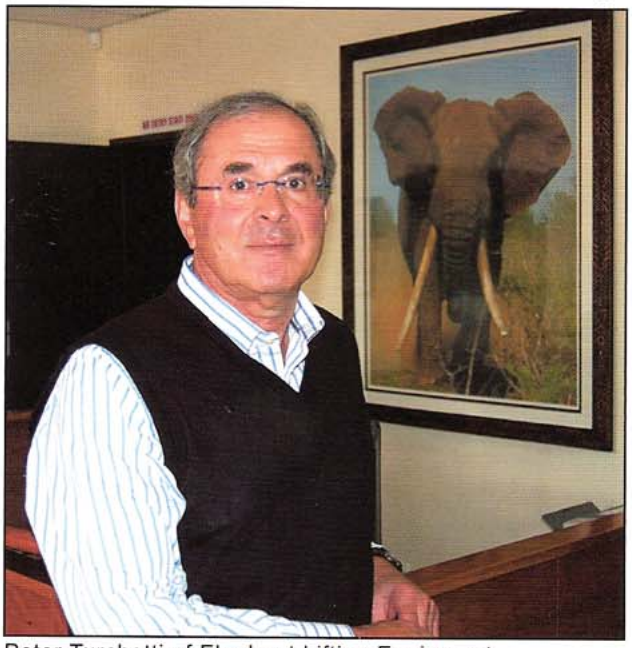
Safe Lifting

Nobody is complaining about the volume of work currently being experienced by the construction industry in South Africa, however there's always the danger of problems arising when projects being done too quickly. This is particularly true in terms of safety, as many people ignore or simply forget to pay attention to it in the frenzy to rake in as much as possible while the going is good.

The lifting equipment industry is particularly prone to this, especially when considering the crucial role that lifting plays in projects like the Gautrain, the 2010 world cup stadiums, power generation expansion, civil construction and mining developments. "Bulk Handling Today" met with Peter Turchetti, a director of Elephant Lifting Equipment, to talk about the pitfalls of neglecting the safety aspects regarding lifting equipment.



Peter Turchetti of Elephant Lifting Equipment

"People tend to forget that the onus of using lifting equipment that complies with prescribed technical and safety standards lies with the user of the equipment," he says. "The understanding is also that the user is not necessarily the operator but rather the owner of the company."

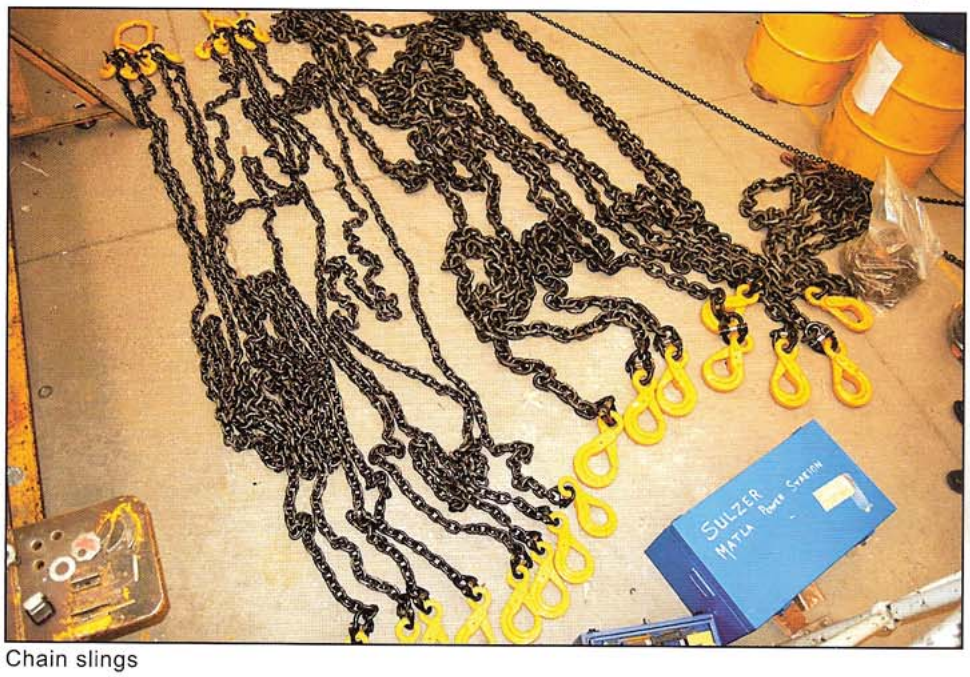
The hook on the left has clear markings and the manufacturers name on it while the one on the right is not traceable because it has no markings

