

# AMG Advanced Metallurgical Group N.V.

Investor Presentation

October 2009

# Disclaimer

THIS DOCUMENT IS STRICTLY CONFIDENTIAL AND IS BEING PROVIDED TO YOU SOLELY FOR YOUR INFORMATION BY AMG ADVANCED METALLURGICAL GROUP N.V. (THE "COMPANY") AND MAY NOT BE REPRODUCED IN ANY FORM OR FURTHER DISTRIBUTED TO ANY OTHER PERSON OR PUBLISHED, IN WHOLE OR IN PART, FOR ANY PURPOSE. FAILURE TO COMPLY WITH THIS RESTRICTION MAY CONSTITUTE A VIOLATION OF APPLICABLE SECURITIES LAWS.

This presentation does not constitute or form part of, and should not be construed as, an offer to sell or issue or the solicitation of an offer to buy or acquire securities of the Company or any of its subsidiaries nor should it or any part of it, nor the fact of its distribution, form the basis of, or be relied on in connection with, any contract or commitment whatsoever.

This presentation has been prepared by, and is the sole responsibility of, the Company. This document, any presentation made in conjunction herewith and any accompanying materials are for information only and are not a prospectus, offering circular or admission document. This presentation does not form a part of, and should not be construed as, an offer, invitation or solicitation to subscribe for or purchase, or dispose of any of the securities of the companies mentioned in this presentation. These materials do not constitute an offer of securities for sale in the United States or an invitation or an offer to the public or form of application to subscribe for securities. Neither this presentation nor anything contained herein shall form the basis of, or be relied on in connection with, any offer or commitment whatsoever. The information contained in this presentation has not been independently verified. No representation or warranty, express or implied, is made as to, and no reliance should be placed on, the fairness, accuracy or completeness of the information or the opinions contained herein. The Company and its advisors are under no obligation to update or keep current the information contained in this presentation. To the extent allowed by law, none of the Company or its affiliates, advisors or representatives accept any liability whatsoever (in negligence or otherwise) for any loss howsoever arising from any use of this presentation or its contents or otherwise arising in connection with the presentation.

Certain statements in this presentation constitute forward-looking statements, including statements regarding the Company's financial position, business strategy, plans and objectives of management for future operations. These statements, which contain the words "believe," "expect," "anticipate," "intends," "estimate," "forecast," "project," "will," "may," "should" and similar expressions, reflect the beliefs and expectations of the management board of directors of the Company and are subject to risks and uncertainties that may cause actual results to differ materially. These risks and uncertainties include, among other factors, the achievement of the anticipated levels of profitability, growth, cost and synergy of the Company's recent acquisitions, the timely development and acceptance of new products, the impact of competitive pricing, the ability to obtain necessary regulatory approvals, and the impact of general business and global economic conditions. These and other factors could adversely affect the outcome and financial effects of the plans and events described herein.

Neither the Company, nor any of its respective agents, employees or advisors intend or have any duty or obligation to supplement, amend, update or revise any of the forward-looking statements contained in this presentation.

The information and opinions contained in this document are provided as at the date of this presentation and are subject to change without notice.

This document has not been approved by any competent regulatory or supervisory authority.

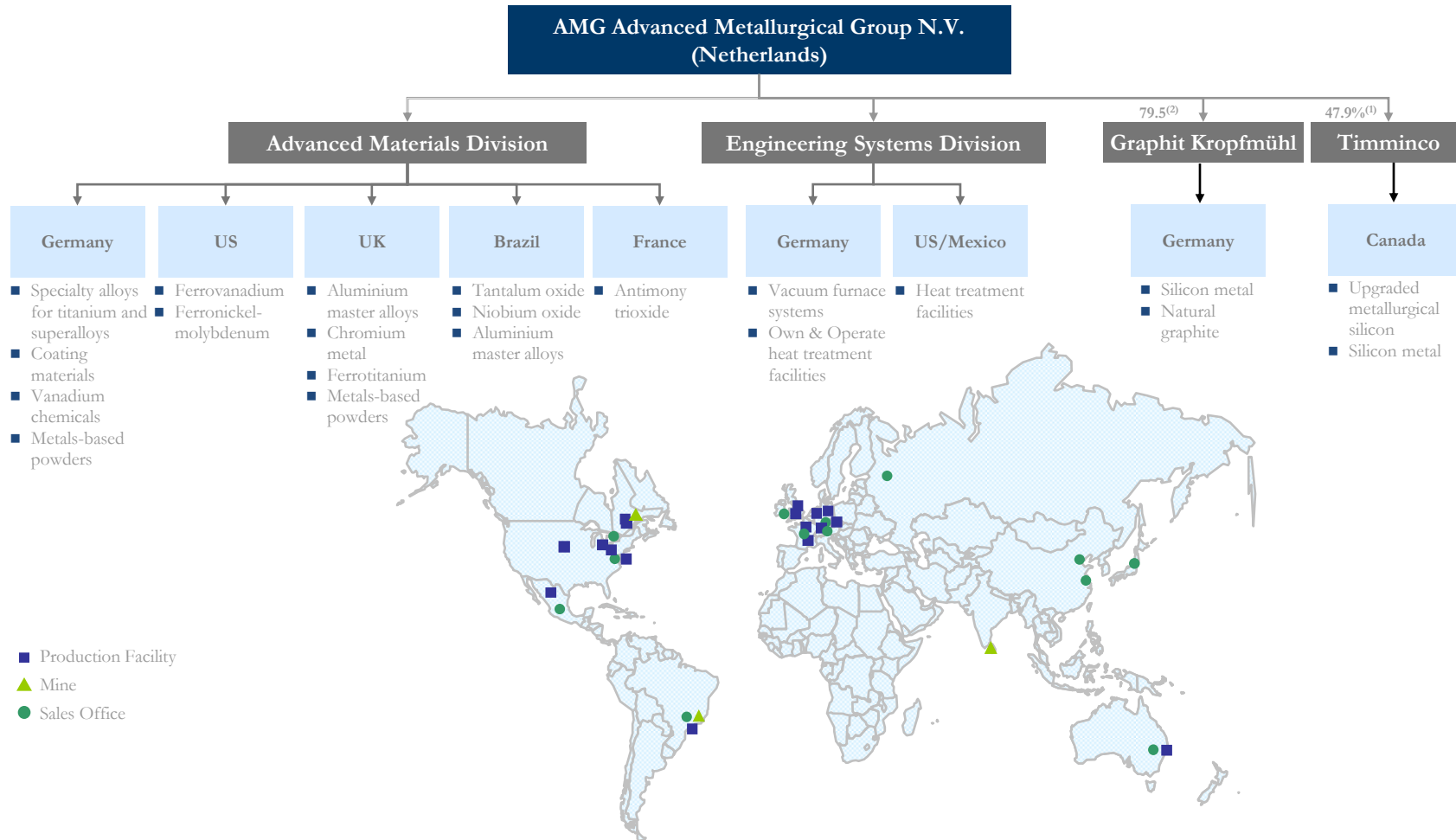
# Contents

- Highlights and Operational Review
- Market Overview
- Financial Review
- Outlook



