

**Feature** 

## Oyster Mews

**AUGUST SEPTEMBER 2021** 

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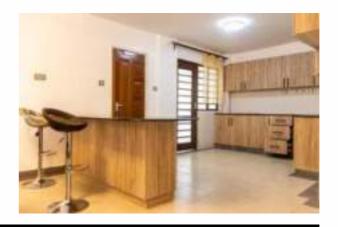
a.Sheema Court Kasuku Road (off lenana road) Next to CVS plaza Kilimani, Nairobi, Kenya

## Invest In The Onyx Place Apartments By House And **Homes Limited**



We at House and Homes Limited are glad to introduce the Onyx Place Apartments. This development targets the sharp investor, able to successfully aim for a return of over 10% per annum. Waiyaki Way presents the investor with the best choice as the road is opening up the area for greater fortunes.

The Onyx place apartments is well appreciated by potential investors as the returns are well defined. When you invest before the completion date (end of July 2021) you shall enjoy greater discounts on our cash payments. To safe guard the investor's funds in regards to completion delay, we as House and Homes Limited have taken a Bank Guarantee ensuring that ALL your funds are safe and secure. The bank guarantee has been issued by reputable local banks to safe guard on the promise made to potential investors such as you. This way we guarantee you that investing in The Onyx Place Apartments is your safest bet. These Apartments will have a 10% annual return and will have an annual 2-3% increment rate on asset value. If you decide to invest with us, you are definitely assured about reaping capital gains as the project is going to appreciate with the high potential growth for infrastructural developments and also rise in economic growth around the area.



## THE ONYX PLACE **APARTMENTS**

3BR & 3BR + SQ







#### Located along Mukiri Road Off Waiyaki Way

#### AMENITIES:

- 2 Parking Slots per Unit
  - · Standby Generator
- Solar Water Heating
- · 2 High Speed Lifts

· Borehole

- Ample Play Area
- & Rooftop Terrace





The Onyx Place is located off Waiyaki Way on Mukiri Road, with an urban feel and natural ambiance for those who appreciate a lifestyle of quality and comfort. The project consists of 64 units sitting on a 3/4 acre of land.

The apartments consist of 3 bedrooms without an SQ, with a plinth area of 135 Sqm (1453.13sqft) and 3 bedrooms with an SQ, with a plinth area of 145 Sqm (1560.77sqft).

#### **Amenities**

- Two allocated parking slots per unit, and Ample visitors parking
- Playing area for the children
- Borehole with fresh water and solar water heating
- Direct connection to sewer line
- CCTV and electric fence

#### **Introductory Price**

Type 1 - Three (3) Bedroom with SQ - Kes.

Type 2 - Three (3) Bedroom without SQ - Kes.

Invest in The Onyx Place Apartments, where ALL deposits are guaranteed by reputable local Banks and you get to earn a return of over 10% per annum.

#### To invest

- WhatsApp/Call +254 799 448 800
- Call +254 784 448 800
- Email: sales@houseandhomes.co.ke
- For more information https://www.houseandhomes.co.ke



## **Builders' Magazine**

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#### Contributions

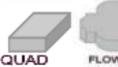
The editors welcome news items, press releases, articles and photographs relating to the Construction Industry. These will be considered and, if accepted, published. No responsibility will be accepted should contributions be lost, damaged or incorrectly printed.

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### GAJIPARA BUILDERS LTD



50mm	60mm	80mm
Quad	Quad	Quad
Uni	Uni	Uni
Flower		
Hexagon		







Gajipara builders carries out building and construction projects all over Kenya. The favourable progress on each contract and the outstanding quality of work delivered within schedule has promoted the company to be one of the best contractors in the County. The company is registered with the National Construction Authority as a Building Works contractor under category NCA2.

In addition to carrying out building and construction projects, it also manufactures paving blocks and other pre-cast concrete products. The production of quality paving blocks has made the company a household name in Nakuru and the entire Rift valley province. The company's products are accredited by the Kenya Bureau of Standards (KEBS).

## MAJOR CONSTRUCTION PROJECTS COMPLETED

#### Taidy's suites

This unique project, a nine storey 4\*Hotel with roof top swimming pool and automated parking system designed to minimise the space required for parking cars was a complex project that required precision and exceptional engineering.



