

# PtSA News

Newsletter of the Production Technologies Industry  
in South Africa

August/September 2020 - Issue 14

## PtSA National Partners

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- *ISTMA holds virtual General Assembly*
- *Atlantis Foundries uses 4IR Technology*
- *ISTMA Africa Forum launched*
- *Drive to increase Local Content*
- *PtSA members participate in National Ventilator Project*

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### Reminder

**National Virtual Networking Event**  
**13 August @ 16h00 via Zoom**  
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# FOREWORD FROM CEO

Welcome to this edition of the PtSA News, which is being distributed at a time when the economy is opening up after the lockdown situation and industry is slowly returning to normality, all be it an adjusted normality. We trust that all the members of PtSA have adapted to this new normality and we wish everyone all the best over the next few months as we continue to fight the virus and the effects of the virus.

PtSA has continued to operate over the last few months and the PtSA office has continued to give the best support possible under the circumstances to the members and to endeavour to add value to the members. This raises the question of what is the value of belonging to PtSA. To answer this question we should consider the following:-

PtSA is the only Association which represents the TDM industry in South Africa, known internationally as the production technologies industry. PtSA is the voice of the production technologies industry for the benefit of its members.

PtSA has a partnership agreement with government (the dtic) known as the INTSIMBI Future Production Technologies Initiative, and wholly owns the solutions development and implementation agency, the NTIP (National Technologies Implementation Platform). This partnership has resulted in the successful establishment of the TDM Powered Programme which is internationally recognised as the benchmark for the training and skilling of machinists and toolmakers. To date the programme has produced over 2500 skilled people who have been employed in industry around the country.

In addition, through the partnership, over 150 companies to date have been assisted to improve their competitiveness for the benefit of the South African economy.

PtSA organizes regular networking and matchmaking processes and provides the members with relevant information on a regular basis. In this Newsletter we have included a summary of the key points made by the PtSA Chairman and Regional Chairmen at our last Networking Event. We have also included some details of the recently launched Business Turnaround and Recovery Programme which may be of benefit to those members who are facing distress as a result of Covid-19. Our next Virtual Networking Event is taking place on Thursday 13<sup>th</sup> August and we have included some details in the Newsletter regarding the guest speakers and the topics for presentation.

PtSA is a member of the International Special Tooling and Machining Association (ISTMA) which gives the members access to international connections.

ISTMA recently held a Virtual General Assembly which was chaired by the ISTMA President, Bob Williamson, and was attended by the PtSA Chairman, Emile Coetzee, NTIP CEO, Dirk van Dyk, and INTSIMBI CEO, Tapiwa Samanga. We have included an overview of this General Assembly in the Newsletter.

As indicated, PtSA is the voice of the production technologies industry and plays an important role in representing the industry at various levels.

A number of relevant issues have been identified by industry, which PtSA is addressing on behalf of industry. We have included a short overview of these in this Newsletter.

To conclude, PtSA is a membership based organisation, for the benefit of the members. The PtSA structures include a Board of Directors elected by the members, Regional Executive Committees consisting of Regional Chairmen (who serve on the Board of Directors) and regional committee members, and an operational capacity (the PtSA office). We encourage our members to make use of these structures to ensure that the requirements of the members are highlighted and acted upon. We also encourage our members to make use of all the benefits available to them, and we encourage all those in the industry who are not yet members, to join the Association and to “become part of the voice of industry”

We trust that you enjoy this Newsletter and find it informative.



**John McEwan**

**CEO: PtSA**

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## COMMENT BY THE CHAIRMAN OF PtSA



Mr. Emile Coetzee

Shortly before we knew about Covid, I was given an e-book by a friend titled 'Exploiting Chaos' by Jeremy Gutsche. The author opens his book by stating that dramatic change and simple evolution give birth to a new set of market needs. He then goes on to mention that chaos causes organizations to

retreat but he ends up giving some examples of iconic companies that were founded during periods of economic recession, including Microsoft, Apple, IBM, Disney, CNN, MTV, Burger King, GE and Hewlett-Packard.

In this time where certain risks and threats have become very apparent, it has also opened the door to new opportunities. The manufacturing industry is talking about the shortening of supply chains, harnessing 4IR and working together on long term competitiveness. This certainly sounds very positive for local manufacturing, but on the ground things don't seem that straight forward. When we talk about China, the words 'don't wake up the sleeping giant' comes to mind. But then again, has this giant ever gone to sleep or is it already recovering at full speed and waiting for the recovery of the global logistics system?