- Preeminent global specialty materials and materials technology company serving growing end-markets
- **Advanced Materials Division:** Niche and complex specialty materials
- **Engineering Systems Division:** Advanced vacuum furnace systems for high-purity metals
- Publicly listed investments:
  - **Timminco (47.9%-owned):** Silicon metal and solar grade silicon
  - **Graphit Kropfmühl (79.5%-owned):** Natural graphite and silicon metal
- **2009 Q2 Results:** Revenue down 5% from Q1 to \$233.4 million and EBITDA up from \$3.3mn in Q1 to \$13.3mn in Q2

# Global Operations



Global presence enables access to key growth markets

Note: This chart is a simplified depiction of AMG's organisational structure.

(1) Timminco Limited is listed on the Toronto stock exchange (TIM.CN / TIM.TO).

(2) Graphit Kropfmühl AG ("GK") is listed on the Frankfurt stock exchange (GKRG.DE / GKR.GR).

# AMG strategic principles

## AMG's objectives



## Strategy

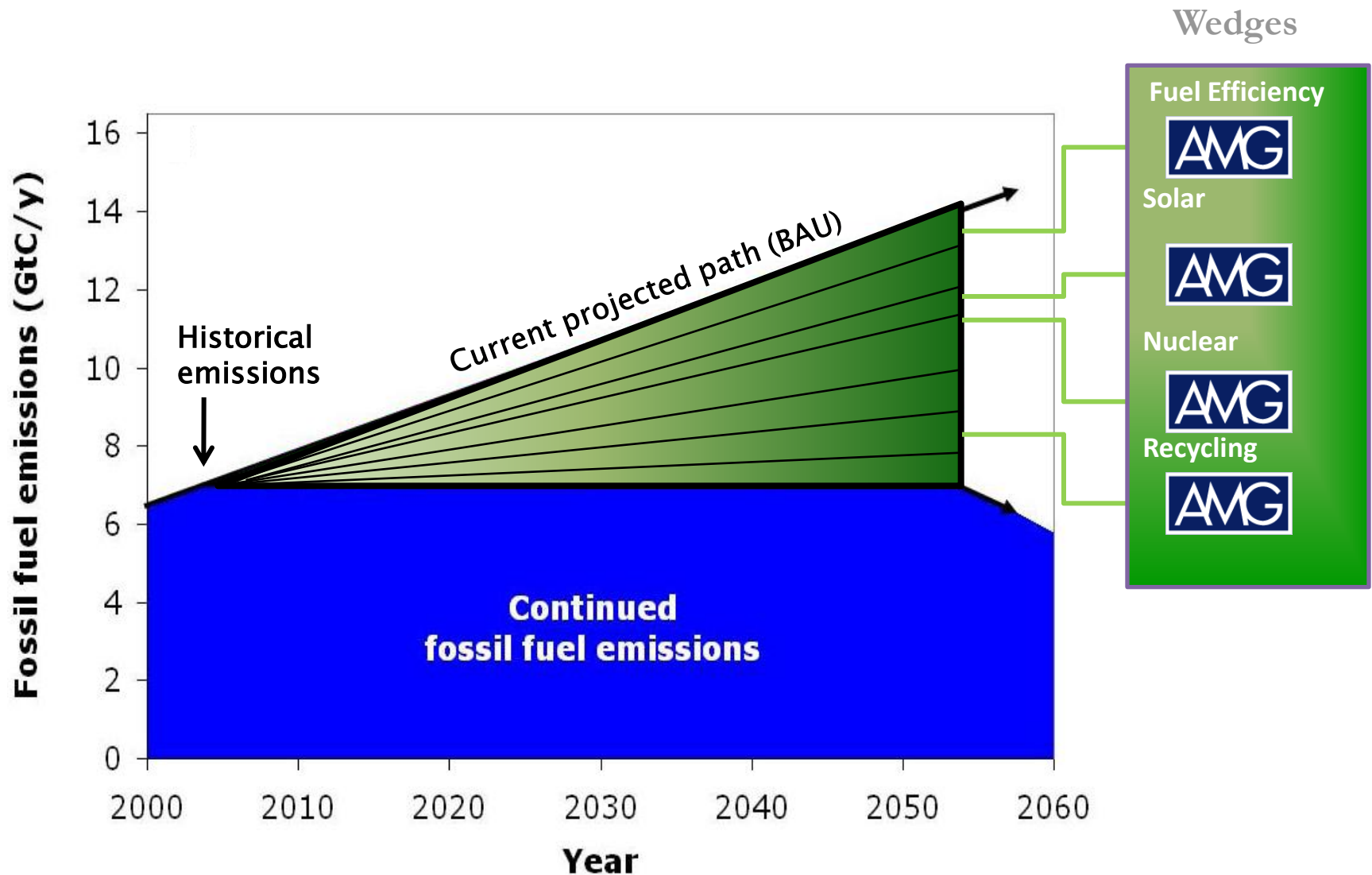


AMG's strategy is to increase shareholder value through focusing on clean energy technologies and industries – Solar, Fuel Efficiency, Recycling and Nuclear

# Market Overview



# Stabilization Wedges - AMG





# Focus on Clean Energy Technologies and Markets

## Fuel Efficiency

- Proprietary alloys and superalloys for aerospace applications
- Furnace technology for production of titanium and other weight-advantaged alloys
- Coating solutions for aerospace and combustion engines

## Solar

- Crystallisation and purification vacuum furnace technology
- Low-cost producer of solar grade silicon (SoG Si) based on proprietary technology
- Producer of silicon metal feedstock used to manufacture polysilicon

## Recycling

- Recycling of spent refinery catalysts and power plant residues used to produce ferrovanadium and ferronickel-molybdenum and vanadium alloys
- Long-term contract for spent catalysts supports long term capacity expansion plans

## Nuclear

- Sintering furnaces for nuclear fuel cycle
- Annealing furnaces for production of nuclear fuels
- Vacuum furnace technology for pebble bed reactors
- Storage technology for nuclear waste

