

# JENDAMARK JUNCTION

MAKING OUR MARK IN GLOBAL AUTOMATION

ISSUE 9 | 2022/23



The Women  
of Jendamarck  
**EQUAL**  
**TO THE TASK**



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# GENDER MARK

Welcome to our first female-focused issue of *Jendamark Junction*. This is not an attempt at window dressing, but rather at addressing a very real challenge in building a sustainable future for our brand.

Empowering women has become a must-do for every business and every country, and we have set ourselves clear targets in this regard (page 2).

Forgive us if this sounds a bit like "mansplaining" but, as male guest editors, we beg your indulgence. According to the McKinsey Global Institute, if women played the same role as men in the labour market, the boost to the global GDP would be a staggering US\$28-trillion by 2025. By giving women equal access to opportunities, everybody wins.

However, for historically "male" industries, like the manufacturing sector, attracting female talent can be a real problem. This is often not because there are no women with the requisite technical skills and qualifications but because they opt to take those skills to "softer" sectors.

At Jendamark, we are proud to have female colleagues who exemplify the values of hard work and professionalism - and are at the top of their game - whether this is at management level (pages 6 and 7), on the shop floor (page 4) or in developing our technologies (pages 8 to 11).

We are encouraged by the young women coming up through our educational partnerships (page 13) and those we partner with to make a difference in our communities (pages 14, 15 and 18).

As the directors in South Africa and India, we are also grateful to our wives, who support us on the home front, and our "work wives", our personal assistants (including Chantel Rossi, Linelle du Preez, and former PA Natasha Thompson) who manage our work life, so that we can keep building a Jendamark legacy we can all be proud of.

We hope you will be inspired by the role models gracing these pages and the many more we simply couldn't cover in this issue. Thank you to every one of you for the role you play in making us a global success!

*Himanshu & Siegfried*  
 Himanshu Jadhav | Siegfried Lokotsch | Editors



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# The Women OF JENDAMARK



Mariette Geldenhuys and Pallavi Chavan

Globally, the manufacturing sector is still male-dominated, and many companies struggle to attract skilled female candidates. But with digital technologies creating previously undreamed-of job possibilities, Jendamark is working hard to redress the gender imbalance.

The management teams in both India and South Africa have set clear targets to develop a diverse and inclusive workforce across all departments.

"In a perfect world, we would want a 50:50 ratio," says Jendamark Automation human resources manager Mariette Geldenhuys.

"But we are hopeful that with the intake of more women through our skills development programmes, such as apprenticeships, we are actively

"On a micro level, working women become financially independent and will have greater control over their own lives. This encourages women to stand against physical and emotional abuse, enabling them to handle social issues and pressures. At the macro level, greater participation of women in the workforce is good for the overall economy."

In South Africa, women are one of the under-represented minority groups covered by the Employment Equity Act.

"In terms of affirmative action, we absolutely want to contribute to the success of various policies in this regard, but our aim is always to be an equal opportunity employer and appointments will be made according to experience and merit," explains Geldenhuys, adding that female representation has grown from 16.9% to 24% in just two years.

working towards closing the gender gap, especially in the traditionally 'male' technical roles."

### THE BIG PICTURE

At Jendamark India, where women currently represent 7% of the workforce, the company has set an ambitious target of doubling this in the 2023 financial year. The aim is to employ at least one or two women in every department. "The advantages of having women in the workforce are manifold," says JMKI's head of HR, Pallavi Chavan.

### DIGITAL TRANSFORMATION

Both Chavan and Geldenhuys agree that the rise of Industry 4.0 technologies is transforming and creating new opportunities in the manufacturing space.

"In terms of innovation, women are adding great value, but a lot can be done to encourage young girls to enter into the fields of ICT, science and technology, which will enable them to apply for the various types of jobs that will inevitably be created by 4IR trends," says Geldenhuys.

"It will become society's duty to empower girls to be able to pursue these careers, specifically those in rural areas where access to technology is near non-existent."

### EMPLOYER OF CHOICE

According to the human resources professionals, diversity is becoming a strategic imperative for organisations looking to build a sustainable future. Women tend to bring a different dynamic to the workplace, with collaborative management styles and multi-tasking abilities, which fosters more balanced, motivated, and creative teams, helping the business to grow to its full potential.

"But this requires change from the top and, in Jendamark's case, this change is being driven from exactly there. Being able to offer flexibility and a positive work-life balance by incorporating various policies and incentives will make a difference in attracting and retaining these skills," Geldenhuys says.

Both agree that Jendamark's flexible work-from-home policy, maternity leave benefits and empowerment programmes, such as self-defence training, are making a difference.

"Ultimately, our aim, when it comes to both male and female employees, is to be the employer of choice," affirms Chavan.

# A (WO)MAN'S WORLD

Women at Jendamar are overturning the stereotypical ideas of "men's work" by taking on technical roles across the traditionally male-dominated shop floor, machine shop and related professions.



**Assembly Co-ordinator (India)**  
Shweta Saindane



**Controls Engineer (India)**  
Shweta Rahulwad



**Mechanical & Electrical Design**  
Hilda Bushby (technical assistant - mechanical), Thandile Ndevu (quality coordinator - mechanical) and Jean Smit (functional safety technician - electrical) with manager Matt Jamneck



**Electrical Technician**  
Shonri Floors



**CNC Milling Machinist**  
Michelle Kitching (tool, jig and die-maker artisan)



**Grinding Artisans**  
Khanyiswa Peter, Nobuntu Mgunelwa and Funeka Gusha (apprentice mentor)



**Apprentice Toolmakers**  
Bongiwe Mzizi and Anelisa Bolo



**ODIN Developers**  
Jeannie Serfontein (solutions engineer), Christine Chetty (mechatronics engineer), Sakeena Langeveldt, Sivashani Pather, Asanda Madikizela and Karen Tenda (data scientist)



**Mechanical Designers**  
Anna Joubert and Noelene Goodwin



**Junior Control Systems Engineer**  
Nolubabalo Nqgoba



**Apprentice Fitters**  
Zikhona Ndllebe, Gloria Mdongwe and Nompumelelo Mentoor with learner Sisipho Zono (second from left - Incubating Great Engineering Minds programme)



**Global Services Engineer**  
Sibulele Mamayo



**Project Manager**  
Danielle Jansen (mechanical engineer)



**Manufacturing Coordinators**  
Debra Essen, Jennilee Titus and Shandré Salsone



**Electrical Assembler**  
Phindiwe Mhlathuzana



# BIRD'S EYE VIEW

Jendamar Automation's head of finance, Jacqui Nagle, is used to crunching big numbers and making tough business decisions. We asked her for an honest account of what it's like to be a woman in the hot seat.