One thing is certain, to unlock the potential benefits for local manufacturing is going to take hard graft, it is certainly not

going to happen by itself. Yes, we are all dependent on the macro-economic environment and policies around us, but this is exactly where networking, innovation and the various associations we belong to will play a role; in short, we will have to do this together! A great understanding of where we can potentially be competitive is needed, how funds need to be channeled, when to tariff and when not to tariff; as industry we have to help our associations and government departments to help us.

I have often asked the question to potential clients who import their goods from the far east 'How often do you have to fly stuff'. When things go wrong with imports, in certain industries it can go very wrong and I've seen production lines come to a standstill because of it. But then to be fair, we as industry should also shape up and have samples and quotes ready timeously as our Asian counterparts. Like I said, we have to hustle, shape up, do what it takes to bring about long-term localization allowing us to not only survive now, but thrive in the future.

**Emile Coetzee**

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# ATLANTIS FOUNDRIES USES 4IR TECHNOLOGIES TO STAY AHEAD

Atlantis Foundries (a member of PtSA), with a capacity of 110 000 tonnes per annum, supplies cast cylinder blocks to the world market. The company was recently purchased by Daimler AG which indicates the faith that this automotive giant has in South Africa and the South African capabilities.

The foundry is a specialist in producing cylinder block castings for the heavy duty truck market in the range of 12 to 16 litre engines, which are used in Mercedes Benz, Western Star, Freightliner and Fuso trucks. “With 100% of our production being exported, we are up against international competition which means that we have to be innovative, efficient and lean in order to beat this competition and ensure that we meet the customer demands” says **Cordell Rautenbach**, Senior Manager, Technical Engineering at Atlantis Foundries, and a members of PtSA Western Cape Executive Committee.



Mr. Cordell Rautenbach

He goes on to say “the facility has been turned into a Smart Foundry through strategic investment and partnerships, leading edge innovations, the use of Big Data analytics and artificial intelligence in order to improve quality and efficiency. This includes detailed tracking, monitoring and recording of hundreds of key parameters on robotics, equipment and components in order to enhance the

process control, process optimisation and problem solving of the

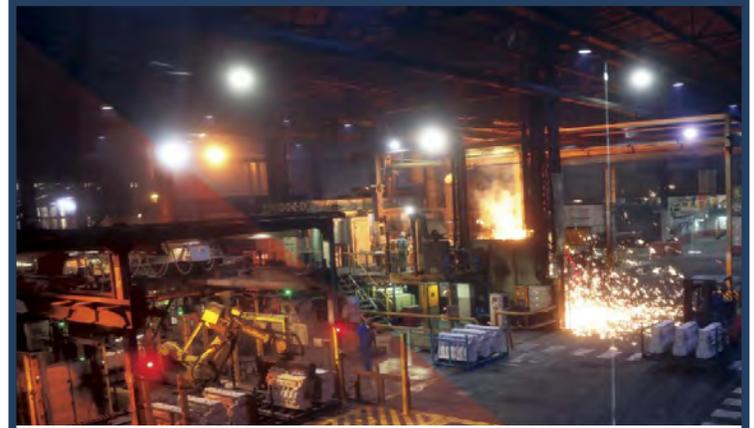


Robot and Castings

foundry.



It has not been easy to turn a 40 year old facility into a highly efficient and modern facility, but by embracing new technologies, we have been able to achieve this”, indicates Cordell.



View inside the Foundry



Mr. Pieter du Plessis

**Pieter du Plessis**, CEO of Atlantis Foundries, says “We are extremely proud of what we have achieved so far, but we need to continuously improve in order to stay ahead of the game. We are very pleased that Daimler AG has faith in us and in the future by purchasing the company.”



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# ISTMA WORLD MAKES HISTORY WITH FIRST ONLINE GENERAL ASSEMBLY

The International Specialist Tooling & Machining Association, ISTMA World, made history on 30 June 2020 when the Association presented its first ever online General Assembly. The international association represents special tooling and machining associations in 21 member countries throughout the world. Collectively, ISTMA member associations represent over 8,000 companies with an estimated 120 billion U.S. dollars in annual sales. The aim of the virtual General Assembly was to give representatives from all ISTMA member countries around the globe access to the proceedings. The presentation of an online General Assembly via the Zoom platform follows a decision by the ISTMA Board of Directors to postpone the 16<sup>th</sup> ISTMA World Conference due to the global Covid-19 pandemic. The conference was scheduled to take place in Shanghai, China in June 2020. The Board decided to proceed with the holding of a virtual General Assembly meeting, using a video conference platform and utilizing the services of professional conference organizers to enhance the experience.

