

INTERIM RESULTS

March 2020

Making strong progress as the market leader in graphene dispersion and application technology



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- It should be noted that past performance cannot be relied on as a guide to future performance. This presentation contains forward-looking statements with respect to AGM’s plans and objectives regarding its financial conditions, results of operations and businesses.

Executive leadership



DR ADRIAN POTTS

Chief Executive Officer

Joined AGM in January 2015, CEO from August 2018

Various senior roles in composites industry including UMECO

Experienced in strategy development, business turn-arounds and integrating new innovation



DAVID BLAIN

Chief Financial Officer

Joined AGM in October 2018 from Nanoco Group PLC

Substantial experience in PLCs and the nanomaterials industry

Experienced at delivering successful commercialisation of technology startups

Company overview

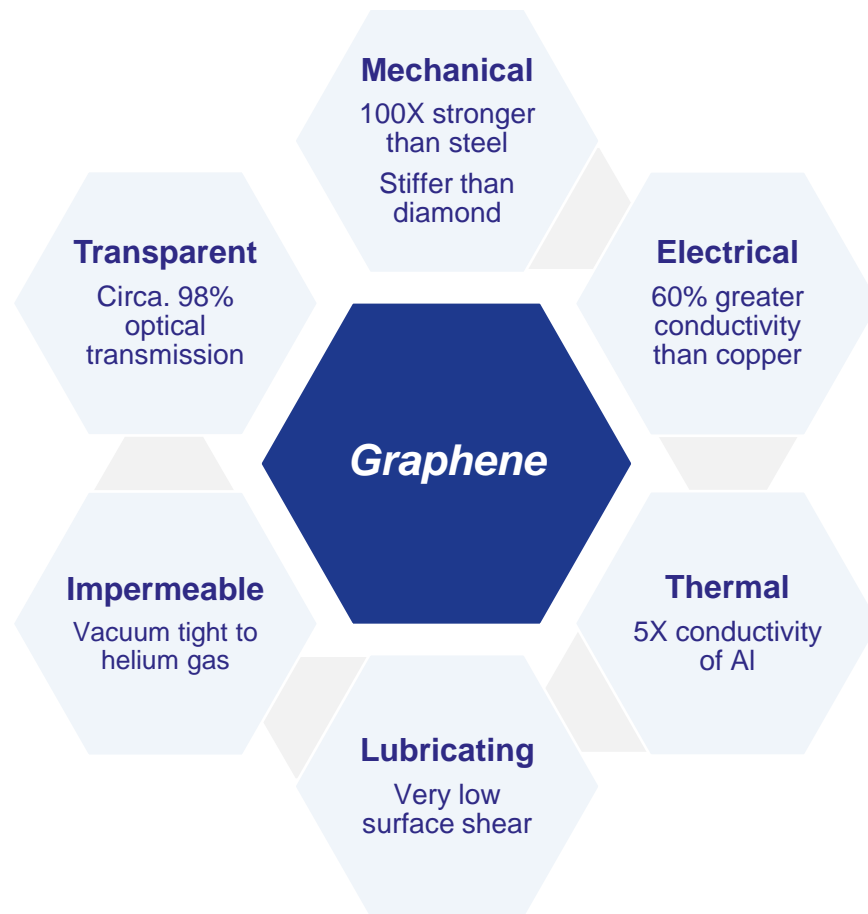


1. Leading innovator in Graphene dispersion and application technology with significant and patent-protected IP
2. Expertise and substantial know-how to manage the primary challenge of incorporating graphene into end products and achieving property enhancements
3. Enhanced product offering of easy-to-use, dispersed nanomaterials
4. Products supported by in-depth technical data and practical guidance, providing a unique solution proposition for a growing number of customer engagements
5. Long term customer collaboration now resulting in increased product launches and sales momentum

Strong progress in 3 core sectors of protective coatings, composites and functional materials

Graphene – the performance.....and the challenge

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- Single layer, super-performance material
- Isolated in 2004 at University of Manchester
- Nobel prize in 2010

