over 4 years before COVID – now back on upwards path

Process knowledge embedded in key employees

Large addressable market size

Solid position in energy sector

New aerospace business with Airbus, Leonardo Helicopters and others

Power generation turbine blade market opportunities are significant

In new, larger UK premises with additional production equipment and space for future growth

Positioned well for significant future growth