#### **Guest House**

An old farm house extended and refurbished into a modern guest house with exceptional interior



#### **Old Guest House**



New Refurbished and Extended Guest House

#### Godowns

Recently completed project of 2 godowns for storing, sorting and packaging of grains





#### **PAVING BLOCKS**

The company sells paving blocks in four different shapes being; Uni, Hexagon, Flower and Quad.

Paving blocks are manufactured in varying thickness being 4" 6" and 8". Areas requiring high strength blocks like fuel stations require thicker blocks compared to paving in residual houses for parking that require thinner pavers. Other precast concrete products produced include:

i. Wall Copings

ii. Road Kerbs & channels

iii. Paving Slabs

iv. Drain Covers

v. Louver Vents

vi. 1.B Drain / Slide Slabs / shallow drains

vii. Ventilations

Cabro manufacturing, loading and transportation at Nakuru to other parts of the country.











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## thyssenkrupp's cutting-edge technologies helping to develop renewable hydrogenbased economies on the African continent

"The global development of renewable hydrogen-based economies has the potential to convert Africa from an essentially developing continent and largely commodity exporter to a leading global producer and exporter of clean energy in the form of green hydrogen," says Rajend Govender, newly appointed CEO of thyssenkrupp Uhde Africa.

The growing global demand for green hydrogen, especially amongst developed economies, is driven largely by ever stricter environmental regulations. However, some of these economies like Europe for example, lack sufficient renewable resources as well as land to produce the amount of clean energy required, opening up immense

opportunities for Africa.
With its potential
abundance of
renewable
energy

clean energy for its own requirements in sectors such as power, transport and agriculture. Many parts of the continent have daily solar radiation of between 4 kWh and 6 kWh per sqm. In addition, an overall estimated wind potential of 460 PWh (Petawatt) hours with the potential to meet a production cost target of 1.8 to 2.4 USD per kg, providing Africa with a significant cost advantage over most locations in Europe.

"Green hydrogen holds so much more potential than just a zero-carbon energy carrier. Once you have green hydrogen you have the flexibility to go many different routes. You can use hydrogen to create a whole suite of products such as green ammonia (an organic hydrogen carrier that is also used to produce fertilisers), explosives, green methanol, synthetic fuels, synthetic natural gas, etc." states Govender. The graphic below shows the value chains and markets that can be created by green hydrogen and its derivative products.

"A hydrogen-based economy is both attainable and feasibl

s in the form of solar radiation, wind, geothermal and hydropower, combined with the availability of large areas of non-irrigable land, the African continent is not only equipped to produce and export green hydrogen to meet global demand but it can also utilise this

for Africa given that the technology as well as all the technological infrastructure required to support a hydrogen energy system is now available," continues Govender. "Moreover, the cost to produce green hydrogen from renewables has also reduced significantly."

thyssenkrupp Uhde owns a large portfolio of chemical process technologies, one of which is large-scale alkaline water electrolysis, a process that uses direct electric current to drive an otherwise nonspontaneous chemical reaction. It is also the process that produces green hydrogen using 100% renewable resources.

At the centre of thyssenkrupp's electrolysis technologies are its patented large electrochemical cells which allow for very high efficiency in industrial scale green hydrogen production. "Our electrolysers, a technology that converts water and electricity into hydrogen, oxygen and heat, forms the heart of our hydrogen production plant with high availability of 98% and hydrogen purities of up to 99,99%. The principal design is well-proven and was born from our worldwide leadership in the design, construction and operation of hundreds of electrochemical plants for chlor-alkali production. Our technology is available in pre-fabricated, skid-mounted standard modules which facilitate and streamline the deployment of industrial scale hydrogen projects," notes Govender. These modules can be easily added to achieve the desired project size, with the potential of reaching hundreds of megawatts.

The thyssenkrupp Uhde standard 20 MW electrolyser module, depicted below, produces 4000 Nm3/h of high purity hydrogen and 2000 Nm3/h of medical grade oxygen.