# End Markets

## AMG Advanced Metallurgical Group N.V. <sup>(1)</sup>

Revenue Gross Margin Margin %	Solar		Fuel Efficiency		Recycling		Nuclear		Other		Total Group YTD	
	Q2 09	Q2 08	Q2 09	Q2 08	Q2 09	Q2 08	Q2 09	Q2 08	Q2 09	Q2 08	Q2 09	Q2 08
	84	100	62	124	18	55	3	0	66	134	233	413
	20	28	5	27	(2)	19	1	1	7	18	32	93
	24%	28%	8%	22%	-11%	35%	45%	N/A	11%	13%	14%	22%
	<ul style="list-style-type: none"><li>Solar grade silicon</li><li>Silicon metal</li><li>DSS Vacuum furnaces and other solar furnaces</li><li>Coatings for thin film applications</li></ul>		<ul style="list-style-type: none"><li>Vacuum furnace systems for the production of high purity metals</li><li>VAl alloys</li><li>Superalloys for the Ti industry</li></ul>		<ul style="list-style-type: none"><li>Ferrovanadium</li><li>Ferro nickel - molybdenum</li></ul>		<ul style="list-style-type: none"><li>Vacuum sintering furnace systems</li><li>Engineering for processing of weapons grade plutonium into MOX nuclear fuel</li></ul>		<ul style="list-style-type: none"><li>Chromium metal</li><li>Tantalum</li><li>Vacuum sintering furnace systems</li><li>Antimony trioxide</li><li>Natural graphite</li><li>Al master alloys</li></ul>			
	<ul style="list-style-type: none"><li>Producer of solar grade silicon</li></ul>		<ul style="list-style-type: none"><li>Petrol prices drive growth in specialty metals to improve fuel economy</li></ul>		<ul style="list-style-type: none"><li>Secondary business model enables unique low cost feedstock</li></ul>		<ul style="list-style-type: none"><li>Expanding nuclear technologies portfolio and expertise</li></ul>		<ul style="list-style-type: none"><li>Portfolio of diverse metals based businesses</li></ul>			

A focus on global clean energy technologies and industries

# Business Update

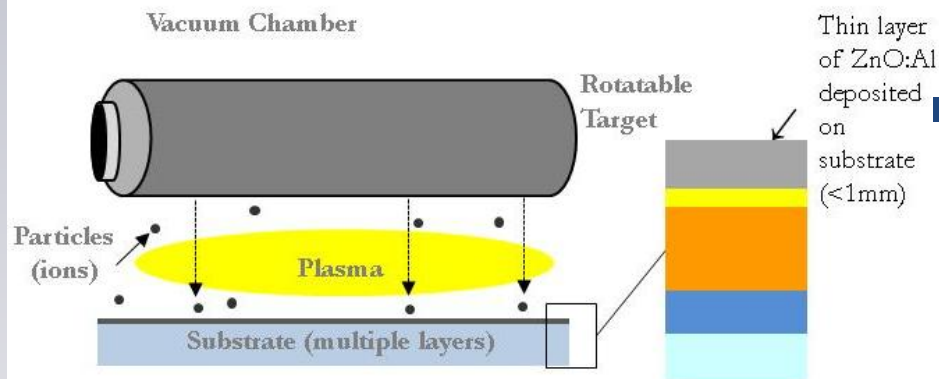
- Advanced Materials volume and price declines slowed during Q2; some product volumes showed signs of a bottom
- Engineering Systems produced solid Q2 results; the backlog declined amid global reductions in capital investment
- Publicly listed companies:
  - Timminco's solar grade silicon and silicon metal customers postponed deliveries; temporarily idled its silicon metal furnaces
  - GK maintained profitability despite lower silicon and graphite pricing and increased energy costs



# Solar – Update



- Market continues to struggle
  - Oversupply still evident in the value chain
  - Production continues to move to Asia
  - Weakness expected to continue into 2010
  - Long term prospects for solar remain positive
  - Thin film – market challenging, 2010 should improve



## Operations

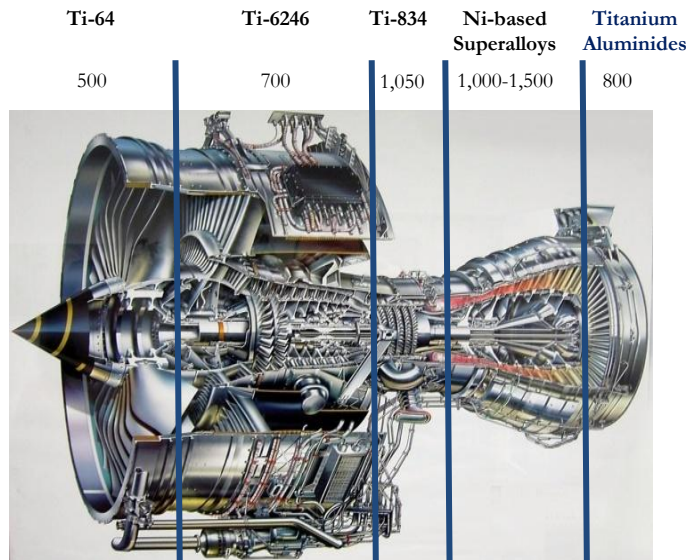
- Formed AMG Conversion Limited
- Retooling Berlin facility to produce non-solar furnaces



# Fuel Efficiency – Update



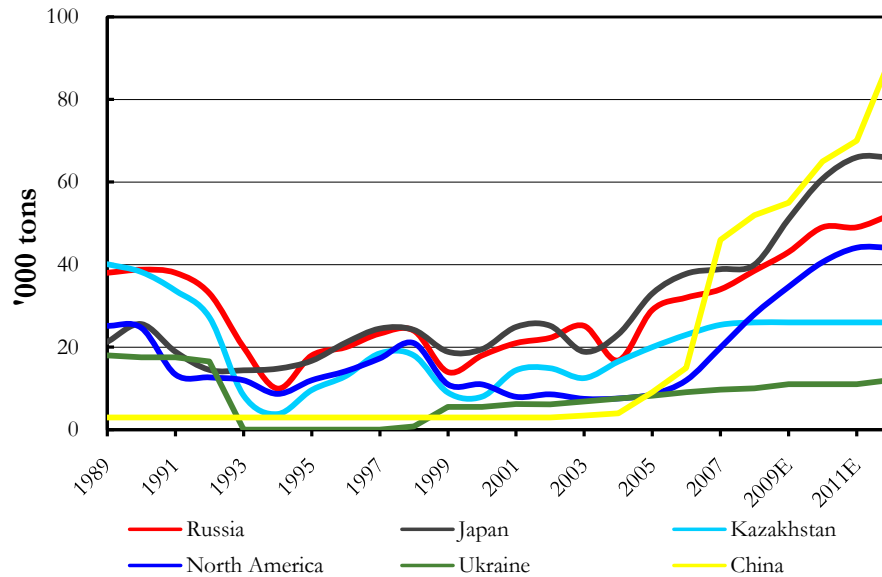
e.g.  
Operating  
temperature  
[ °C]



