

PRESENTING THE 21ST ANNUAL

Australian Gas Turbines Conference

26 – 27 November 2020 | Virtually Delivered

HEAR FROM AUSTRALIAN AND INTERNATIONAL INDUSTRY LEADERS:



Girish Kamal, *Principal Rotating Equipment Engineer, Petronas Carigali – Malaysia*



Rashmin Gunaratne, *Squadron Leader (O-4), Officer-In-Charge – Propulsion Systems Integrity (PSI) - Directorate of Aviation Engineering (DAVENG), Defence Aviation Safety Authority*



Jeffrey Goldmeer, *Emergent Technologies Director - Decarbonization, GE Power USA*



Dr. Maxine Watson, *Partner, MorrisWatson*



Joel Thakker, *Engineering Solutions Manager, LEAP Australia*



Ervin Mom, *Engineering Manager Rotating Equipment Services, Sulzer*



Douglas Nagy, *Manager, IGT Components Repair, Liburdi Turbine Services, Inc. Canada*



Attilio Pigneri, *CEO, H2U*



Paul van Dyk, *Turbomachinery Safety & Control, Pantac System Control Pty Ltd*



Arturo Roxas, *Regional Manager, Certified Lubrication Specialist (CLS), Fluitec Australia*



Patrick Jansen, *Chief Services Officer, VBR Turbine Partners – The Netherlands*



Giuseppe Stella, *Project Engineer for Turbomachinery NovaLT Products in APAC, Baker Hughes*



Abel Rochwarger, *Chief Engineer, GTC Control Solutions – USA*



Dawid Dlugosz, *Controls and Instrumentation Engineer on GE LM turbines, MTU Maintenance*

SUPPORTED BY:



Australian Gas Turbines Conference

Thursday 26 November 2020

DAY 1

10:30 **OPENING** | Opening remarks from the Chair

Dr. Maxine Watson, *Partner, MorrisWatson*

10:40 **COVID-19 - Remote engineering work arounds**

Pantac Sytem Control is a small engineering company specialising in Turbomachinery Functional Safety and Control.

COVID-19 has forced Pantac's clients to adopt project strategies, that in times past, may have been considered 'Risky' 'Unwarranted' 'Not Secure' 'Too Slow' 'Unmanageable' and potentially 'Not Safe'.

This paper covers 4 current projects, looks at the available Remote Engineering Tools as well as the pros and cons of Remote engineering.

Paul van Dyk, *Director Turbomachinery Safety & Control, Pantac System Control Pty Ltd*

11:10 **INTERNATIONAL GUEST SPEAKER**

Ten Year Aftermarket LTSA, Observations and Results

An overview of the cost-savings goals and actual achievements of an aftermarket LTSA for a two-on-one combined cycle combustion turbine plant. The major successes, the minor successes and the new procedures implemented. A fiscal overview of the program clearly show that it was a success.

Doug Nagy, *Manager IGT Components Repair, Liburdi Turbine Services Canada*

11:50 Refreshment break

12:10 **CASE STUDY**

Use of Simulation in the Turbine, Fan & Compressor Industries, with Case Studies from the Australian Market

The use of 3D simulation via computational fluid dynamics (CFD) or finite element analysis (FEA) is now a common place occurrence in the turbomachinery market. Whether it is designing a jet fan for ventilation or an engine for a UAV or a pump for the mining industry, CFD and FEA are used extensively, across Australia, by engineers, designers, novices and experts alike. This presentation details such a project, with the aim of educating the audience on (i) the general simulation process (ii) the benefit to design and (iii) the resources required. What was once a tool reserved for an army of Phd's and global corporations, is now being done on laptops and designers, throughout the country.

Joel Thakker, *Engineering Solutions Manager, LEAP Australia*

12:40 Lunch

1:10 **INTERNATIONAL GUEST SPEAKER**

Decarbonizing the Australian Energy Ecosystem with Gas Turbines

- Gas turbines, which are a key element of today's electricity production infrastructure, are often overlooked when developing plans for future decarbonized electricity
- These existing assets can be upgraded to reduce carbon emissions. This can be accomplished using fuels with reduced or zero carbon content. Another option is to add a post-combustion carbon capture system
- New gas turbines are effectively future proofed (for future reductions in carbon emissions) as they can be configured to be "hydrogen ready"

- This presentation will provide a view of these technology options, as well as highlighting GE experience with hydrogen and similar low heating value fuels

Dr. Jeffrey Goldmeier, *Emergent Technologies Director - Decarbonization, GE Gas Power USA*

1:50 **The role of hydrogen in fueling gas turbines**

- Benefits and opportunities
- Commercial viability

Dr Attilio Pigneri, *CEO, H2U*

2:20 Refreshment break

2:40 **INTERNATIONAL GUEST SPEAKER**

Dry Gas Seals - Why they fail and how to improve their reliability

Design and Maintenance considerations

- Major factors affecting Dry Gas seals life and efficient operation
- Seal Gas supply and control requirements
- Primary Gas seal venting and health monitoring
- Secondary Gas seal venting and health monitoring
- Separation Gas supply and control requirements
- Recommended Alarm and shutdown conditions
- Improve DGS operating performance
- Avoid unplanned shutdowns
- Reduce energy consumption and costs
- Extend equipment lifespan

Girish Kamal, *Principal Rotating Equipment Engineer Centre of Excellence Division, PETRONAS Carigali Sdn. Bhd. Kuala Lumpur*