Further unpacking the importance of hydrogen for Africa, Govender says that by moving from exporting commodities to exporting clean energy and its carrier products to world markets and by using green hydrogen to meet its own requirements, the continent can significantly increase its value chain depth, becoming more self-sufficient and less reliant on imports. Africa can use hydrogen to produce its own fertilizer for its substantial agricultural sector as well as synthetic fuel and green methanol to power agricultural machines, commercial and passenger vehicles. Govender also points out that hydrogen has some leap frog potential for Africa. Europe for example, has large diesel and electric fleets that have the potential to be moved to hydrogen. Africa, on the other hand, with fewer internal combustion engine vehicles, has a distinct low-density and cost advantage; the continent can move straight to hydrogen, skipping the fast developing electric power transport era altogether.

Citing another important advantage offered by green hydrogen production, Govender says that it can be decentralised. "Being a massive continent with large distances and partially underdeveloped road infrastructure, the associated costs for transporting commodities such as fuel via road or air to remote mines and plants are high. The solution can be as simple as erecting a small decentralised unit to produce fuel on site. Not only is this a much more affordable route but the risk of delivery delays and subsequent downtime is eliminated." Govender adds that decentralised units can also be used to produce for example green methanol.

As many African countries still have coalbased economies and energy generation, Govender does not believe that a change to green hydrogen can happen overnight. He says however that it is possible to capture and clean these CO2 embitters and use them together with green hydrogen to build new chemical elements.

encouragement to potential customers who also want to 'become green'," concludes

he maturity of this clean technology is proven by the

he maturity of this clean technology is proven by the many projects thyssenkrupp Uhde have executed (amongst others, the recent commencement of a 2GW hydrogen plant in the Middle East) as well as its own installations in their main steel plant in Duisburg and thyssenkrupp's own Carbon-to-Chem Technology centre. Africa too will soon have its first hydrogen plant which is currently under construction in Morocco.

"It stands to reason that a company that develops green technologies must also have a green footprint," says Govender. thyssenkrupp, a global powerhouse with 160 000 employees and 200 sites in 80 countries, has been an A-listed green company for five consecutive years since 2015, achieving an A+ listing for the past four years. "We are also proud to be amongst the global top 5% out of more than 2 400 green companies and only one of seven companies in Germany to achieve this prestigious ranking. thyssenkrupp's green journey presents a great example as

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About us:
Thysssenkrupp Uhde Africa,
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For more information visit: www.thyssenkrupp-industrial-solutions.com

#### Contact:

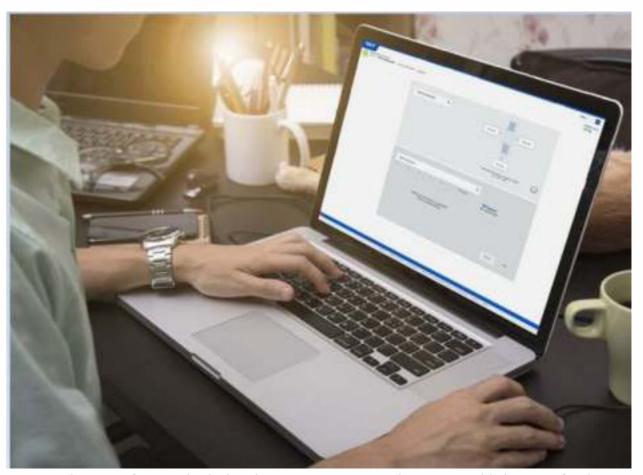
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## SKF bearings expertise helps to harvest more energy from waves



Bearing selection software – backed up by expert knowledge – helped CorPower Ocean to specify the most appropriate bearings for a new design of wave energy converter.

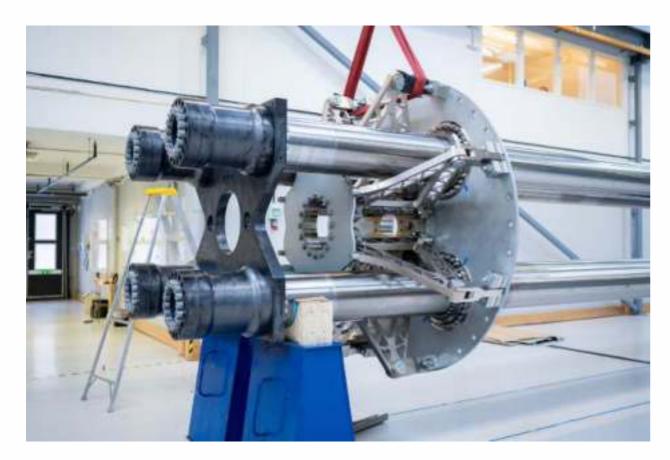
SKF's expertise in bearings has helped CorPower Ocean to optimise the design of a new class of wave energy converters.

