

# World Investment Casting Market Review

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Investment Casting Seminar  
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# Agenda

- World Investment Casting Sales 2014
- Sales by Region
- Market Sector Analysis
- Market Sector Review
- 2014 Summary
- Prospects & Estimates for 2015 & 16



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ICI (Investment Casting Institute, United States)

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CFA (China Foundry Association)

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EICF (European Investment Casters' Federation)

cmf (Cast Metals Federation, UK)

ABIFA (Brazilian Foundry Association)

Individual contributors

The information given is based on official figures together with best estimates where statistics are not available. No legal responsibility is accepted for information, advice given or opinions expressed

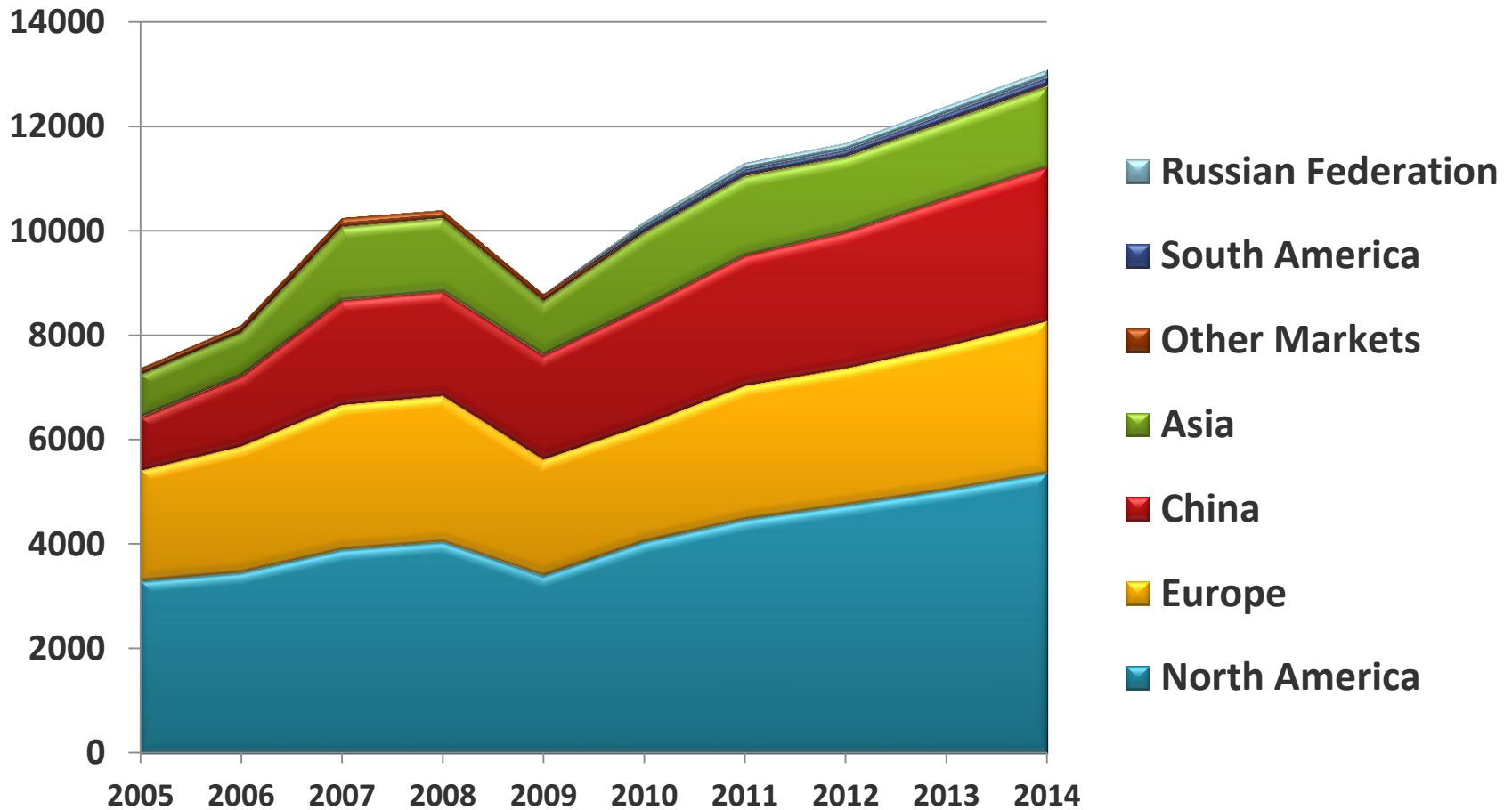


# World Investment Casting Sales 2014

- Total global investment casting sales exceeded US\$13 billion in 2014
- Representing an overall increase of 5.6%
- This confirms the strength of investment casting
- The excellent performance is led by castings for the commercial aircraft industry
- Emphasises investment casting's unique ability to satisfy the increasingly stringent demands for engine and airframe construction

