



The World Foundry Organization

World Foundry Organisation – update 2019

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Joe Vecchio

- Tradesperson Pattern Maker – Northern Iron and Brass Foundry
- Operations Manager – Northern Iron and Brass Foundry
- National Secretary – Australian Foundry Institute
- AFI Queensland Legend - 2018



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World Foundry Organisation – update 2019

Annual WFO Technical Forum




The WORLD
FOUNDRY ORGANIZATION
TECHNICAL FORUM
and
59th IFC PORTOROZ 2019

18-20 September
Portoroz, SLOVENIA




The WORLD FOUNDRY ORGANIZATION - TECHNICAL FORUM and 59th IFC PORTOROZ 2019



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World Foundry Organisation – update 2019

Venue – Hotel Slovenia



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Venue – Portoroz and Piran



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Slovenia – Street castings



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Slovenia – Street castings



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Foundry Industry - Slovenia

- Incorporates Die Castings Factories
- Approximately 20 Foundries
- Produces the most castings in the world per capita
- Population of 2 Million
- Official languages – Slovenian, Italian and Hungarian



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Summary – Technical Forum

- Location – Portoroz, Slovenia – Hotel Slovenia
 - Organized by – Slovenian Foundrymen Society
 - Held in conjunction with their 59th Congress
 - 400 delegates from 27 Countries – Normally 250 attendees
 - Registered Delegates, WFO Executive, Foundry Employees, University representatives and suppliers.
 - 3 streams of technical papers of 2 days – 50 exhibitors
- All Technical Paper are delivered in English



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Sponsors

NATIONAL PARTNER OF THE EVENT

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MINISTRSTVO ZA GOSPODARSKI
RAZVOJ IN TEHNOLOGIJO

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Technical Forum - Time line of events

Tuesday – Welcome Party – 6pm

Wednesday –

- Foundry Tours – All day – 2 Groups – Die and Sand Cast
- Welcome address – Piran – 6pm

Thursday

- Opening Ceremony and Technical Papers
- Gala dinner – Bus to Piran – 7.30pm

Friday

- Technical Papers and Closing Ceremony
- AFI States – copies - 95 papers & WFO report



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Foundry tour – LTH Castings



Capabilities

Aluminium die-cast automotive components
 In-house manufacturing of tools and devices
 Development of products, tools and processes
 Prototyping
 One stop shop - from initial development to serial production
 Key Customers – BMW and AUDI

Locations

6 production sites in 3 countries (Slovenia, Croatia, Macedonia)

Key Figures (2018)

Turnover 315 Mio € - AUD\$510M
 No. of employees 3.200
 No. of die casting cells > 90 (up to 2.800 t)
 No. of machining centres > 170



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WFO - Time line of events

Thursday

- WFO Executive Meeting



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Friday

- WFO Working group
- WFO General Assembly – All countries
- WFO Executive Dinner



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World Foundry Organization – Key Executives



Mark Fenyes - President



2020 President
Vinod Kapur
Indian Foundry Society



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Streams of papers - Summary

Stream 1 – Cast Iron and Steel

- Casting defects – Steel castings
- Runners and gating systems for large castings
- Simulation for large steel castings
- ADI – Austempered Ductile Iron – applications
- Cooling rate affect – Ductile Iron Castings
- Mechanical Properties and part quality of investment cast Ductile Irons (Roger Lumley – AW Bell – Victoria, Australia)
- Imperfections in thick wall Cast Iron Castings



Roger Lumley



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Streams of papers - Summary

Stream 2 – Non ferrous alloys

- Development of high strength Aluminum for gravity castings
- Development of heat resistant aluminum alloys
- Optimization of Boundary Conditions for Solidification Simulations
- Development of an Aluminum tilt casting pour method
- Optimization of high pressure die castings -
- Benefits of data analysis for die casting technology



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Streams of papers - Summary

Stream 3 – Technologies for the Foundry Industry and Development Trends

- What the EU wants for the Foundry Industry
- Development for advance Tool Steels
- Sustainable Cold-Box Systems
- Digital Transformations in Foundries – Challenges and Solutions
- Non-standard dynamic testing for green sand control



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WFO – Future events

WFO World Foundry Summit May 2020 – New York

- New concept – Invitation only - First was successful – Rome 2019



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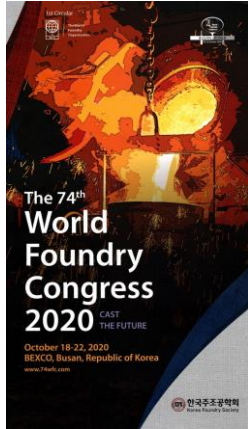


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WFO – Future events

World Foundry Congress – October 2020 - BEXCO, Busan, Republic of Korea



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WFO – Future events

World Foundry Organization Technical Forum – Turkey 2021



The World Foundry Organization



The World Foundry Organization Technical Forum



2021 Cesme, Turkey



2022 – Congress – Milan, Italy
2023 – Technical Forum – India



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WFO – Active Working Groups

- Cast Metal Matrix Composites
- Die Castings
- Ferrous Metals
- Non-Ferrous Materials
- Training and Professional Development



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Thank you



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