CorPower's compact wave energy converter works by oscillating with the waves, amplifying the movement, using phase-control technology, and converting this into electricity.

"Wave power has a more stable production profile," says Patrik Möller, CEO of CorPower. "It can play a key role in the transition to 100 percent renewable energy systems by replacing base power such as coal and nuclear power." However, choosing suitable bearings for the new converter, which has slow rotation speeds and very high loads, was challenging.

CorPower began with SKF's Bearing Select online tool, as a first step to selecting the optimum bearing arrangements. The software, which is free to download, simplifies the task of finding the correct bearing solution for a particular design. Inserting operational parameters into the software automatically generates bearing solutions within one minute.

Because of the special conditions related to the wave power converters, CorPower needed more detailed bearings advice. SKF was brought into the project early – providing engineering support for the bearing solutions, as well as lubrication and monitoring systems.



"Our application engineers were involved at an early stage in the design process," says Mattias Arstadius, Industrial Sales Unit Manager for SKF in Sweden. "This helped us to identify improvements that shorten development time, optimise performance and reduce costs."

CorPower Ocean has now developed a first full-scale plant. This will be tested in the company's dry-test rig over the summer, then placed in the sea off the Portuguese coast in the autumn. The company plans to launch a type certified commercial product on the global market by 2024. Shorten your development process by downloading SKF Bearing Select via www.skfbearingselect.com

SKF's mission is to be the undisputed leader in the bearing business. We do this by offering solutions that reduce friction and CO2 emissions, whilst at the same time increasing machine uptime and performance. Our products and services around the rotating shaft, include bearings, seals, lubrication management, artificial intelligence and wireless condition monitoring. SKF is represented in more than 130 countries and has around 17,000 distributor locations worldwide. Annual sales in 2020 were SEK 74 852 million and the number of employees was 40,963. www.skf.com ® SKF is a registered trademark of the SKF Group.



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## Atlas Copco ZenergiZe energy storage systems - ZERO fuel consumption, ZERO CO<sup>2</sup> emissions, ZERO noise!



When powered or charged by renewable sources, the ZenergiZe range of battery energy storage systems from Atlas Copco consumes zero fuel operating in island mode and produces zero CO<sup>2</sup> emissions when used as a standalone power source. At the heart of these powerful and compact units are high-density lithium-ion batteries which operate silently ensuring zero noise levels.

Owing to significantly reduced fuel consumption and CO<sup>2</sup> emissions, this clean, quiet energy source offers a profitable and green solution to operators, reducing their Operating Expenses (OPEX) and delivering a very low total cost of ownership. The ZenergiZe units are capable of a remarkable 40,000 hours lifespan which translates to more than 5 000

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cycles or over 1 600 days of continuous operation without compromising on power and requiring virtually no maintenance. These battery energy storage systems present an ideal solution for noise-sensitive environments such as events, metropolitan construction sites, or telecoms. In addition to rental applications, these versatile units are also suitable for small businesses requiring smart power management as well as for large applications with multiple units.

"Our medium 10kVA to 90 kVA and large 100kVA to 1000 kVA ZenergiZe ranges are defined by optimum performance, sustainability and flexibility, taking battery energy storage systems to a whole new level," notes David Stanford, Business Line Manager, Portable Products, at Atlas Copco Power Technique. "The units can serve as either the primary or standalone power source, replacing a generator in noise-sensitive areas or where fuel fumes / pollutants are not permitted. If the application dictates, they can be combined with a generator to make a hybrid solution and enable smart load management. Furthermore, by combining the units with renewable energy sources such as solar panels, 100 percent sustainability can be achieved with these systems."