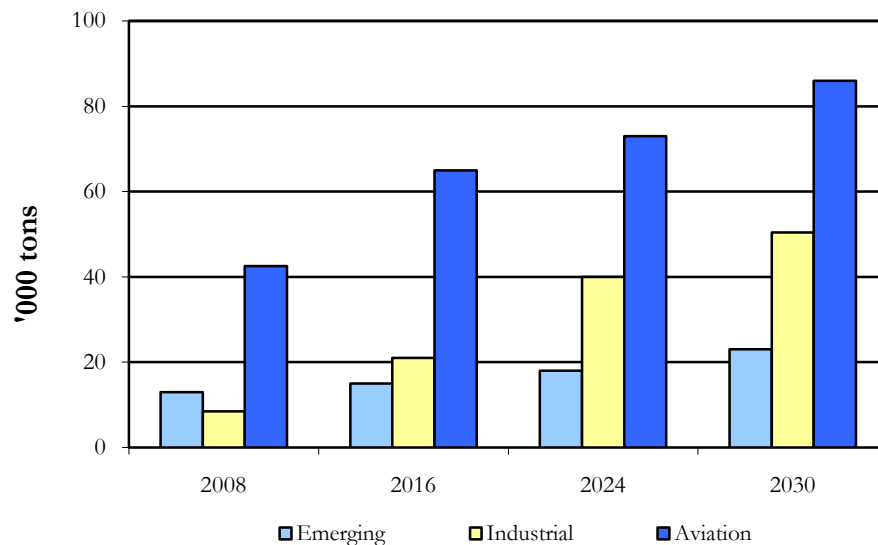
- Market demand moderating
  - Market adversely impacted by Boeing 787 and 747-8 delays
  - Significant inventory overhang in value chain
  - Prices have rebounded slightly from Q2 lows; demand still lagging

- Operations
  - Reducing headcount to match demand
  - Working capital reductions ongoing to improve cash flow

# Fuel Efficiency – Market Trends



Source: UKTMP



Source: UKTMP

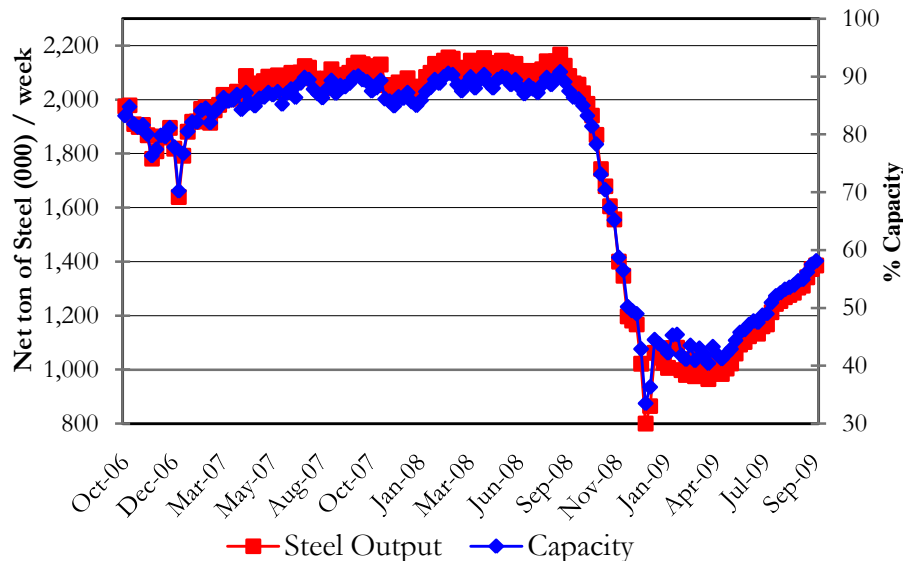
## Titanium Sponge Production by Country

- China production has surpassed other countries and will continue to lead in sponge
- Russia, Ukraine, Kazakhstan have become major producers of titanium sponge

## Titanium Metal Demand by Segment

- Despite recent market turmoil, titanium metal will continue to grow substantially for the next 20 years
- Aviation will be the key market going forward

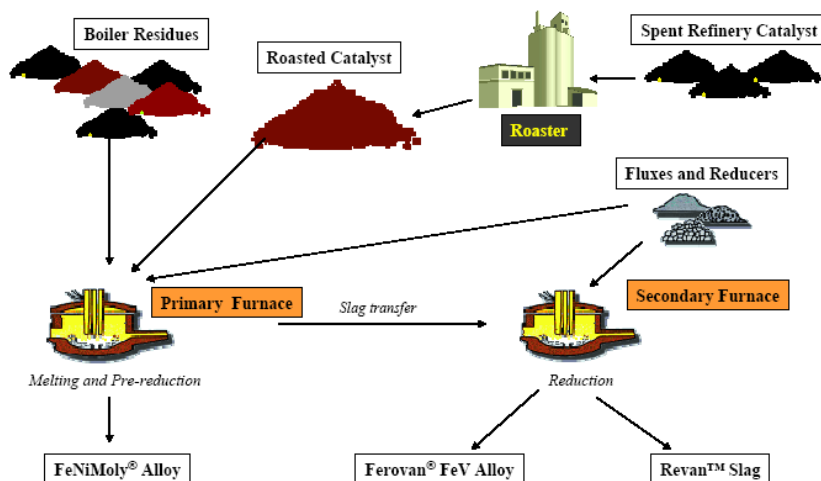
# Recycling – Update



- Market demand moderating
- AMG shut down operations during Q3 2009 – 6 weeks
- North American steel capacity utilization approaching 60% in Sep 09
- FeV pricing reached \$13/lb; currently at \$12/lb