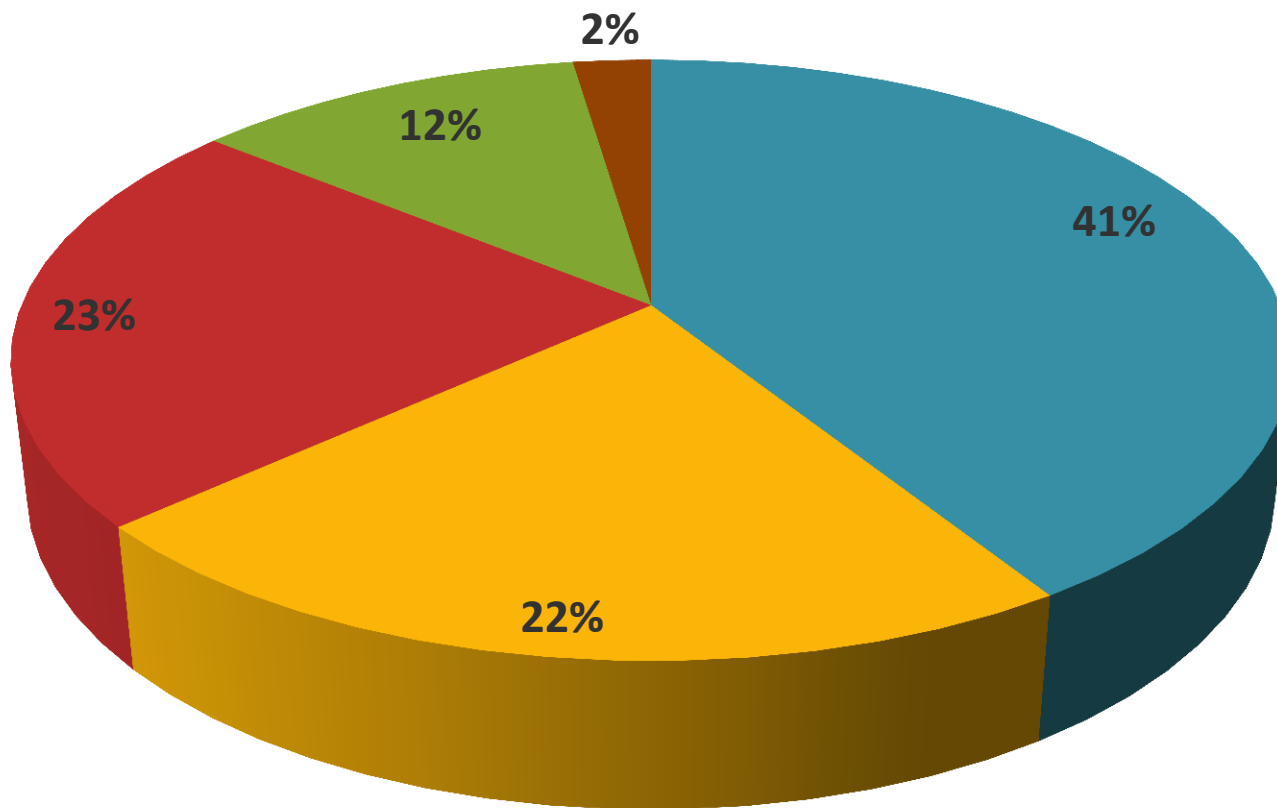


# Sales by Region (US\$M)



# 2014 Sales by Region (US\$M)

■ North America ■ Europe ■ China ■ Asia ■ Others

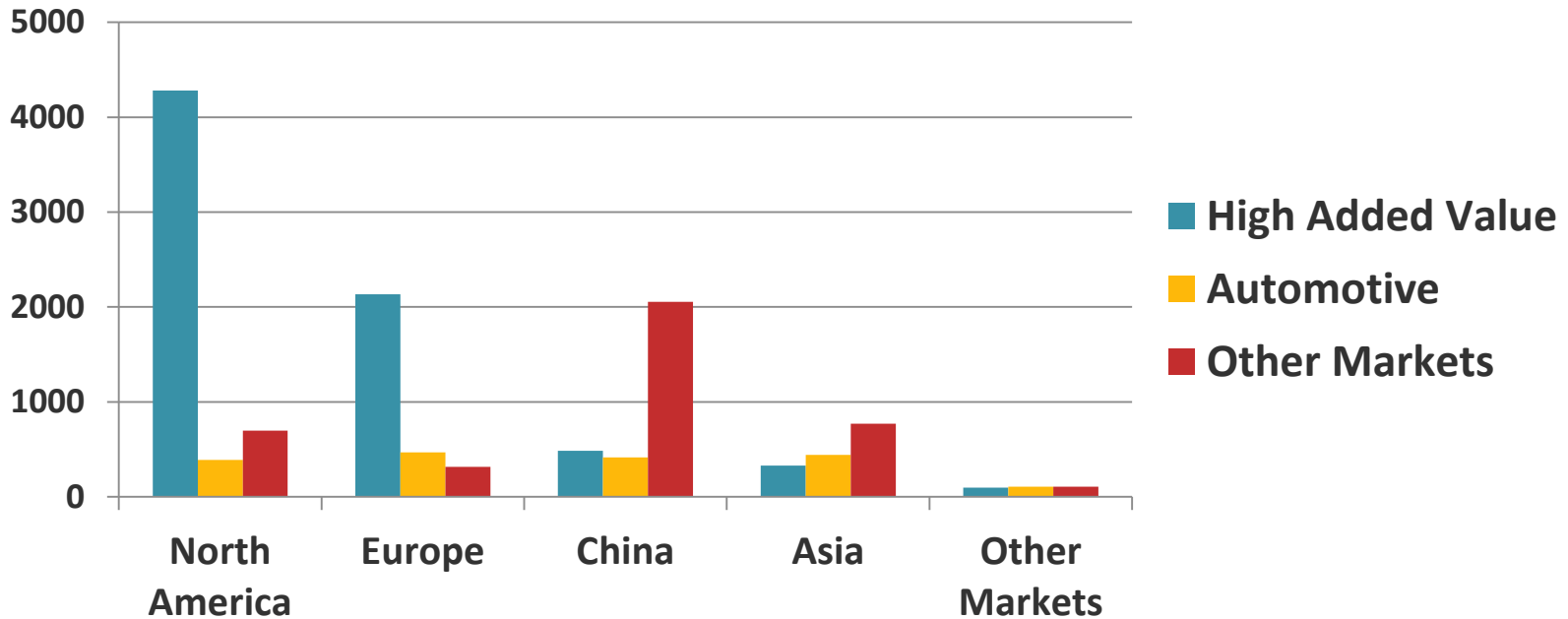


# 2014 Sales by Region

- North America retains its position as the single largest manufacturing region with a 41% share
  - Overall sales improved by 7%
- China has now climbed into second place at 23%
  - Focus on increasing production of high quality and high added value castings
- Asia in total now produces 35% of global investment casting sales



