Press release:

Rand-Air's oil-free compressors, portable generators and nitrogen generators ensure 'well-oiled' refinery shutdowns

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An oil refinery is a very large and highly complex installation. Because of this complexity and the nature of the process, shutting the plant down for ad hoc repairs is not an economical option. Oil and gas refineries are designed so that they will run uninterrupted for a period of 18 months to two years, after which sections of the refinery are shut down for scheduled periods of repair and maintenance. During what is invariably a period of frenetic activity, all repairs, upgrades and maintenance are carried out. These pre-emptive measures prevent the eventuality of unscheduled (and extremely expensive) down time.

As a shutdown at a major refinery could disrupt the flow of fuel to the nation, these events have to be meticulously planned and timed.

This is according to Rudi de Vry, Rand-Air's Area Manager in Durban, Kwa-Zulu Natal.

"Before a shutdown, the oil refinery contacts all the repair and maintenance subcontractors that will be needed during the shutdown. In order to ensure that the shutdown proceeds as swiftly and smoothly as possible, these contractors need to ensure they have the tools and equipment with the correct capability and the highest levels of safety," de Vry explains.

He adds that, to give an idea of the scale of a refinery shutdown, often thousands of contract workers are involved, who in many cases need to be supplied with temporary compressed air and power, as well as other tools and equipment.

For Rand-Air Durban, situated strategically near a number of major oil refineries, shutdowns are therefore critical events in their annual project hire planning.

"For these, before the shutdown starts, we need to assemble a specific 'fleet' of rental equipment which can include dozens of items. In terms of this, the logistics can be very challenging, as often equipment items have to be brought from our other branches in order to meet refinery shutdown requirements. Once in Durban, these will have to be checked to make sure they meet the refinery's scrupulous quality, safety and reliability standards," he advises.

"We been in business for some 46 years and, during this time, we have become the preferred rental equipment partner to many South African oil refineries," de Vry continues.

For example, in July this year, South Africa's largest refinery completed a month-long shutdown, during which contractors worked on site around the clock. With its reputation for supplying high quality, ultra-reliable generators and compressors, Rand-Air was called upon to hire out significant quantities of equipment to the refinery.

"With the immense deadline pressure, equipment downtime had to be avoided at all costs – something which Rand-Air managed to do with great success in this instance," he adds.

During the shutdown, various sections of the refinery needed to be activated temporarily for testing purposes. Here, compressed air is used for driving the refinery's control systems. Ironically, though the installation is an oil refinery, the air used in control systems has to be absolutely free of oil vapour and other contaminants. "Fortunately, we are able to meet this requirement with our Class-0 oil-free compressors. Our ability to supply absolutely pure, clean, dry compressed air has built up a strong niche for Rand-Air in the refinery market," de Vry continues.

Similarly, during the shutdown, temporary power was also needed for various functions in the refinery. These included extensive welding for repairs and maintenance, the execution of which was also achieved more efficiently with the use of Rand-Air portable generators.

On a second refinery shutdown-related hire by Rand-Air this year, contractors working in the tank section of the refinery also needed compressors to carry out cleaning, shot blasting and spray-painting. Furthermore, this refinery's alkylation unit was shut down completely for maintenance and upgrade, and Rand-Air's generators were used for chemical washing in the alkylation unit and for the change rooms.

Apart from compressed air and portable power, Rand-Air - through parent company Atlas Copco's global rental network - is also able to supply nitrogen generators to its refinery customers. Nitrogen is used for inerting, blanketing, and purging, the aim being to suppress flammability by reducing oxygen levels to a point where combustion is no longer possible.

"Refineries are, after all, in the business of producing highly flammable liquids - and therefore the potential for risk is high unless very stringent counter-measures are taken. Rand-Air recognises this critical operational and safety consideration - and therefore every single equipment item that is sent to a refinery is checked and double-checked to ensure that it meets with the customer's safety, health, environmental and quality standards," he comments.

De Vry also explains that Rand-Air goes to considerable effort to familiarise itself with the refinery's safety standards, so that it can be 100% compliant with its customer's all-important safety requirements.

"During nearly five decades of operation, Rand-Air has developed and nurtured a close relationship with South Africa's oil refineries, including those in Durban," observes Rand-Air's General Manager Louwrens Erasmus.

"At Rand-Air, we have achieved this through scrupulous adherence to one of our fundamental business tenets – to always exceed what our customers expect of us, in every single area of the business," he concludes.

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(865 words)

Note to Editors

About Rand-Air

With several depots, branches and substantial representation across Southern Africa, Rand-Air continues to expand their footprint to service a diverse market. Since 1973, Rand-Air has been driven by an ethos to exceed customer expectation and satisfaction. This is complemented by a product offering that adheres to the highest quality standards in the industry. Rand-Air's products portfolio includes oil-free compressors, industrial air compressors, diesel compressors, electric air compressors (all screw compressors), diesel generators and lighting towers.

As the market leader in portable air compressors and generator rental, Rand-Air upholds its reputation through regular training and upskilling in business related and product-specific matters.

Rand-Air is part of the Atlas Copco group and is a Level 3 B-BBEE contributor.

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