ISTMA World President, Bob Williamson, says although the decision to postpone the tri-annual event came as a disappointment he is optimistic that 16<sup>th</sup> World Conference in 2021 will be one of the best world conferences ever. He

says the event will be historic in many respects as it is the first time that China will act as host country for the ISTMA World Conference since the inception of ISTMA almost half a century ago. Williamson says the first online global General Assembly was a great success and served as a valuable experiment for the future application of virtual technology for the benefit of all ISTMA members.

The online General Assembly, chaired by ISTMA President Bob Williamson, featured 31 attendees from a record number of 19 countries, five global partner representatives and 13 invited guests from four countries. For the first time representatives of four non-member African countries – Zimbabwe, Zambia, Malawi and Uganda attended as observers. Williamson says the African representation is of special significance as it represents an important step forward towards the formalisation of ISTMA Africa structures.

The keynote address at the General Assembly was delivered by Dr Harry Teifel, Platform Leader of Progressus, a multi-expert 4IR/Digitalisation Solution Eco-system who provided an insight on how supply chains will be shortened and new technologies introduced in the post Covid-19 global economic revival.



Mr. Bob Williamson

A screenshot of a keynote slide from a presentation. The slide has a dark background with white and blue text. On the right side, there is a partial view of Dr. Harry Teifel speaking. The text on the slide reads: "OUR WORLD IS IN FOR SIGNIFICANT DISRUPTION It means a new operating model". Below this, there are three bullet points: "Digitalization dictates new rules for success and creates new opportunities for the nimble", "Combinations of technologies accelerate change and create massive potential", and "Sharing and cooperating is key to future success and allow for more agile value creation".

**OUR WORLD IS IN FOR SIGNIFICANT DISRUPTION**  
It means a new operating model

**Digitalization** dictates new rules for success and creates new opportunities for the nimble

**Combinations** of technologies accelerate change and create massive potential

**Sharing and cooperating** is key to future success and allow for more agile value creation

Dr Harry Teifel, - Platform Leader - Progressus Digital

# LAUNCH OF ISTMA AFRICA FORUM

At the recent ISTMA World General Assembly, non-member African associations were invited for the first time to attend as observers. Delegates from Malawi, Uganda, Zambia and Zimbabwe joined PtSA, the only ISTMA World member from the continent, in the meeting.

This followed by a Zoom meeting, chaired by Tapiwa Samanga (pictured below), (CEO of INTSIMBI FPTI and CEO designate of the NTIP) to discuss the development of the production technologies (TDM) sector in Africa. This meeting was primarily convened to:

- Share information on what the TDM sector is and why it is key subsector of the manufacturing sector
- Raise awareness on the importance of the TDM subsector for Africa to increase its manufacturing output
- Create regional and continental platforms for collaboration in the TDM subsector
- Develop a shared agenda/action plan to enhance the TDM sector in Africa

The meeting was attended by industry and government representatives of Malawi, South Africa, Uganda and Zimbabwe; apologies were received from Zambia. Also in attendance were representatives of the SADC Business Council and The East African Community., as well as the ISTMA President, Bob Williamson, and the Executive Director of NAACAM, Renai Moothlal.

The meeting recognised the importance of the TDM sector and agreed that for sustainable industrialisation and manufacturing to take off on the continent the TDM subsector needed attention.

As indicated by Bob during the meeting, up to 60% of the cost of manufacturing is directly influenced by tooling. This was further supported by Renai who also stressed the importance of tooling for the automotive industry in South Africa in order to achieve the required increase in local content from the current level of 38% to the required level of 60% as per SAAM (South African Automotive Masterplan) (See a separate article in this Newsletter). He also stated that the achievement of this level of local content will require the supply of components from both South Africa and other African countries.

The meeting resolved that:

- a task team involving REC (Regional Economic Community) officials and Business Councils should be formed. The initial team will include SADC (Southern African Development Community), EAC (East African Community) and COMESA (Common Market for East & Southern Africa) whilst contacts are sought from the other RECs to pursue the listed four outcomes above
- there be increased inter – association and interfirm collaboration in the TDM sector
- country associations should collaborate to form regional and continental TDM platforms which will then join global groupings like ISTMA World



Mr. Tapiwa Samanga

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# LOCALISATION—THE NEED TO STRENGTHEN THE SOUTH AFRICAN MANUFACTURING INDUSTRY

PtSA has launched the “Support Local - Support each other” campaign in an effort to support and encourage the rehabilitation and growth of the local manufacturing industry, and in particular the local production technologies (TDM) industry.

