

# Feedback

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# BILBAO



## THEME

- Advanced Sustainable Foundry.

# ATTENDANCE

- Around 1100 professionals from more than 45 countries have taken part to share the latest advances and technological developments from the sectors

# HIGHLIGHTS

- Technical papers ( advanced engineering, cast iron, cast steel , collaboration, energy, environment, foundry technologies, management, molding, non ferrous)( 180 oral presentation)
- 71<sup>st</sup> WFC has strongly promoted participation of young researcher
- Almost 200 people have taken part in the industrial visits ( 10 different Programmed Tours)
- With the aim of boosting the future of the sector and offering first hand information regarding markets trend and demands, a casting buyers forum was coordinated within the official congress programme

# DELEGATION



# GLOBAL METAL CASTING ( ASSESSING OUR STRENGTH AND WEAKNESSES ( ALFRED T SPADA( AFS)

- Metal casting is a global growth industry.
- While recession from 2009-2010 slowed the pace of growth in casting, global casting is forecast to increase more than 25% from 2010 – 2015 and reach 110 million metric tons
- With this growth , our global industry faces challenges related to industry perception, safety, environment , our workforce and our communities
- While this challenges are not necessarily new , they have come to the forefront in a society where manufacturing isn't view as the creator, of wealth that it once was.

- The future success and sustainability of metal casting across the globe depends on the ability , as an industry to overcome these challenges by working together with each other as well as our customers , regulators and communities
- As we grow it is critical that we focus on a sustainable future for all our resources- raw material, technology and personnel
- The key is for the industry is to look beyond production and invest in marketing, management and human capital to ensure a strong future and continued , sustainable growth

# GOBL CASTING OVERVIEW

	2004	2008	2010	2012
Grey Iron	40,435	42.958	43.258	45,130
Duct Iron	18,705	23.841	23.451	24,108
Steel	6,594	10.538	10.215	10,919
Cu base	1,239	1.808	1.652	1,763
Alumi	10,357	12.932	10.879	13,844
mag	134	268	196	217
zinc	907	664	528	549
<b>Total</b>	<b>79,745</b>	<b>93.449</b>	<b>91.673</b>	<b>98, 269</b>

Until 2008, Global casting was on a considerable upswing from 80 million tons to 93,5 million in four years

Projections shows this total reaching 110 million by 2015

# USA

- 2001 metal casting facilities in 2013 ( employ 200 000)
- Like any other nations they experienced a reduction over the years
- Current facilities continue to become more advanced and efficient.
- Fewer facilities are needed to produce the same level of castings
- Since 2009 US has grown 10% per year

# THE REASONS FOR THE RESURRECTION

- Low energy cost ( abundant natural gas)
- Low Labor content per casting coupled with high productivity per labor hour
- Global shipping cost have risen dramatically
- Casting buyers have realized the errors and high cost associated with global sourcing if not performed efficiently,

# CHINA

- Largest Producer of metal casting ( 42.5 million tons in 2012) ( 30 000 Casting facilities)
- China is still advancing its quality and process control
- The largest hurdle china is facing is the growth of its own domestic demand for casting
- Whether it is needs of auto , truck, construction or energy, the country considerable growth requires significant levels of casting
- Can the Chinese metal casting industry supply all the required components?

# GERMANY

- Germany is the strongest casting in Europe and one of the leaders in the globe ( 5.21 million tons
- Exports more than it consume
- While it was hit hard by recession it has recovered well
- They focus on process control during manufacturing rather than quality control after manufacturing as a way to reduce and eliminate defects

# INDIA

- One of the fastest growing but they have some of the greatest challenges
- The infrastructure is still developing causing significant problems with Transportation, energy and other necessities

# SWOT OF METAL CASTING

- **Strength**

- Technology development
- Raw materials
- Proximity to customers
- Increasing productivity

**Weakness**

Perception

Technology adoption

Fixation on production

Next generation leaders

## **Opportunities**

- Conversions to casting
- Value added
- Educating of customers'

## **Threats**

- Plastics, fabrications
- Government/ reg . Burden

# CONCLUSIONS

- Metal casting is a global growth industry
- The future is now for all metal casters across the globe
- The days of just taking orders and making parts are done
- We must promote, educate , and provide solutions to our customers
- We have to find new casting opportunities And drive market growth by providing solutions to customers instead of **price war**
- The future is bright for global metal casting industry.
- Now is the time to push business and profits to ensure successful future

THANK YOU FOR YOUR ATTENTION

