

Provided high volume breathing air for 60 users over 35 days using a combination of low pressure continuous flow and High Pressure Air Systems (HPAS).

Provided three King Air™ compressor stations and one Air-Qube™ to generate high volume of breathing air to protect welders from hexa-chromium exposure.

Challenge

To provide Grade D breathing air for up to 60 users working under high volume equipment for welding.

Solution

The King Air™ provides 250 cu ft/min of breathing air, enough to support 20 users utilizing a free flow delivery of air. Over the course of the event, the King Air systems provided over 13M cu ft of breathing air to users.

Results

The King Air™ successfully provided breathing air for the 35 day outage with no air disruptions, good, high volume flow and demonstrated its capabilities to handle emergency shutdown situations.

This project was for high volume welding being used to replace the cyclone separators in one of the largest FCC units in the USA.

Installation was quick and seamless due to the streamlined design of the hoses and system.

Despite a short timeframe of three weeks, United Shutdown Safety was ready to operate by project kick off. This included mobilizing the equipment to site in New Jersey from Texas, and assigning and deploying personnel.



USA

KEY CUSTOMER BENEFITS

Efficient, smooth and reliable delivery of vast quantities of breathing air to a large number of workers simultaneously.

United's proprietary Air-Qube™, T-COM onsite compressor, and 6/12 Packs delivered 89,928 standard cubic feet during the project. Our King Air™ systems delivered 13,875,000 cu ft of breathing air during the project which required constant high volume of air ideal for large capacity welding jobs.

The system lowered costs while supplying up to 60 workers with Grade D breathing air. The Air-Qube™ and our onsite portable high pressure compressor were utilized to refill the 40 - 6/12 Pack Cascade Systems and two bottle carts which were used to handle individual breathing air jobs distributed throughout the project area. United Safety worked on site for 49,000 manhours with no recordable incidents.

Smooth transition during two emergency shutdown events

The King Air™ gas detection and emergency shutdown systems were put to the test during two incidents onsite. There was concern the intake air could become heavily contaminated and the units were shut down as a preventive measure. Field crews and compressor technicians initiated emergency shutdown procedures to ensure the safety of workers. The high pressure reserve air was engaged so workers could safely evacuate the work site.

Strong site leadership and well-trained personnel

United Shutdown Safety delivered 122 onsite personnel. The leadership team had an excellent working relationship with the various contractors which reduced issues in the field, virtually eliminating contractor wait times for safety watch and supported conflict resolution on issues at the appropriate level in the field. Site leadership was very strong and managed the project well including communication, personnel management and equipment rig in/out operation. By cross-training safety watch to perform bottle watch and confined space watch, United Safety was able to reduce the overall headcount and streamline operations.