To illustrate the concern regarding the local manufacturing industry, and the opportunities that localisation offers, we refer to a report by Deloitte entitled “Rooting SA: Strengthening the Local Automotive Industry.” the following is an extract from this report:-

*For decades, the automotive industry has been fundamental to South Africa’s economy. It contributed 6.8% (4.3% manufacturing and 2.5% retail) to GDP in 2018. In addition, automotive exports are valued at nearly R180bn, and comprised 14.3% of South African exports.*

*While the sector is important to the South African economy, the low and decreasing level of local content remains distressing. In 2015, local content was recorded at 38.7% – below some of our automotive peers and the current SAAM target of 60%. This is challenging for the domestic economy – localisation drives employment and skills development – and for the automotive industry in particular. By importing goods, the automotive industry is exposed to exchange rate volatility, something the rand is renowned for as one of the most traded emerging market currencies.*

At our next Virtual Networking Event, we will have a presentation by Ms Shivani Singh, Commercial Director of NAACAM, regarding various localisation and business development activities in the local automotive industry.



NAACAM (National Association of Automotive Component and Allied Manufacturers), which is recognised as the voice of the South African component industry, devotes many resources towards positively impacting the localisation, transformation and supplier development environment in South Africa. We look forward to the presentation by Ms Singh, and to understanding the opportunities that the SAAM target of 60% local content will offer the local manufacturing industry.

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# SUSTAINABILITY—THE QUESTION OF PLASTICS

In our October/November 2019 Newsletter, we included an article with the same title.

This article indicated that plastic products are vital for our modern society, but that plastic waste is a real environmental disaster. This disaster is being caused by us humans and our habit of indiscriminately discarding plastic waste which can end up in rivers, lakes, oceans, etc. The article then went on to describe the technology developed by Clariter to convert plastic waste into high grade products.

Clariter is a global partner of ISTMA World, with an industrial scale plant in East London in the Eastern Cape, South Africa.

Mr Ran Sharon, President and CEO of Clariter, will give a presentation at the next PtSA Virtual Networking Event entitled “Taking Plastic Waste that nobody wants and transforming it into products everybody needs.”

In his presentation, which was also given at the recent ISTMA World General Assembly, he refers to three challenges that the world is facing, even during the Covid-19 pandemic:

- Plastic waste
- Volatility of oil and oil products
- Social unrest - the need to create jobs

Clariter addresses these 3 challenges by looking at plastic waste as a misplaced resource, which can be transformed into something positive through, what Clariter refers to as, chemical upcycling. This is turning plastic waste into advanced products such as solvents, oils and waxes which are used in various industries and businesses as lubricating oils, shoe polish, candles, degreasers and thousands more applications.

We will continue to include articles in our Newsletters and bring you presenters in our Networking Events, regarding sustainability and developments for the future.



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# WHAT PRACTICES DO PERFORMING COMPANIES TEND TO FOCUS ON?

## FOOD FOR THOUGHT from Albert Brink: Executive Manager Regional Operations of Productivity SA

To remain relevant in a highly competitive and fast changing business environment is not easy. Ask any PtSA member! Customers are spoilt for choice – there are numerous suppliers to turn to. Market conditions are very challenging at this point in time and demand is generally speaking down. Manufacturing business entities must continuously adapt to new performance requirements in terms of:

**Quality (Q)** which includes issues such as conformance to specifications, product reliability and durability, customer service and support, and delivery reliability.

**Cost (C)** which includes everything from direct operating cost to overhead cost to procurement and inventory holding cost. When referring to cost two key issues should not be ignored – productivity and capacity utilization.

**Speed (S)** which includes delivery speed, manufacturing lead times and procurement lead times.

**Flexibility (F)** which includes the ability of the organisation to customise products and to deliver varying quantities of a high variety of products.

The question is not whether improved performance in terms of these requirements is necessary. The more challenging question is: ‘What do the best performing companies do?’ What practices do they tend to focus on? Laugen, Boer and Frick in an article\* entitled ‘Best Manufacturing Practices: What do the best performing companies do’ \*( International Journal of Operations & Production Management, Volume 25, Number 2) identified the following four practices associated with higher performing companies in terms of **Q-C-S-F**.

- Developing a strong **Process Focus** in everything they do. This included the review of and restructuring of processes

and layouts to obtain ever increasing performance. Processes includes all core and support processes.

