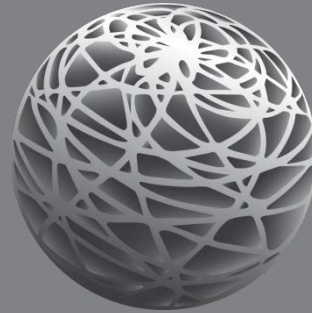


A GLOBAL LEADER IN METAL FLOW ENGINEERING

## Investor Pack

July – August 2015

VESUVIUS PLC



A GLOBAL LEADER IN METAL FLOW ENGINEERING

## 2015 Half Year Results

31 July 2015  
François Wanecq  
Chief Executive

VESUVIUS PLC

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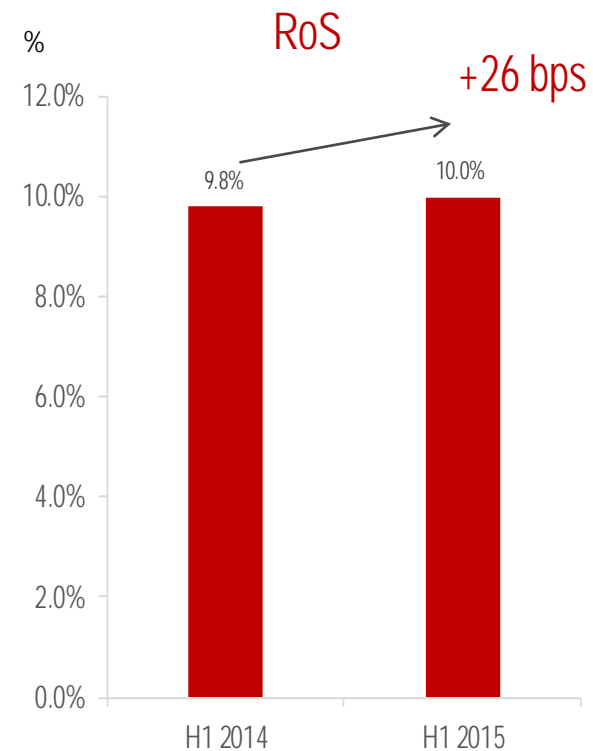
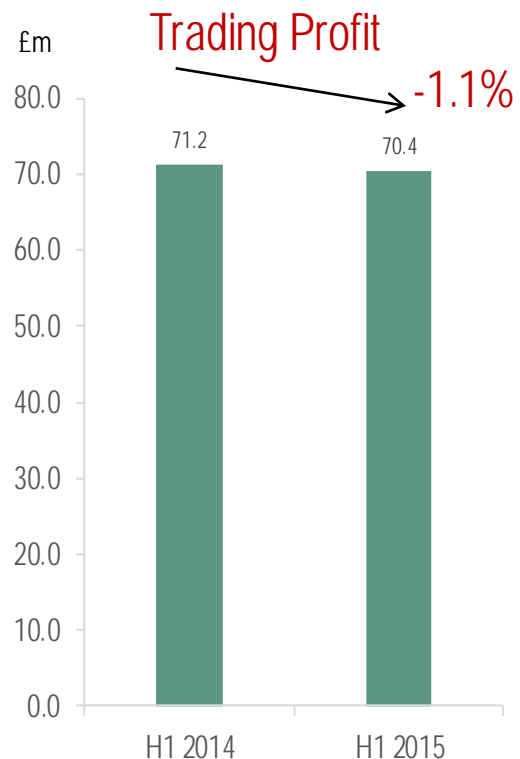
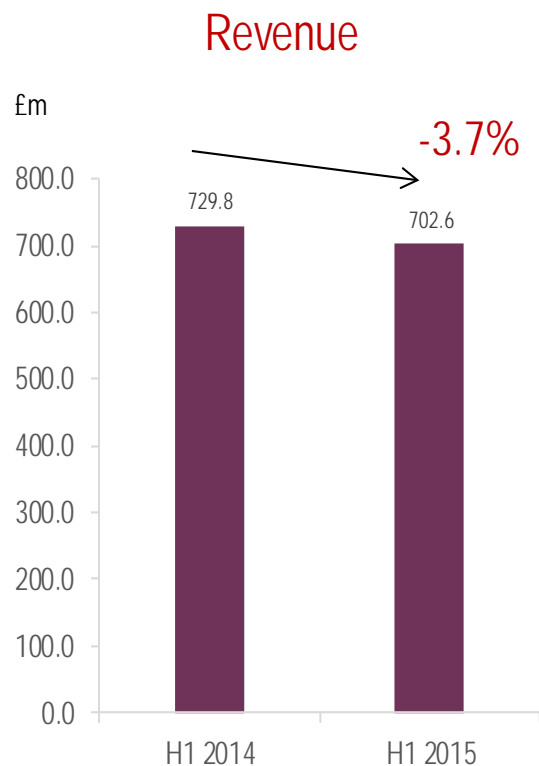
This presentation comprises information which is already in the public domain, and includes extracts from the Announcement of the Half Year Results for the six months ended 30 June 2015 (31 July 2015). You should read the whole of this Announcement. No reliance may be placed for any purposes whatsoever on the information contained in this document or on its completeness. None of the Company, its advisers, or any other party is under any duty to update or inform you of any changes to the information contained in this presentation.

# H1 2015 overview

- Lower performance reflects decline in global steel production volumes, with US hardest hit – our largest market
- Revenues up in all Asia-Pacific businesses
- Outperformance in China & India – both key to the future
- Return on sales increased to 10%, driven by proactive approach to self-help
- Encouraging progress on all five Strategic Priorities
- Restructuring programme being implemented to address structural changes in end markets
- Expectations for the full year remain unchanged
- Interim Dividend of 5.15 pence per share recommended, an increase of 3.0%



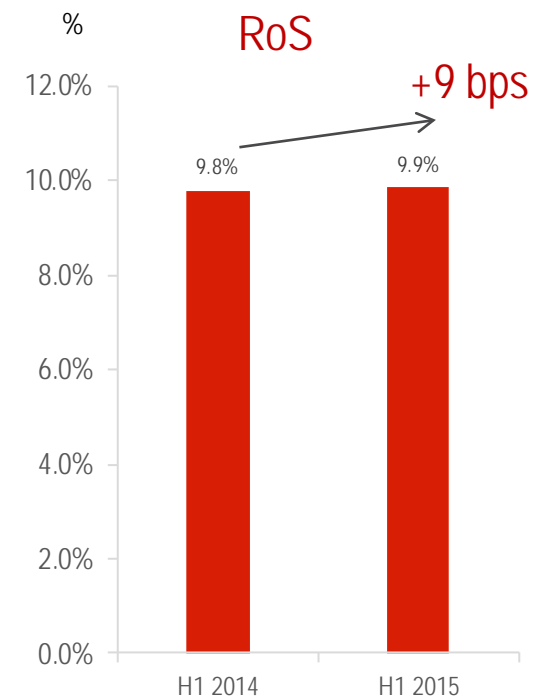
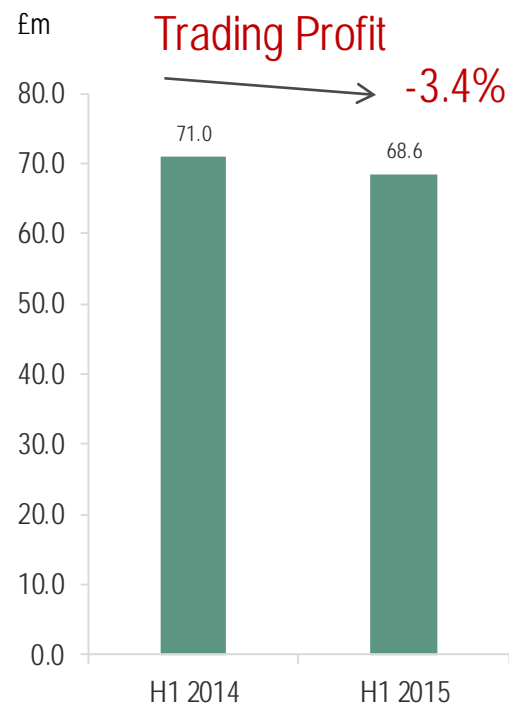
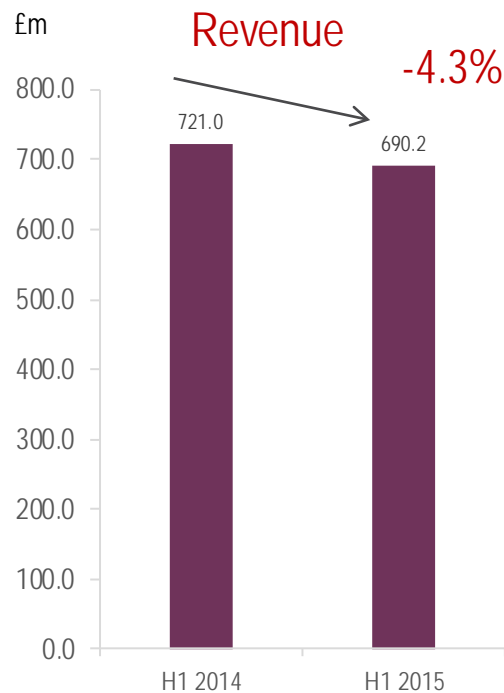
# H1 Trading performance as reported; lower sales, higher RoS



- 26 basis point improvement delivered on a reported basis



# H1 Underlying<sup>(1)</sup> trading performance



- 9 basis points improvement delivered on an underlying basis

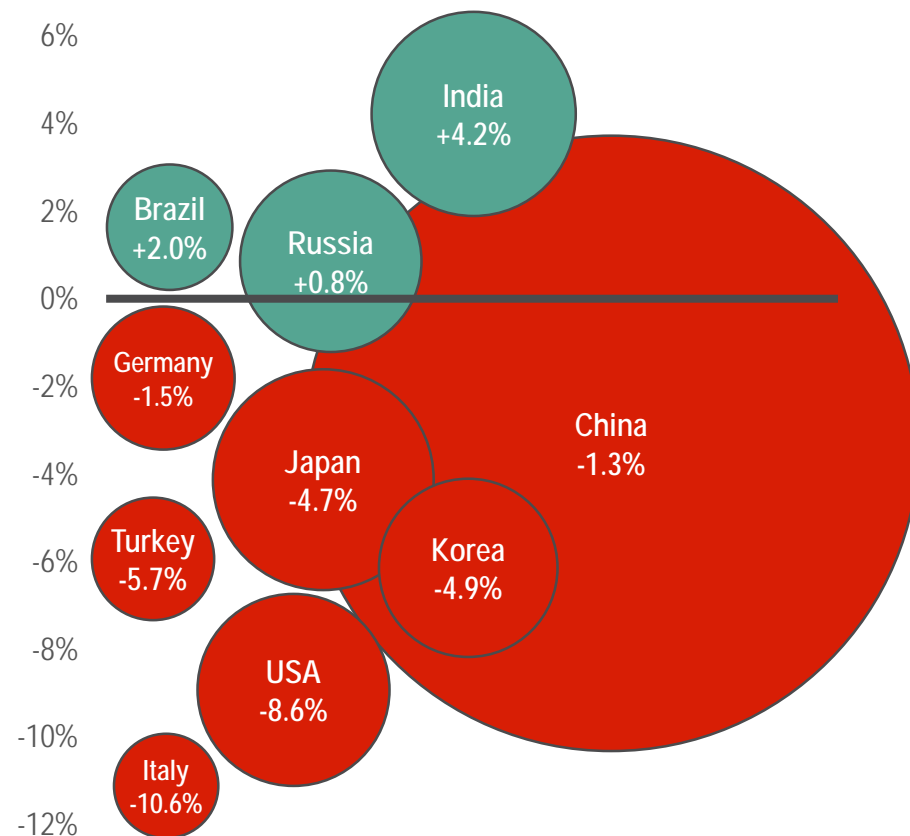
<sup>(1)</sup> Underlying basis is at constant currency and excludes separately reported items and the impact of acquisitions and disposals



# The world steel markets show substantial decline....

- World steel production down 2%
  - China (50.4% of global production) down 1.3%
    - 5.4 million tonnes reduction
  - Rest of world down 2.8%
    - USA down 8.6%
    - 11.4 million tonnes reduction
- 30 out of 65 WSA countries reported a drop
  - 7 of the top 10 producers reported drops
    - Represent 84% of global production

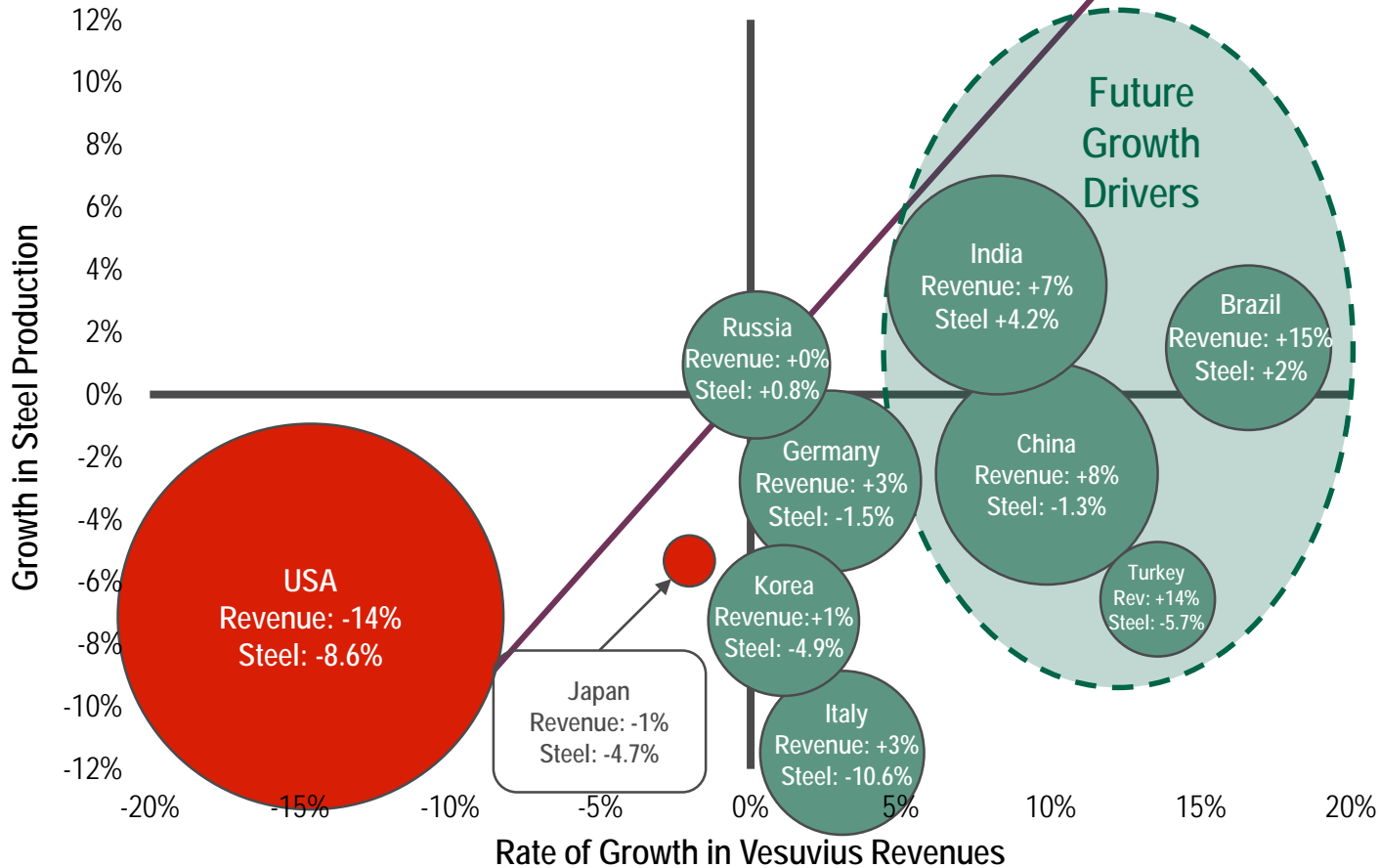
Rate of Growth in Steel Production  
H1 2015 Top 10 steel producers