“I started at Jendamar on secondment in my final year of articles, and never looked back. The passion that runs through the veins of this company is what drew me to it and keeps challenging me every day.

In my experience, talking about women in the workplace can be a very taboo subject. We are in that awkward friend zone, where we are making progress, but not quite there yet globally.

I can honestly say that being a woman at Jendamar has never been particularly challenging for me. Yes, there have been the odd nuances and usual stereotypes from colleagues or service

providers, but never have I felt the need to prove myself because of my gender. This has a lot to do with the directors and the culture they have created.

Don't get me wrong; there are challenges. As I write this, while rocking my daughter to sleep after a long day\*, I know that a lot of it has to do with previous generations not changing quickly enough and the knock-on effect this has had on the generation of women currently in leadership positions.

Women are often still expected to be the default parent and homemaker, and many companies are not in tune with a woman's needs. A big fear among women is how we become mothers without compromising our careers.

I had an older man ask if I had been bothered by work during my maternity leave. When I said 'No, not at all!', he was surprised and exclaimed how lucky I was. This should not be considered luck. This is how it should be in every company in every country globally. Burnout is a serious risk among this

generation of career-oriented women who are also becoming moms.

**However, the new generation emerging from university is putting its collective foot down when it comes to gender roles. Seeing this, I know that in the near future the discussion around women in the workplace will no longer be necessary because it will no longer be of any relevance.**

One of our management team's directives for 2022 was to hire more women. This is not because we feel women need an advantage but rather because of the value we add, which is becoming increasingly clear globally. Women are key role players when it comes to facilitating engagement, passion and empathy within the organisation and among colleagues. Nowadays, people want more out of their jobs. It's not just about money or status but about the intrinsic value it adds to a person's life.

Within Jendamar, our wellness days, talent pools and employee engagement initiatives are driven

largely by our female colleagues. This is testament to our passion for the well-being of all people in the workplace.

It used to frustrate me that women were stereotyped as the more emotional sex, which translates to us often being labelled aggressive instead of assertive, or argumentative instead of honest. I've come to realise that it simply means our passion shines through, and for that we should be proud.

I often see social media posts by women saying, 'Let's be more like our male colleagues - don't apologise when you're late, no need to say thank you...!' But this, I believe, is more reflective of historical egos than gender.

I don't agree with changing ourselves, as men or as women, for fear of judgement. Be professional, absolutely, but let us never lose our passion or enthusiasm for what we do!"

*\*Disclaimer: My husband is in the next room putting my son to bed, and he cooked supper, so I'm not that hard done by!*



# Ma'am with a plan

From starting as key account manager for a previously unknown core business to setting up the whole Jendamar India marketing division, Sayali Mahajan's career journey has certainly been a challenging one.



“Five years ago, I started my journey with Jendamar as a key account manager for catalytic converter assembly lines. The canning business was very new to India and nobody really had much of an idea of how it worked and what it takes to install a canning line. It was very challenging and exciting to go through the process. I also worked as a project manager for the first ever canning line delivered by Jendamar India.

Being a woman working in a hardcore manufacturing industry can be a bit tricky. Many times people tend not to take you seriously. We always have to put in extra efforts to prove ourselves and make our opinion or work valued. Personally, I have never felt that I am less than any man when it comes to my work as I have the knowledge of the products I am selling. I am also willing to learn and get better at it. I love my job and all the challenges that come along with it.

After my maternity leave, I was promoted within two months to head of marketing for Jendamar and all other associated business verticals, including ODIN Manufacturing, ODIN Education, eepos and Dobot. Before I came into the picture, there was no dedicated marketing person or team. Marketing activities were ad hoc but the rapid growth of our business has meant that leveraging the Jendamar brand has become a key function within the company.

It was a great experience building a team and creating marketing strategies for all the different business verticals as we knew we couldn't have the same strategy for all.

**I was adamant on hiring all women in my team. I am extremely proud of the fact that my entire marketing team is female. We are a 'Girl Gang'.**

Unfortunately, there is this mistaken impression, which many people have, that girls have it easy or we have to make less of an effort in our jobs. But the reality is that we are expected to deliver the same results as that of any male employee and even put in extra effort to get there as we have to take care of our work, our children and our families too.

After having my baby, I thought it would be a bit difficult for me to manage work and my child, as I have to travel a lot for my job. But flexible working hours and work-from-home facilities made it easier. My child is also very accommodating and co-operative. My baby is my biggest cheerleader.

My Jendamar journey has been an amazing rollercoaster ride. I have learned a lot, made use of all the different opportunities I've been given, and gotten to do so many new things. I am sure my next five years will be as exciting as the last five years."

# Managing DEVELOPMENT CHALLENGES

It has been a trial by fire for one of ODIN Manufacturing's newest developers, Asanda Madikizela, who, fresh from university, has risen rapidly to the challenge of making ODIN Manager a reality.

Part of the ODIN Workstation offering, ODIN Manager is a web-based application that allows customers to configure their production processes and access data straight from the production line.

"My job involves both back-end and front-end development, which is challenging and exciting at the same time," says Madikizela, who has been working on the app for the past year.

"There's a satisfaction one gets when that piece of code not only works but has a great interface to go with it."

Her focus is on adding new features, making continuous improvements to existing ones, and fixing bugs to maintain efficiency and usability.

"I'm currently being challenged to create a scheduler page, which is quite complex. The gist of it is that the page must allow the user to create a scheduled job for a particular substation and assign schedules to it, which can be executed in three different ways - time based, part count or shift based. These scheduled jobs contain a list of jobs that must be executed for the operations to be marked as complete."

She says one of the most fun and challenging aspects is ensuring that the interface is smooth and efficient to allow the user to add all the necessary information without running into complications or being unable to use the system effectively.

"I'm still brainstorming how the UI will look for this one and it's promising to be the most exciting yet."

Of course, moving from the front end to the back end has not been without its challenges.

"I would say I'm most proud of the work I did with the operations page rewrite, which is the most recent feature I worked on. It made me sweat and cry, and yet it brought me so much satisfaction and growth.