- Super-performance single layer vs practical real-time use
- Whilst graphene is capable of delivering transformational improvements to a variety of materials, its complex nature means successful integration is dependent upon highly collaborative relationship with customers
- This involves rigorous and time-intensive testing processes to successfully transfer these material enhancements into commercial end products

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It is a matter of matching the right material at a certain price point to specific application and performance objectives

*The Graphene Council
Graphene Commercialization Report 2020*

AGM – Ideally placed to meet the challenge with unique offer



DISPERSION

AGM's patented dispersion technology - key enabler for successful use of GNP

- Range of IP protected chemistries to suit numerous applications
- Environmentally friendly solutions
- Dispersion optimisation to suit end use
- Long shelf life additives



APPLICATION

Differentiators that set AGM apart:

- AGM's Application Technology – clear understanding of end-use need and how to achieve it
 - Deep engagement with end customer
 - Understand objectives, needs and commerciality
 - Standard dispersions – as general purpose additives across a range of applications
 - Customised solution – end-use specific



DATA

AGM's "How-To" data validates easy use of graphene

- Impressive technical data to support claims
- "How-To" knowledge to assist the customer practically
- Regulatory leadership for safe use of nano-materials

AGM's business model

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MODULAR MANUFACTURING PROCESS

PROVEN DATA

Genable industry tested for 5,000 hours,
delivering 5x anticorrosive performance
improvements

Hycote Graphene anti-corrosion primer
delivering 1,750+ hours protection

100% improvement in fracture toughness in
composites
Low Density thermal conductivity adhesives

Dispersion IP & capability

Application IP & capability



**Coatings barrier
performance & anti-
corrosion**



**Composites,
adhesives,
elastomers**



**Functional
materials**



**Printing
platform
technology**

Routes to market are through sales team and distributors that have delivered a sales pipeline of over 90 ongoing programmes, 76% of which are in coatings

Highlights for the period – Large scale product launches



COATINGS:

halfords

October 2019 – Halfords launched instore and online sales of Graphene primer

- Aerosol primer produces exceptional corrosion protection, due to AGM's graphene dispersion



October 2019 - James Briggs Ltd (JBL) launched Hycote graphene anti-corrosion primer

- Product for sale in mainstream market on Amazon and Tetrosyl Express



Aug 2019 - Alltimes Coatings Ltd launched Advantage Graphene liquid coating roofing system

- Significantly enhanced anti-corrosion performance delivered by incorporating AGM's graphene, includes unparalleled 30 year warranty



January 2020 – Graphene enhanced Top Coat MT

Product for harsh environment industrial applications demanding outstanding anti-corrosion protection

Positive progress with industrial applications for Avanti

COMPOSITES:

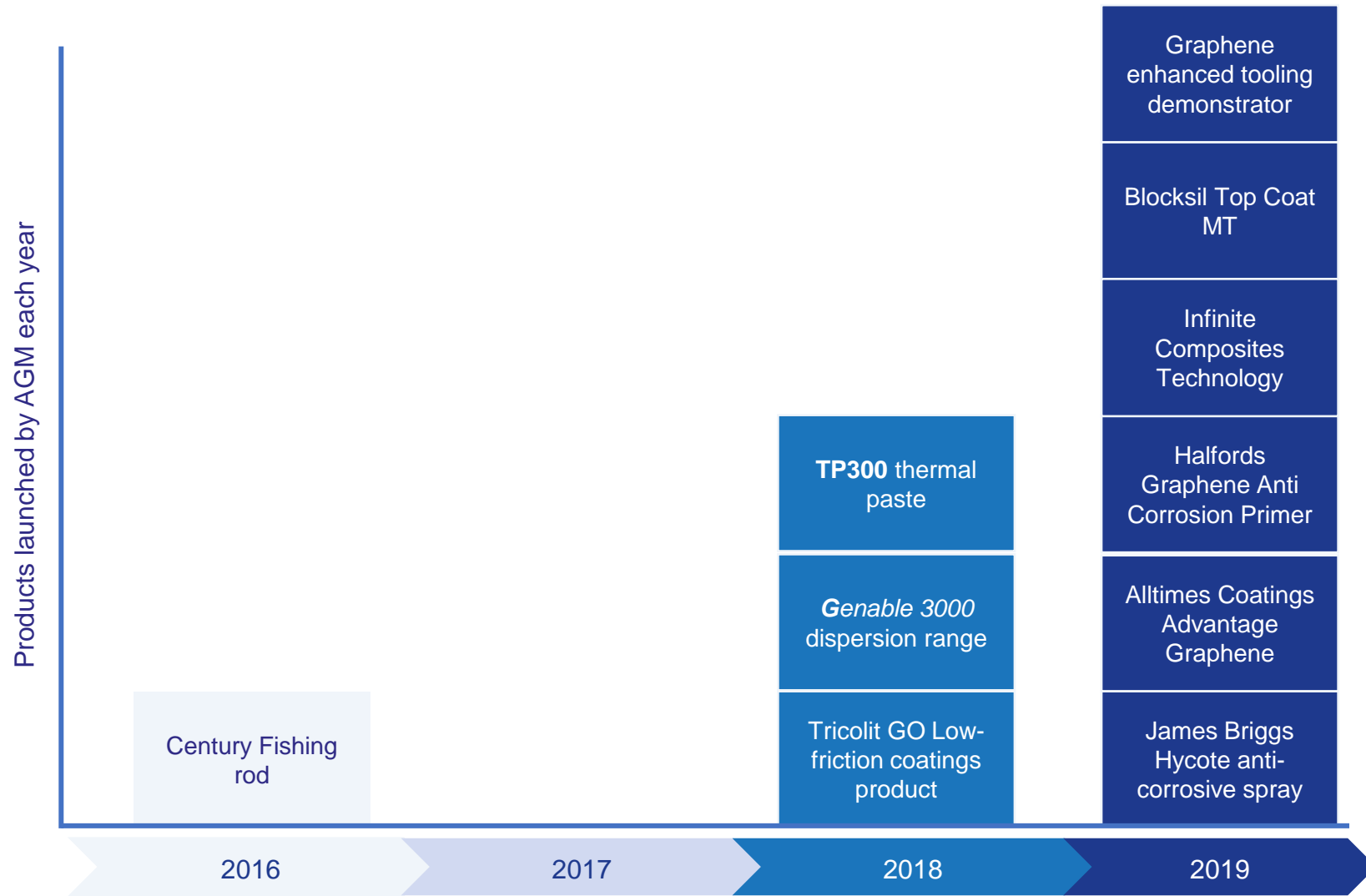


January 2020 – design, manufacture and demonstration of 10m carbon fibre forming tool incorporating graphene suitable for advanced fibre placement methods



Cost effective materials solution combined with graphene for enhanced longevity in multi-component manufacturing through toughness increase of the composite material

AGM – Product portfolio to date



Highlights continued

STRATEGIC REVIEW

- Completed with a focus on commercial momentum and cash conservation

RESOURCES RE-ALIGNMENT

- Resources aligned across business development and technical teams to support product development, rigorous testing and customer engagement
- Streamlining of manufacturing operations to focus on dispersion capabilities
- Company's cash run-way extended until at least Q4 2021 on very conservative revenue forecasts

ASIA

- The strategic review established that Asia has potential to be a core market territory for AGM regarding graphene exploitation and commercialization
- Positive engagement with Beijing investor community in October 2019; ongoing COVID-19 delayed follow up

FINANCIAL

- Cash at 31 January 2020 was £4.3m
- Loss before tax for the period was £2.3m. £2.0m after tax

Number of projects in pipeline vs July 2019

Stage of
Development

Approval Time

Short

Medium

Long

Scouting/ unclear

Total

Agreement on
scope of sampling
and engagement

4 (0)

8 (-3)

0 (-5)

0 (-1)

12 (-9)

Initial testing and
interpretation of
results

12 (+3)

27 (-1)

5 (-8)

1 (0)

45 (-6)

Repeat testing for
consistency and
review of results

7 (+2)

6 (-3)

1 (+1)

0 (0)

14 (0)

Final product trials
formulation and
specification

5 (+2)

8 (+4)

0 (0)

0 (0)

13 (+6)

Final commercial
engagement

6 (0)

2 (0)

0 (0)

0 (0)

8 (0)