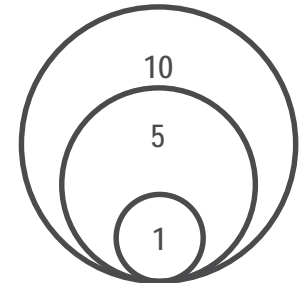
(1) Size of bubble refers to relative amount of steel produced

# ...whilst revenue grows in our main markets outside of the USA

Rate of Growth in Steel Production & Revenues H1 2015  
Top 10 steel producers



Scale of Bubbles  
(on both slides)

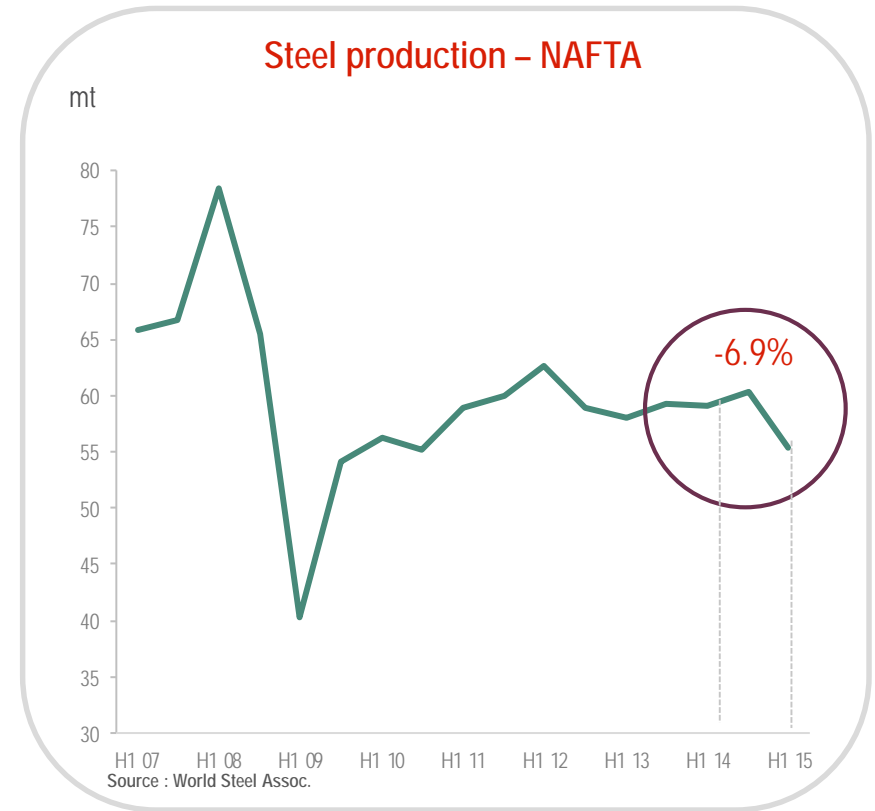


(1) Size of bubble refers to relative size of Flow Control and Advanced Refractories 2015 1H Revenue in each country



# NAFTA steel markets

- Final steel consumption remains solid
- Strong US Dollar favours imports from lower cost countries:
  - Canada
  - Brazil
  - Korea
- Inventories have started to decline but remain high
- Prices have declined considerably and imports have started reducing

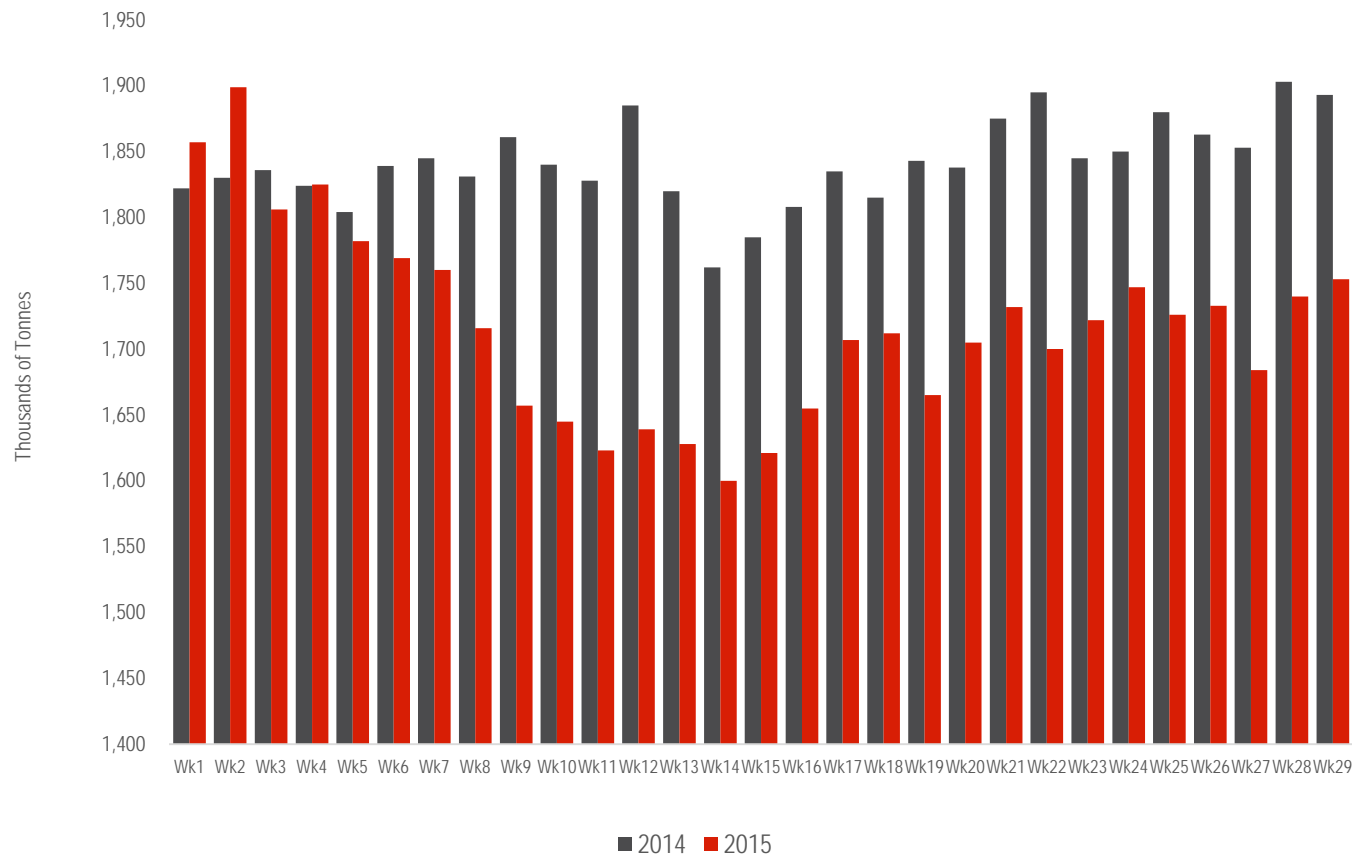


- H1 15 down 6.9% on H1 14
- NAFTA produced 55.2mt in H1 2015 (H1 2014: 59.4mt)
- Canada seeing slight growth, Mexico seeing moderate decline

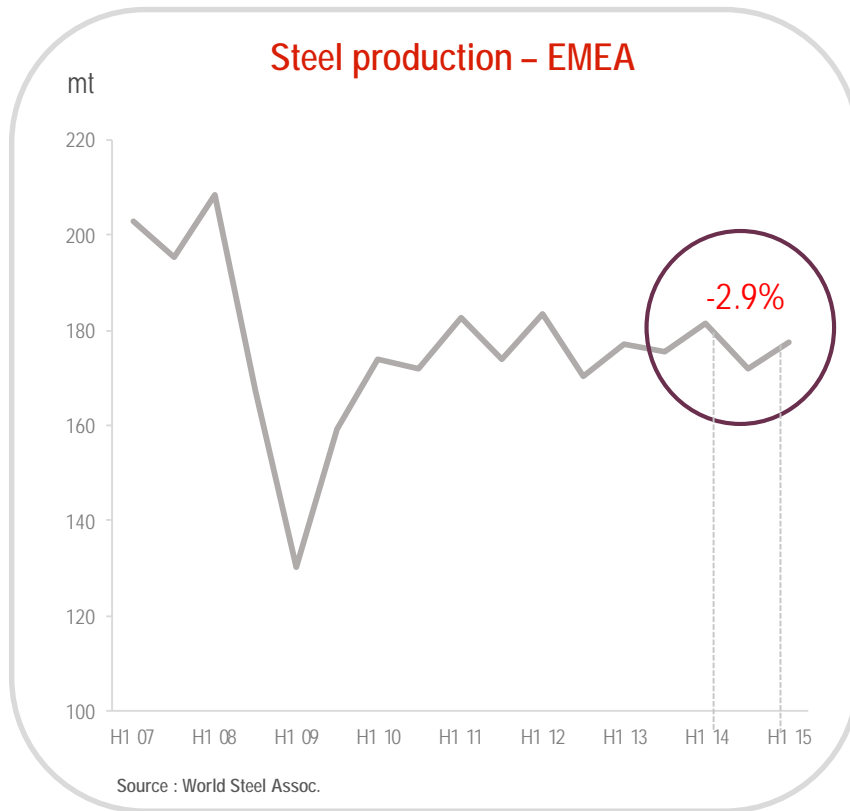
# US steel volumes stable ~10% below last year



## US Weekly Steel Production



# EMEA steel markets

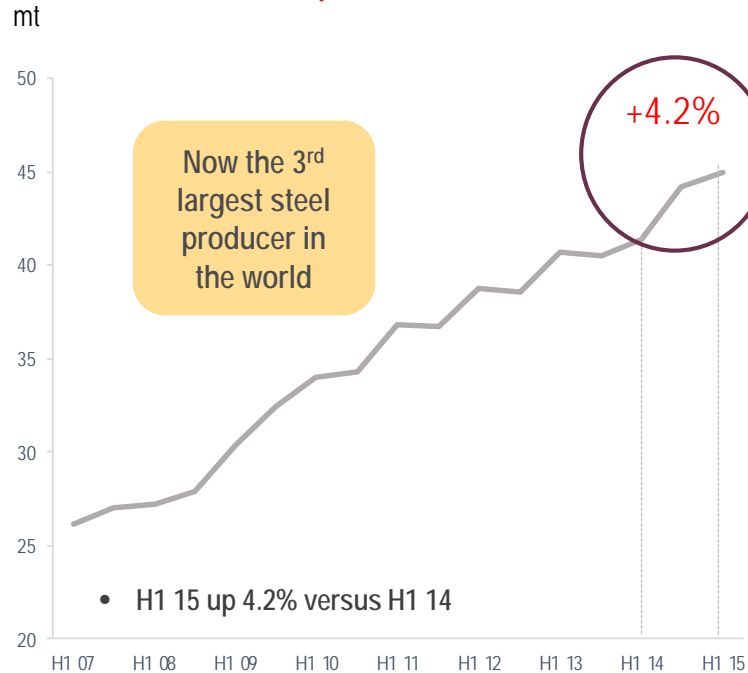


- European Union steel production resists due to the regained competitiveness with lower Euro
- Ukraine more affected
- Production in Turkey is lower due to a decline in Black Sea markets
- South Africa is equally lower due to economic conditions

- H1 15 down 2.9% versus H1 14
- EMEA produced 177.4.1mt in H1 2015 (H1 2014: 181.8mt)
- EU seeing slight growth, Africa and rest of Europe seeing moderate decline

# Emerging steel markets

## Steel production – India



Source : World Steel Assoc.

## Steel production – Brazil



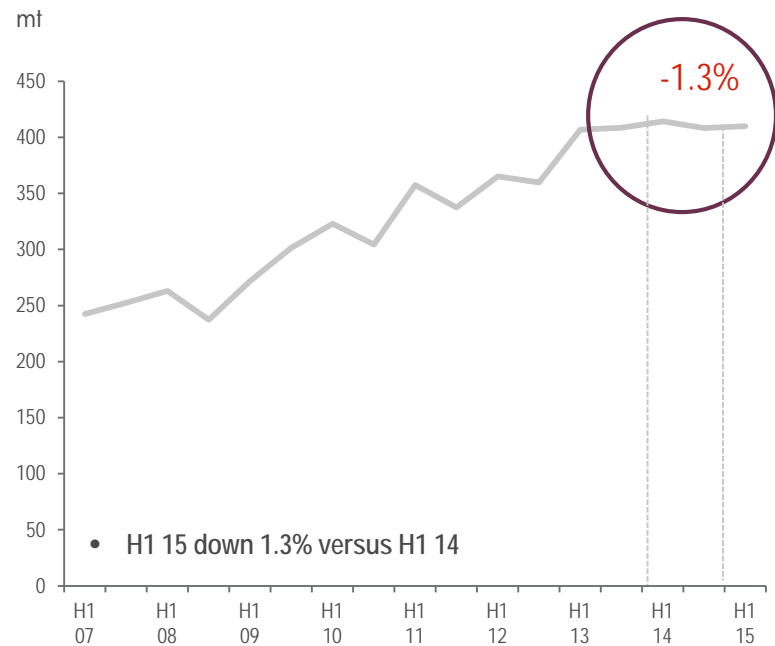
Source : World Steel Assoc.

- Recent growth in key developing markets:
  - India produced 45.0mt in H1 2015 (H1 2014: 43.1mt)
  - Brazil produced 17.1mt in H1 2015 (H1 2014: 16.7mt)



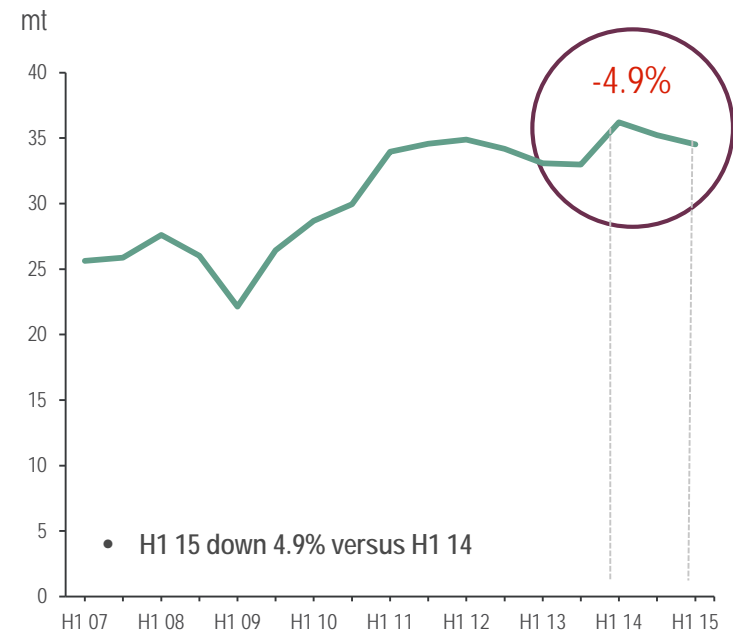
# Asian steel markets

## Steel production – China



Source : World Steel Assoc.