■ Producers reducing capacity to match demand

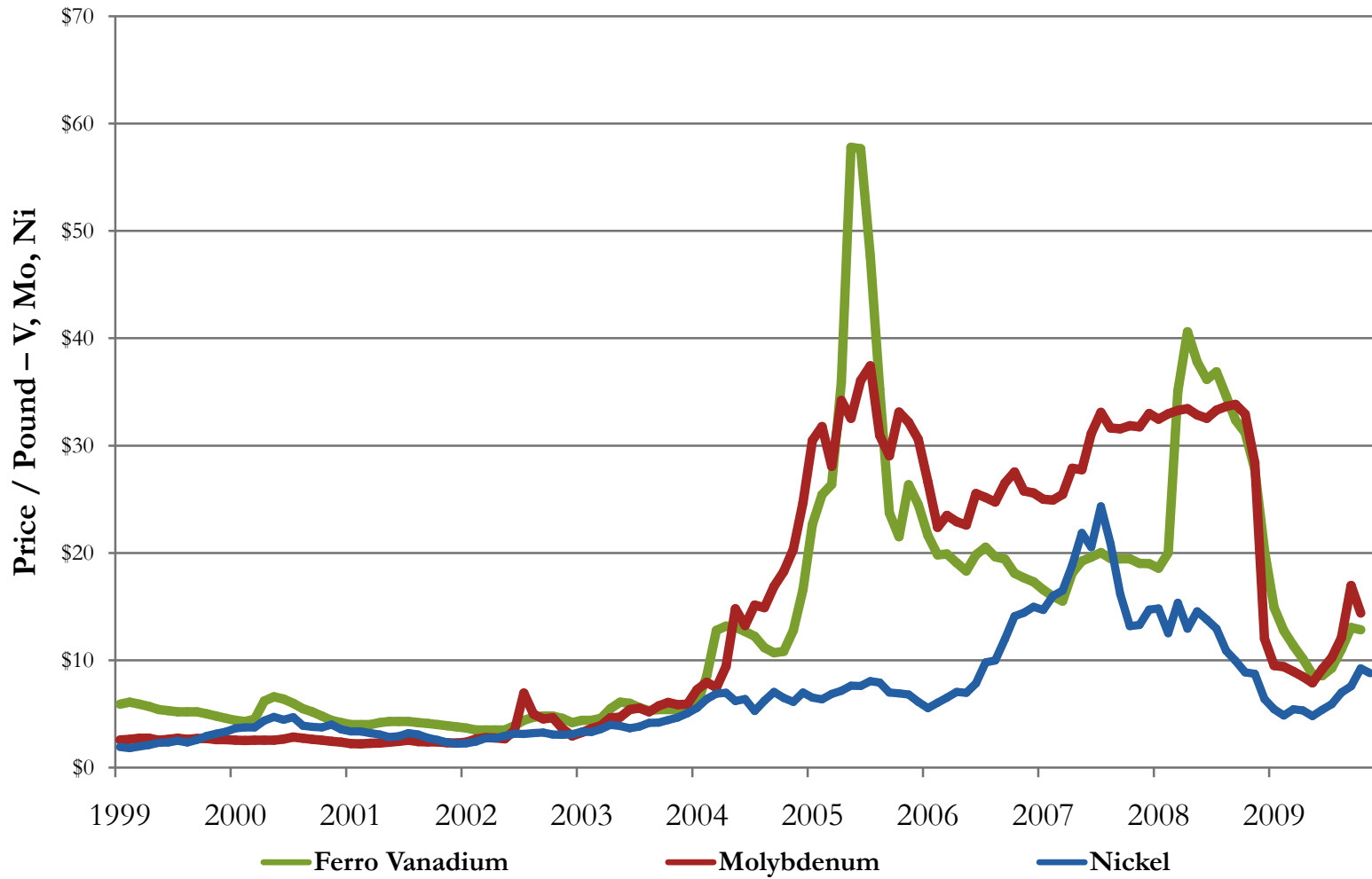
- Long term trends still positive
- Infrastructure growth from emerging markets will drive demand