Total at 31 January 2020
Movement since 31 July 2019

34

51

6

1

92

+7

-3

-12

-1

-9

2019 Case studies



ALLTIMES COATINGS

- Produced in partnership with Alltimes Coating, specialist in the supply and application of protective coatings for buildings
- Significantly enhanced anti-corrosive performance delivered through incorporation of AGM's graphene – Advantage Graphene is being offered with an unparalleled 30-year product warranty
- Industry-leading levels of anti-corrosive performance and life expectancy for industrial & commercial roofs
- A highly cost-effective solution. Provides building contractors and owners longevity and reduced cost of ownership
- **Nigel Alltimes, Managing director, Alltimes Coatings Limited:**
"We believe that with the launch of Advantage Graphene, we are bringing to market a unique and revolutionary liquid roofing system for our industrial and commercial customer"

Before



After



ADVANCED COMPOSITES



- 10m long Advanced Fibre Placement composites tool
- Produced in partnership with CTES and SHD
- Successful integration of graphene through printing technology into tool composite structure
- Proven performance enhancements include increased fracture toughness to enhance longevity of tool for multiple part pulls
- Integration of low temperature curing innovative, high end use temperature tooling prepreg from SHD. Enables lower cost route to market
- Easy integration of graphene. Can be incorporated as liquid dispersion into matrix resin or through AGM's innovative Structural Ink printing technology

The Forming tool fixture



Research, Development and Data Progress



- Dispersions for Water based environmentally friendly coatings chemistries, acrylics and epoxies
- Completion of C4/C5 higher performance additives for harsher environment coatings
 - Low risk of adoption enabling conventional primers and top coats to be used
 - Easier point of entry for a 3 coat system for exceptional barrier performanceOR
 - Corrosion and barrier performance enhancement as a single coat primer to be used with a top coat
- CX extreme corrosion environment coatings additive development progressing to plan
- Adjacencies to barrier and coatings performance in work
- In-depth technical data availability to support customer engagement
- Active international engagement for regulatory accreditation for volume and safe use of new materials technology
- Composite materials development progressing through printable technology platform

Income statement summary

	Unaudited 6 months to 31 January 2020 £'000	Unaudited 6 months to 31 January 2019 £'000	Audited year ended 31 July 2019 £'000
Revenue	35	26	50
Other income	-	23	74
	35	49	124
Cost of sales	(135)	(231)	(472)
Gross loss	(100)	(182)	(348)
Operating expenses	(2,196)	(2,226)	(4,554)
EBITDA	(1,900)	(2,233)	(4,559)
Exceptional costs	(168)	—	—
Depreciation	(228)	(175)	(343)
Operating loss	(2,296)	(2,408)	(4,902)
Net finance income	18	34	67
Loss on ordinary activities before tax	(2,278)	(2,374)	(4,835)
Tax on loss on ordinary activities	300	200	908
Loss for the period attributable to equity shareholders	(1,978)	(2,174)	(3,927)

- Strong sales in February 2020
- YTD revenues are 20% higher than the year ended 31 July 2019

- Revenues – sample sales stable at approx. £10k, product sales increased by £9k
- No grant income available in the period
- Cost re-alignment completed in 2019 reducing the cost base by £1m on an annual basis – this will come through in future periods
- The exceptional cost relates wholly to the cost of implementing the re-alignment process
- IFRS 16 implemented with effect from 1 August 2019 to recognize leases as assets and liabilities – no material impact on Income statement

Cashflow summary

	Unaudited 6 months to 31 January 2020 £'000	Unaudited 6 months to 31 January 2019 £'000	Audited year ended 31 July 2019 £'000
Operating activities			
Net cash used in operations	(2,349)	(2,173)	(4,184)
Net finance income	2	45	69
Tax received	623	—	—
Net cash used in operating activities	(1,724)	(2,128)	(4,115)
Investing activities			
Purchase of intangible assets	(56)	(12)	(77)
Purchase of property, plant and equipment	(16)	(57)	(116)
Net cash used in investing activities	(82)	(69)	(193)
Net decrease in net cash and cash deposits	(1,806)	(2,197)	(4,308)
Net cash and cash deposits at 31 July 2019	6,135	10,443	10,443
Net cash and cash deposits at 31 January 2020	4,329	8,246	6,135