- **‘Pull production’** – a method of production in which downstream activities signal their needs to upstream activities. Pull production strives to eliminate overproduction and is a critical component of a ‘just-in-time-production’ system.
- A strong focus on optimising **equipment productivity**
- An **‘environmental compatibility’** focus which implies a commitment to improving the company’s environmental compatibility (externally) and to internally provide a safe and ‘healthy’ work environment.

W Edwards Deming, the father of the Quality Management movement once said: *‘If you cannot describe what you do in terms of a process, you don’t know what you do.’* He also said: *‘Put a good person in a bad system (process) and the bad system (process) wins, no contest.’*



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# WAGNER SYSTEMS SUPPLYING TO THE SA NATIONAL VENTILATOR PROJECT

Wagner Systems, Cape Town-based producers of fine mechanics components and assemblies, have been contracted to produce components for South Africa's National Ventilator Project.

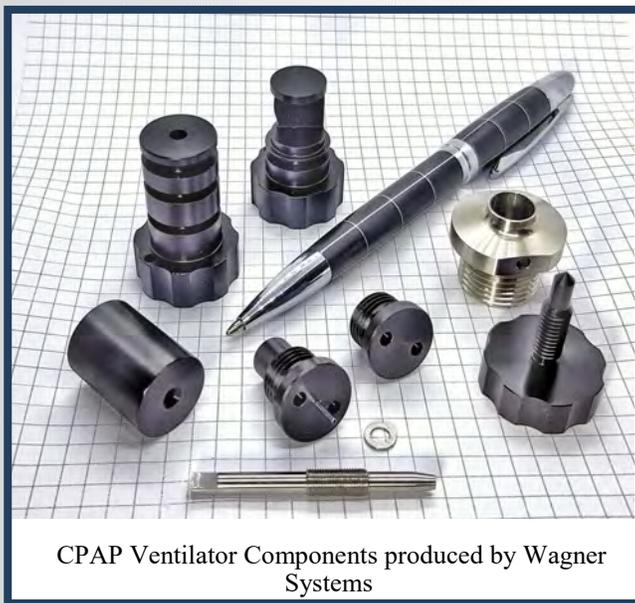
Initial involvement in the project entailed producing a number of pre-production sampling components for CPAP ventilators. This allowed Wagner Systems to demonstrate their capabilities for a project of this nature, and to prepare for the production phase to follow.

Following this, the company received an order in mid-July this year to deliver production quantities of seven CPAP ventilator components by the end of August 2020. The order consists of two parts – production, assembly and cleaning of new components and the cleaning of certain components produced by other suppliers. Component materials consist of POM, stainless steel and hypodermic tubing.

For Lasni Millar, Wagner Systems' managing director, it is an honour to be part of the National Ventilator Project as a component supplier. "It is not often that a local manufacturer has the opportunity to become involved in projects such as these that directly affect the lives of fellow South Africans around us," Millar says. "Although our contribution may be small compared to the rest of the project, this is what Wagner Systems are geared for and are good at – producing to tight specifications in smaller batches at short turnaround times. We take pride in the fact that we can do so for this important national project."



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CPAP Ventilator Components produced by Wagner Systems



Nozzle assemblies produced by Wagner Systems in front of the specialised ultrasonic cleaner used to sterilise the components

# CAPEWELL SUPPLYING TO THE SA NATIONAL VENTILATOR PROJECT

Capewell is participating in the NAACAM affiliated national ventilator project as well as the CSIR ventilator project and has been instrumental in the development of several springs, including the peep valve spring, used in the ventilators. Throughout the lockdown Capewell went ahead and worked on samples of the springs, and it was really viewed as a privilege by them to be included in such a vital project.



Various companies collaborated with each other for this project, without any guarantee of remuneration. As Capewell MD, Emile Coetzee says, *“it certainly has been a common drive towards a higher cause. Within this process, new business relationships, networks and collaborations have been formed and as South Africans, we have certainly proven once more what happens when we pull together”*.

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## PTSA BOARD ENDORSES PROJECT & ADVOCACY INITIATIVES

At the recently held PtSA Board of Directors Meeting, the following project and advocacy initiatives were endorsed for implementation:

- Tooling and its place in the supply chain
- Trade testing and Red Seal Certification within the NTIP Trade Test Centres
- Finalisation of how PtSA can assist PtSA members obtain work
- Industry payment terms for the benefit of PtSA members and customers
- Quality assurance listing as part of PtSA membership
- Steel pricing and tariffs

Project plans are currently being developed to address each of these initiatives and feedback regarding progress will be given to the members via the Weekly Bulletins and future Newsletters.

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