Battery energy storage systems present a simpler way to capture and store renewable energy for immediate or later use, ready for delivery at any given time, thus serving as ideal short-term solutions in applications where there is no access to grid power or where there are low load issues. Atlas Copco's large ZenergiZe units can work in parallel with other energy storage systems and act as the 'brain' of a microgrid, storing and managing the power coming from the different sources and regulating the load for

each of the applications associated with the microgrid. "The fact that ZenergiZe energy storage systems have two operating modes (island and hybrid mode) allows the end-user to address any peaks in demands," adds Stanford.

In the development of ZenergiZe, Atlas Copco has leveraged the advantages of the lithium-ion batteries namely sustainability, flexibility and usability, without compromising on power. As lithium-ion batteries are lighter than other technologies, these units are 70% more compact and also lighter in weight compared to traditional alternatives. They are nevertheless capable

of providing over twelve hours of power with a single charge, requiring only 1.5 hours to charge from empty to full. This weight and size reduction not only brings a ground-breaking level of versatility and usability but also facilitates transportation without the need for specialist equipment. These energy storage systems are easy to use, scale and install.

The two models in the medium 10kVA to 90 kVa range, the ZBP and ZBE, offer rated power of 15kVA and 45kVA and energy storage capacity of 45kWh. A wide range of socket options ensure hassle-free connection to a generator. With a small 1.5 m2 footprint, these medium range units are ideal for telecom installations in remote locations. In metropolitan construction sites, they can be used to balance out the peaks in demand and low loads.

There are four models in the large ZBC 100 to 1000 kVA energy storage system range

offering the ideal

applications that require a constant and significant flow of electrical energy. With rated power of 100kVA and 500kVA (depending on the model), the parallel capability of this range enables operators to scale with up to 30 ZBCs working in parallel in any power node. The ZBC can store energy coming from different sources and manage the power supply of small residential areas.

for demanding





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Ruaka Apartments

**Installation Of:** 



Trident Estate - 2



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South Park Apartments

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## SKF's virtually maintenancefree rope sheaves put a stop to high maintenance costs and increase paper machine reliability

SKF's virtually maintenance-free rope sheave units offer a unique solution to the pulp and paper industry by significantly reducing the high costs related to rope sheave maintenance and improving paper machine reliability.

"Rope sheaves are notorious for frequently causing maintenance problems at paper mills, leading to unscheduled shut downs that negatively affect production levels and drive up costs," notes Frans Odendaal, SKF Product Manager - Power Transmission. Odendaal explains that if the sheaves are not running properly, the rope can slip, resulting in rope wear and paper tail tears. He adds that worn ropes can break while lubricant leakage can lead to paper damage. "Furthermore, accessing hazardous locations to re-lubricate rope sheave bearings puts maintenance personnel at unnecessary risk." Pointing to a less common but very important problem, Odendaal cautions about the dangers of sheaves falling off their shafts causing serious injury to personnel and damaging product, felts and rolls.

According to Odendaal, mills often accept these conditions as normal and have resorted to applying preventive maintenance to minimise the potential problems caused by malfunctioning rope sheaves due to bearing failures. He notes that inadequate lubrication and corrosion damage are two main causes of bearing failures. "Despite periodically removing and replacing the sheaves with new or refurbished units, or even dismounting the failed bearings and mounting new ones, rope sheave failures continue to occur, especially during machine start-up, when the units' performance is critical." Odendaal adds that production has to be brought to a halt to allow for maintenance, resulting in exorbitant production losses and labour hours.

"But mills no longer have to contend with the high costs of rope sheave maintenance," affirms Odendaal. The fitment of SKF rope sheaves will increase uptime and dramatically reduce maintenance costs. The rope sheaves have been specially designed and engineered to reduce rope wear as well as the possibility of paper breaks. Mills are able to schedule planned stops for less urgent and routine maintenance.

The rope sheaves are based on SKF's tried-andtested wheel hub units which perform well even under extremely stringent conditions. Rope sheaves are fitted with two deep-groove ball bearings which are ideal for accommodating low loads and moderate speeds. Both the unit as well as the bearings are sealed for life, ensuring long maintenance-free periods. Not only is the need for grease nipples and lubrication ducts which can potentially leak and contaminate the product eliminated, but personnel are no longer required to enter difficult-to-access potentially hazardous areas to re-lubricate the bearings. The zinc-coated, corrosion resistant SKF sheave rope units are also supplied with a special grease.