3:20 **CASE STUDY**

Ventilation Air Ingestion - the impact of the plant layout

Dawid Dlugosz, *Controls and Instrumentation Engineer on GE LM turbines, MTU Maintenance*

3:50 **IoT, from buzzword to practice**

- Lower the barrier to implement IOT for the client
- The different levels for the value proposition and avoid the commodity trap
- IoT should be a service, not software. Software is just the enabler, not the goal
- IoT potential for the total OPEX expenditure and the reliability of assets
- Machine learning and how to deal with insufficient volume of data
- Case study

Patrick Jansen, *Chief Services Officer, VBR Turbine Partners The Netherlands*

4:20 **CLOSING** | Closing remarks from the Chair

Australian Gas Turbines Conference

Friday 27 November 2020

DAY 2

9:30 **OPENING** | Opening remarks from the Chair

Dr. Maxine Watson, *Partner, MorrisWatson*

9:40 **INTERNATIONAL GUEST SPEAKER**

Two Single Point Of Failure Case Studies, Implementation Of TIL 1275 And 1524: What You Need To Know, Mark VI Issues Missed By The OEM TILs, And Two New GTC Mark V Cards

Abel Rochwarger, *Chief Engineer, GTC Control Solutions – USA*

10:20 **Aircraft Propulsion Systems Integrity Management in the Australian Defence Force**

The presentation will provide an overview of propulsion systems integrity management in the ADF. It will also highlight the importance of having an aircraft propulsion system integrity program through a number of case studies.

Rashmin Gunaratne, *Squadron Leader (O-4) Officer-In-Charge – Propulsion Systems Integrity (PSI) Directorate of Aviation Engineering (DAVENG), Defence Aviation Safety Authority*

10:50 Refreshment break

11:20 **CASE STUDY**

Gas turbine varnish removal, methods and technologies used, outcomes and best practice

This presentation will answer:

- Why are some varnish mitigation technologies better suited for particular application than others?
- How to know when to change filters?
- Is there value in a varnish mitigation system if I don't have varnish?

Arturo Roxas VI, *Regional Manager, Certified Lubrication Specialist (CLS), Fluitec Australia*

11:50 **Advancements in Cogeneration Ecosystem with the NovaLT Gas Turbine family**

- Technical developments in the cogeneration sector offer a resilient, decentralized, and energy efficient system
- The demand for reliable and cost-effective solutions for cogeneration products from 5 MW capacity is increasing in the industrial sector
- The NovaLT family of gas turbines continue to be a part of Baker Hughes' best-in-class power generation solutions

Giuseppe Stella, *Project Engineer for Turbomachinery NovaLT Products in APAC, Baker Hughes*

12:20 **Session to be advised**

Please check the conference website for regular updates

1:00 **The remote outage support and other issues related to Covid and maintenance**

Ervin Mom, *Engineering Manager Rotating Equipment Services, Sulzer*

1:40 **CLOSING** | Closing remarks from the Chair



Content is King: Enjoy Curated Content

With two days of expert sessions and industry leading speakers, delve into expertly curated content that you won't find anywhere else.



Accessible from your devices

Learning and networking is now at your fingertips – the conferences and matchmaking platform is accessible from your laptop, tablets or mobile devices.



Time Efficient and Cost Saving

Save on travelling time and accommodation costs while getting in touch with industry professionals without geographical boundaries.



Business Matchmaking Live

Connect and meet with fellow attendees from all over the world by taking advantage of the AI powered matchmaking within the virtual platform.



Live and On-Demand

Wherever you are in the world, view the presentations at your leisure – either live or on-demand you'll never miss a session.



Engage with our expert speakers

Make the most of your virtual experience by keeping updated with the latest insights and discussions, all while engaging with speakers through live polls, Q&A and more!

Australian Gas Turbines Conference

26 – 27 November 2020 | Virtually Delivered

Easy Ways to Register

1 Web
www.informa.com.au/gasturbines2020

2 Telephone
+61 (0)2 9080 4307 – Quoting P20R20

3 Email
info@informa.com.au – Quoting P20R20

Stay Connected



gasturbines20

Pricing Details

Register Early & Save	Early Bird Rate Book & pay by 12 Oct 2020				Standard Rate Book & pay until 6 Nov 2020			Full Rate Book & pay from 7 Nov 2020		
	PRICE	GST	TOTAL	SAVE	PRICE	GST	TOTAL	PRICE	GST	TOTAL
Two day conference										
Virtual Pass	\$595	\$59.50	\$654.50	\$900	\$995	\$99.50	\$1094.50	\$1,495	\$149.50	\$1644.50

For full terms and conditions, please visit:
www.informa.com.au/gasturbines2020

IMPORTANT – VIRTUAL PASS BOOKINGS

For virtual pass bookings, please read below before proceeding:

- All delegate registrations must use their own email address to ensure each delegate receives a unique password to join the digital event.
- You cannot use one email for multiple profiles.
- If your company is not based in Australia, check the GST box on the next page as you are not required to pay GST.

SPONSORSHIP AND EXHIBITION OPPORTUNITIES

Brand your company across this virtual event from the safety of your home or office. The virtual Forum is fully interactive, sophisticated and will enable you to connect with industry thought-leaders.

You will have access to the same great content, hear from leading experts and access unique networking and business development opportunities with key decisions makers. Our virtual platform will allow you to engage directly with attendees through meetings, video link, chat, live product demos, and virtual exhibits.

To see what is on offer please contact:

Megan Rogulski, Sponsorship Manager

Phone: (02) 9080 4030

Email: megan.rogulski@informa.com.au