"The operations page had a lot of interacting tables. I remember being stuck for over a week trying to figure out how to get the image coming from a separate tab to be displayed on a second tab without having to hit the refresh button. This was previously on a separate page, and all you had to do was click a button and it would redirect you.

"I remember getting to a point in the second week where I actually went to the bathroom and cried a bit. I thought to myself, 'I'm going to be stuck on this for another week, aren't I?'"

Madikizela says she grappled with the problem, which was with the initialisation of the page, for days on end until a simple answer presented itself.

"Imagine my shock when, after a long and tiring trial and error, the problem was solved by only calling a certain property on the tab that allows the pages to be initialised for the first time when the user clicks on the tab.

"But honestly, I learnt a lot during that process; the most important was patience, and to continue searching for the answer even when you feel like you've done everything that you can. Because there's always one more thing you can try." 

# Maximising MACHINE DATA

Going to market in 2023 is the ODIN IOT platform, which gathers real-time performance data straight from customers' machines to predict and avoid downtime. The technical product manager, Christine Chetty, explains what it's all about.

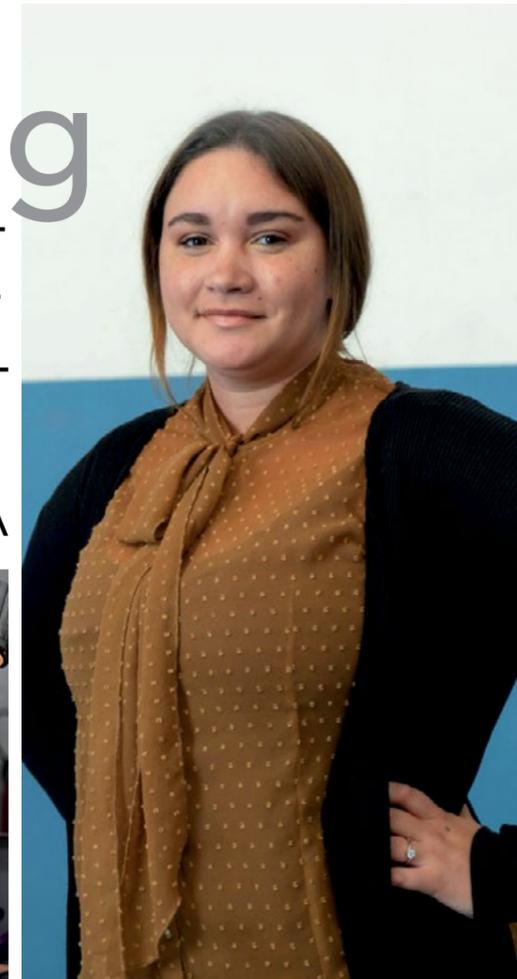
Essentially, ODIN IOT is about unlocking everyday value from machine vibration data, says Chetty.

"Do you really know when and how all your critical assets are being utilised, or when the right time is to perform asset maintenance? ODIN IOT is designed to be a reliable source of asset utilisation data to help you make the right decisions whenever you need it."

Chetty says the vibration data produces actionable insights in near real-time, so there is no need to pay an expensive specialist to come in at regular intervals and carry out an in-depth vibration analysis to extract meaningful information and predict problems.

"The subscription-based service gives you access to data that you wouldn't normally have or possibly even understand. It makes it useful on a daily basis."

For instance, she says, it enables the scheduling of just-in-time preventative maintenance, based on actual productivity, which reduces downtime and unnecessary spare part consumption. By predicting harmful trends in asset vibration, it can help customers uncover faults and use the



'raise alert' function to trigger action before any damage is done.

The IOT platform pairs with the on-device Raven sensor, which, Chetty explains, also allows customers to gain new insights into older machines.

"Mechanical machines can connect to the cloud without the infrastructure setup and expertise costs associated with most IOT system implementations.

*"At Jendemark, we validate the insights produced on the grinder in our own machine shop. We can see that it's consuming energy, even when it is idle or not producing parts. So then we have the data to show that it should be turned off to reduce non-productive expenditure."*

A new feature, which is a useful value-add, is that mobile app users can now input their own production data on the shop floor.

While this is not strictly an IoT core value, it is in line with ODIN Manufacturing's vision to connect people, machines, and products, says Chetty.

"We are helping customers to digitise their processes. We're talking about the kind of thing that would be noted manually on a whiteboard or a clipboard form daily. For example, if you scribble up your production targets on a whiteboard, you can now see the history of those targets over time."

This, she explains, is ideal for small businesses that do not have a manufacturing execution system (MES) like ODIN Workstation collecting their production data.

"We are constantly trying to refine our understanding of our customers' problems, and make a real, practical difference in their operations, which is what led us to completely re-architect our offering in 2021," says Chetty.

"Often production problems aren't complex. But why are there no existing digital solutions to these problems?"

This is what Chetty and the ODIN Manufacturing development team are working to answer. 

# Talking tech futures

Two of Jendamar India's software developers, Monali Chalwadikar and Pratiksha Sawalakhe, answer some tough questions about the challenges and opportunities for women in the tech industry.

**Q: Did you always know that working in technology was what you wanted to do?**

MC: Honestly, I wanted to be a gynaecologist! Since I couldn't get a merit seat in college, I opted for engineering. In saying so, I am very much into technology, so I am happy anyway. I have a phobia of electrical wires, so electrical engineering was definitely not an option. I had lot of interest in coding, so I chose computer science.

PS: No, I wanted to become a physiotherapist but because of a lack of knowledge and miscommunication about that field, I was not able to take admission. I did get admission to computer science engineering. Deep down, I knew that I had an interest in technical stuff. When I was about to take the admission for my 11<sup>th</sup> standard, I had to choose one optional subject, so I chose IT and then I got interested in technology. I used to create small websites and found it very interesting, so I decided to go into computer science.

**Q: It's no secret that many women in the tech industry have felt their gender has affected the way that they are perceived or treated. Have you ever been in a situation like that? How did you handle it?**

MC: Being a woman is one of the proudest things I can ever experience as a person. Though it sometimes has disadvantages in terms of the treatment or limitations we face because of society and culture. According to my experience so far in the tech industry, I have faced a situation where I have had to adjust



MONALI CHALWADIKAR

or negotiate with regard to a certain privilege and facilities. Sometimes the male ego and insecurities, and lack of belief in my capabilities, also become a very big challenge. I have faced all the situations by having the right attitude, ignoring a condition which doesn't add value to my personal and professional growth, and by proving myself with all my hard work. Nothing can stop a woman who really has the right attitude and dreams to achieve.