Furthermore, a patented security device locks the unit firmly in place, preventing the unit from falling off the shaft, even in the unlikely event of bearing failure, subsequently creating a much safer working environment for paper mill personnel.



## Oyster Mews



Oyster Mews is a residential development located on Langata Link Road, 1.5 kms from the main Langata road. Within a 10km radius of



Oyster Mews are malls, movie theatre's banks retail outlets, places of worship, hospitals, school, and more in an extremely high demand and occupancy rate area with credible security.

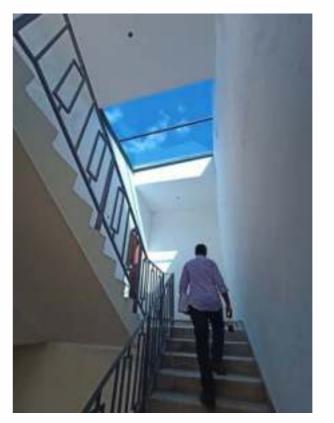
It consists of 29 four (4) bedroom + Dsq all



ensuite townhouses and a community centre. Each townhouse exhibits modern architecture with excellent finishing and robust solid structures. The exteriors are designed to exhibit vibrance through its colour scheme that compliments the luxury that resides within the estate.

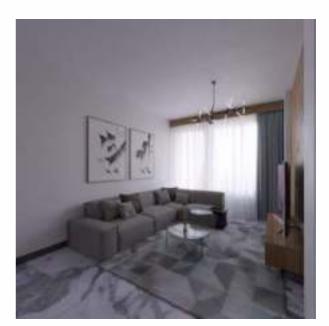
The townhouses consist of 2 lounges- one on the fround floor and first floor, a kitchen, scullery, yard,3 all ensuite bedrooms, a master ensuite bedroom, a roof terrace, a Dsq as well 2 parking slots.





The large windows in the rooms especially as in the main lounge that is defined by its "double" volume space allow a large amount of natural light and ventilation into the interior space thus visually connecting the exterior with the interior.

Natural light is also welcomed into the main stairwell via the skylight situated at the roof level thus maintaining the theme of visually integrating the units within its environment visually.





Each house has an additional family room, a private roof terrace and garden area allowing you and your family indoor and outdoor relaxation within the precincts of your home.



The Club House, which is strategically looped from the main spine road that connects all courts at the estate, will act as the heart of the development welcoming both residents and their visitors to engage and enjoy an array of activities and events.

The activities include a swim in the pool, wellness facilities such as the gym and spa as well as the lounge and entertainment terrace on the roof.



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## SKF Training Solutions upskill key customer's maintenance teams

The SKF Training Solutions Department recently upskilled the maintenance team of key customer, thyssenkrupp Industrial Solutions South Africa, through the presentation of a customised training course on bearing mounting and dismounting best practice procedures.

Armed with this necessary skillset, the thyssenkrupp maintenance team is now able to carry out equipment repairs faster with less rework required. In addition to financial savings, a quicker repair turnaround time enables thyssenkrupp to keep their customers' downtime to a minimum.

decided to split the team into eight groups and conduct the training sessions over a two-day period."

The training took place at the thyssenkrupp Industrial Solutions South Africa Training Academy at their Service Centre in Chloorkop, Kempton Park, and included the demonstration of various best practice bearing mounting and dismounting methods. The attendees were then required to replicate the demonstrations. This comprised the fitting and removal of a bearing, first on a tapered journal using a hydraulic nut and oil injection, then on an adaptor sleeve by way of hydraulic means and finally, the attendees were required to

fit and remove a bearing on a A total of 33 thyssenkrupp maintenance team withdrawal sleeve. members attended Taylor confirms the practical that the training training course. SKF course was a Training great success Solutions and that they Manager, received Gail positive Taylor, feedback from the explains that due attendees. to the "They also high complimented number of SKF's people innovative enrolled, they bearing mounting decided to and dismounting tools customise the course, which facilitated some of addressing only those the tasks required of them bearings applicable to thyssenkrupp during the training," concludes Taylor.

















equipment. "To further streamline the

training course for our customer, we





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