- R&D tax credit of £700,000 re 2018/19 expected to be received in second half
- Cash runway to Q4 2021 in very conservative revenues scenario following re-alignment process

- Cash used in operations in line with operating loss
- Non cash items offset by decrease in creditors
- R&D tax credit of £623,000 re 2017/18 received in August
- Continued and increased investment in IP assets
- Minimal investment in PP&E during the period

Extending cash runway



- In October 2019 AGM confirmed its operational update announcing the re-alignment of resources
- This has better positioned the Group to support the product development of customers presenting nearest-term revenue opportunities, in order to focus on sales growth
- Over recent years AGM's core expertise has been proved to be in dispersion and the application know-how to effectively integrate the performance benefits of graphene in customer products
- The Board decided to focus resources and activities around meeting customer opportunities through the dispersion and end-use application of graphene as the best means of revenue growth
- Re-alignment has reduced the Company's operating cost base and extended AGM's cash runway to Q4 2021 positioning the Company well to deliver new technology and products to the market place
- Cash operating cost base of £4.3m in the year to 31 July 2019 is expected to fall by circa £0.9m and £1.1m for the years ending 31 July 2020 and 2021, respectively. The cost of implementation of these changes was circa £0.2m, incurred during the period to 31 January 2020.
- The Company retains the capability to scale up at the appropriate time and maintains its core skill base

Impact of COVID 19



- Cash forecasts are based on very conservative revenue so are already on a worst case basis
- Staff working in accordance with UK government guidance and have taken appropriate precautions to keep our staff safe
- Essential manufacturing of customer orders and monitoring of customer service and long term projects managed on a rotating staff basis
- All meetings moved to remote format
- Travel halted until further notice. Costs reduced
- All planned conference attendance has been postponed until a further later date by organisers. Costs reduced accordingly
- Our customers may find it more difficult to generate sales as their customers may be focused on the current crisis rather than new technology projects

Summary



Leading IP and know-how

- Leading innovator in graphene application technology
- Significant (and patent protected) IP in production, dispersion and application
- Company ideally placed to enable industry to manage the primary challenge of incorporating graphene into end products and achieve recognised property enhancements

Compelling product portfolio

- Making strong progress in 3 core sectors of coatings, composites and functional materials – products to market increased by 200% in 12 months
- Enhanced product offering and supporting product data providing unique solutions with significant number of focused customer engagements
- Strong technology base to develop coatings offering and continued opportunities with composites, inks, printing and adjacent technologies

Evolved focus gaining customer traction

- Management team streamlining focus on commercial traction and revenues
- Early commercial engagements approaching product sales
- Cash runway until at least Q4 2021



APPENDIX

Major shareholders

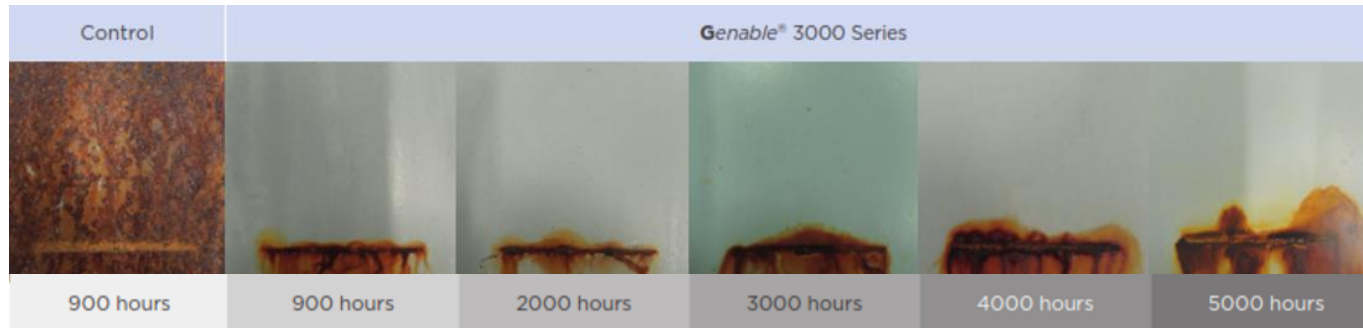
Shareholder	% holding
IP Group	19.09
Hargreaves Lansdown Stockbrokers	11.56
Herald Investment Management	9.61
Eden Tree Investment	7.59
Insight Investment	6.60
Ruffer	5.14
Interactive Investor	5.14
HSDL Stockbrokers	3.99
Directors	
Professor Karl Coleman	3.60
Dr Bryan Dobson	0.27
Adrian Potts	0.14
Sean Christie	0.07
David Blain	0.07
Mike Townend	0.05

