

**ALUCAST 2021 VIRTUAL CONFERENCE & EXHIBITION**

**BRIEF EVENT REPORT**

Dates – 9th – 10th – 11th December 2021

Theme – CURRENT TRENDS IN DIE CASTING

The Aluminium Casters’ Association (ALUCAST)®, India hosted its Annual Event ALUCAST2021 – Virtual Conference and Exhibition on the Theme ***CURRENT TRENDS IN DIE CASTING***on the 9th – 10th – 11th December 2021 that focused on sustainable development and growth of the Die Casting Industry moving ahead amidst current challenges – The Covid 19 pandemic impact on business,the fluctuating prices of Aluminium, increasing manufacturing costs, shortage of skilled manpower and the resultant pressures on cash flows that have become a major concern for the Die Casting Industry today.

 ALUCAST 2021 received an overwhelming response with participation from more than 1,000 participants in the Conference & Exhibition combined together. Authors, Speakers, Presenters and Delegates from India, China, Singapore, Spain, Switzerland, UK, USA, Italy and Germany participated in the Virtual Conference. The Technical Papers and the Presentations provided insight into the Current Trends, Practices and Technologies used in the Die Casting Industry in India and across the world as well. ALUCAST 2021 was inaugurated and addressed by Mr. Ujjwal Munjal, Trustee ALUCAST and the CMD& ED – Rockman Industries & Hero Electronix followed by the Keynote Address by Mr. Vivek Joshi, President & CEO – Sundaram Clayton Limited.

In his inaugural address, Mr. Ujjwal Munjal said that we could not have chosen a better theme for ALUCAST 2021 at this moment in time given the world environment we live in. With the pandemic and the impending shift in mobility from IC to EVs, the world economy has been going through unprecedented challenging times since the last two years, largely due to the disruptions caused by Covid 19. The challenges are further exasperated for the manufacturing sector and casters around the world. Safety of the workforce in the work environment has become paramount leading to enforcement of very difficult but much necessary protocols in curtailing personal interaction, at the same time being able to fulfil customer requirements. These issues are even more difficult for manufacturing companies who must meet customer expectations and at the same time be able to manage the dynamic work environment. Mr. Ujjwal further added that the world around us is evolving very rapidly and the onset of the pandemic has further accelerated some of these technology shifts. The penetration of connectivity and digitization in our factories is leading to a revolution popularly called Industry 4.0. This will in the very near future have a very significant impact on all manufacturing including die casting and shall become one of the key success factors for any Company in the next few years. While investments in Industry 4.0 today may seem a secondary priority but these investments will make our factories’ data real time and transparent and this will have a direct impact on our cost of production, our quality and our delivery. Within the Die Casting industry itself, casting technology has progressed significantly with regards to alloys, production processes, tools and application possibilities in the last few years. Mr. Ujjwal emphasized that it is very important that the Indian die Casting Industry keeps pace with these fast-moving developments to ensure that the Die Casters not only remain cost competitive but competitive also on the technology front in the global arena. The inaugural address was followed by the release of the ALUCAST 2021 Technical Volume, the ALUCAST Technical Journal December 2021 Issue, the ALUCAST Technical Reference Handbook and the ALUCAST Aluminium Casting Industry Directory at the hands of Mr. Ujjwal Munjal.

Mr. Vivek Joshi, President & CEO – Sundaram Clayton Limited in his Keynote Address said that there would be trends, ups & downs, the Industry will go through multiple challenges, but let us not forget what India has been in the field of Die casting and caught attention to the fact that India has 1000 + years old and very strong history in Die Casting Technology and hence no pandemic or any advancement or shift in technology can put a jolt to India’s journey in Casting and cannot wipe away the Die Casting Industry in India. He elaborately spoke on the latest trends in Die Casting, Product Design, Die Casting process, Quality, Sustainability, New Product Development and the ‘People’ factor in the Die Casting Industry. He emphasized the importance of shift to multi material castings, light weighting, conversion from iron to aluminium, conversion from thick wall Gravity Die Castings andPermanent Mould Castings to thin wall High Pressure Die Castings, lean manufacturing, digitalization, using and leveraging the benefits of Simulation Software to design and develop defect-free and quality products, agility of the workforce – organizational work culture, collaboration, strong customer connect and customer focus, empowered decision-making, diversity and inclusion, conducive infrastructure support, engaging leadership, encouraging and attracting young talent to the Die Casting Industry, career development opportunities, robust performance management system, rewards and recognition, role-based competency development to ensure capable and competent workforce that is aligned towards productive and profitable business. He also expressed a strong need for Academia-Industry close interaction and association to ensure appropriately trained pool of talent. He also added that environment-friendly industry practices are an important aspect of sustainable development.