# 2014 Sales by Sector (US\$M)

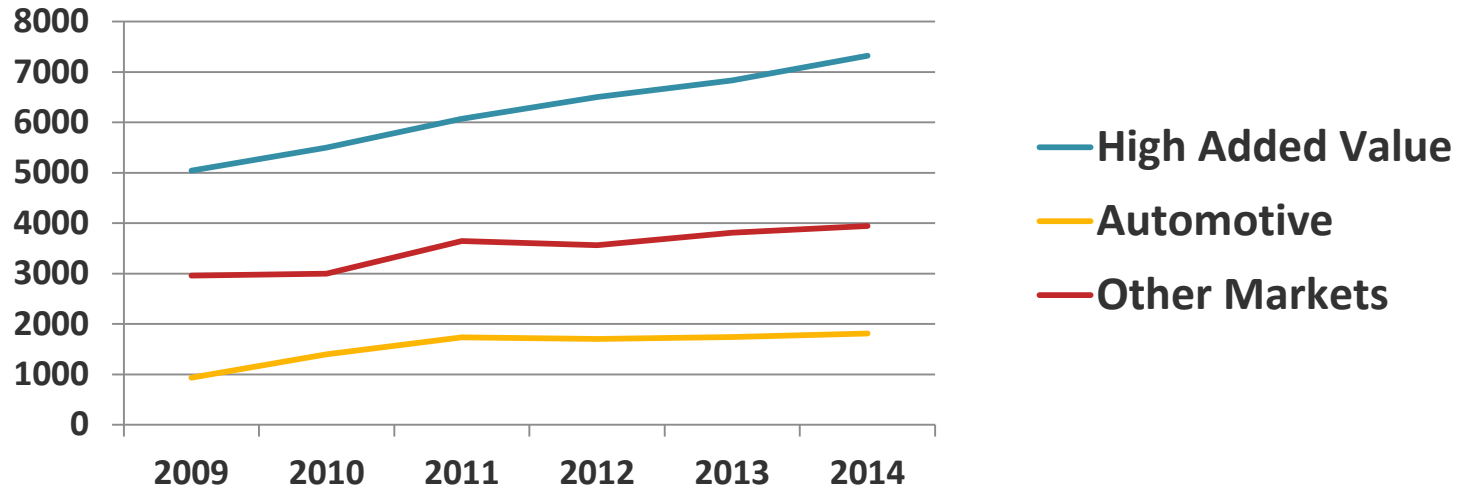


- High Added Value casting production leads in North America and Europe and is in contrast to other regions
- The increased Automotive casting manufacture in China and Asia means that regional sales are very similar





