

Greg Barrett Sewing Services and the 'Merinie' – second prize at 3M Awards

The 'Merinie' is the brain child of Greg Barrett. He has been involved in the clothing industry for the last 35 years and self employed for the last 15. The idea first came about through the need of Greg and his mates to keep their heads warm when cycling in Winter.

Greg Says, "I decided to see if I could create a beanie that would keep us warm on cold Christchurch mornings, but that would also be safe to be worn under our helmets. It had to be something that was lightweight and something that didn't overheat us during exercise. I achieved this by using a constructed beanie which conformed to the shape of the head. The fabric I chose to use was merino wool, which had the properties I was looking for – it absorbs 35 per cent of its own weight in moisture, is light weight, flame resistant, does not hold odour and breathes.

"It also has another very important characteristic – it enhanced the ability of our helmets to stay in place.

"Guys started wearing the beanies at work and the news spread. Before I knew it, an employer had ordered a hundred and since then, its reputation has gone from strength to strength, initially by just word of mouth recommendations."

The 'Merinie' solves a long standing problem for many workers – it

can be safely worn underneath a hard hat without a chin strap. Many workers, not easily able to find a suitable hat with a chin strap, resort to wearing beanie type hats underneath hard hats that can compromise the safety of the hard hat. This is not the case with the 'Merinie'.

The Department of Labour has praised Greg for providing an item that will make the construction industry safer.

The 'Merinie' can also be tailor made to suit different industry needs, a part of this service is to have them embroidered with the companies logo, to enhance brand awareness.



Construction worker enjoying the warmth of his 'Merinie'

Methanex and the Human Factors safety management system – third Prize at 3M awards

Methanex NZ is a wholly owned subsidiary of Methanex Corporation – the world's largest supplier of methanol. Methanol is a liquid petrochemical that must be handled with care because it is toxic and flammable under certain conditions. Methanex is New Zealand's only methanol producer with two methanol facilities in Taranaki and employs about 200 people – employees and contractors. Methanex has for years had a strong commitment to safety that applies to keeping people safe both on and off the plant site.

Despite having an exemplary safety record in terms of serious injuries, Methanex was still suffering low severity incidents and wanted to do something about it. They decided to apply the Human Factors safety programme to their operations, as research from the UK showed that major hazard facilities were having success by implementing it.

Human Factors analysis describes the interactions of facilities and equipment, people, and management systems.

Methanex introduced the program in three stages.

Stage one – measuring safety culture

Workshops were conducted with employees to understand the overall level of safety culture, measured

against a safety culture maturity model. This gave a baseline measure and enabled Methanex to select initiatives consistent with their maturity level. The workshops also generated improvement ideas direct from the employees.

Stage two – defining critical behaviours

The safety culture assessment identified strengths and weaknesses at all levels (manager, supervisor and worker) and helped to tailor a health and safety behaviour standard around four key themes – standards, communication, risk management and involvement.

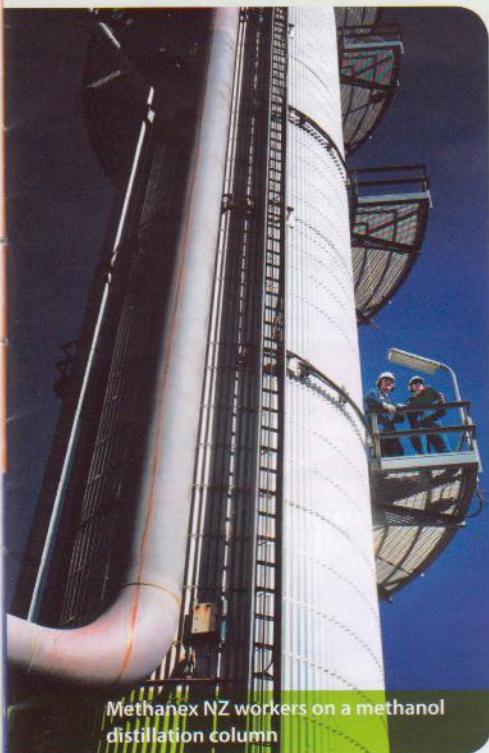
Surveys then took place to measure compliance against the standard at all levels and also determined the workers' perceptions of their managers' safety behaviours compared with the managers view of themselves. This showed quite a gap in some areas which is helping managers adjust their behaviours in line with the standard and employee expectations

Stage three - human failure and incidents

It is likely to be no surprise that 80 per cent of incidents are the result of human error or omissions of people. Methanex brought over a consultant from Keil Centre in Aberdeen, the think tank of the Human Factors programme, to help get a better understanding of the factors that influence incidents and to develop a more robust system to prevent them reoccurring.

Through applying the Human Factors analysis tool to recent potentially significant incidents, Methanex have identified improvements that can be made in areas such as shift handover communications; human error tolerance of safety critical procedures (such as permit to work) and alarm management improvements in the operations control rooms.

Jayne Francis, director of corporate resources at Methanex says, "The changes that have been implemented to date have opened our eyes to the potential scope of improvement available to us through the integration of Human Factors into our manufacturing management systems."



Methanex NZ workers on a methanol distillation column