



Grit Blasting Incident. There were several contributory factors

Incident Detail	Incident analysis/ control measures / possible solutions
<p>A rope access technician was standing on an I-beam, blasting. He was attached with slings and cow's tails to an I-beam at shoulder level. These were not tight enough to hold him in position. He lost his balance and fell forward letting go of the dead man's handle. As he put his arm out to stop himself falling forwards, he blasted his forearm with the residual pressure in the system.</p>	<p>Pre-job training is necessary in the precautions and techniques to deal with the additional hazards of using high pressure tools when associated with rope access, over and above standard safety measures for blasting on the ground.</p> <p>Do not rely on own ability to maintain balance; feet should only be used to stabilise. To overcome reactive forces, subsidiary anchor lines should be used to tension the technician in position, in addition to being adequately braced. Tree surgeon type work-position devices with steel cored rope may help with body positioning. A hard line [steel cable] with minimal slack to a separate safety line and / or to the structure is necessary in case of damage to textile elements of the suspension system.</p>
<p>The suit had a damaged thumb ring, which allowed the sleeve to slide up the arm un-restricted. The blasting gauntlets had been modified by cutting a hole through the upper section to allow a karabiner to attach them to gear loops, as constant removal and replacing is necessary during climbing and blasting operations. The main blast damaged was at the modification point of the gauntlet. He had other gloves to wear when he was carrying out rope access manoeuvres.</p>	<p>PPE provided for rope access technicians is no different to PPE provided when blasting on the ground. The company are developing a new suit with helmet attachment to help overcome this problem. The thumb elastic loop was broken allowing the sleeve to ride up his arm away from the gauntlet. PPE should not be modified; in this case, this may have reduced the protection provided. It is common practice to tape sleeves to gloves and overalls to boots to prevent flesh being accidentally exposed.</p>
<p>The manpower and offshore Rep belonged to one company and the supervisor and equipment were provided by another company. References on the permits showed a mix of procedures being used. This caused some confusion on both the risk assessment side of the job and the general understanding of procedures from two different companies.</p>	<p>Joint operations involving more than one company's procedures should be clarified at the planning stage and a single joint procedure agreed prior to work commencing.</p>

References:

[Abrasive Blasting: Code of Practice 2004](http://www.deir.qld.gov.au/workplace/law/codes/abrasiveblast/index.htm) Queensland, Australia. <http://www.deir.qld.gov.au/workplace/law/codes/abrasiveblast/index.htm>
OPITO Trainee Blaster/Painter Training Standard: http://www.opito.com/library/industry_training_standards/blasterPainter_training_standard.pdf