

CAPE MARINE ENGINEERING SECTOR EXPANDING

Will the local skills base cope?

Since the first marine diamond was discovered, prospecting along the west coast has been laced with anecdotes and legend. Thesen's tiny coasters ran water barrels and food to those hardy folk who, believing that they would get rich, endured unspeakable hardships to find diamonds.

While diamond prospecting on the coast developed into large-scale open-cast mining after World War 2, exploitation of marine mineral riches began in earnest only when an American, Sam Collins, poured money into his offshore operations. Under his flag, some interesting floating contraptions went to find the diamonds, and some grounded on that inhospitable coast.

It's a far more sophisticated operation now, and diamond recovery has become an important part of the South African shipping and mining sectors, as evidenced by the De Beers Group who have invested over R1 billion in their South African Sea Areas project that involves buying ships and fitting complex mining equipment.

Their drillship ***Coral Sea*** recently completed a R90 million five-year refit that involved both maintenance and capital expenditure to upgrade her equipment, and included several weeks in Cape Town's Sturrock Dry Dock. The extensive project used 40 sub-contractors and provided employment for about 1100 people.



Fig 1 Coral Sea alongside shortly before sailing after a major refit in Cape Town

She has resumed operations off the west coast that involve her drilling gear extracting

diamoniferous gravels that are brought to the surface for sorting. To operate the equipment, her power generation capacity equates to 3.5 megawatts - 60 percent of the power generation needed for Groote Schuur hospital campus!

Douglas Bay, a De Beers' dredger, is currently in port undergoing minor maintenance work until she sails on the next phase of her survey programme early next year.

Arriving in Cape Town next month from a shipyard in Newcastle (UK) where part of a R300 million conversion has been done, De Beers' vessel ***Peace in Africa*** (formerly the cable-layer ***Dock Express 20***) will complete the work here to enable her to carry remote-sensing vehicles for submarine diamond-mining operations, while a diamond recovery plant will also be fitted. This will provide a substantial amount of work for local contractors, most of whom will be empowerment companies. ***Peace in Africa*** should be ready for service by the end of June.

A fourth De Beers' vessel, ***Debmar Atlantic***, will undergo a major R300 million refit starting in February.

Each vessel carries the mandatory ships' crew complement, as well as mining personnel from geologists and electronics engineers to maintenance crews, and since crews are changed every 28 days by helicopters operating from Oranjemund, two full crews are employed.

Besides the diamond vessels operated by De Beers - a loyal customer of Cape Town's engineering sector - the flow of ships from the West African oilfields is quickening. The drillship, *Valentin Shashin*, is currently refitting in the Sturrock Dry Dock while another, *Deep Venture*, will come from Argentina to Cape Town for her five-year survey prior to operating in waters over 4000 metres deep off West Africa.

The rig *Orca* will probably come to Cape Town after a spell on the Oribi oilfield that is scheduled to close in February. *Pride South Seas* is likely to require some work before shifting to the Kudu field, and I hear that several major rig operators are making inquiries among local agents and engineering works.

Project work of this magnitude is a fillip for local marine engineering firms and provides - directly and indirectly - many jobs, some of which are temporary during a refit as hordes of workers undertake a myriad of tasks aboard the ship within limited time.

Large volumes of work are being projected for Cape Town and for the envisaged **Saldanha Fabrication Centre** where rig components are scheduled to be constructed. Good news from Saldanha is that contractors have begun to re-establish the Fabrication Centre site where rig components were made about 20 years ago, and work is scheduled for completion around August 2008. Old offices adjacent to the ore jetty are being refurbished to house engineers, while earth-moving equipment will level part of the site.

Word is that some potential orders to be undertaken at the Fabrication Centre are close to being secured, which, if it comes to fruition, is encouraging news for Grinaker-LTA who will lease the site, and for a myriad of sub-contractors who will be involved in the projects. *Weskussers* hope that more Saldanha-based firms will be used than is currently the case. However, a shortage of vital personnel - marine engineers, precision welders, millwrights, electronics technicians and others - inhibits the Western Cape in its valiant attempts to attract a greater share of engineering work associated with offshore mineral exploration. And the staffing problem in the marine engineering sector could be exacerbated by the demand for personnel for construction projects relating to the World Cup.

To handle the refit of a ship in drydock a few months ago, an engineering team came from Durban, indicating the shortages of personnel here, while organised labour needs to understand and share the long-term vision for Cape Town and Saldanha to play an extended, global role in marine engineering work. When rigs can be chartered for \$300 000 a day, owners become understandably irritated by labour difficulties or shoddy workmanship, both of which can cause delays.

Western Cape ship repairers have a brief period in which to develop facilities that will draw a strong clientele from the oilfields. Waiting with bait to lure the same fish are other facilities stretching from Walvis Bay to Equatorial Guinea. One hopes the Western Cape can land the prize!