PS: No, I have never been in that situation.

**Q: What do you think is the best part of being a woman in the tech industry?**

MC: It doesn't make any difference to me. Being a woman will not give you extra benefits or special treatment. I have achieved everything by proving

myself and through all my hard work and right attitude.

PS: The best part as a woman in the tech industry is that you will get to improve your technical skills and personality. And you will never stop learning.

**Q: Do you notice a lack of women in technology? If so, why do you think that's the case?**

MC: Yes. Because of lack of family support and sometimes because parents feel that it's unsafe to support their daughters to leave their city and allow them to live on their own.

PS: Yes, I did notice a lack of women in technology. I think organisations should initiate recruiting more women employees and give them the chance to prove themselves. We

need more women who are willing to take on leadership positions. We live in a profoundly connected and global world, and companies that are more diverse will achieve better performance. But my experience tells me that time will not solve the gender leadership gap.

**Q: What advice would you give a woman considering a career in the tech industry? What do you wish you had known?**

MC: The right guidance and taking opportunities - no matter how small or big the opportunity is. I wish I would have received the right guidance and internships at the right time, which would have helped me grow my knowledge of working as a techie at organisational level in the early phase of my career.

PS: My advice to any woman would be never to miss any opportunity, no matter whether you are in college or an organisation. Just make sure you do your best because small opportunities can make a big difference and it will give you the experience that will definitely take you further.

**Q: You've both described yourselves as introverts, and even wrote about how to network as an introvert. What is the most difficult thing about being an introvert in the tech industry? How have you overcome it?**

MC: When I joined Jendamar India as a fresher, I was an underconfident woman though I had full faith in my abilities. Being an introvert, initially I was struggling to take help from the right connections, and, because of that, I used to get stressed out about not being able to complete a task on time. Then I worked to change into a talkative person, who started communicating with the right people, doing customer presentations, travelling alone, dealing with customers, and late-night, on-site work with seniors. This really helped grow my confidence.

PS: As a Jendamar employee, you get to explore and learn new things. As an introvert, I felt very shy to contact a person I didn't know, but in my role, I have to speak to people from other departments too. My colleagues help me a lot in becoming a bit more extroverted. 



# Taking the lead

Senior design engineer Reshma Jadhav recently travelled to South Africa where she spent two weeks learning the complexities of catalytic converters before taking up her new role as technical lead for Jendamar India's canning division.

It has been a rapid rise for Jadhav, who joined Jendamar India just one year ago, after seven years with another automation company.

"At that company, the most complex project that I worked on was a cylinder head cam cover assembly line for a facility in China, which presented a number of challenges, including the cycle times on the line," says Jadhav.

"Before I joined Jendamar India, I was never exposed to canning projects. So, my initial goal with this intensive training experience in South Africa was to learn all there is to know about the basics, including all tooling and facilities, so that I can impart this knowledge to my team in India."

Jendamar's South African team has been developing catalytic converter assembly facilities for almost three decades.

"When I started my training, I was given an induction by Alwyn Smit, who explained the entire design process flow, ensuring that I had a clear foundation. Then each member of the tooling team shared their personal process flow that they follow to ensure that a successful design is released every time," explains Jadhav.

"I gained exposure to all the various checks that need to be done, the customer data that must be assessed, the tooling calculations that need to be done as well as the lessons learned from these calculations.

"I also learned about parametric modelling when designing multi-body assemblies, which is an incredibly helpful tool that can be used for designing canning tooling."

Jadhav is excited to share all this newfound knowledge with her team, and see where improvements and increased efficiencies are possible.

She also takes back some fantastic travel memories such as taking time out to experience Gqeberha's beautiful beaches, seaside flea markets, and game reserves with her colleagues.

"This opportunity is really exciting for me, and I accepted it with open arms. This is a fantastic opportunity for growth, and I will be eternally grateful for all the support and guidance. This new role is a way to develop my career in a well-established company and it's a great position. I am excited to see what the future holds and looking forward to growing my team around me."

Jadhav says, as a working mother, the flexibility that Jendamar offers with work-from-home initiatives makes it an adaptive environment that fits in with life's daily challenges that can arise.

"The fact that Jendamar's work globally is project-based means that every project we take on is challenging and different. No day is the same and I love coming up with innovative solutions to every one of the various challenges." 



# ODIN works for Erkunt

Turkish manufacturer Erkunt Traktör A.Ş. recently entered into a joint venture to build engines for Mahindra. It is the first time that these engines are being assembled outside India, on an assembly line developed by Jendamar India. Erkunt's PLC automation engineer, Tuğçe Karakuş, explains how ODIN Manufacturing contributed to the project's success.

**Q: Which ODIN Manufacturing solutions were used on the engine assembly line?**

A: We used ODIN Workstation, ODIN Maintenance, ODIN Documentation and ODIN Linewatch.

**Q: The Mahindra engine is usually assembled in India. Did the use of the ODIN system play a big part in enabling the transfer of this local knowledge and skills to Turkey?**

A: Normally, Mahindra engines were assembled in India and then sent to Erkunt Traktör. With the ODIN system, we can now successfully perform this assembly process in Turkey. ODIN Workstation takes our operators through the process step by step: which bolts we need to tighten, with how many torques, and not to forget important details, such as completing the fine measurements and all the necessary tests. The ODIN system ensures the correct completion of the engine assembly. The first engine we completed in Turkey with the ODIN system worked successfully and there were no major problems.

**Q: Was the Mahindra engine assembly line the first experience that the Erkunt facility had in building engines?**

A: Yes, it was the first experience in engine assembly at the Erkunt facility and we are very proud of it.

**Q: How did having animated work instructions, which were translated into Turkish, give your operators confidence and make a difference to the whole assembly process?**

A: The fact that the work instructions were strengthened with visuals and presented in Turkish was very useful because it was simple and easy for operators to understand. It has eliminated any confusion during assembly, allowing the operator to do their job more comfortably and ensure complete engine installation without forgetting the steps.

