



**ON THE RIGHT TRACK**  
Kasturie Pillay is determined to put her world-class training to good use. She is one of 12 young SA engineers headhunted to be part of a project to design and deliver 600 ultramodern passenger trains to Prasa  
PHOTO: LUCKY NXUMALO

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**A**lstrom, a world leader in rail transport equipment, has made a bold move towards equipping young South African engineers with a range of skills in train manufacturing. These skills range from engineering and design, and technological and management techniques, through to building trains from scratch.

As South Africa prepares to launch a state-of-the-art train manufacturing and assembly plant in Dunnottar, east of Johannesburg - with the target to deliver on the 20-year project to supply the Passenger Rail Agency of SA (Prasa) with 600 ultramodern trains - the project could not be any bigger than Prasa's 2027 infrastructure development plan.

Gibela, an Alstom empowerment consortium, looks to the future of the South African passenger rail service, with the aim of transferring skills and knowledge to young South Africans, thus ensuring industrial capacity for the country's young engineers and the industry.

Kasturie Pillay (35) is one of 12 young engineers and designers who left for France in February and is excited to be part of the "world-class training" she and the others in her group are receiving in France.

For the past six months, Pillay says she has been trained on anything from designing and assembling to building rail equipment from scratch using state-of-the-art equipment.

A model of self-motivation, grit and determination, Pillay took charge of her life when she realised her family's financial situation would not allow her to study further after she matriculated in 1997.

Raised by a single mother in Chatsworth, Durban, Pillay says she always wanted to become an engineer from an early age, but due to her financial circumstances, she had to find other ways to achieve her dreams.

This drive required her to build on her skills through hard work, which included taking on temp work and short computer courses.

"If you grew up like I did ... your dreams are everything and with your dreams, nothing is impossible if you are willing to work towards achieving them," says Pillay with a glint of wisdom on her face.

Her first job as a student temp while she was in high school gave her enough skills to continue working after matric. She soon realised that the more she worked, the better the employment opportunities.

She also worked at her uncle's printing press, but it was at a bulk shipping company in Durban where Pillay felt her life was taking shape.

She could finally afford to enrol in mechanical engineering courses. This has been pivotal in her rise to becoming a sought-after train designer, having worked as head of design for the Gautrain project.

With 10 years' mechanical and design experience, the soft-spoken designer has come a long way. She is one of the first 12 young engineers headhunted to become part of the Gibela project.

"I am grateful to those who headhunted me from among many other young designers," she says.

"It is their faith in me and the value they entrusted in my skills that motivate me to work even harder."

Speaking about the training she is receiving in France away from friends and family, Pillay has only praise for the "concise, integrated and sophisticated" French way of doing things.

She says the teaching methods are "nothing she has seen" anywhere else.

Once the training is complete, the young engineers will return to the country and lead design teams, maintenance teams, validation teams and assembly teams that will see out the completion of the project. With Pillay and her colleagues at the helm, the future looks bright for South Africa's rail infrastructure project.

Not one to rest on her laurels, Pillay is achieving her long-held dream of graduating with a university degree.

She is studying for a national diploma in mechanical engineering through Unisa, while also juggling the demands of the design industry.

Individual and team projects all form part of Pillay's training here and in France.

And once that is done, she intends continuing with her studies.

Pillay is due back in France this month, but is enjoying being at home with her mother, younger sister and nieces.

When she is not busy with family obligations, she is sure to be working on the next big design she has running through her creative brain.

# Skills FOR BIG DREAMERS

With self-motivators like Kasturie Pillay, the future looks bright for SA's **rail infrastructure** project

## THE GIBELA PROJECT

Gibela is the empowerment consortium created through a partnership between the Passenger Rail Agency of SA (Prasa) and French multinational Alstom. Prasa has awarded Gibela contracts worth R51 billion to build a fleet of 600 Alstom trains over 10 years starting from 2017.

In terms of the project, the first 20 trains will be built in Brazil, with the remainder being built at a purpose-built manufacturing plant in Dunnottar, east of Johannesburg.

As the projects develop, so will the skills of young South African engineers because the project seeks to develop the industrial capacity of the country. Various training initiatives will see young South Africans being equipped with skills in various industries and capacities. The first of these are the 12 young engineers who are undergoing training in France under Alstom's 18-month mentorship programme.

### The multibillion-rand project includes:

- The delivery of 600 state-of-the-art passenger trains (3 600 coaches) over 10 years.
- Ongoing maintenance, spares supply and technical support over 19 years.
- The construction of a world-class manufacturing and training facility in Dunnottar.

According to Gibela CEO Marc Granger, the project is meant to deliver modern trains, develop an efficient local industrial plant, and support South Africa's economic and social development.