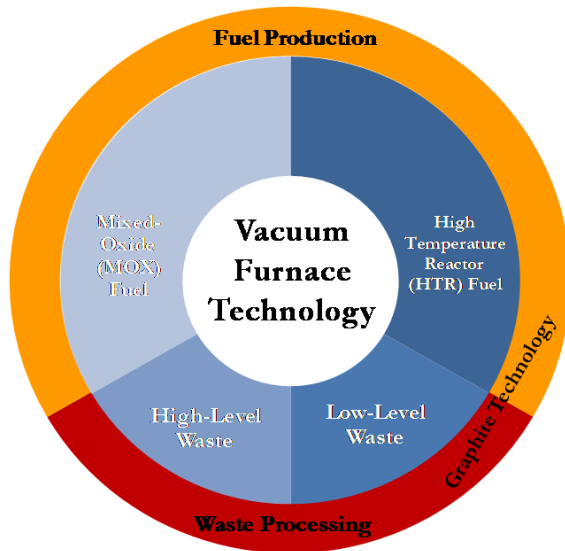
# Recycling - Pricing

Significant price trends – 10 years

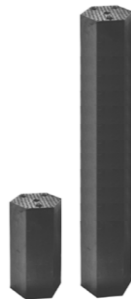


Prices are still below pre-crisis levels

# Nuclear – Update



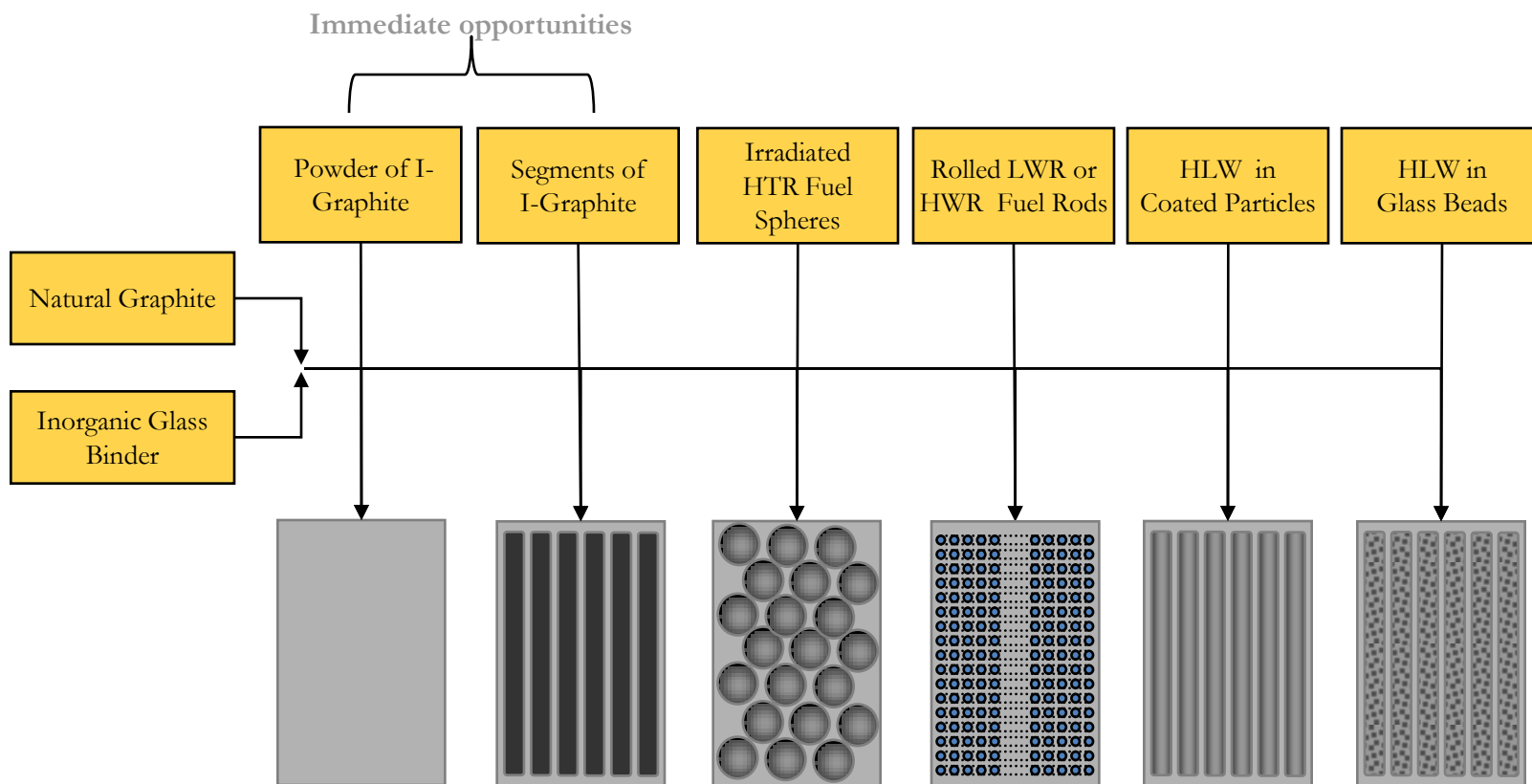
Stackable  
Graphite Blocks



- Market development ongoing
  - U.S. DOE engineering project on schedule
  - Impermeable graphite glass matrix (IGM) development achieved milestone
  - Business development projects are long term
  - New business opportunities in Russia and U.S.
- Operations
  - Engineering team has expanded to 20 engineers
  - AMG working with partners to expand product offering

# Nuclear – New IGM technology

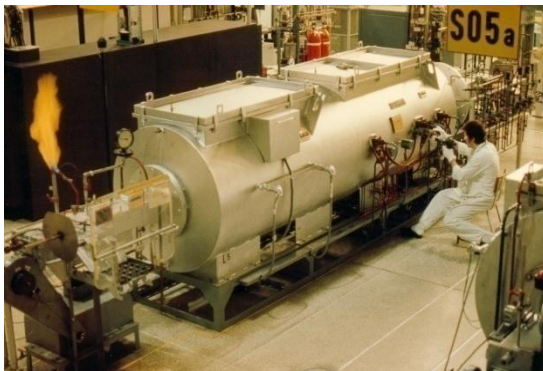
- Impermeable graphite-glass matrix (IGM) developed by ESD
  - Extends safe disposal from 10,000 years with today's vitrification technology to 1,000,000 years.
  - Extremely low corrosion rate due to closed pore system
  - IGM can transform various types and forms of radioactive waste streams



# Financial Review

# Financial Update

- Q2 Revenue: \$233.4 million
  - Q2 revenue excluding TIM: \$214.9 million
  - H1 2009 revenue excluding TIM: \$430.7 million
- Q2 EBITDA: \$13.0 million
  - EBITDA excluding TIM: \$22.2 million
  - H1 2009 EBITDA excluding TIM: \$38.0 million
- Cash of \$110.1 million and debt at \$249.3 million at June 30, 2009
  - Net debt of \$139.2 million at June 30, 2009
  - Total liquidity \$190.1 million
  - Net debt was \$85.1 million excluding TIM, 0.9x TTM June 2009 EBITDA



# Advanced Materials - Market, Products, and Customers

## Products

### Fuel Efficiency

- Specialty alloys for titanium
- Coatings for wear resistance

### Recycling - FeV

- Ferro-vanadium
- Ferro-nickel molybdenum

### Other

- Chromium Metals
- Tantalum
- Antimony
- Aluminium master alloys

## Competitors

- Reading Alloys Inc.
- Strategic Minerals Corporation

- Highveld Steel & Vanadium
- Gulf Chemical & Metallurgical Corporation
- Strategic Minerals Corporation
- Xstrata plc
- Chengde Vanadium & Titanium Stock Co. Ltd.

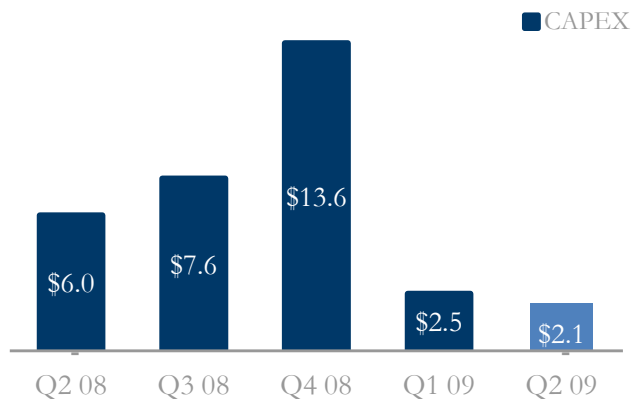
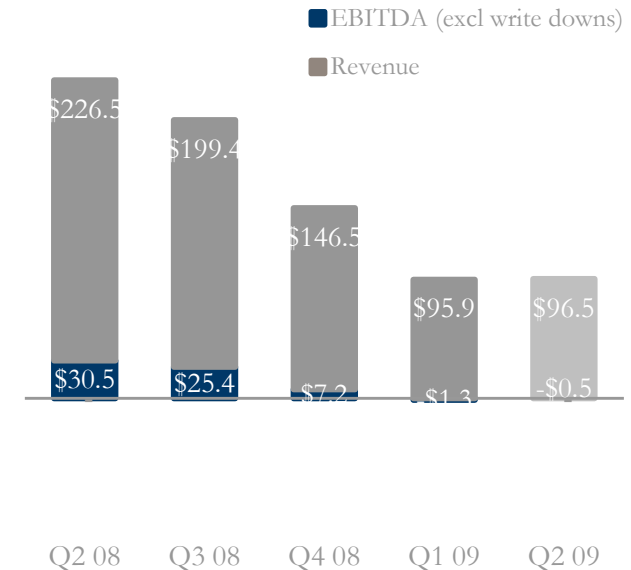
- KBM Affilips B.V.
- KB Alloys, Inc.
- Delachaux S.A.
- Campine S.A.
- Chemtura Corporation

