

CASE STUDY

A leading construction materials company was using disposable masks to protect their staff from silica dust in their hard rock quarries and cement processing plants. With disposable masks, their operators complained about breathability, fogging, stale air and grit in their mouths/nose at the end of the shift. The safety managers had issues fitting staff with stubble and site managers knew many of their operators were changing the disposable masks frequently (3 − 4 times through the shift) to reduce the effect hot, moist masks on their face. Recently the Occupational Safety guidelines changed for crystalline silica to recommend respirators be worn and staff be TSI Portacount fit tested to ensure proper fit. Faced with poor compliance for disposables or expensive, cumbersome traditional belt mounted PAPRs, the company trialled CLEANSPACE™ – an innovative lightweight PAPR.

Trial results for CLEANSPACE™ Respirators delivered significantly improved operator comfort and compliance with staff commenting on the lightweight design and cool airflow in the mask. CLEANSPACE™ portacount testing results were consistently and reliably high across the team. Site managers evaluated the costs for CLEANSPACE™ PAPRs compared to the disposable masks and traditional PAPRs: With the CLEANSPACE™ filter alarm and active airflow, operators only changed the filters when required (every 2 weeks) significantly more cost effective compared with other respirators.

The Construction Company deployed the CLEANSPACE™ PAPRs to all operators on all their sites because CleanSpace offered cost effectiveness (50% lower than the disposables), fewer parts (no cables, hoses or battery packs) and a simple operating system (easy training). CLEANSPACE™ is now used by the global leaders in construction around the world and successfully deployed in over hundreds of hard rock quarries and used by thousands of staff every day.

MASK CATEGORY	MASK Pressure	PROTECTION LEVEL	HAZARDS/ Filters Available	UNIT PRICE	MONTHLY INDICATIVE FILTER USAGE PER OPERATOR	AVG PRICE PER FILTER	ANNUAL FILTER COSTS PER OPERATOR	ANNUAL MAINTENANCE & SPARES	ANNUAL TOTAL COST OWNERSHIP
PAPR – Brand X	Positive	P100/HE 99.97%	Dust & gas	\$1,672	1.3	\$45.00	\$702	\$235	\$2,609.00
PAPR – Brand Y	Positive	P100/HE 99.97%	Dust & gas	\$1,216	1.3	\$53.33	\$832	\$302	\$2,350.26
PAPR – Brand Z	Positive	P100/HE 99.97%	Dust & gas	\$1,491	1.3	\$60.00	\$936	\$302	\$2,729.00
PAPR – CleanSpace	Positive	P100/HE 99.97%	Dust & gas	\$600	2.0	\$21.00	\$504	\$100	\$1,204.00
Disposables – Fold flap Valve	Negative	N95 95%	Dust only	-	80	\$4.55	\$4,368	-	\$4,368.00
Disposables – No valve	Negative	N95 95%	Dust only	-	80	\$2.00	\$1,920	-	\$1,920.00

"The cool airflow on my face and light face piece with the CleanSpace mask, I no longer get headaches or tired during my shift" – *Loader Operator*

"We have had CleanSpace masks on site for over 2 years. The guys love them and the masks are easy to carry and put so the guys actually wear them and I don't have to remind them." – **Site Manager**

"Our whole team has a CleanSpace PAPR. I know with this PAPR, they are well protected and have the freedom to move while they work." – **Safety Manager**

FOR MORE INFORMATION PLEASE CONTACT CUSTOMER SERVICE: SALES@PAFTEC.COM