## Steel production – South Korea



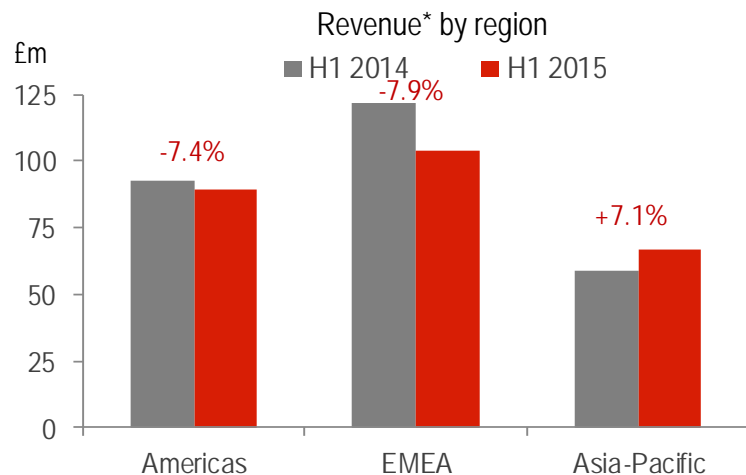
Source : World Steel Assoc.

- Steel Production down year-on-year in key Asia-Pacific markets:
  - China produced 410.0mt in H1 2015 (H1 2014: 415.4mt)
  - South Korea produced 34.5mt in H1 2015 (H1 2014: 36.3mt)



# Trading review: Steel division revenue

## Steel Flow Control



### Americas:

- Reduction in crude steel production, reflecting decline in pipe demand and increased imports driven by strength of US Dollar

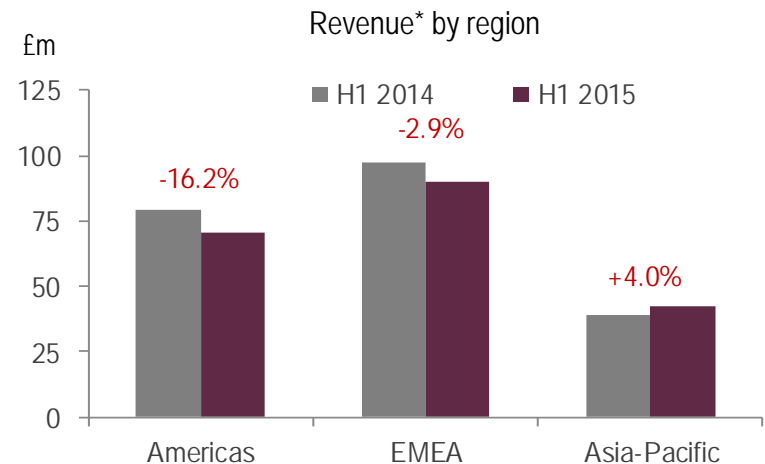
### EMEA:

- Declining crude steel production in Turkey and Africa, significant reduction in Ukraine

### Asia-Pacific:

- Strong revenue growth in China, supported by continuing shift from long to flat steel production
- Strong sales in Korea and India, outperforming underlying steel production in region

## Advanced Refractories



### Americas:

- Lower activity in North America, driven by reduction in crude steel production
- Increased imports in the region

### EMEA:

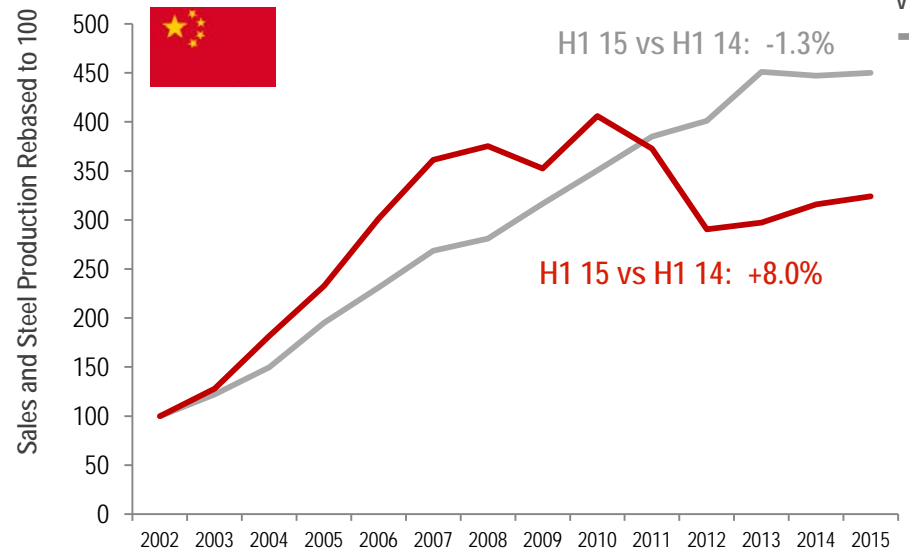
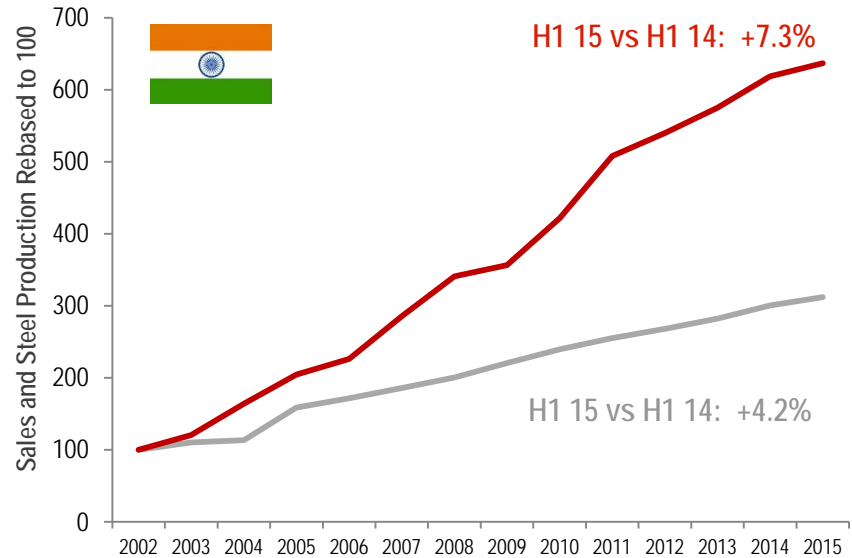
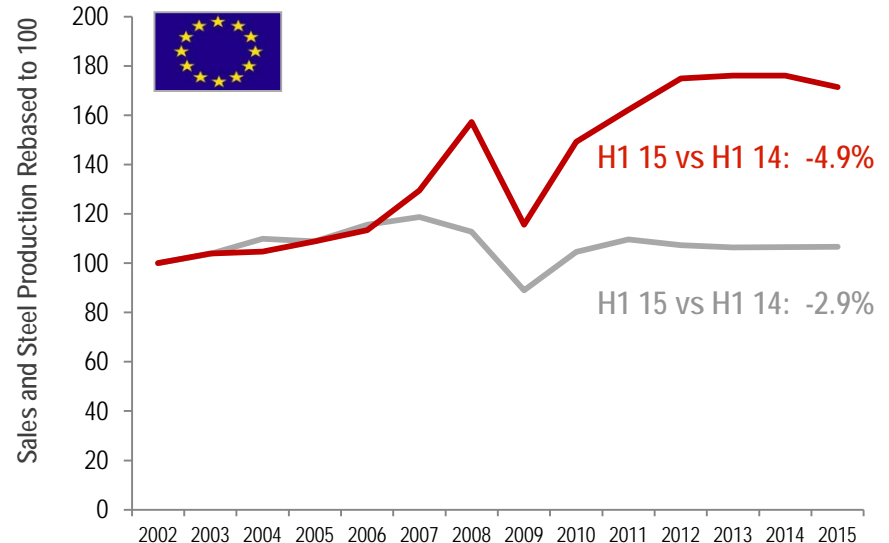
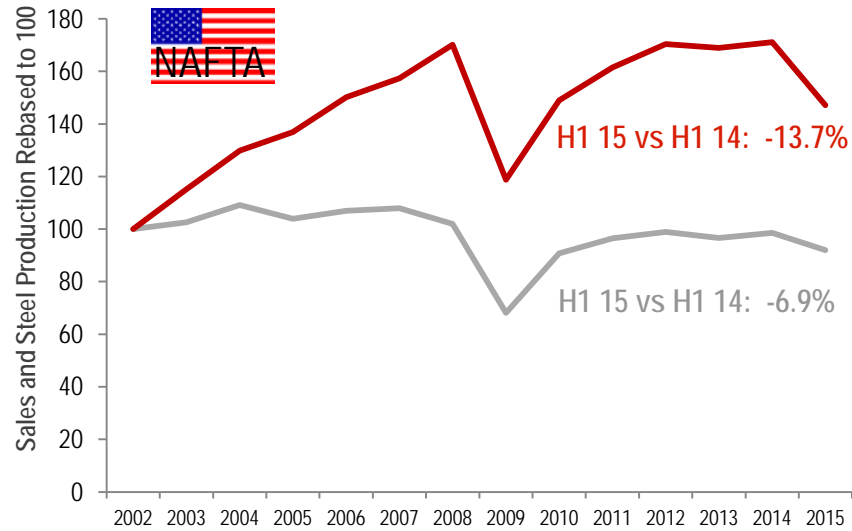
- Decline broadly in line with the decline in market

### Asia-Pacific:

- Strong revenue growth through market penetration
- Recommencement of customer facilities

\*On an underlying basis: at constant currency and excluding the impact of acquisitions and disposals

# Steel markets



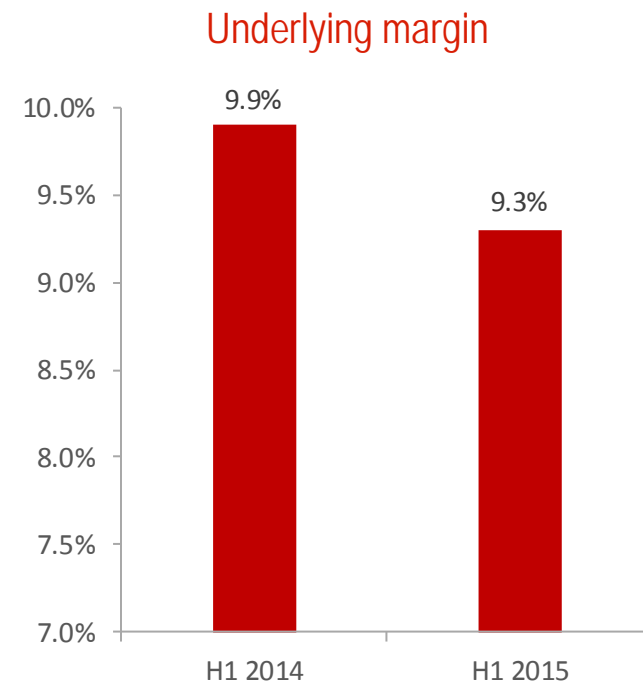
Vesuvius Sales Value  
Steel Production Volumes

Source: WSA for steel production volumes, Vesuvius internal data for Vesuvius sales at constant currency. Note 2002 figures are rebased to 100



# Trading review: Steel division margins

£m	H1 2015	H1 2014	Y-o-Y change	Underlying change
Revenue				
Steel Flow Control	260.4	273.9	-4.9%	-4.3%
Advanced Refractories	203.5	215.6	-5.6%	-7.4%
Technical Services	12.4	-	-	-
Total Revenue	476.3	489.5	-2.7%	-5.4%
Total Trading Profit	44.5	47.2	-5.9%	-11.9%
Trading Margin %	9.3%	9.7%	-31bps	-68bps

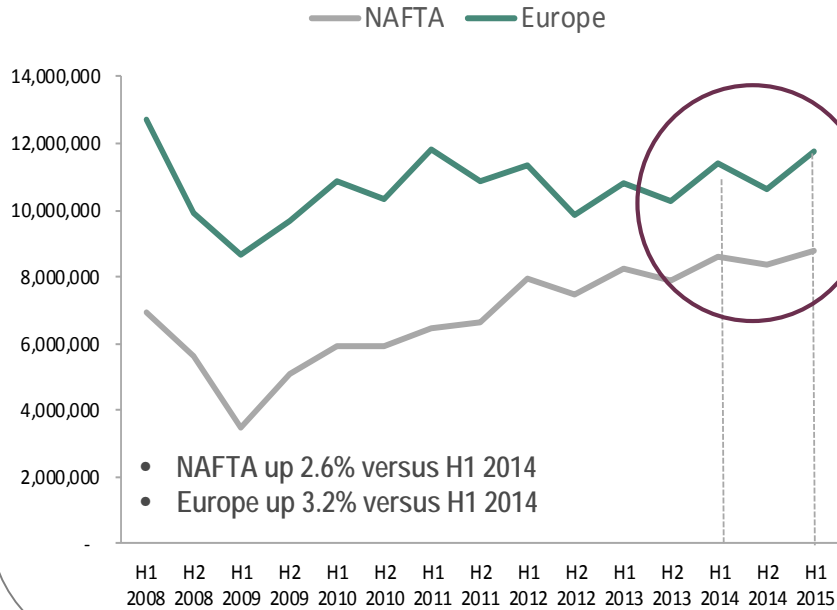


- Underlying trading profit down 11.9% reflecting:
  - Lower activity in key regions of NAFTA and EMEA, together accounting for 67% of revenue
  - Revenue decline driven by inventory reductions in supply chain
  - Margins lowered by our materials purchased in US Dollar and inventory reduction action