He can't possibly go back to some obscure supplier

Applying standards

There are various standards for lifting equipment such as the South African National Standards (SANS), and international standards like ISO and EN (European Norm). In the case of engineered products where something is custom-made, prescribed best-practice engineering standards are applied.

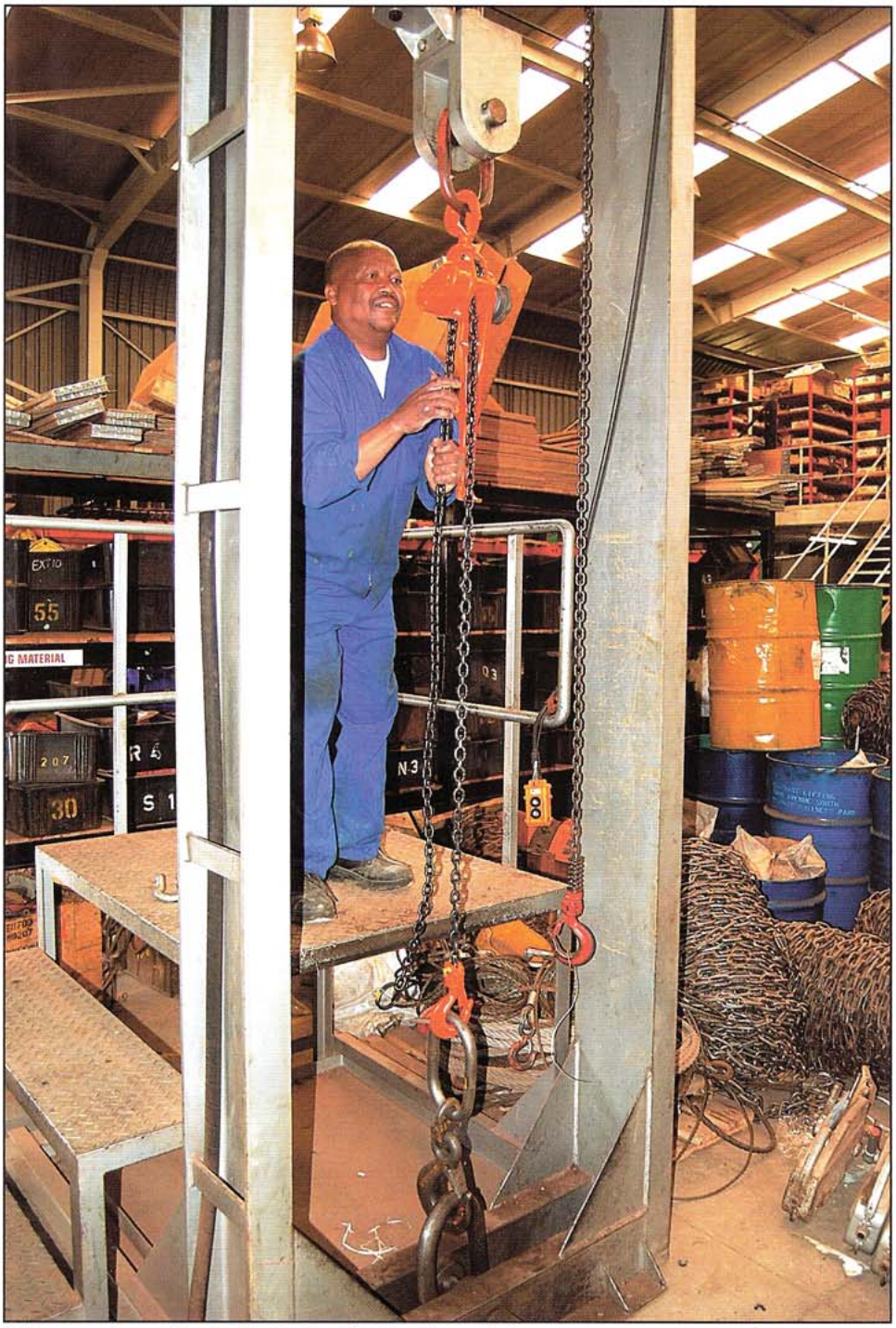
"Compliance to any of these standards is a key factor today which means complying with requirements of the various statuary acts such as the OSH Act and the construction safety act" says Peter. "Any lifting environment, whether it's underground or on a construction site, is an inherently dangerous working environment. If clients don't start with the right equipment, made to the right design standards, they're in trouble already."