# Investment Casting Sector Trends (US\$M)

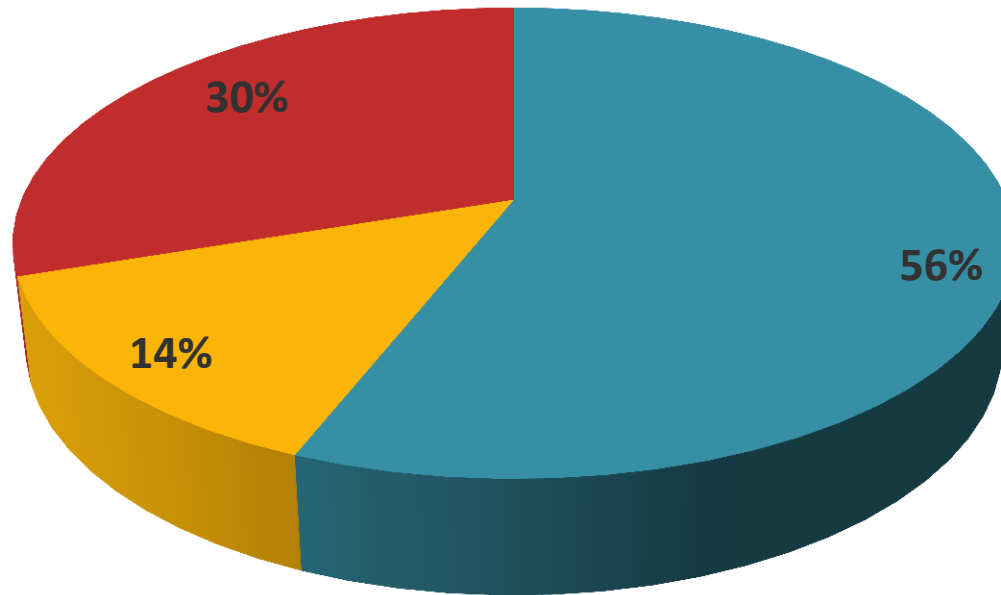


- Strong commercial aircraft sales have driven demand for High Added Value castings
- The Other Markets sector is just beginning to show improvement in all regions
- Automotive casting sales are improving



# Investment Casting Sectors 2014

■ High Added Value   ■ Automotive   ■ Other Markets



- High Added Value castings now account for 56% of the world market



# Aerospace



- 2014 casting sales increased by 7%
- The Paris airshow resulted in 934 new orders for Airbus, Boeing, ATR and Embraer worth US\$130 Billion
- The order backlog of more than 10,000 planes currently means a 9 year wait for delivery
- Airlines requirement for more fuel efficient aircraft is driving demand
- Demand for smaller regional jets is improving due to increased air traffic and replacement of inefficient planes
- Rolls Royce new advanced blade casting facility has commenced production and has a capacity of 100,000 blades a year



# Industrial Gas Turbines



- IGT continues to show a mixed picture with regional variation
- North America is seeing increased demand for medium size turbines
- The European market is showing an improvement
- Consolidation of turbine manufacturing has taken place
- Demand for spare parts for installed capacity continues



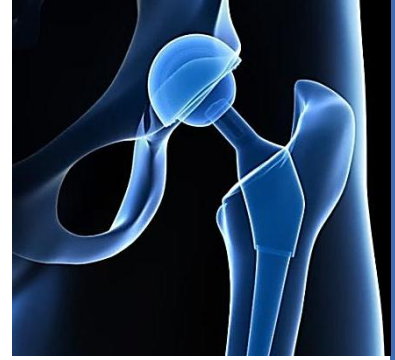
# Automotive



- Globally over 75 million cars were sold in 2014
- Most regions have seen growth returning sales to pre-recession levels
- Europe manufacturing and sales are slow with exception of UK companies and German luxury manufacturers
- Turbocharger wheel market remains a growth area



# Other Sectors



## Medical

- The world's growing and ageing population means increased sales of prosthetic castings for joint replacement
- The medical castings sector is becoming more competitive as cost reduction programmes are implemented

## Commercial

- Commercial casting sales increased by 3.5% in 2014
- Regional variation is noticeable also variation between individual foundries
- The falling oil price has reduced casting sales to the oil industry



# Industry Prospects

- Aerospace - Airbus and Boeing record production levels will continue
- IGT – signs are of an improvement in all markets
- Automotive - with economies improving continued growth is predicted
- Medical - casting applications are increasing for surgical instruments, injury stabilising appliances and diagnostic equipment
- Commercial – casting sales remain very competitive



# 2015 Estimates

- The industry estimates growth in 2015
  - High added value      7%
  - Automotive              4%
  - Commercial            3 - 4%
- **2016** casting sales are expected to maintain the current growth trend in all sectors





**Thank You**

# The Blayson Group Ltd



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