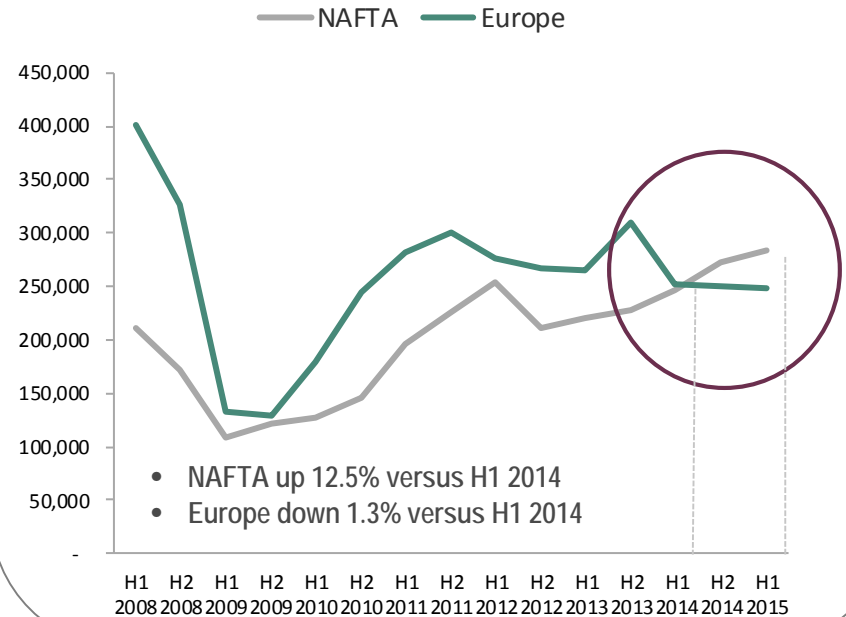
# Foundry market

## Light vehicle production



Source : LMC Automotive

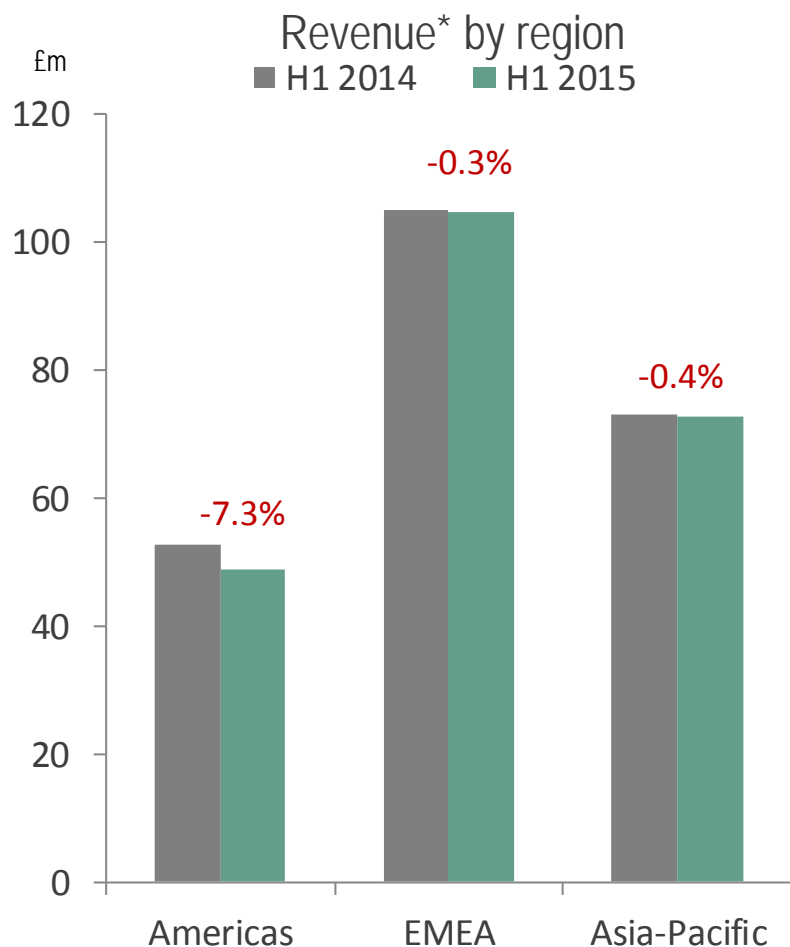
## Truck production



Source : LMC Automotive

- Truck and Light Vehicle markets represent approximately 40% of Foundry product line sales
- Growth in light vehicle output counteracted by low demand in mining, construction and agriculture
- Steel foundries in US moving to China

# Trading review: Foundry revenue



## Americas:

- Growth in NAFTA light vehicle and truck production offset by:
  - Reduced foundry activity in Brazil
  - Weak demand in mining, construction and agriculture foundries

## EMEA:

- Decrease driven by lower truck production in the Central Europe and Middle East region

## Asia-Pacific:

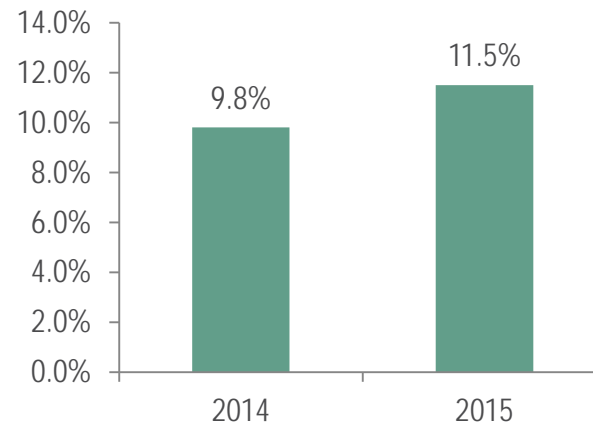
- Growth in Chinese light vehicle output offset by:
  - Severe downturn in auto sector in Thailand
  - Reduction in automotive production in North Asia (excluding China)

\*On an underlying basis: at constant currency and excluding the impact of acquisitions and disposals

# Trading review: Foundry division margins

## Underlying ROS improvement

£m	H1 2015	H1 2014	Y-o-Y change	Underlying change
Revenue	226.3	240.3	-5.8%	-1.9%
Trading Profit	25.9	24.0	+8.2%	+14.6%
Trading Margin %	11.5%	10.0%	+148bps	+165bps



- Despite the global foundry market remaining mixed:
  - Underlying profit increased significantly by 14.6%
  - Underlying margin improvement of 165bps as a result of self-help measures



# Restructuring programme initiated

- This will programme will
  - Address structural changes in geographic trends in markets
  - Deliver efficiencies
  - Improve decision making quality and speed
  - Resize the cost structure with a particular emphasis on overheads
- Expected to generate annual cost savings in excess of £10m by 2017
  - Expected to result in total exceptional restructuring cost of c. £20 million in 2015 & 2016
    - £3.1 million incurred in first half
- Foundry and corporate cost reductions started in late 2014 / early 2015
  - Benefits already coming through
- Steel division included to address structural changes in markets

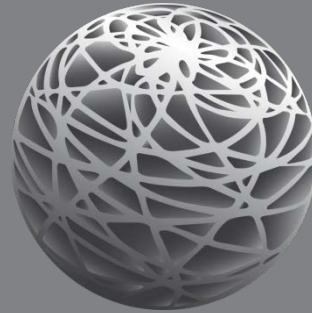


# H1 2015 Trading summary

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- Challenging markets overall, but with some brighter spots
- Further margin improvement
  - Margin recovery in line with our plan: 189 bps delivered since 2012
- Ahead of continuing self-help measures, implementation of a structural cost reduction plan to substantially improve our cost base





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## Financial Review

Chris O'Shea  
Chief Financial Officer

VESUVIUS PLC

# Income statement

	H1 2015	H1 2014	Year on Year Change	
	£m	£m	As reported	Underlying <sup>(1)</sup>
Revenue	702.6	729.8	-3.7%	-4.3%
Trading Profit	70.4	71.2	-1.1%	-3.4%
<i>Trading margin %</i>	<i>10.0%</i>	<i>9.8%</i>	<i>+26bps</i>	<i>+9bps</i>
Net finance costs	(8.0)	(9.2)		
Share of JV	(0.5)	0.8		
Profit before Tax	61.9	62.8		
Effective tax rate %	25.5%	26.5%		
Tax	(15.9)	(16.4)		
Non-controlling Interest	(2.7)	(2.1)		
Headline Earnings	43.3	44.3	-2.2%	-5.5%
Headline Earnings per share (p)	16.0	16.4	-2.1%	-5.4%

<sup>(1)</sup> Underlying basis is at constant currency and excludes separately reported items and the impact of acquisitions and disposals

# The translational FX position has neutralised somewhat in the first half

	2015 YTD Average Rates	2014 FY Average Rates	2015 Average Rates v 2014 Average Rates
USD	1.523	1.649	7.63%
EUR	1.365	1.241	(9.99%)
BRL	4.515	3.869	(16.72%)
INR	95.608	100.495	4.86%
JPY	183.035	174.087	(5.14%)
RMB	9.470	10.157	6.76%
ZAR	18.128	17.834	(1.65%)

2015 June Period End Rates	2015 June Period End Rates v 2015 YTD Average Rates
1.571	(3.14%)
1.410	(3.36%)
4.872	(7.89%)
99.874	(4.46%)
192.371	(5.10%)
9.737	(2.82%)
19.105	(5.39%)

But the combination of the strong USD and RMB and the weak EUR, JPY and BRL are causing more transactional FX issues

And Sterling has strengthened!

FX outlook for the second half of 2015 is negative:

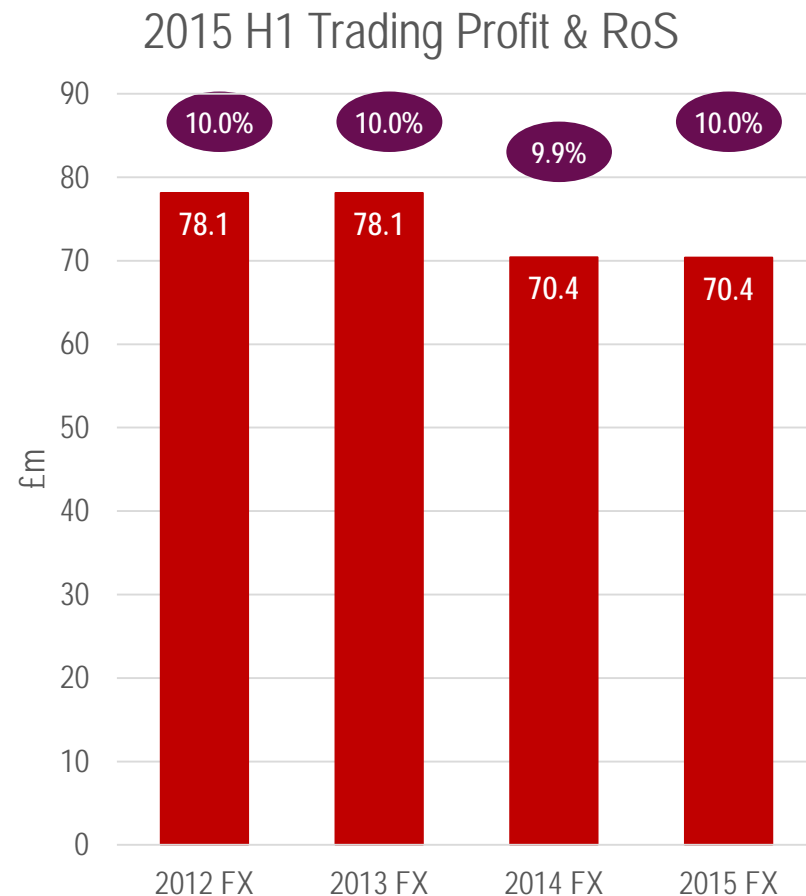
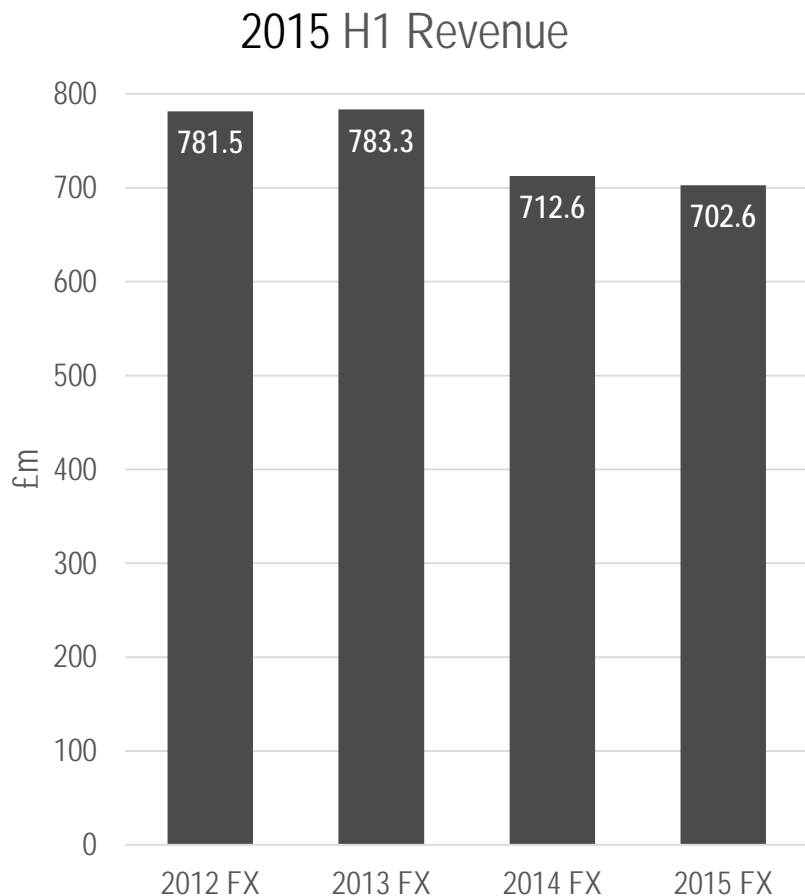
- transactional FX hitting the European, Brazilian and Japanese businesses; and
- translational FX reducing reported H2 results





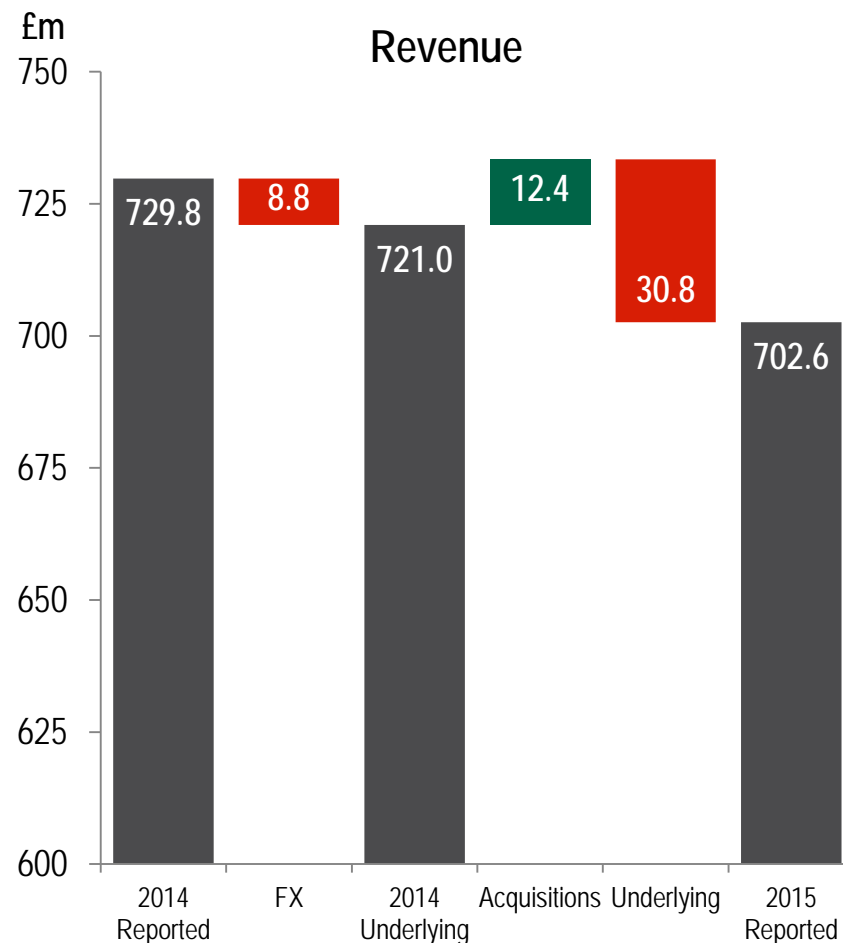
...but the cumulative effect of translational FX has been significant