## Sample Customers



## Financial Summary

(in millions)



## Highlights

- FeV reference prices declined 74% and FeV volumes declined 5% year over year impacting both revenue and EBITDA
- Demand remained soft due to lower structural steel production levels
- FTE headcount reduction of 20% from September 30, 2008
- Capital expansion limited to completion of projects in process and essential maintenance capital





# Engineering Systems - Market, Products, and Customers

## Products

### Solar

- Solar silicon melting and crystallisation systems (DSS furnaces)

### Fuel Efficiency

- Vacuum Melting and Re-melting Systems
- Precision Casting and Coating Systems
- Heat Treatment with high pressure gas quenching

### Nuclear

- Vacuum Sintering Systems

## Notable Successes

- 2001 – Secured furnace exclusivity with REC
- 2005 – Introduced single crucible furnaces
- 2008 – >\$200mm in revenue, 2<sup>nd</sup> largest market participant

- 2008 – Market Share leader in Ti remelting in China, the fastest growing Ti market
- 2008 – 80% market share in turbine blade coating

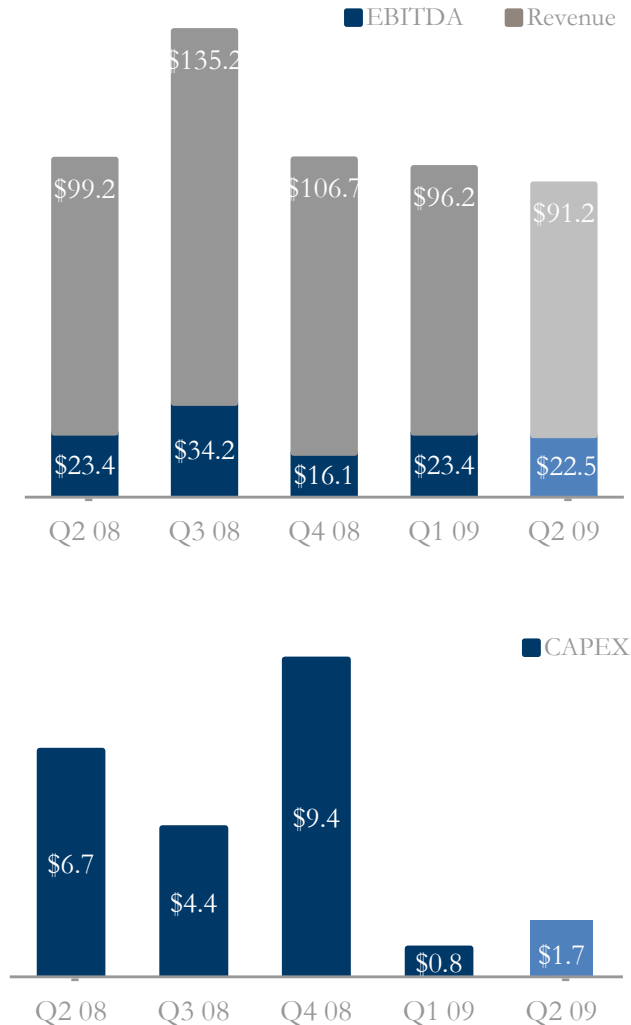
- July 2008 – Secured first nuclear engineering contract with DOE, through Shaw-Areva
- Portfolio of problem solving technologies under development

## Sample Customers



## Financial Summary

(in millions)



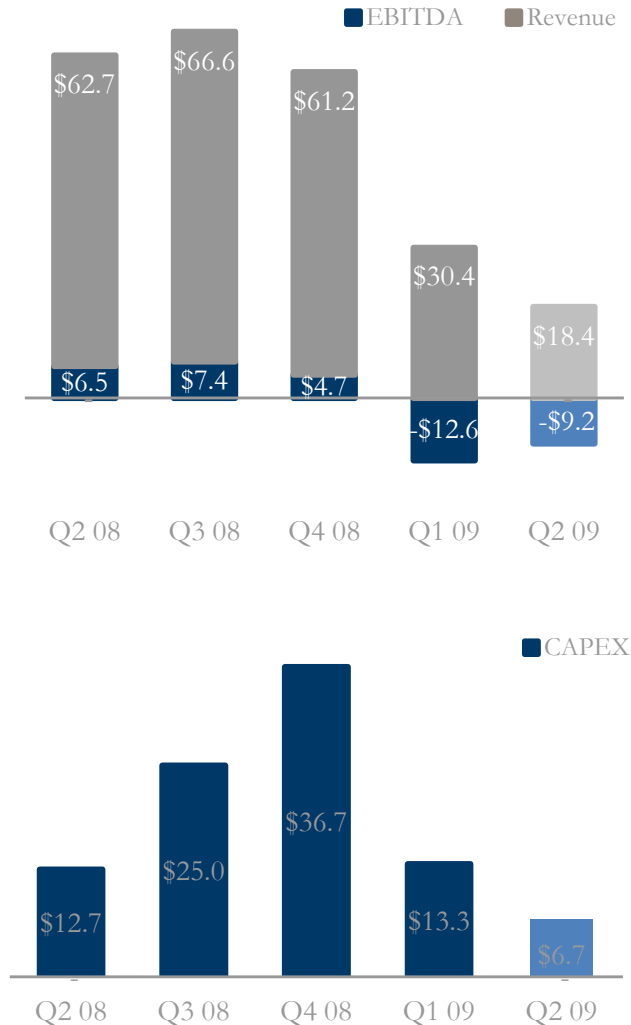
## Highlights

- Revenue decreased 8% to \$91 million
  - Solar silicon DSS furnace revenues increased 64% in Q2 09 as compared to Q2 08
- EBITDA was strong at \$23 million
- Backlog declined from \$332 million at December 31 2008 to \$223 million at June 30, 2009
  - Order backlog is now primarily comprised of furnaces sold to fuel efficiency end market
- H2 2009 EBITDA is expected to be lower than H1 due to the decline in backlog



