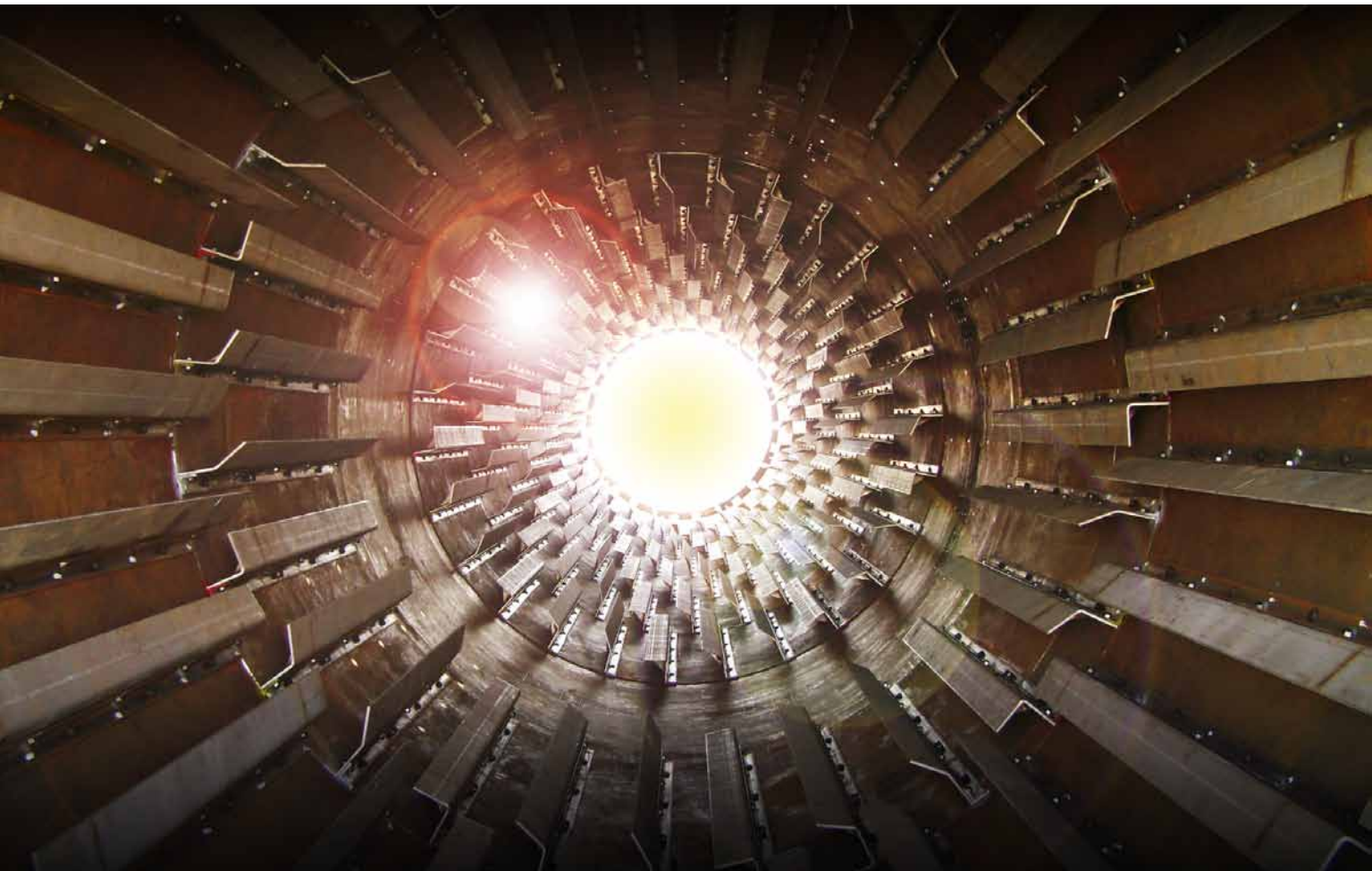


# DRYTECH INTERNATIONAL

A DRY HUMOUR





# A DRY HUMOUR

*Having established a reputation for solving tough industrial drying problems, particularly in the minerals industry, Drytech is now taking that expertise globally*

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Ammonium metavanadate flash dryer and reduction kiln



The higher the value of a product and the more specific or challenging the drying requirement then the more likely it is that the services of Drytech will be required. Based in South Africa and operating out of Denver, Johannesburg, the company specialises in solving thermal processing problems for industries as diverse as minerals and mining through to pharmaceuticals, chemicals and food.

There are no standard off the shelf products rolling off a production line in Denver. A highly trained team of engineers develops and tests individual solutions for each customer, adapting or combining a wide range of drying technologies and calling on over 30 years of experience from past projects. As a result, the team is continuously developing and improving on technologies as diverse as calciners, flash and fluid bed dryers through to rotary, spray, and vacuum dryers and fluidized bed combustors. Over those 30 years some industry changing advancements have emerged from the Drytech labs, and the company has developed a reputation as a leader in concentrate drying, particularly for the mining and minerals industry.