ALUCAST 2021 Virtual Conference focused on the current challenges being faced by the Die Casting Industry and the methods to tackle these issues and revive the Die Casting Industry post pandemic and pave the way for development and sustainable growth. The Conference was spread across 5 Sessions with a total of 24 Presentations. The Sessions were chaired by Mr. Rahat Bhatia, Vice Chairperson – ALUCAST Delhi Zonal Centre and Die Casting Innovator, Author, Speaker & Fonder – Raga Group (Session-1), Mr. Rajesh Aggarwal, Director – TechSense Engineering Services, Pune (Session-2), Mr. Rajesh V. Shah, Vice President (Engineering) – Jaya Hind Industries Private Limited, Pune (Session-3), Mr. Supreet Jain, Chairperson - ALUCAST Delhi Zonal Centre and Managing Director – SRS Diecasting Private Ltd. (Session-4) and Mr. N. Sayaji Rao Nikam, Chairperson - ALUCAST Bangalore Zonal Centre and Founder – Dolphin Die Cast Private Ltd. (Session-5).

The Presentations were made by authors / speakers and presenters from the reputed organizations / industries within India as well as from outside India.Fourteen Technical Presentations and Ten Full-length Technical Papers were presented in the ALUCAST 2021 Virtual Conference based on the Nine topics defined for ALUCAST 2021 – Industry 4.0, Non-automotive Applications of Die Casting, Die Casting for E-vehicles, Managing Price Fluctuation of Aluminium, Impact of Vehicle Scrappage Policy on Die Casting, Industrial Revival Post Pandemic, Cost Management in Die Casting, Reducing Casting Rejection using the Six Sigma Tool and the Latest Development in the Die Casting Technology (Process / Machine). followed by ALUCAST 2021 Conference Overview / Summary Presentation by Mr. Anurag Luthra, Member – ALUCAST 2021 Technical Review Committee, Hon. Secretary – ALUCAST Delhi Zonal Centre and Technical Consultant – Engineering Industry.

The Technical Papers presented in the Virtual Conference have also been published inthe ALUCAST2021 Technical Proceedings / Technical Volume and shall serve as a valuable reference for the Engineers, Practitioners, Consultants and the Researchers in the Die Casting Industry. The Authors have provided wonderful insights into the problems faced by the Die Casting Industry currently and have provided elaborate and comprehensive solutions to the problems to pave path towards the sustainable development and growth of the Die Casting Industry amidst several challenges. The Technical Volume was not possible without their commitment to steer the Die Casting Industry towards sustainable growth & development with the help of innovative ideas, practices and solutions.

The ALUCAST 2021 Virtual Exhibition was also concurrently organized that providedDie Casters, manufacturers, suppliers from the allied industries a platform to showcase their products & services and most importantly to facilitate thought leaders and technology providers an opportunity to share trends, developments and best practices. Twenty-two Exhibitors – reputed Organizations from India as well as outside India participated in the Virtual Exhibition.

ALUCAST 2021 was well supported byall the Sponsors and the participating Industrial Organizations, Academic Institutions and the Delegates from India as well as from outside India. The efforts of the ALUCAST Secretariat with wonderful support from the ALUCAST Zonal Centres, the ALUCAST 2021 Organizing Committee & the Technical Review Committee toprovide value to all the delegates and visitors, at the same time giving visibility and exposure to the Exhibitors and Sponsors through the ALUCAST 2021 Virtual Conference & Exhibition were well received and appreciated by all those who participated in the Event. ALUCAST extends special thanks to ALUCAST 2021 Virtual Platform Partner – IBENTOS and the Event Management Partner – CONFERAS INFOTECH.

ALUCAST extends Warm New Year Greetings to everyone from the Die Casting Fraternity and those that support our Industry. We look forward to a very Happy, Healthy, Safe and Prosperous 2022 for all of us and also look forward to ALUCAST 2022 happening physically in December 2022.

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