**Q: Were there any challenges with the assembly process and how did the ODIN system contribute to solving them?**

A: The ODIN system facilitates many operational steps. For example, when tightening more than one bolt, it ensures that each bolt is tightened to the correct torque and the bolt is not skipped. The operator must complete all operations in the correct order; by

following the barcode, the system does not allow them to skip a step or station. Obviously, all the difficulties decrease to the minimum level if the ODIN system is followed correctly.

**Q: Your customer, Mahindra, could log in to the system and monitor in real-time how the production process was going. How did having access to this data contribute to a transparent and good working relationship between Erkunt and Mahindra?**

A: The detailed report provided by the ODIN system is the best solution for us to be able to see all the steps that the engine went through during assembly, and all the data from when the process started to when it finished. It informs us in a simple and transparent way, giving us the details of the assembled engine, and what is happening on the line.

**Q: We understand that you were hired specifically to take care of the ODIN system. Tell us a bit about your role and your experience on this project.**

A: I'm a PLC automation engineer in the Erkunt team on this project. My role is to ensure that the ODIN system and PLC always work correctly and completely. I am working on the necessary controls, maintenance and troubleshooting on the line. I ensure that a new operation is defined in the ODIN system, that operations are kept up-to-date and always live without ever disconnecting. It's been a truly enjoyable experience. I am very happy to work with the Jendamar team. When the ODIN Manufacturing system was implemented, the Jendamar team always worked with smiling faces and never hid their knowledge.

**Q: Anything else you would like to add?**

A: I am very proud that the Erkunt Tractor, Jendamar and Mahindra teams came together for such a big project and worked as a team. As the female engineer on the team, I would like to thank my managers Mehmet Temucin and Ahmet Cenk Çivici for always supporting them and my teammate Utku Söyünmez for managing this process with me. I would like to thank the entire Erkunt team for their efforts and contributions. I would also like to thank Kumarshiv Himandi and Suslove Biswas from the Mahindra team for coming to Turkey to support and help us. From Jendamar, I would like to thank Himanshu Jadhav and the whole team.

# In the driver's seat

The 20-year-old Joshi is in her final year of her four-year B.Tech degree but it was her trailblazing involvement in an extracurricular technical club that secured her the two-week trip to South Africa. She is the first female driver for Team Piranha Racing – the university's official Baja team and Overall Champions at BAJA SAE India in 2021.



An unplanned, last-minute application saw mechanical engineering student Mrudula Joshi beat out a host of other applicants to claim one of two spots in the exciting new international exchange programme initiated by Jendamar India in partnership with MIT-World Peace University.

Baja teams design and build their own racing buggies from scratch, with members learning about all aspects of vehicle production from inventory to design, assembly, sales and management.

"My mom always said this is all boys' stuff. There are no girl drivers. So, from my first year, I wanted to be a driver – that's the thing I wanted to change," says Joshi.

"I had no technical experience. During lockdown I learned the software; I always want to learn something new. I worked very hard to move up through the team."

She says her all-male team has been very supportive and respectful. "They were so happy there was finally a girl. Girls bring emotional intelligence; we keep things neat and orderly. They're happy about the changes in themselves – it's a progressive environment."

Her experience has made her even more determined to pursue a career in vehicle dynamics and testing, and the automotive software behind it.

"It's true that girls often want to do the software side of things and not get their hands dirty. But if you go into industry, even on the automation side, you need to have basic mechanical skills and an understanding of how things work. An engineer knows how to solve problems."

"I'm doing my internship at an OEM, but I would like to gain experience in a company that is a Tier 1 supplier. That is where all the work happens, whereas the OEM is all about management. You need to have strong technical knowledge before going into management," explains Joshi.

Through a range of programmes, events and seminars, Jendamar has been instrumental in exposing Joshi and her fellow students to the latest Industry 4.0 technologies, while helping MIT-WPU to develop a curriculum that ensures its students are workplace ready. Joshi's older brother is one of the students who completed their final-year engineering internship with Jendamar India.

"Other companies are older, but they don't want to change. Our generation

has come with fresh minds. We always want to introduce something new and implement the new things with the existing ones," smiles Joshi.

*"Jendamar in India and South Africa has an amazing culture. The people are friendly, and you can explore opportunities in various departments."*

"All aspects of engineering are involved in this automation company. Other companies go for the big things. Jendamar works on a small thing very hard. Right now, they are developing Odin – you could do anything with that software."

She describes the trip to South Africa, which included visits to Nelson Mandela University's School of Engineering and School of IT, the world-famous Addo Elephant Park, and, of course, Jendamar Automation's headquarters, as an amazing experience.

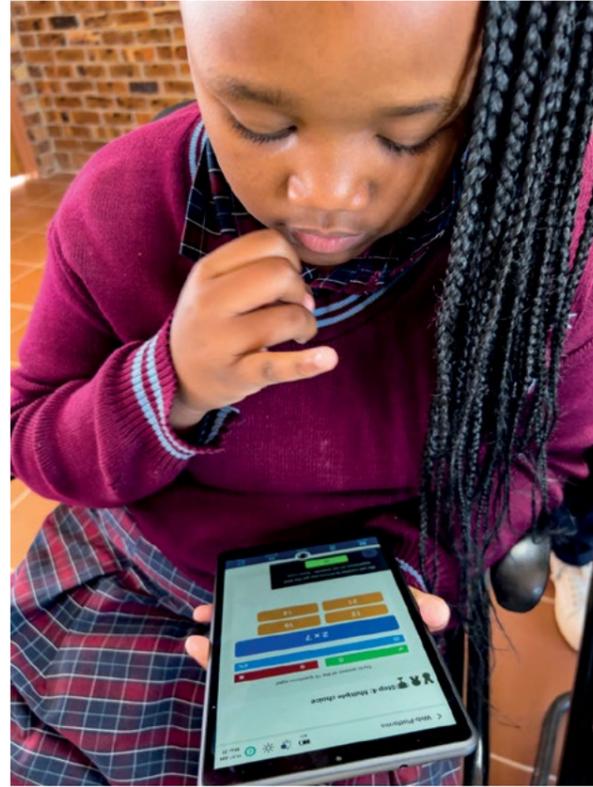
"This is the first time that I've travelled without my family. My brother is so proud of me, and they always want to protect me, but now I know what I'm capable of."

# Making an IMPACT

Companies looking for a way to make a sustainable impact using either their corporate social investment budget or B-BBEE spend can now partner with Jendemark and join our ODIN Education ecosystem.