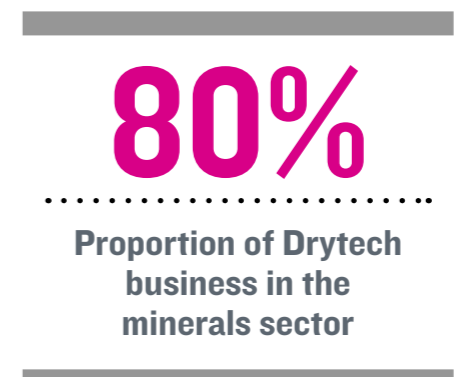
The Johannesburg facility includes an extensively equipped pilot plant that incorporates all the technologies Drytech offers, and is continuously being updated and reconfigured. “So when a client comes to us and asks us to either optimise an existing

process or design a new drying solution, once our team has worked on the problem we then run the proposed process at our pilot plant to investigate, test and validate it. We will then develop the process flow sheet, and cost and produce the equipment that will solve their problem,” said managing director Ryan Carpenter.

Developing customised and individual solutions requires a considerable degree of trust between Drytech and its clients, as most of the work is experimental. This trust has been developed and reinforced through years of successful and ground breaking achievements.

The first big success came in the early 1980s when the company developed a new flash drying system for platinum sulphide ore for mining company JCI – later to become Anglo American Platinum. “The process in use prior to this had been cumbersome, highly labour intensive and very inefficient,” said founder and President Harry Traub. “The new process worked very well, and launched the company into the minerals market.” The minerals sector continues to account for 80 percent of Drytech business while the remaining 20 percent is derived from a variety of industrial uses ranging from biomass and chemicals to food.

“One of the reasons we are able to deliver such highly customised products and build a personal relationship with our clients is that we have kept our engineering team





relatively small. This enables us to be a great deal more dynamic and flexible,” explained Carpenter, “and we don’t need a massive bureaucracy to macro manage projects.”

Instead of incessant meetings and a time and resource consuming paper trail of minutes and reports, there is a culture of close and continuous communication across the business and with the client, who

is not only informed of the progress of the engineering team and involved in decision making, but also remains in contact with the project leader who originally negotiated the contract.

“This continuity is a key contributor to the relationship of trust we build with the client,” Carpenter said. “For us, clients never become just another number. They

“CONTINUITY IS A KEY CONTRIBUTOR TO THE RELATIONSHIP OF TRUST WE BUILD WITH THE CLIENT”



Silica sand – rotary dryer – Atlantis Foundries



Chrome sands – rotary dryer - Xstrata

are part of the process of design and development, from beginning to end.”

The Drytech offering is characterised by a personal service that extends significantly beyond design, manufacture and installation, and this is one of the company’s big differentiators. For newly

designed equipment a comprehensive programme of hands-on training is delivered on site by the Drytech engineers, while familiarisation training is given for updated or optimised technology. Once the technology is up and running, Drytech engineers are always on call, and will fly

immediately to the location if any issues arise.

To date, the company has completed projects as far afield as Brazil, Venezuela, the US and Canada in the west, Australia and China in the east, and Europe and Turkey to the north. The strategy going forward is to increase the sales and

**30 YEARS**

Drytech experience in solving engineering problems

marketing campaign overseas and extend the global footprint, thereby reducing the reliance on the South African market and creating a buffer against the cyclical nature of economic growth.

“Being based here in South Africa gives us something of a competitive advantage,





Chrome sands – fluid bed – Samancor



Twin spray dryer – Platinum Concentrate



Platinum concentrate – flash dryer – Anglo American Platinum

“CLIENTS NEVER BECOME JUST ANOTHER NUMBER. THEY ARE PART OF THE PROCESS OF DESIGN AND DEVELOPMENT FROM BEGINNING TO END”

as our engineering labour costs are lower than in most Western countries,” Carpenter said. Not only are engineering and design carried out at the Denver site but many of the critical components are manufactured there, to ensure the company retains control over its vital intellectual property.

Much of the fabrication work is then outsourced to trusted companies in South Africa. “With international projects, we can

look at using workshops in the country we supply into. Or if it’s more cost effective, we might do the fabrication here and then ship it overseas,” Carpenter said.

“This is how we are managing a new vanadium smelter project in Brazil,” Traub took up the story. In this instance, one of the primary concerns was the risk of IP piracy. The company had to overcome significant hurdles to ensure manufacture in South

Africa was cost effective for the client. “Taxation on imports into Brazil is very high,” he continued. “However our client has been able to negotiate tax relief because the plant is a good growth opportunity in an under-developed state.”

As with so many companies in South Africa, Drytech has to work hard to maintain its pool of highly skilled and experienced engineers. “What we do is highly specialised,” Carpenter said, “and it’s just not possible to find engineers specialised in this discipline, particularly with the ‘brain drain’ this country is suffering from. So what we do is bring in talented new engineering graduates and provide extensive in-house training to bring them up to speed in drying technology.”

Drytech has developed its business model

around the quality of its engineers, their capability to innovate and communicate, and their long track record of technology development. “We are selling a concept: that we have the ability, the experience, the tools and the toolbox to develop new concepts and make them work,” Carpenter concluded. “To do that, we have to be consistent, reliable and absolutely honest.” These traits are well developed and have been amply demonstrated during the company’s impressive 30 year history of solving engineering problems. **BE**

For more information about Drytech International visit: [www.drytech.co.za](http://www.drytech.co.za)



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