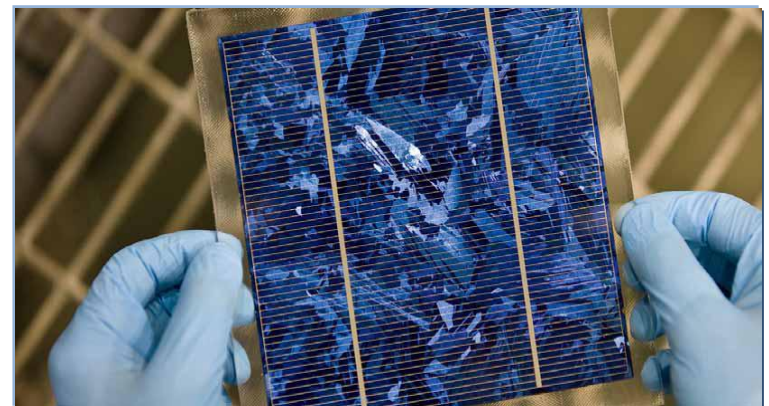
## Financial Summary

(in millions)



## Highlights

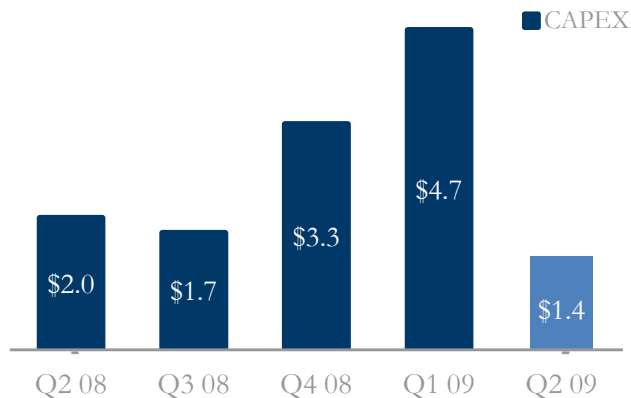
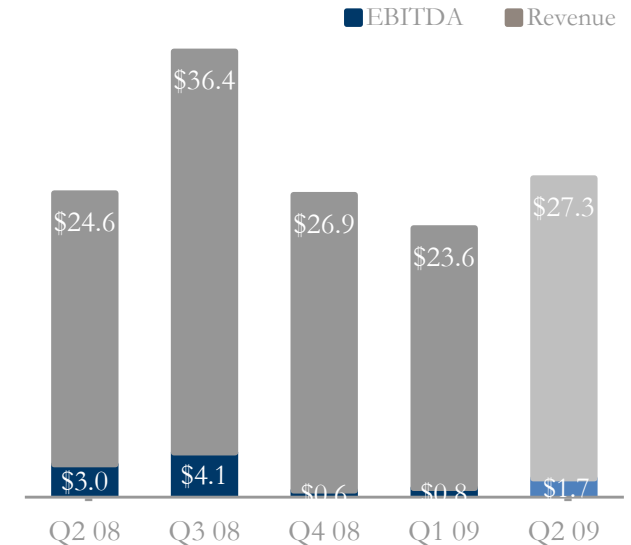
- Revenue decline due to lower silicon metal prices and stagnant solar grade silicon orders
  - Si metal spot prices: \$1.14/lb at 9.30.09
- Solar grade silicon pricing declined substantially due to excess capacity for polysilicon in the solar market
- EBITDA negatively impacted by lower volumes as well as production inefficiencies
- Future capital expenditures for the solar grade silicon line have been deferred
- Magnesium spin off completed during July of 2009



# Graphit Kropfmühl

## Financial Summary

(in millions)



## Highlights

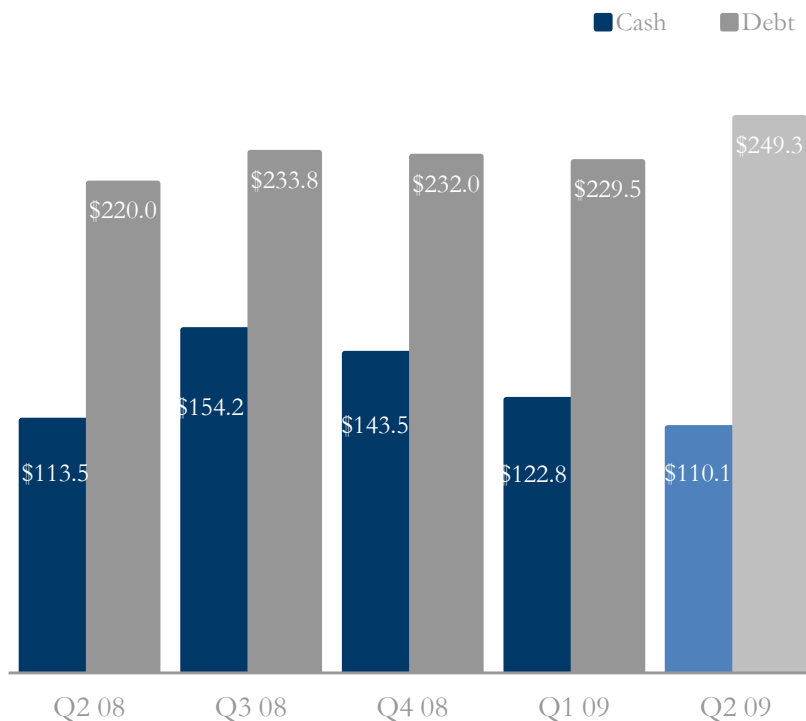
- AMG acquired GK in April of 2008 – Q2 2008 data is two months while Q2 2009 data is three months
- Revenues were negatively impacted by a decline in silicon metal volumes and declining graphite volumes and pricing
- EBITDA of \$1.7 million, increased from Q1 2009 due to cost containment measures
- CAPEX was primarily for the expansion of silicon metal production capacity, continued from 2008 initiatives
- Experiencing significant growth in energy saving building materials



# Capital Base

## Cash and Debt

(in millions)



Note: Cash includes short term investments

## Highlights

- Cash of \$110.1 million at 30 June 2009
- Total debt \$249.3 million at 30 June 2009
- Net debt of \$139.2 million at 30 June 2009
  - Excluding Timminco, net debt was \$85.1 million, 0.9x TTM June 2009 EBITDA
- Total liquidity \$190.1 million at 30 June 2009



# Outlook

- Advanced Materials
  - First signs of pricing stabilization occurring in Q3 2009
  - Return to historical levels will take some time
- Engineering Systems
  - Q2 2009 order intake better than Q1 2009
  - Lower order backlog entering Q3 2009 will affect H2 revenues and EBITDA compared to H1 2009
  - Q3 is seasonally slow due to holiday period
- Timminco
  - Weak demand for solar grade silicon continues; Si metal demand marginally improving
  - Focus on capital preservation
- Graphit Kropfmühl
  - H2 2009 silicon metal and graphite demand consistent with H1 2009 demand



# AMG Advanced Metallurgical Group N.V.