AGM technical capabilities

Analysis	Information Gathered
Raman Spectroscopy	Composition, Degree of Graphitization
Electron Microscopy SEM/TEM	Morphology, Fracture surface analysis
Light Scattering	Particle Size Distribution
Thermogravimetric Analysis	Thermal Stability, moisture content, non-carbon residue
Turbidity Monitoring	Short and long term dispersion stability
Viscometry	Dispersion viscosity, rheology
UV Analysis	Dispersion characterisation
Mechanical Testing	Flexural modulus + strength, tensile modulus + strength
Electrical Testing	Sheet resistance, bulk resistivity
Thermal Analysis	Thermal conductivity
Electrical Impedance Spectroscopy	Corrosion potential, corrosion current, coating impedance
Synthetic Seawater Immersion Testing	Corrosion resistance
Salt Spray Testing	Corrosion resistance
Impact Testing	Coatings impact resistance
Abrasion Resistance Testing	Coatings performance
Chemical Resistance Analysis	Coatings performance
QUV	UV resistance
Analysis	Information Gathered

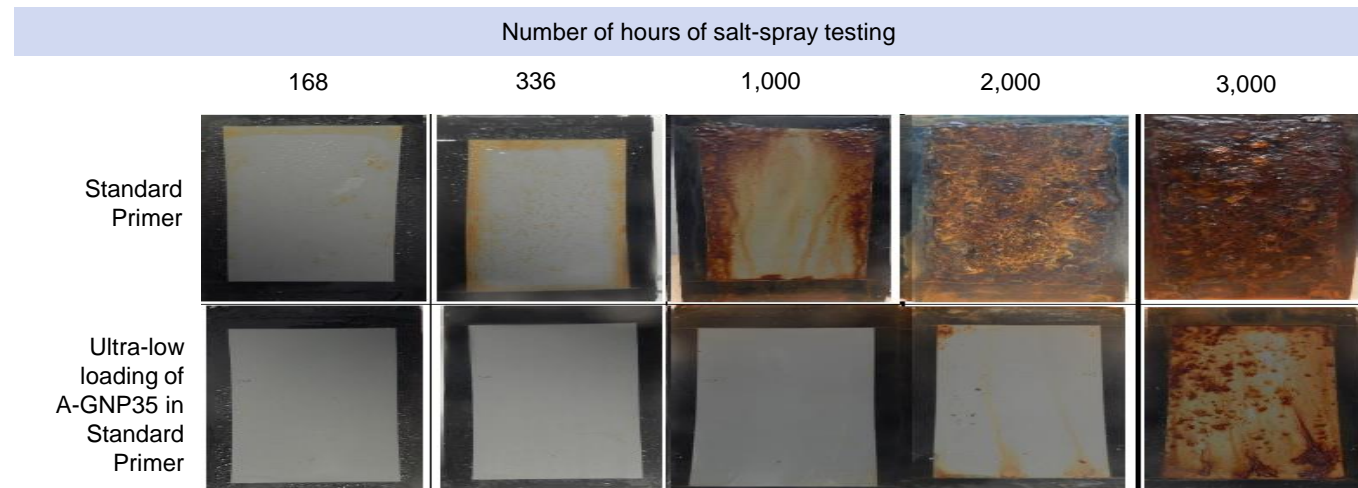
Market progress – coatings

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At least 5x Performance improvement by using Graphene A-GNP loading low % by weight in final coating

Substantial improvement to corrosion performance



AGM dispersion technology and application know-how key to performance success

About AGM

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