



PARTNERS IN MARKETING

June 2010 – PIM inspires Husqvarna

Contrary to the 'standard' idea on marketing (develop a product and try to sell it), PIM is known for its pro-active and solution driving marketing. In this spirit Husqvarna Construction Products AB developed a solution for a Norwegian company that will change the oil-industry forever. The solution is called 'The Green Turtle'.

Background

Whenever an oil well is abandoned, oil companies have an obligation to restore the environment in its original set-up. Therefore, the oil platform as well as the connecting oil pipes have to be removed. On top of that there is a rule that all wellheads have to be cut 15ft below the mud line (sea bottom). Currently this is done by dredging a large hole around the oil well and sending in divers that are manually cutting the wellhead. Apart from the time and cost consuming operation (takes at least 8 days for a wellhead) there is obviously a serious danger for the divers involved.

Beerenberg Corp AS

It was Beerenberg Corp AS, and more specifically Harald Ramfjord (Technical Director) who contacted Johan Lauwers (Business Development Manager Heavy Demolition Husqvarna CP) to co-develop a fully automated and remotely controlled machine to deliver an easy to operate and time and cost effective solution for the wellhead removal. When the original concept was presented to the authorities in the Gulf of Mexico they were very enthusiastic on one condition: If there is one more turtle killed in the Gulf of Mexico you will never set foot again in the oil fields. The name of the solution was born.

Concept

Several parameters were driving the project:

- remote operation
- no manual intervention of divers
- time-effective
- cost effective
- turn key installation

The machine was developed at the same tool as the diamond tool giving state of the art performance together with a fit to measure combination machine / tool. The machine consists of a rotary part that drives 4 diamond knives that are entering the wellhead during the rotation.

After a while two blades retract, at the end a third blade retracts so there is one blade finishing the cut. The machine clamps itself to the wellhead using hydraulic pressure and will lift the cut part of the wellhead on the boat so there are no additional removal operations necessary. On top of that a special dredging system was developed that is pushing away the mud around the wellhead to allow the machine to 'dig' into the bottom of the sea until a depth of 15 feet.

The diamond knives were especially developed for this application, everything from diamond composition, distribution to even painting and packaging is custom built.



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Timeline

- November 15, 2007: Harald Ramfjord meets Johan Lauwers and his team for the first time during 2008: development and cooperation agreement negotiated and signed
- May 2008: a 1 to 5 scale machine is built using only 2 diamond knives with a reduced length (Ath - Belgium)
- October 2008: a 1 to 1 prototype is built using 4 diamond knives with the operational length and diamonds (Ath - Belgium)
- April 2009: the first cutting unit is ready and tested (Risor - Norway)
October 2009: cutting unit and dredging unit are built together and tested (Port Arthur - USA)
- March 2010: machine presented to customers
- June 2010: 2 contract signed for removal of 12 wellheads

Business potential

At this moment, our customer already has 2.000 wellheads to be removed. The enthusiasm of the end customers during the presentation in March 2010 was overwhelming.

The cooperation between Husqvarna Construction Products AB and Beerenberg Corp AS where the approach has been used starting from a problem that needs a solution instead of trying to use existing products, has proven itself extremely successful.