## 2015 H1 Revenue, Trading Profits, and RoS at various historic FX rates



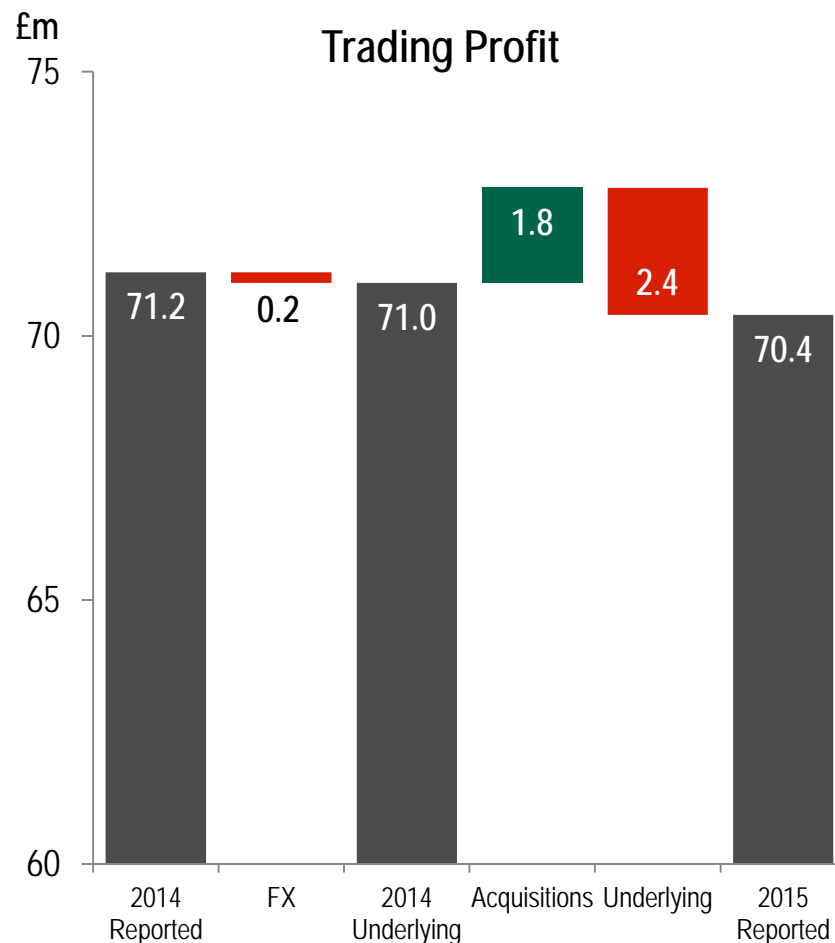
# Underlying revenue fell by 4.3%...

- Revenue down £27 million on a reported basis
- Revenue down £31 million on an underlying basis
- Acquisitions added £12.4 million of revenue
  - Ecil Met Tec, Process Metrix, Sidermes
- Underlying revenue growth in developing markets more than offset by decline in mature markets
  - Asia +3.3% +£5.8m
  - EMEA -3.8% -£11.9m
  - Americas -10.5% -£24.7m

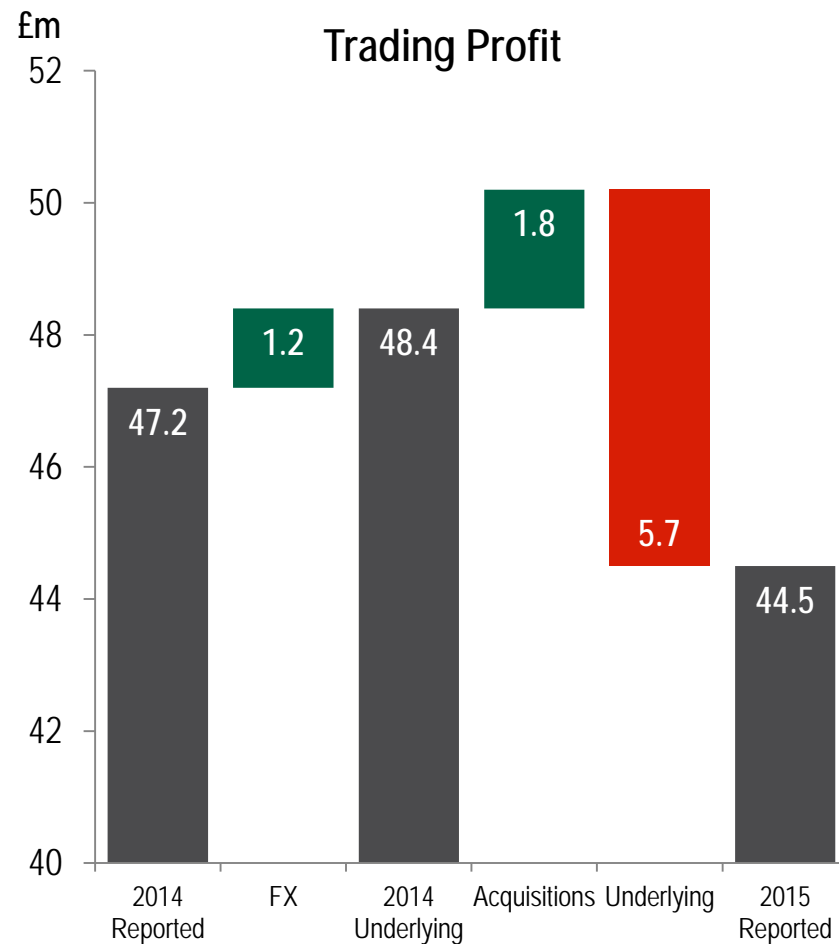
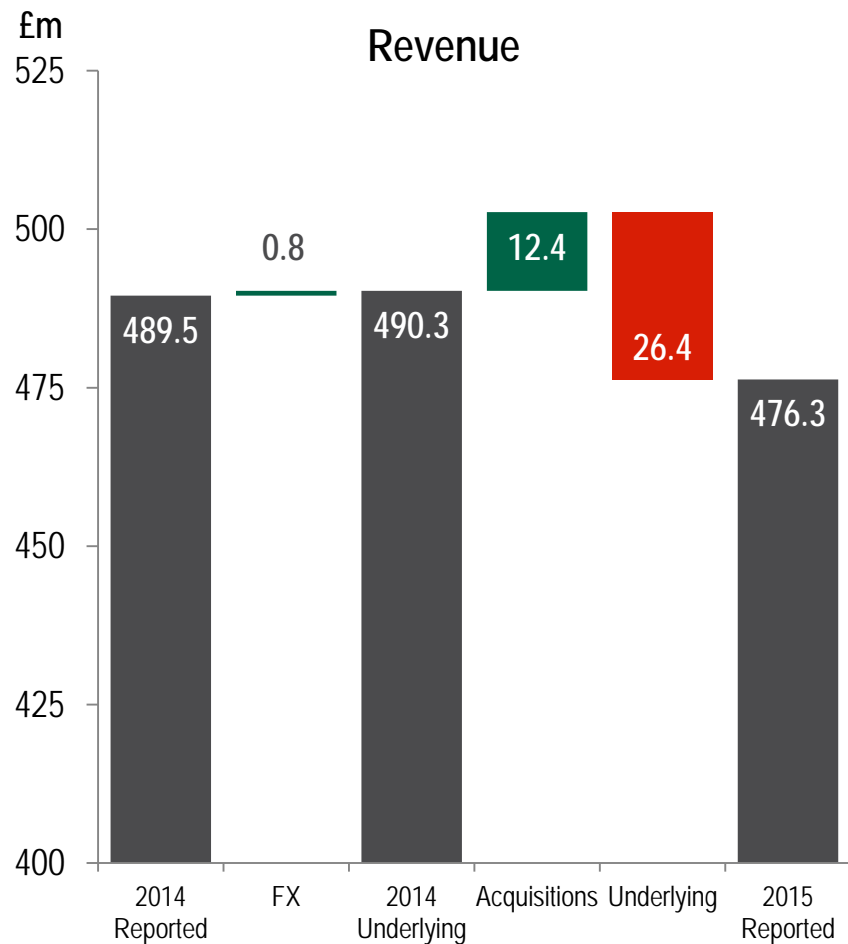


## ...whilst underlying trading profit fell 3.4%

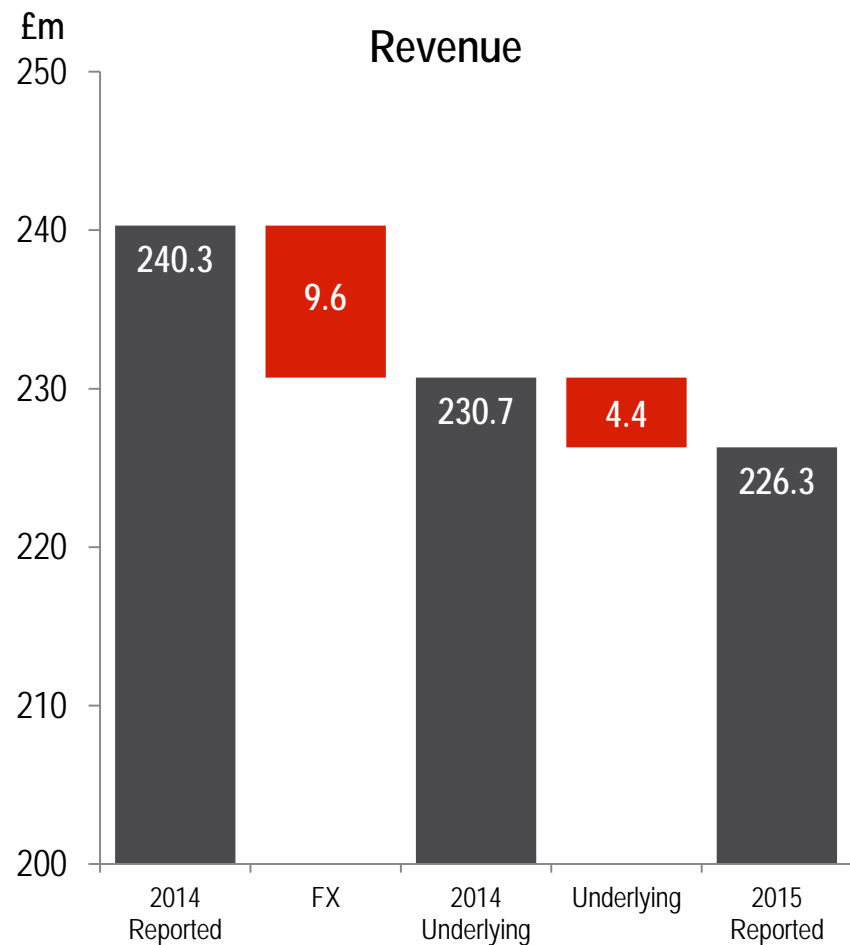
- Trading profit down £0.8 million on a reported basis
- Trading profit down £2.4 million on an underlying basis
- Return on Sales improved by 26 bps on a reported basis
- Return on Sales improved by 9 bps on an underlying basis
- Acquisitions added £1.8 million of trading profit
  - Ecil Met Tec, Process Metrix, Sidermes
  - Trading profit down £2.4 million on an underlying basis



