

## Case study:

### Ditching disposable RPE - The Benefit of Mandating Half Mask Respirators on Site

#### Summary

Respiratory health is a rising concern on sites, and all too often workers are relying on single use masks or disposable respiratory equipment. In 2017, Bowmer + Kirkland decided to make a step change in the way that respiratory protection is managed on site.

Changes implemented by Bowmer + Kirkland promoted use of engineering controls such as on-tool dust extraction or alternative working methods. There still seemed to be a reliance on FFP2 / FFP 3 disposable respiratory equipment among subcontractors, unsuitable for construction dust. The move towards half mask RPE was to provide enhanced protection to the workforce and emphasise the 'personal' aspect in PPE.

A big influence was the availability of equipment that considered worker-specific requirements, such as daily face-fit check to help guarantee users are achieving a higher Assigned Protection Factor than disposable products can theoretically achieve.

#### Problem statement

Disposable FFP respirators were the default choice among subcontractors on site. A wide range of makes, models and sizes were in use and it was impossible to ensure all workers had the correct RPE that they had been face-fitted for.



Figure 2: Bowmer + Kirkland team receiving half mask training



Figure 1: Half mask respirator in use.

We identified a solution that included press to check filter technology for reassurance that there was proper face-fit to ensure a consistent, higher level of respiratory protection over a longer period of time.

The main objective for Bowmer + Kirkland was to better protect all workers on site. The benefits were better value and business costings and reducing our overall impact on the environment.

#### Solution / what you did

Announced early in 2017 Bowmer + Kirkland introduced the JSP Force 8 half mask with the 'press to check' feature and implemented it as the default for RPE for dust use. This was mandated for Bowmer + Kirkland Group employees including employees of our subsidiary companies, as well as our agency workers from 1 September 2017.

We were impressed by the JSP offering and technical support and worked with JSP to provide face-fit tester training to ensure the best quality and use for the half masks. This was well received and provides a continuous, long-term protection from hazardous dust.

From January 1st, 2018, the use of the JSP Force 8 half mask with the 'press to check' feature was mandated for subcontractors on Bowmer + Kirkland Principal Contractor sites.

FFP2 / 3 disposable RPE was only permitted for exceptional short duration use. Sites are not allowed to order stocks of disposables.



Figure 3: Bowmer + Kirkland Team

### Key challenges faced

The 'press to check' feature was unique, and the default JSP Force 8 mask is stocked at local and familiar retailers.

There was some resistance following the initial mandate announcement, but the change has been widely accepted.

Bowmer + Kirkland informed those affected early and enforced it contractually and at safety inspections.

Bowmer + Kirkland rarely encounter any objections.

### Outcomes and benefits

The implementation of half masks has ensured the protection of employees and workers from excess dust exposure, promoting long-term respiratory health. It also provided additional comfort for the mask wearer whilst reducing breathing resistance.

In terms of cost, it has saved money as half masks and accompanying filters do not need replacing as frequently due to longer filter life and greater filter efficiency.

One of our contractors reported a saving from 2-3 disposables a day replacing it with filters that lasted days or weeks. This proved especially true for occasional users.

### Measures of success

Bowmer + Kirkland are able to monitor and enforce use of half masks where required – but not in lieu of engineering controls - to ensure workers are best protected.

Using half mask respirators is how we now work collectively at Bowmer + Kirkland.

### Lessons learnt

Not to just consider or discuss making these small changes but putting the planning in place to make them happen. It was a small step, minimal change but has made a big difference to Bowmer + Kirkland. We would encourage other contractors from to follow suit as we have found the half masks very beneficial, in more than one way!



Figure 4: Bowmer + Kirkland Team attending Working Well Together

### Contact details

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