Chain slings

However, others providing the lifting equipment also have responsibilities. "Importers and manufacturers like ourselves are responsible for the equipment risk assessments while the end-users are responsible for the functional arena. In the first place they must ensure that they have the right equipment, trained operators and ensure that the equipment is used correctly," explains Peter. "The three combine to form an integrated safety approach.

Special lifting equipment has to be designed by an engineer



Lifting equipment being tested in Elephant's workshop

Chain sling

To explain what is actually happening in the industry Peter uses the example of a chain sling, a common piece of lifting equipment used extensively in the construction industry for the moving of large pre-cast components. "Traditionally these chain slings have been supplied by a reputable local manufacturer of chain and lifting components but today there are quite a lot of imports on the market," he says.

"Most of the European imports, for instance, are made to the Berufsgenossenschaft safety standard, a norm which is among the highest quality assurance accreditation in the world. One or two companies from the Far East are also registered to provide certified and fully traceable lifting equipment, but most of the imports from the Far East are not made to any specified standard and are therefore considerably cheaper," says Peter. "Because compliance isn't general knowledge to all users, people tend to buy the cheapest. In doing so they actually endanger the lives of the people on site.

The fabrication of lifting equipment is governed by a strict process

Traceability

"The sad part of all this is that if something does go wrong, this user has no recourse and usually no insurance cover and he can't possibly go back to some obscure supplier.

On the other hand, equipment conforming to the Berufsgenossenschaft standard has a registration number on it indicating the registered manufacturer product and can therefore be traced back to the original manufacturer. The assembler and the manufacturers of all the components, the chain, the links and hooks, all have to be integrated into a fully traceable system.

"When we supply a brand new chain sling, for example, it comes with a certificate from the manufacturer," says Peter. "It's not our documentation, we're just authorised to complete that certificate and sign it on their behalf when an end-user buys from us. The manufacturer remains responsible."

Strict process

All users of lifting equipment should also know that the fabrication of lifting equip-

The fabrication of lifting equipment is governed by a strict process that involves four stages of certification

ment is governed by a strict process that involves four stages of certification. "It has to be designed by a registered professional engineer, it has to be put together by a certified welder, the materials have to be certified and finally it also has to have load testing certification," explains Peter.

"What most people don't know is that this is applicable to all fabricated assemblies. At the moment there's so much pressure on the construction industry, for example, that many people make up their own lifting assemblies with no consideration for certification requirements.

Golden rule

"In our brochure, we outline exactly what information should be contained in an order for lifting equipment," says Peter. "We draw clients' attention to the fact that the design standard has to be specified on drawings, tenders and purchase orders and remind them that all equipment must be individually certified and have full traceability to its manufacturer. The health and safety act requirements and the international design standards are also printed in every brochure.

The golden rule is to do it right the first time round

"The golden rule is to do it right the first time round," says Peter in closing. "If you don't know what is right, all you have to do is ask. Today safety is embedded and specified in fine detail into all contracts. But if there are any doubts it's just a matter of picking up the phone and calling any one of the many companies like us that are well organised when it comes to specifications."

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Testing a sling at Elephant's facility