# Underlying Steel division profitability declined by 68 bps

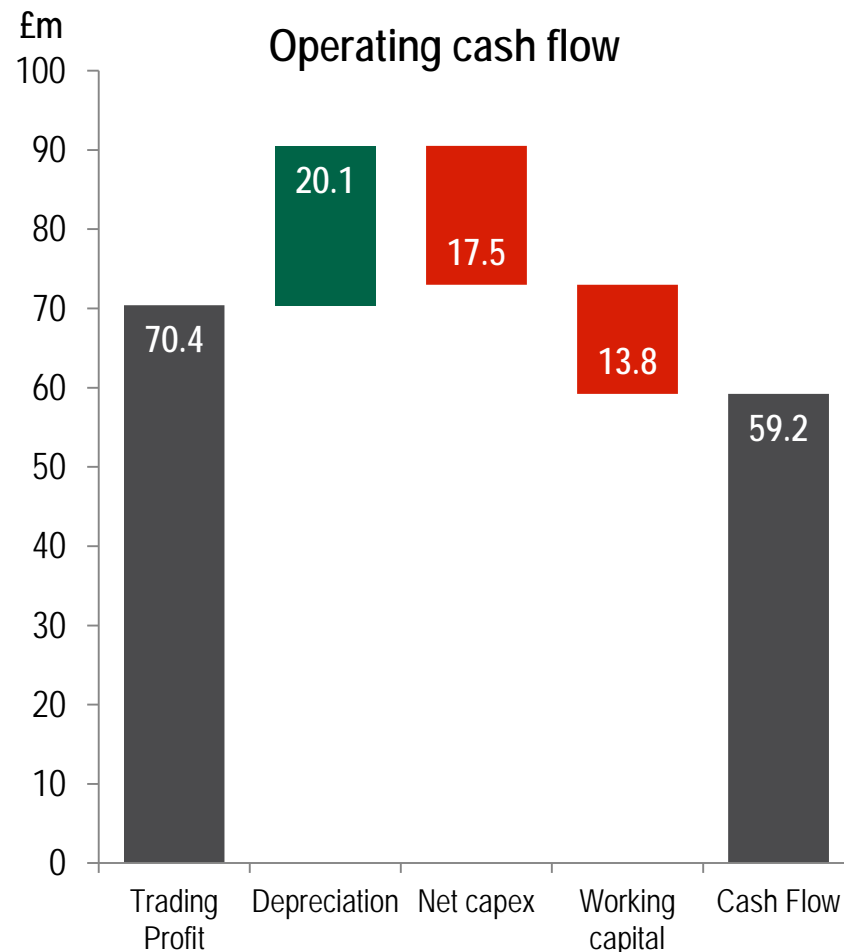


# Underlying Foundry division profitability increased by 165 bps

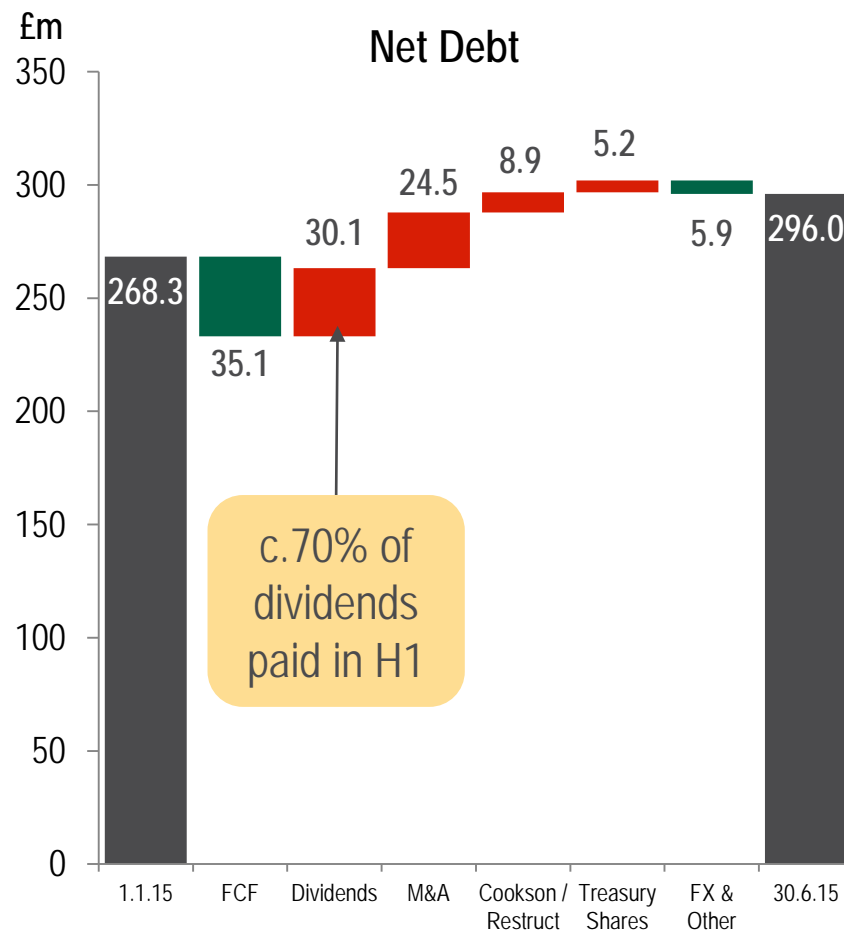
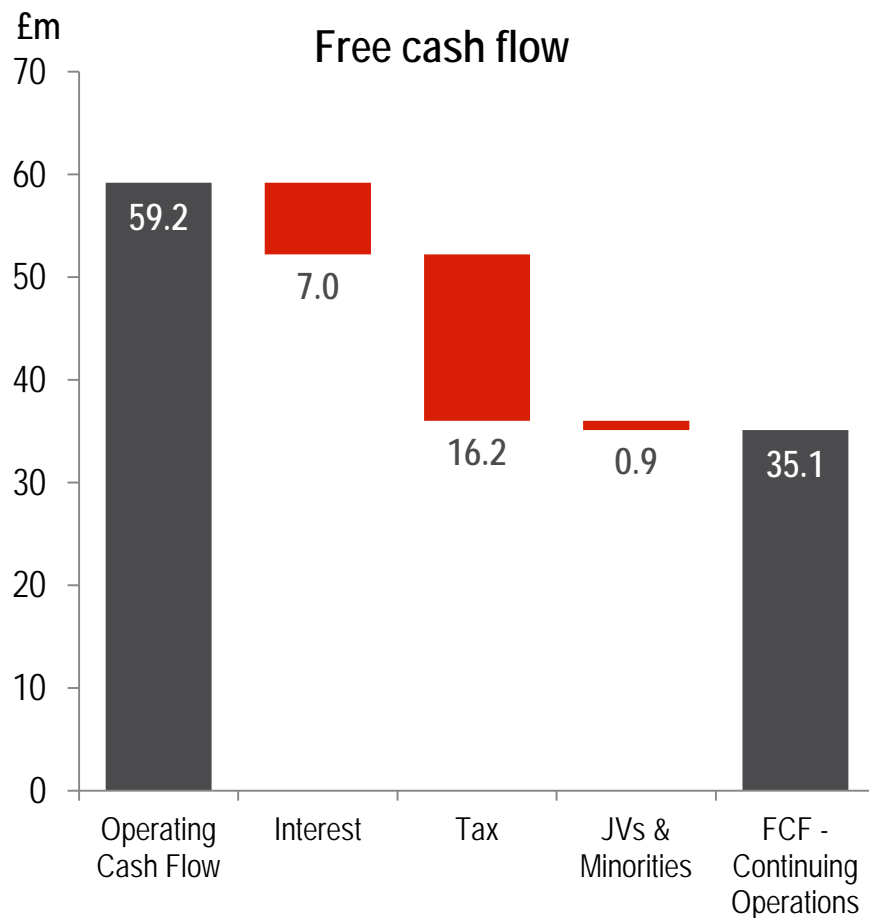


# The cash conversion rate is in line with expectations...

- Year to date cash conversion of 84%
  - Some seasonality seen (Q2 stronger than Q4)
- Working capital outflow reflecting normal seasonality
  - This excludes £9.5m of trade working capital acquired as part of Sidermes
  - Reduction in inventories and payables
  - Receivables up in line with normal seasonality
  - Annual cash incentives paid in full in the first half
- Capital expenditure phasing more even than previous years
  - Projects more evenly weighted throughout year



# ...whilst the increase in net debt reflects M&A activity



At June FX rates



# Defined benefit employee benefit schemes

- UK, USA and Germany comprise over 90% of Group's gross pension liabilities
- Decrease in net deficit due to reduction in discount rates
  - UK 3.75% (up 0.25%)
  - USA 4.10% (up 0.40%)
  - Germany 2.50% (up 0.3%)

£ million	30 Jun 2015	31 Dec 2014
<b>Net Pension Deficits</b>		
Germany	35.0	39.9
USA	33.5	35.6
Rest of World	<u>17.6</u>	<u>19.0</u>
	86.1	94.5
<b>Net Pension Surpluses</b>		
UK	<u>(47.7)</u>	<u>(48.8)</u>
<b>Net Pension Deficit</b>	<b>38.4</b>	<b>45.7</b>
<b>Net Deficit on Other Post Retirement Benefit Schemes</b>		
	<u>4.7</u>	<u>5.4</u>
<b>Net deficit on Employee Benefit Schemes</b>	<b><u>43.1</u></b>	<b><u>51.1</u></b>



# Financial strategy remains consistent...

- Financial flexibility essential

Committed unutilised facilities of £171m

- Conservative balance sheet stewardship

Gearing of 1.6

- Focus on cash generation

Cash conversion ratio of 84%

- Cost control

ROS improved by 189 basis points from 2012

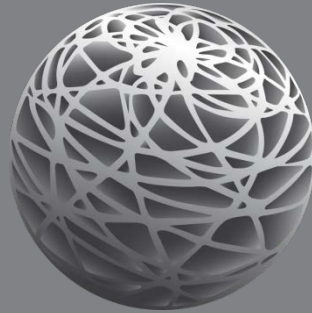
- Efficient working capital management

WC to sales ratio 27.3% in 2012 down to 25.5% in 2015

- Improve returns

RONA up from 18.7% in 2012 to 24.5% in 2015





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## Strategy and Outlook

François Wanecq  
Chief Executive

VESUVIUS PLC

# Delivering on the strategy

- Maintain technology leadership

Building our R&D centers;  
Launching new products

- Increase penetration of value creating solutions

Start up of the new SST caster at Hyundai;  
Further success with INITEK

- Capture growth in developing markets

Growing ahead of underlying market in China,  
India and Brazil

- Improve cost leadership

Foundry margin improved by 165 basis points;  
Commenced a restructuring programme

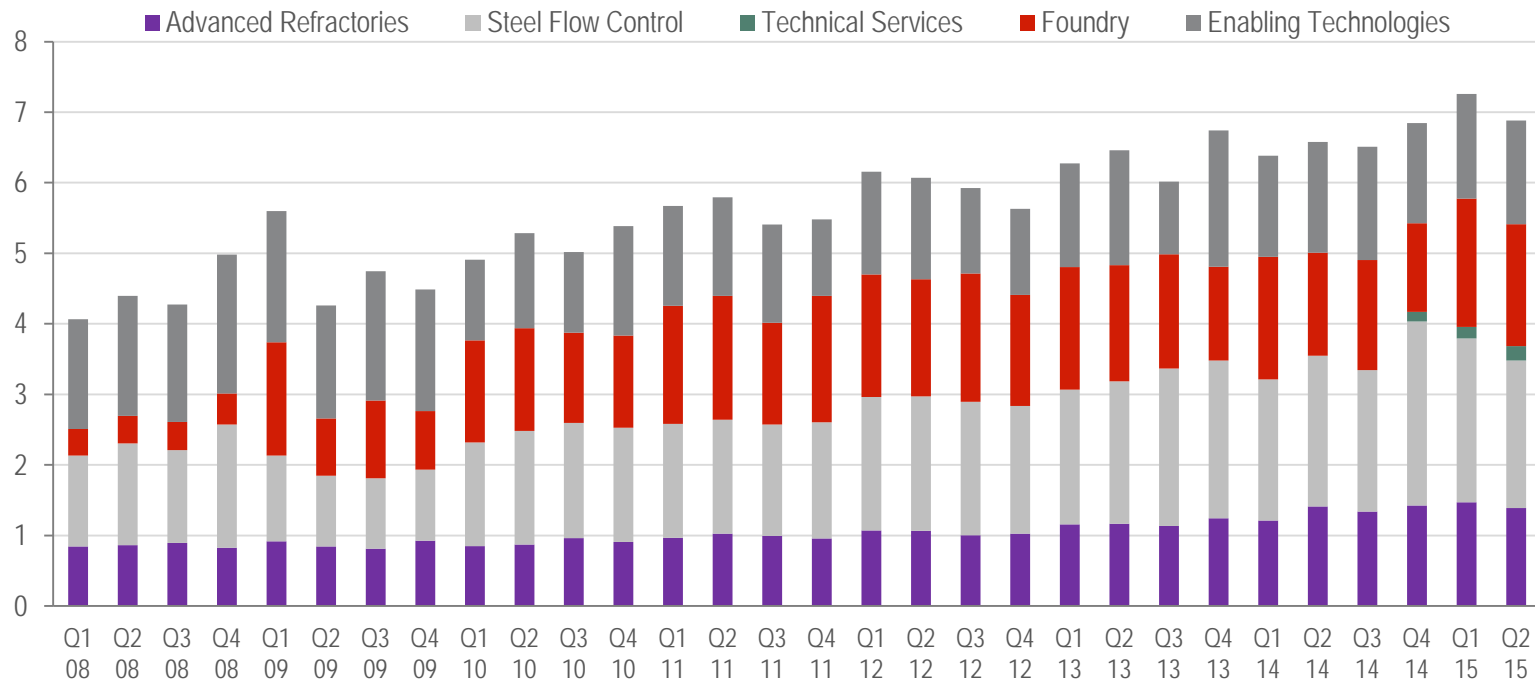
- Build technical services offering

Acquisition of Sidermes



# We increase our R&D effort to maintain technology leadership

## Sustainable growth will come first from technology



- R&D expenditure has progressed steadily since 2008
- Decision to build in Pittsburgh (USA), Enschede (NL), Vizag (India)
- Necessity to improve our ideas generation and time to market



# Technical Services: Deliveries and potential

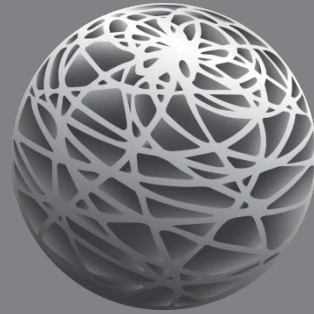
- Acquisitions bring us greater technological inroads and market intimacy in data capture
  - Temperature and gas content with ECIL Met Tec and Sidermes
  - Laser technology with Process Metrix
  - Integration is underway



- The new business model is under development for new products
  - Accuoptix
  - X Mat
- Further acquisitions are under consideration

# Outlook

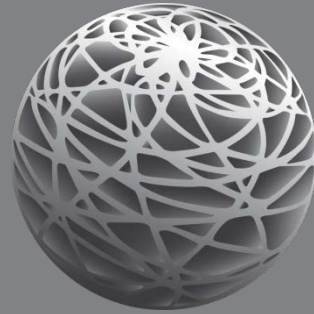
- Underlying trading environment to remain broadly similar to the first half
  - Growth in steel production not expected before 2017
- Foreign exchange expected to negatively impact reported results
  - Both translation and transaction effects
- Self help programme will continue to drive operational improvements
  - Delivered 189 basis points of improvement to date with more to come
- Restructuring programme to gather pace
  - Annualised benefits in excess of £10 million delivered in full by 2017
- Continued focus on building Technical Services business
  - Both organically and through acquisition



A GLOBAL LEADER IN METAL FLOW ENGINEERING

Q&A

VESUVIUS PLC



A GLOBAL LEADER IN METAL FLOW ENGINEERING

## Appendix

VESUVIUS PLC



## 5 year history at constant currency<sup>(1)</sup>

£m	2011	2012	2013	2014	2015
<b>Revenue</b>	<b>748.0</b>	<b>740.6</b>	<b>696.8</b>	<b>721.0</b>	<b>702.6</b>
Steel	481.9	488.7	470.5	490.3	476.3
Foundry	266.1	251.9	226.3	230.7	226.3
<b>Trading Profit</b>	<b>78.6</b>	<b>69.5</b>	<b>62.2</b>	<b>71.0</b>	<b>70.4</b>
Steel	45.9	46.4	39.4	48.7	44.5
Foundry	32.7	23.1	22.8	22.3	25.9
<b>Margins</b>	<b>10.5%</b>	<b>9.4%</b>	<b>8.9%</b>	<b>9.9%</b>	<b>10.0%</b>
Steel	9.5%	9.5%	8.4%	9.9%	9.3%
Foundry	12.3%	9.2%	10.1%	9.7%	11.5%

(1) All numbers shown at June 2015 average exchange rates



# Currency – Ready Reckoner

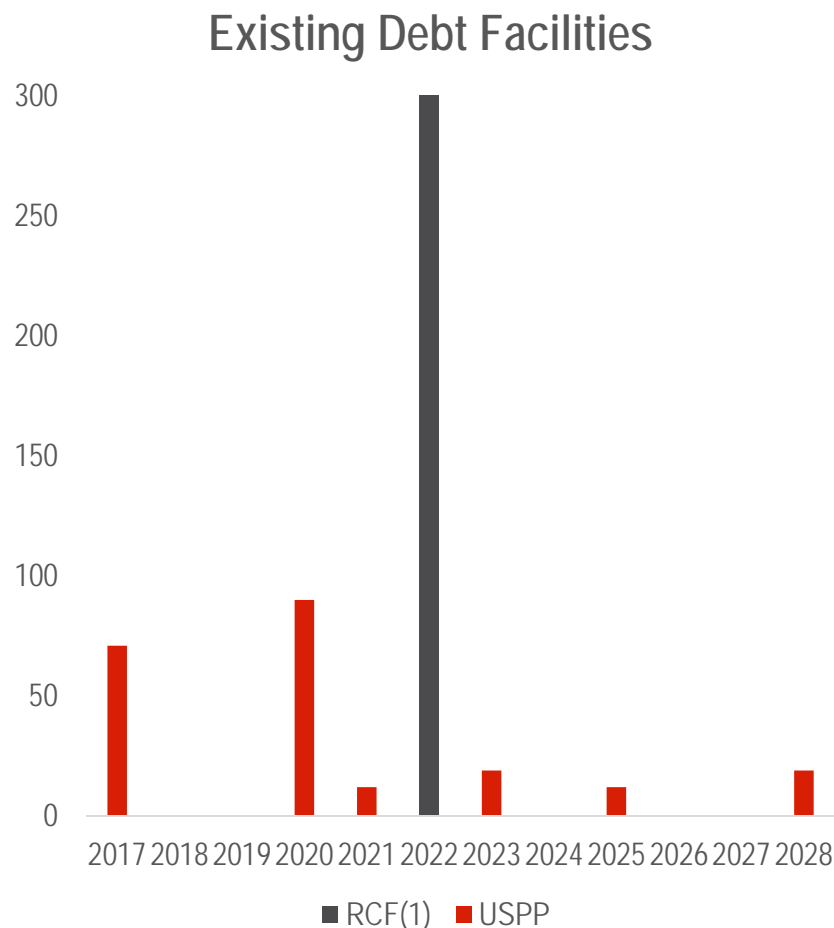
Currencies	Change	Approximate change in profits
US Dollar	1 cent	£0.2 million
Euro	1 cent	£0.1 million
Chinese Renminbi	1 jiao (10 cents)	£0.2 million
Indian Rupee	1 rupee	£0.1 million
Brazilian Real	10 cents	£0.1 million