ODIN Education has already made a positive impact on more than 3000 learners in six provinces across South Africa, with more businesses coming on board to make a difference in their communities.

By leveraging these partnerships to provide inclusive and equitable education for underprivileged learners, ODIN Education aims to meet Goals 4 and 17 of the United Nations' Sustainable Development Goals.



## EXPANDED OFFERING

While readers may be familiar with the Omang e-learning devices, ODIN Education has expanded its offering beyond these ed-tech tablets to facilitate a broader impact that encompasses initiatives such as funding full-time teaching assistants who offer in-classroom tech support to learners and teachers.

Two organisations that have seen the value of investing in the bigger picture are the Sage Foundation and Attacq Foundation, who joined forces to provide a holistic, three-year support programme for Phuthumani Primary School in Thembisa, Gauteng.

The foundations have partnered with ODIN Education to equip the Grade 5 cohort with the digital learning tools they need to progress successfully through to Grade 7. This is in addition to building and renovating classrooms and providing other resources that will enable the school to remain a beacon of hope in the impoverished community.

## SEAMLESS PROCESS

"After starting small with Phuthumani Primary, we saw that we wanted to make a bigger investment in terms of education and infrastructure, which was on the wish list for the school," says Sage Foundation manager Yvette Chochoe.



"So, we said we want to partner with ODIN Education, as what they had to offer tied in very well with our mission and goals as a foundation, as well as what we want to achieve in breaking barriers or bridging the gap in this 4IR revolution that we are in right now.

"More than anything else, we were sold on their model. They don't disrupt the curriculum at all but instead they are bringing innovation in the classroom through technology, and that made us want to partner with Odin Education on this project."

Attacq Foundation's transformation practitioner, Shoky Poto, describes the ODIN Education process as "seamless and easy".

## SUSTAINABLE FUTURE

"They presented their work to us which resonated with our core focus [on education and technology]. They understood what we wanted and they... delivered on their mandate. At the end of the day, the beneficiaries got what they wanted and needed," says Poto.

"What makes ODIN Education sustainable is they bring in the curriculum, they work with the teachers, and therefore empower the learners and the teachers at the same time. You cannot take away that knowledge. That's sustainable in the long term."

To learn more about the process or to try our simple B-BBEE tool, visit [www.odineducation.co.za](http://www.odineducation.co.za)

# ON A ROLL WITH Rotary

Jendemark India and the Rotary Club of Pune Wisdom have joined hands to connect with corporate clients and help them transform the lives of underprivileged children through our ed-tech tool, ODIN Education.



The educational ecosystem, which was officially launched in India in August, is designed to give every child access to the right digital learning resources, whether they are in cities or remote rural areas.

Even though India has the second largest schooling system in the world, more than a fifth of the population lives below the poverty line and cannot afford to send their children

to school. Hence, they do not get the access to education and knowledge that would allow them to compete in the future with their more privileged peers - especially in terms of access to technology.

According to ODIN Education's business development executive Yogini Bandekar, the signing of the memorandum of understanding with the Rotary Club represents the first major development in getting the system, which is delivered via e-learning tablets, into deserving schools. (Ed: The first roll-out of 50 devices to a rural school near Pune was already under way at the time of writing.)

"We welcome the support of this internationally renowned and trusted community service organisation as we work together to create an educational ecosystem that will empower our children to reimagine a better world," says Bandekar.

As outlined in the memorandum of understanding (MOU), Rotary will assist in identifying schools in remote areas that need assistance, as well as connecting ODIN Education with clients who can help to put more e-learning devices in children's hands. Rotary will also arrange the tax benefit certificates for such corporate social investments.

Bandekar says, as part of its corporate social responsibility, Jendemark will handle the practicalities of rolling out the devices, training the students and teachers on how to use them, and sending quarterly reports on engagement analytics to clients to show how their devices are making an impact.

Jendemark India CEO Himanshu Jadhav signed the MOU alongside Rotary Club president Vaishali Varnekar, with past president Hemant Puranik, CSR funding director Nilesh Dhopade and secretary Sarang Balankhe in attendance.

To learn more, contact [yogini@jendemark.in](mailto:yogini@jendemark.in) or visit [www.odineducation.org](http://www.odineducation.org)



