

AIV Australian Industrial Vacuum × THE AUSTRALIAN MINING REVIEW

Australian Industrial Vacuum have had the honour of featuring multiple times within The Australian Mining Review. Our Delfin High Powered Vacuum range is the main point of discussion due to its value within the mining sector.



BIG POWER.
BIGGER POTENTIAL.

Check out our features in The Australian Mining Review below!



High Performance Australian Industrial Vacuums from AIV

Australian Industrial Vacuum (AIV) specialise in high performance industrial vacuums and have a solution for all zones, industries, and applications.

With a whole range of models available, the company supply not only standard machines but also IECEx certified, air powered, brushless, single-phase, three-phase, longpac Safe Bagging Systems, ducted systems, diesel/petrol powered, separators & forklift portable industrial vacuums.

Australian Industrial Vacuum's high powered, heavy duty industrial vacuum range is popular amongst heavy industries that require a method of improving productivity and efficiency.

The company is exclusive Australian wide distributors of Delfin Industrial Vacuums. Australian Industrial Vacuum works closely with its suppliers in Italy, Asia and Canada to keep up to date with research and development.

DHV High Powered Range

Big power. Bigger Potential. If you require large industrial vacuums with high-performance lobe pumps for heavy industry, then Australian Industrial Vacuum recommend the DHV range.

APR2022 AMR

AIV offers a comprehensive range of large portable industrial vacuums robustly designed for high performance, long working life and lowest possible maintenance costs in challenging environments.

DHV vacuums provide safe and efficient handling of large quantities of dusty or dense materials in heavy industries and can assist in:

- Dry material recovery of material such as cement, stone, abrasive material, industrial sand, woods chips etc. when spills are 1 cubic metre or more
- Controlling and recovering spills at conveyor transfer points
- Quick discharge of debris into bulk bags
- Overall maintenance and cleaning work in heavy industries

DHV range:

- Are designed for intensive use
- Provide maximum suction performance and reliability
- Provide great collection capacity and simplicity of handling the collected material

Maximum power and reliability

- **Lobe pumps for high vacuum** – the self-cooled pump guarantees the achievement of very high vacuum values and max airflow

Continuous and efficient filtering systems

High filtration efficiency – the suction unit is always protected by polyester filters and class M safety cartridges, for dust as small as 1 micron. Maximum filtration efficiency thanks to an automatic alternating chamber filter cleaning system. HEPA H14 filtration is optional to ensure the safe handling of fine and toxic dusts.

Simple handling of the material

Easy and safe – DHV vacuum cleaners are equipped with detachable containers that can be easily moved by means of a forklift, guaranteeing maximum simplicity and safety of use. The material is unloaded thanks to the activation safety bars.

Centralised vacuum system – DHV's can be used in a Centralised Vacuum System for the easy and safe handling of large quantities of material even over long distances and from different points of the same plant.

The possibility to convey material with a piping system from all areas of the same plant into a single collection point guarantees the highest efficiency and optimisation of space whilst reducing injury risks and improving safety for all workers.

CASE STUDY ONE

MIDWEST CONCRETE

Different application – Same Concept
Midwest Concrete is a trusted concrete manufacturing company with a solid reputation for manufacturing high quality precast since 1985.

The company initially began making precast sumps for the NSW Forestry Commission. After a short time, MWC expanded into headwalls, and then further developed their product line to incorporate septic tanks, water tanks, and precast water troughs for stocks. They use 75m3 of concrete, producing 165 tonnes of finished product which equates to over 8000 tonnes per annum.

PROBLEM

Being a precast concrete plant there was a lot of dust build up around the facility, in particular toxic silica dust. Their current method of cleaning was sweeping and the use of compressed air.

However, these methods created dust clouds, putting the operators at risk of silica dust exposure. Thus, these dust clouds were creating an OHS risk due to the nature of

silica dust. Therefore, in effort to remove this risk, an industrial vacuum was the solution.

Regulations surrounding silica dust exposure

At the time, the exposure standard was 1mh/m3 for a TWA (time weighted average) of eight hours. Regulations have since become stricter in terms of exposure, however HEPA H14 filtration (as seen in our solution) is still viable.

According to Safe Work Australia, the exposure standard for crystalline silica dust now is 0.05mh/m3 as a TWA (time weighted average) airborne concentration over 8 hours.

SOLUTION

Given the long convey distance and bulk density of the product, the solution found was a DHV 22 Compact.

This 22kW system is equipped with a H14 HEPA filter for the safe handling of silica dust (HEPA H14 filtration is capable of removing 99.995% of dust particles measuring 0.3 µm in diameter or above and tested in line with EN1822), semi-automatic filter cleaning and large collection capacity.

Due to the size of the facility, a small ducted system was created with the fixed unit. That

is, three points of suction were created across the plant allowing the vacuum to be used by multiple operators simultaneously – improving productivity.

BENEFIT

Improved productivity and safety. **AMR**

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**DHV HIGH
POWERED
RANGE**

Big power.
Bigger Potential.

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