- Rule of thumb for impact of a movement in currency against sterling
  - Amounts shown are movements for each currency
  - Works both for strengthening and weakening of currencies



# The new bank facility removes refinancing risk

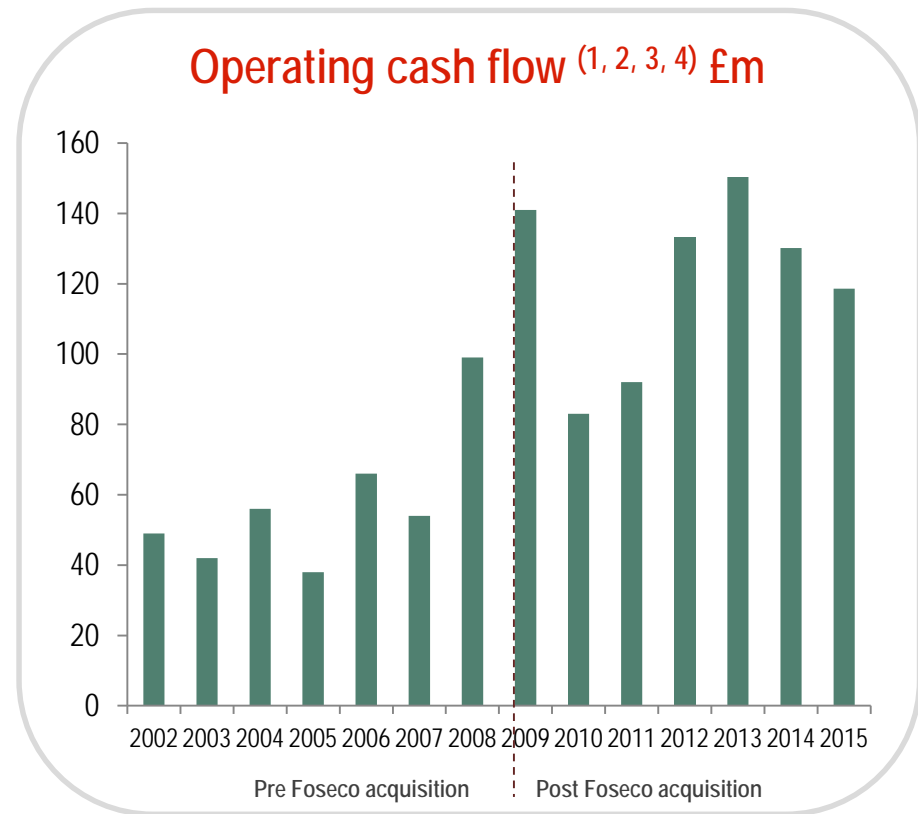
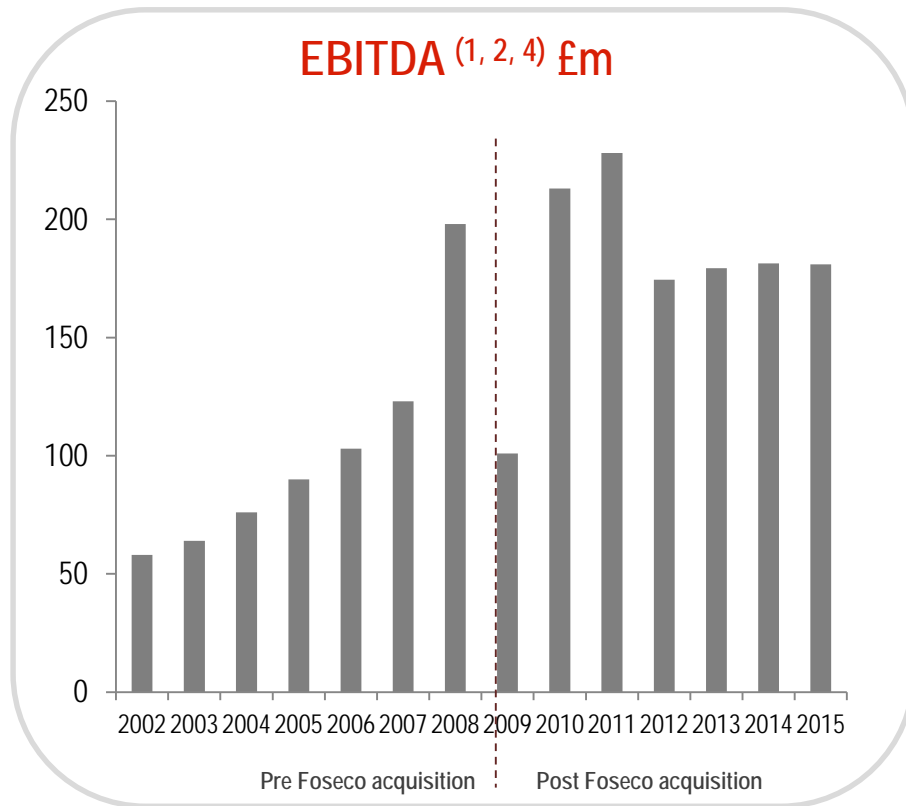
- £300 million multi currency facility
  - Replaces £425 million facility expiring 2016
- 5 + 1 + 1 term
  - 2 x 1 year options at lender's discretion
- £200 million accordion
  - Can be exercised before end of 2016
- Margin cut almost in half
- ND:EBITDA covenant of 3.25



(1) The Revolving Credit Facility has a term of 5 years from 2015 to 2020, with 2 x 1 year options exercisable (at the lenders' discretion) at the end of year 1 and year 2. We currently expect those options to be exercised



# Confirmed resilient profit and strong cash flow generation



- (1) Company data as reported, excluding Precious Metals Processing
- (2) 2012 results have been restated as a result of IAS 19 (Revised) Employee Benefits
- (3) Cash flow from operations before interest and tax and after capital expenditure
- (4) 2015 is the first half results annualised



# Market leading positions across many of our products

## Molten metal in steel industry



- A world leader in flow control systems (slide gates)
- A world leader in isostatically pressed refractories
- A world leader in flow control pre-cast solutions
- A world leader in mould & tundish fluxes

### Steel Flow Control Competitors



SINOREF



## Molten metal in foundries



- A world leader in filters
- A world leader in feeding systems
- A world leader in coatings

### Foundry Technologies Competitors



Hamilton

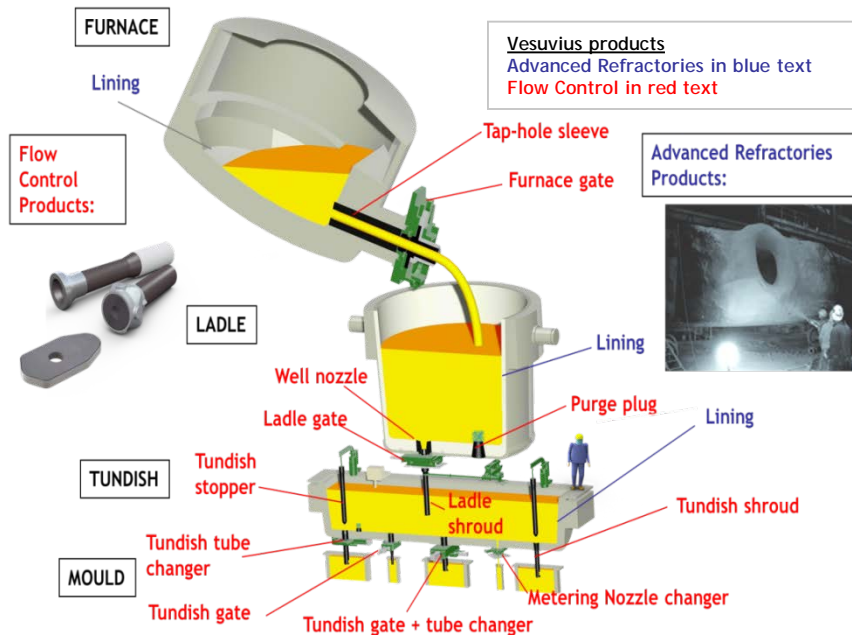


ASKCHEMICALS

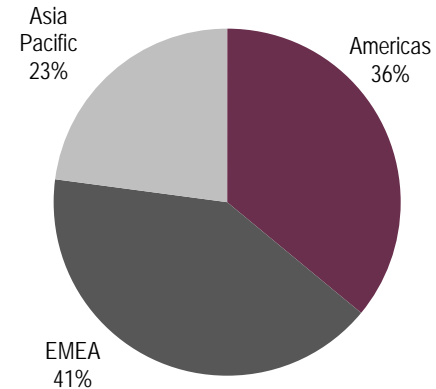
# Main products and markets – Steel business segment

## Steel business segment overview

- World leader in the supply of consumable **Steel Flow Control** products used in the enclosed continuous casting process and a leading supplier of **Advanced Refractories** used as high temperature linings



## Steel business segment revenue by operating location



Source Vesuvius breakdown of H1 2015 Reported Revenues

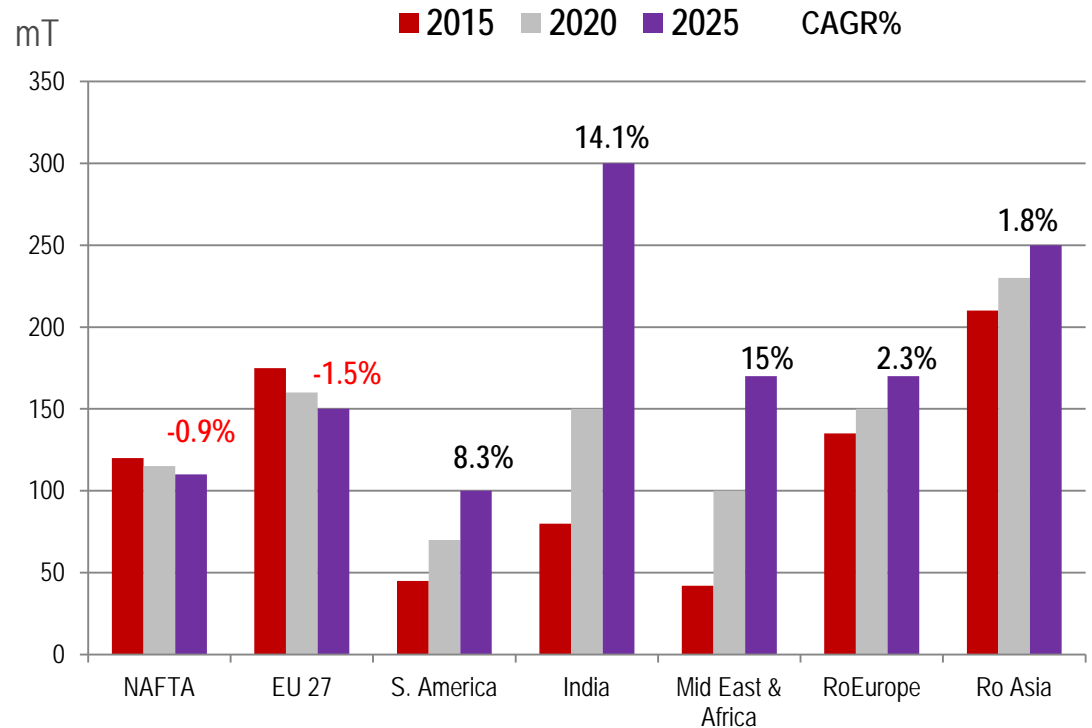
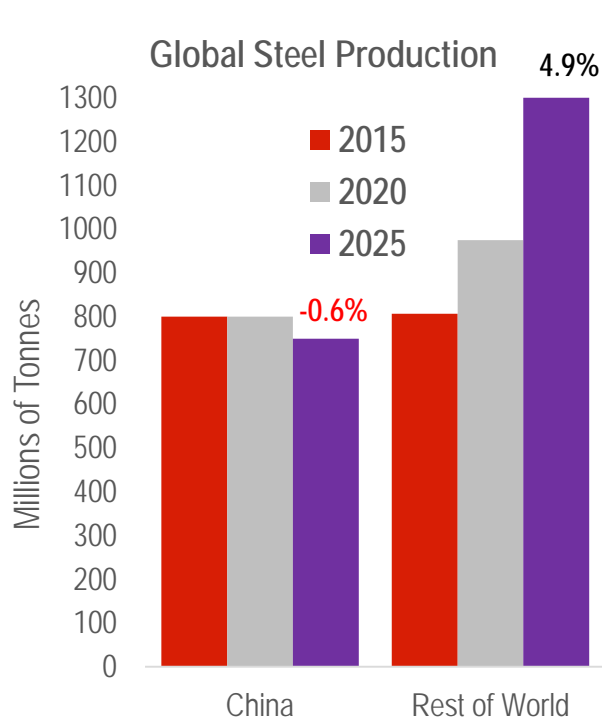
Well balanced presence in all major areas

- Vesuvius is the only truly global player in Flow Control
- Asia Pacific major volume growth potential
- Europe and NAFTA as laboratories for innovation



A global leader for steel flow control consumable ceramics

# Steel market growth scenario



## Global forecast production

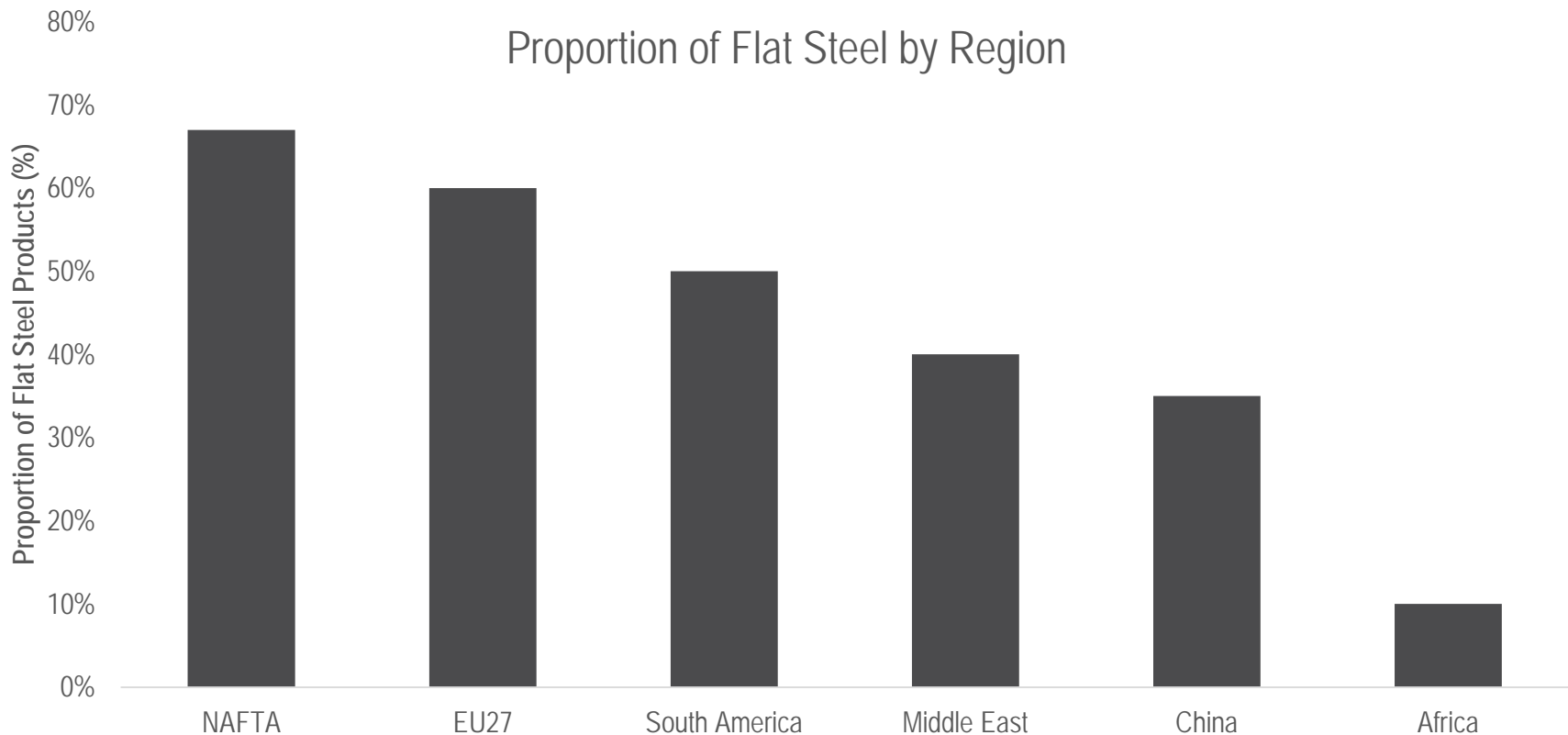
2016 – 1.6 billion tonnes  
 2020 – 1.8 billion tonnes  
 2025 – 2.0 billion tonnes