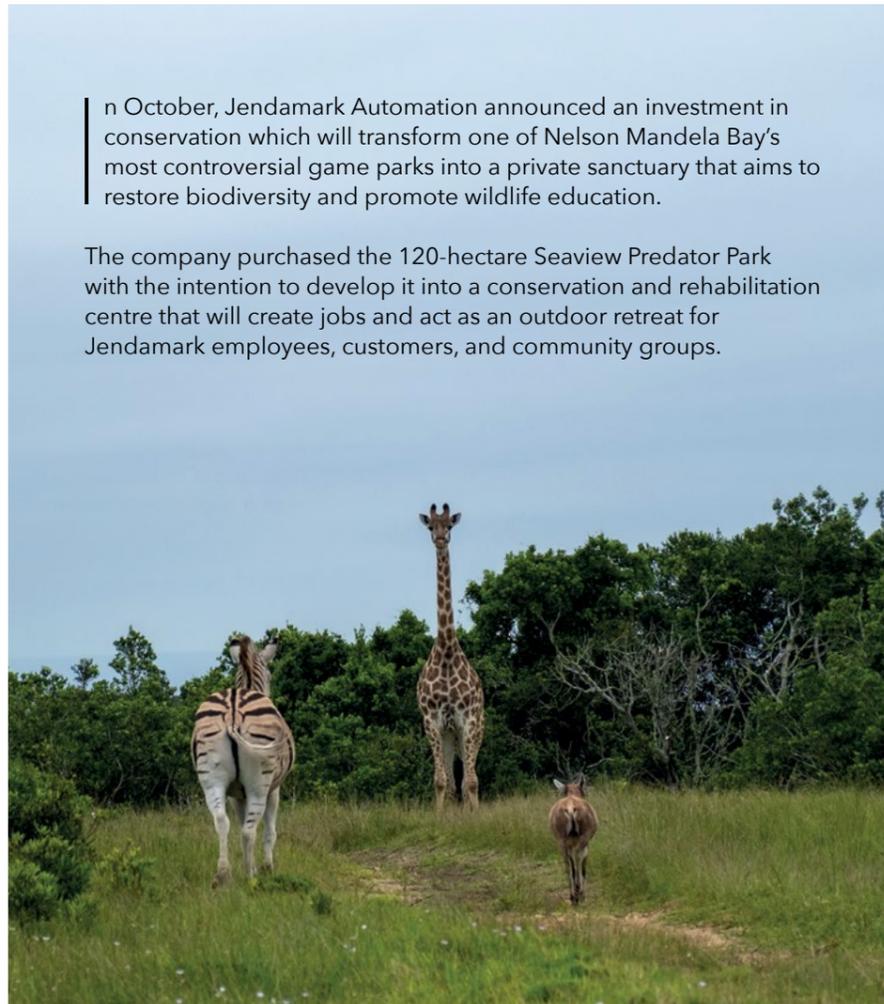
# Investing in conservation

While Jendamar applies ecosystem thinking to the development of all our manufacturing technologies, we recently invested in an ecosystem of a different sort in our quest to be the employer of choice.



In October, Jendamar Automation announced an investment in conservation which will transform one of Nelson Mandela Bay's most controversial game parks into a private sanctuary that aims to restore biodiversity and promote wildlife education.

The company purchased the 120-hectare Seaview Predator Park with the intention to develop it into a conservation and rehabilitation centre that will create jobs and act as an outdoor retreat for Jendamar employees, customers, and community groups.



## WILDLIFE SANCTUARY

According to operations director Siegfried Lokotsch, Seaview Private Sanctuary, as it is now known, is not a commercial tourism venture and will not be open to the general public.

"However, once we are up and running, any educational or community upliftment programme will be welcome to apply to visit our facility free of charge. We want to give back to our community and educate people about the importance of protecting our wildlife."

Lokotsch says the company is in the process of developing a long-term veld and game management plan in consultation with a wildlife veterinarian and environmental specialist.

"We want to understand the biodiversity and do the right thing ecologically in terms of the species that we introduce, the indigenous vegetation and the carrying capacity of the land."

"Currently, we have several free-ranging species such as various buck, giraffe, and zebra. There are no animals in cages and no dangerous game. All the big cats for which the park was previously known have been rehomed by the former owners."

## DEVELOPMENT PLANS

With water for the animals being scarce, rainwater tanks have been installed and a borehole will be sunk to access a steady groundwater supply.

Lokotsch says the first phase of redevelopment will be completed within the next six to 12 months, beginning with high-security electrified fencing to keep out poachers, and keep animals and visitors safe.

The existing facilities, including the restaurant, log cabins, camp sites, ablution blocks and braai areas, will also be upgraded.

"Our vision is to have mountain biking and walking trails criss-crossing the property, so that it becomes a very special outdoor recreational centre that allows people to have close encounters with our incredible wildlife," says Lokotsch.

"In the next two years, we aim to create 30 to 50 jobs in the local community, assisting with trail building and the removal of alien invasive species such as black wattle, which we will help them bag and sell as braai wood for additional income."

## SUSTAINABLE GROWTH

He says the new investment aligns with the company's existing sustainability efforts, such as the rooftop solar energy plant powering Jendamar's Gqeberha manufacturing facility. In addition, aspects of Jendamar's core business are having a positive environmental impact, such as the development of assembly solutions for electric vehicle power packs, as well as catalytic converters, which reduce harmful exhaust emissions.

"What we've realised as a tech business is that attracting and retaining specialised skills involves more than money," adds Lokotsch.

*"For the new generation of tech talent, shared values and wellness incentives are just as important as above-market salaries. So, we are constantly thinking of new and authentic ways to be a good corporate citizen and the employer of choice."*



# Sisters for change

Period poverty is the second biggest issue in Africa preventing educational equality for girls. Jendamar Automation has supported the start-up of Sisterhood SA Pty, a visionary health programme that is changing lives with a simple, sustainable sanitary kit.

While menstruation is a taboo topic in many communities, it has a very real impact on the lives of young women, who miss between 75 and 100 days of school every year because they either cannot afford or do not have access to sanitary products.

Enter Sisterhood SA Pty, which has designed a cost-effective sanitary kit that aims to educate and empower girls and keep them in school. The kit includes a washable, reusable sanitary pad and panties, available in pre-teen to adult sizes, plus low-cost cleaning products and educational brochures on reproductive health.

### FROM START-UP TO SUCCESS

The Gqeberha-based, women-owned company first engaged with

Jendamar during the Covid-19 pandemic when likeminded local businesses started working together to set up supply chains and funding for struggling hospitals.

Seeing the opportunity to make a difference in a different direction, operations director Siegfried Lokotsch made start-up funding available, which allowed Sisterhood SA to develop test kits for a trial run at three schools in Gqeberha.

"The funding gave us the chance to complete our first manufacturing run with leading ISO9000 companies, following written approval from the South African Bureau of Standards to start production on the product and packaging.

"We were able to secure our patent and have a finished product to present to the international market," says Sisterhood SA Pty director and founder Shaan Keegan.

"We are now in the process of finalising full production and, given the interest from the retail sector and corporate social investment programmes, especially in the USA, we will be starting in 2023 with 3000 units per day.

### PARTNERING FOR GROWTH

"We have established partnerships with our CSI partner New Africa Education Foundation, which can issue Section 18A tax certificates for corporate donors, and with Novartis Pharmaceuticals, which has a footprint into 47 countries in Africa. We are also endorsed by the United Nations Women's Forum and Social Justice for Women in SA."

Keegan says the product will first be distributed in South Africa, followed by Kenya and the USA, and then the rest of Africa, once cluster patents have been secured and they have entered into policing of patent agreements with these countries. She says recent discussions have taken place with leading international organisations such as the East African Health Platform, SOS Children's Villages, and the Red Cross, as well as a chain of hospitals in India.



"Sisterhood SA Pty would not exist if it was not for Jendamar, so their constant support and contribution meant the world to us. The kit concept and the education programme have never been done before. We are now gaining global attention and, as per the latest interview at the Global Changemakers forum in the USA, we are being well received by Africa and the West."