- NAFTA and Europe should decrease slowly as their economic growth model requires less steel
- China stabilises and starts declining at the end of the period
- India enters in a major steel growth episode
- South America, Middle East and at the end of the period, Africa, enjoy sustained growth

# Growth opportunities – Steel

Vesuvius serves mainly the flat products market which will grow at a higher pace than global steel as developing markets evolve towards consumption driven economies

Typical consumption of Flow Control products in flat steel is £1.5 /T of steel vs £0.5/T of steel in long



Source Based on data from WSA & SBB, with Vesuvius assumptions used for China

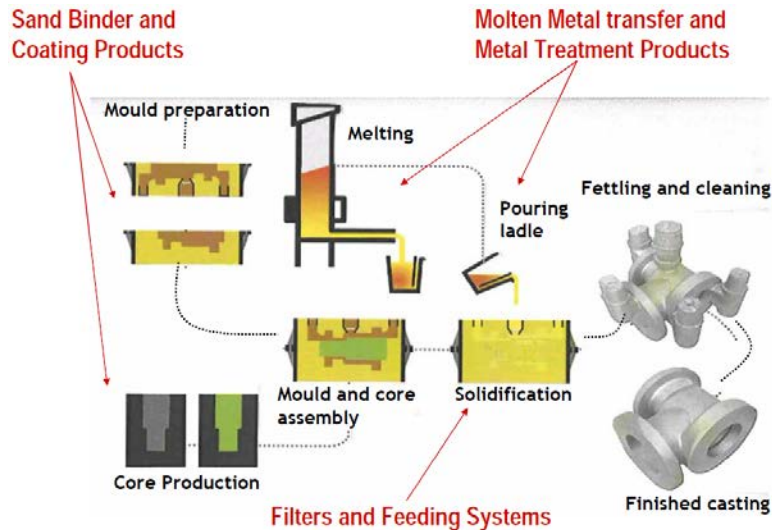




# Main products and markets – Foundry business segment

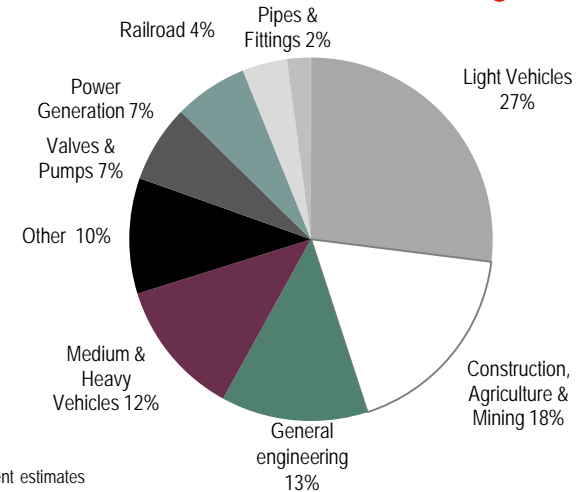
## Foundry casting process

- World leader in the supply of consumable products and technical services used in the production of metal castings which themselves have a wide variety of uses in engineered products



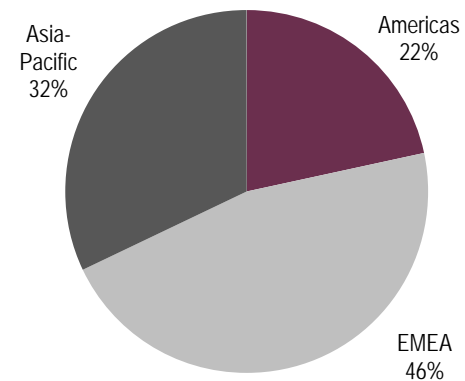
Note Red text denotes Vesuvius products

## Ultimate end markets for castings



Source Management estimates

## Foundry business segment revenue by operating location



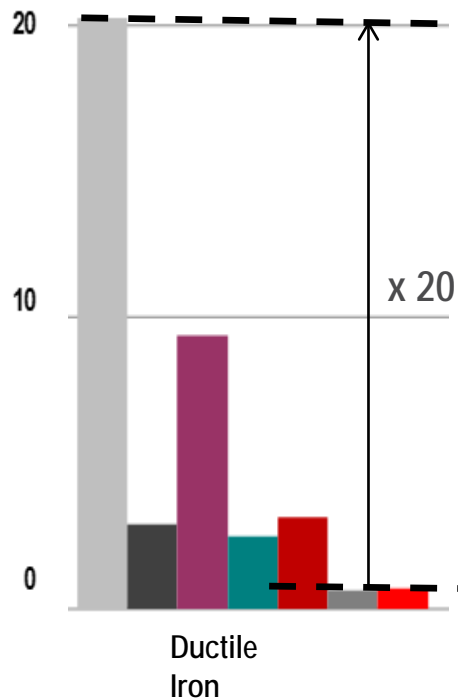
Source Vesuvius breakdown of H1 2015 Reported Revenues



A global leader in consumables for mould & methoding

# Long term growth in Foundry will come from innovation and marketing

Foundry sales  
£/T of total market casting (2013)

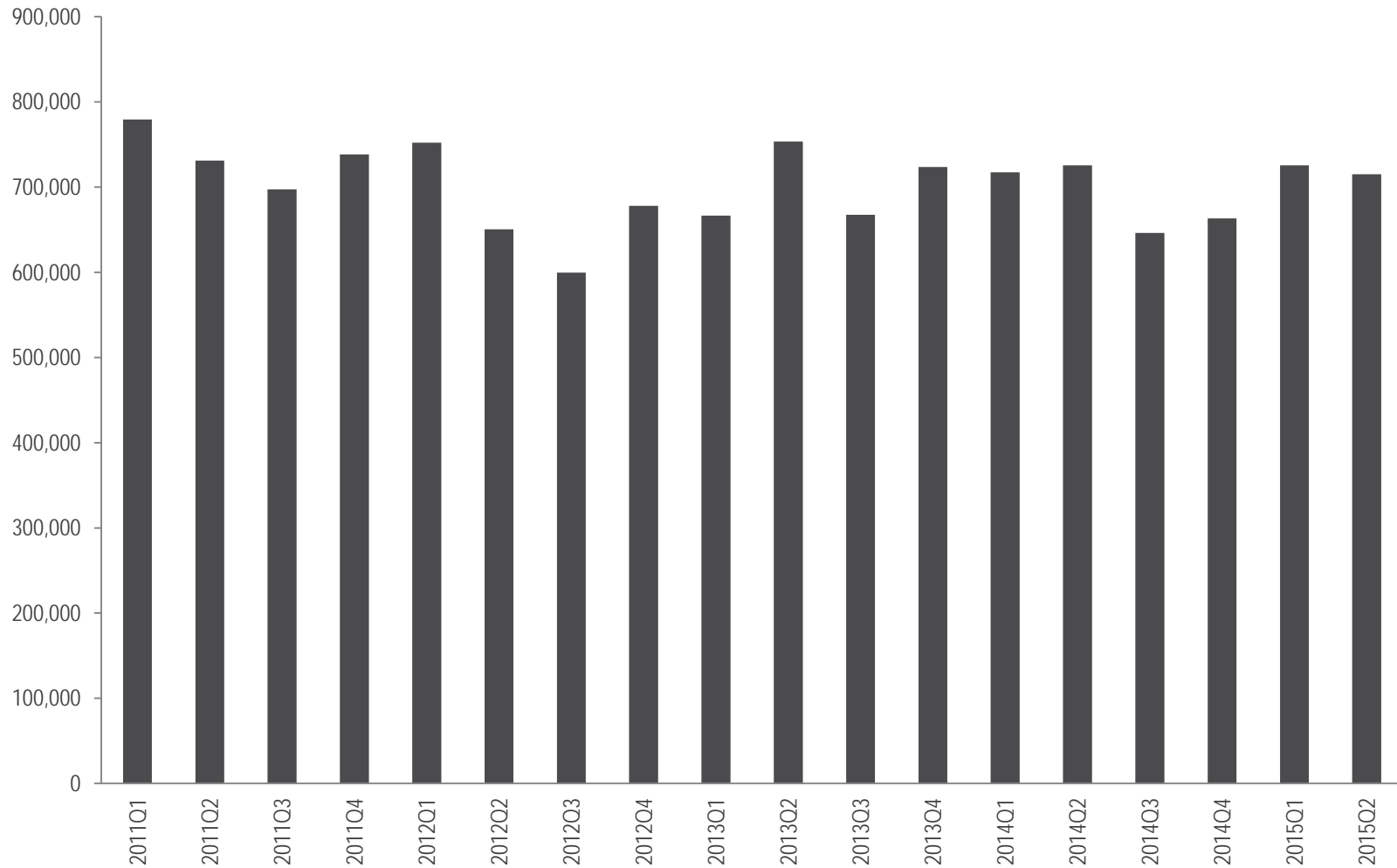


Significant upside potential through continuing market penetration as emerging markets move towards higher quality foundry castings

- Northern Europe
- South America
- Japan
- NAFTA
- India
- CEME
- China

# World truck market evolution

GLOBAL QUARTERLY TRUCK PRODUCTION TRENDS (GVW > 6 tonnes)  
(Source; LMC Automotive June 2015 Forecast Update)



# Mining capital expenditure has fallen significantly since 2012

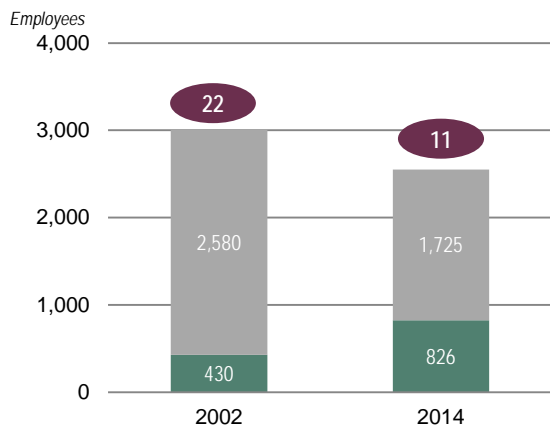


Source: Bloomberg, JPMC Research

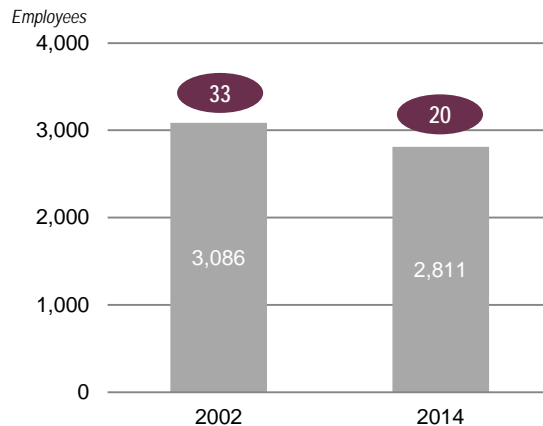


# A continued shift of operations to align with customers

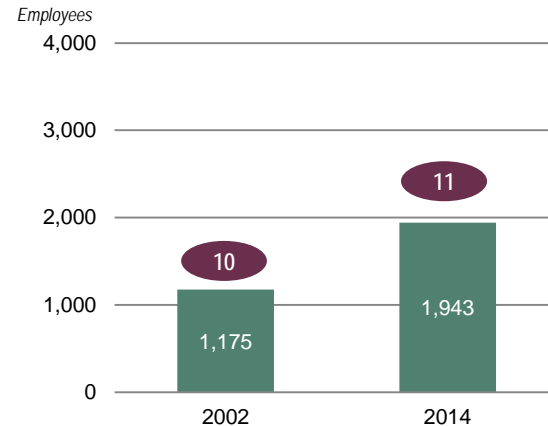
## NAFTA facilities and headcount



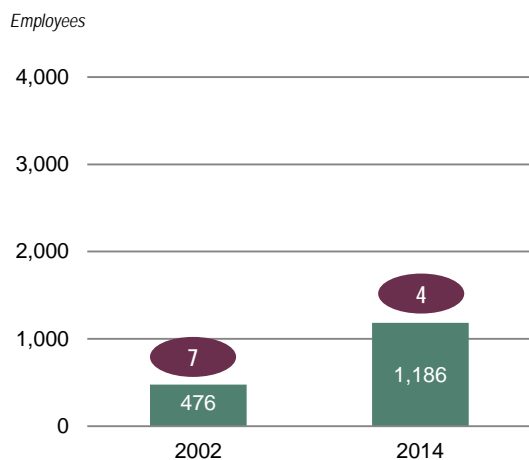
## EU 15 facilities and headcount



## Other EMEA facilities and headcount

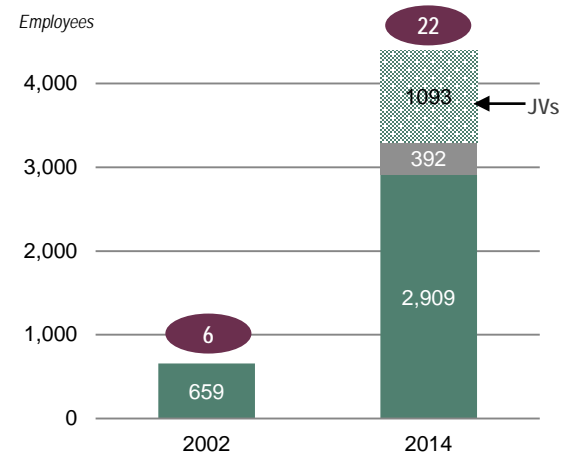


## South America facilities and headcount



● Facilities    ■ Developed markets    ■ Developing markets

## Asia Pacific facilities and headcount



Note 2002 numbers do not include Foseco (acquired by Cookson in 2008) which had 27 sites and 3400 employees at acquisition