# Behind the scenes

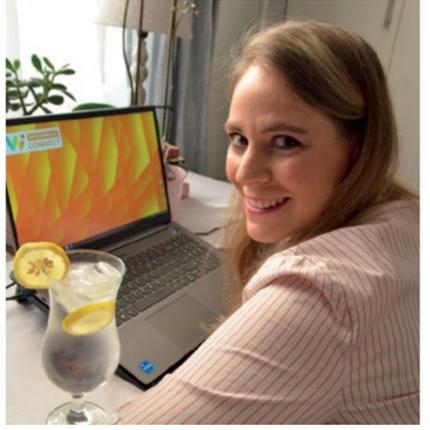
In these pages, you've seen some of our many people and projects. Here are some more behind-the-scenes snaps of our women at work, at rest, and at play.



**AT CHECK-IN:** Jendamar India's travel manager, Kavita Tamhane, makes all the local and international travel and accommodation arrangements for employees on the move. Because travel doesn't keep office hours, she often juggles family and work commitments, so that no one gets left behind.



**AT PLAY:** Value creation specialist Jeanette Maserumule, of the Industrial Development Corporation in South Africa, took time out to enjoy the traditional Maharashi welcome and cultural dancing during a recent working visit to Jendamar India.



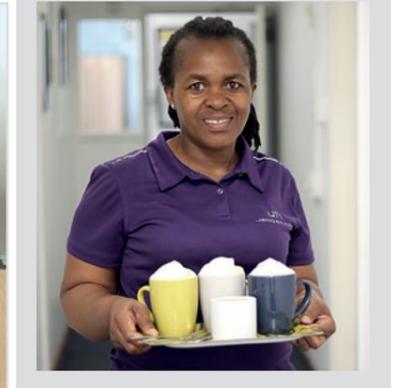
**AT SCHOOL:** The ODIN Education tech platform underpins Woodridge Connect - South Africa's first online high school to use AI as part of the e-learning experience. Hard at work is Woodridge Connect CEO Kristine Tudhope.

**AT WORK:** Seldom seen but absolutely essential is the team of women who look after Jendamar India's facility and catering, keeping it clean and everyone fed. From left are Manisha Sonawane, Seema Bankar and Sarika Avghade.



**AT THE READY:** One of Jendamar Automation's most in-demand employees, Zanele Gadu, is rarely seen without her trademark smile or tray of frothy cappuccinos - keeping management and visitors refreshed and productive.

**AT REST:** Jendamar India's women have their own dedicated Freyja Room, which is a cosy, quiet, restorative space for rest and reflection, when they need time away from all the male energy in this manufacturing space.



# AFRICAN TECH company of the year



Jendamark Automation is proud to have been named Technology Company of the Year at the Africa Tech Week awards in Cape Town in September.

The company was recognised for its technological achievements in developing digitally enhanced component assembly systems for the global automotive sector, which contributed to its commercial success, while showcasing opportunities for economic transformation in Africa.

Founder and managing director Quinton Uren says he is delighted that Jendamark's digital transformation journey has been recognised and rewarded.

"I am incredibly proud of our young and dynamic team who have led the way. Over the past few years, Jendamark has shifted rapidly from a historically automation-focused company in the manufacturing space into a diversified global tech leader.

"What remains unchanged, however, is our focus on understanding and meeting our customers' needs."

### DIGITAL UBUNTU

Jendamark's innovations director, Yanesh Naidoo, says the company's digital manufacturing technologies deliver an African-born, human-centric response to the demands of Industry 4.0.

Unlike more developed economies, where a shrinking workforce necessitates automation, the future of developing economies lies in unlocking their human capital, explains Naidoo.

"Instead of automating processes that take people off production lines, we are developing tech to unleash human potential. We call it 'digital ubuntu', and believe it is the only way to bring more people into the economy and empower them to contribute to society," he says.

"Jendamark's manufacturing presence in South Africa and India allows us to understand the challenges that many developing economies around the world are facing, and we must change the paradigm on how we use technology to solve these challenges."

### ACCELERATING DIGITALISATION

Jendamark's ecosystem of digital productivity and efficiency solutions are marketed under the Odin Manufacturing brand and encompass a range of factory functions from maintenance to quality assurance and

real-time reporting on production data. "We are all incredibly proud of our Odin Manufacturing technologies, but this award is not just for our Odin team," emphasises Naidoo. "It is for every member of the Jendamark family who works hard to ensure that the facilities we build are world class and ready for the digital revolution."

Head of Odin Manufacturing Juane Schutte says the win is further validation that Jendamark is solving the right problems.

"We are on a mission to accelerate digitalisation in small and medium factories in Africa at a low cost, allowing semi-skilled shop floor personnel to do much more advanced work. We see human-centric factories as massive opportunities in accelerating skills development and enhancing the economic impact in Africa."



Scan this QR code to watch the competition entry video showcasing Jendamark's journey.

# MORE POWER ))) WITH EVERY PEDAL



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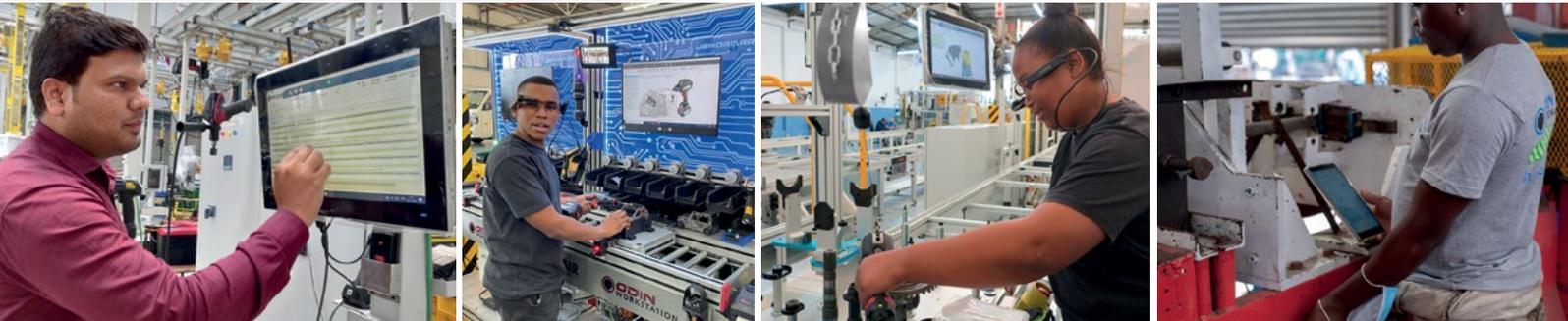
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