RESPIRATORY PROTECTION · PREMIUM & SPECIALISED (HSE-MANDATED)

# Powered Air-Purifying Respirators (PAPR)

Powered air-purifying respirators (PAPR) are battery-powered blower units that draw contaminated air through particulate or gas filters and deliver clean air to a hood, helmet, visor or mask, reducing breathing effort and heat build-up.

| TECHNICAL SPECIFICATIONS | |
|---|---|
| **Standards** | EN 12941 (TH1/TH2/TH3); EN 12942 (TM1/TM2/TM3); EN 166 / EN 175 for visors and welding headtops; NIOSH 42 CFR 84 for US units |
| **Protection** | TH2 APF 20; TH3 APF 40; TM3 APF 40+ (UK-style factors) |
| **Airflow** | Minimum 160 L/min; typically 170–230 L/min |
| **Filters** | P R SL (P3); A2P R SL; ABE1P R SL; ABEK1P R SL; AX, K2 options |
| **Battery** | Li-ion, 8–12 h; charge 3–4 h; ATEX-certified versions available |
| **Headtops** | Loose hood, face-seal hood, hard-hat with visor, welding helmet with ADF, full-face mask |
| **Weight** | Blower with battery and filters approx. 1.0–1.5 kg |
| **Ingress protection** | IP54 to IP67 depending on model |
| **Packaging** | Starter kits boxed; filters in packs of 2–5; headtops individually boxed |

## Key features

- EN 12941 TH2 / TH3 loose-fitting headtops: hoods, helmets with visors and welding helmets with ADF
- EN 12942 TM3 tight-fitting full-face mask options for highest protection
- Blower airflow 160–230 L/min with automatic flow control and low-flow and low-battery alarms
- P3 (P R SL) particulate, A2P3, ABEK1P3 and specialist filters for gases and vapours
- Lithium-ion battery giving 8 to 12 hours per charge; intrinsically safe versions for ATEX zones
- Flow indicator, washable belt and decontaminable housing for pharma and asbestos use

## Variants available

- PAPR with loose-fitting hood, TH2, for painting and pharma
- PAPR with hard-hat and face shield, TH3, for grinding and construction
- Welding PAPR with auto-darkening helmet, TH3
- PAPR with full-face mask, TM3, for asbestos and chemical work
- ATEX intrinsically safe PAPR for refinery and petrochemical areas
- Spare filters, batteries, breathing tubes and chargers

| TYPICAL APPLICATIONS | |
|---|---|
| **Shipbuilding & fabrication** | welding and grinding in Hamriyah, Jebel Ali and Dammam yards |
| **Oil & gas** | coating and insulation removal on ADNOC and Saudi Aramco maintenance contracts |
| **Construction** | asbestos removal, silica-dust cutting and spray-applied fireproofing |
| **Pharmaceutical** | API handling and powder dispensing in Dubai and Jeddah plants |
| **Healthcare** | infectious-disease isolation and aerosol-generating procedures |
| **Industrial** | cement, steel and aluminium smelter maintenance in Abu Dhabi and Jubail |

## COMPLIANCE, BRANDS AND SELECTION

### Compliance (UAE / GCC)

Dubai Municipality and Abu Dhabi OSHAD require respiratory protection selected on an assigned protection factor basis, and PAPR to EN 12941 TH3 is commonly specified for asbestos removal, silica cutting and welding fume where half masks are inadequate. ADNOC HSE and Saudi Aramco CSM accept CE or NIOSH-approved PAPR; in ATEX-classified areas the blower unit must carry intrinsic-safety certification. Loose-fitting headtops avoid the face-fit requirement, which simplifies compliance for multinational workforces.

## Brands we supply

3M Versaflo, Dräger X-plore, Honeywell, Sundström, ESAB, CleanSpace

## How to choose

1. Choose TH3 headtops for welding, asbestos and silica; TH2 hoods for painting and pharma
2. Select the filter class to match contaminants: P3 for dusts, A2P3 for solvents, ABEK1P3 for mixed gases
3. Specify ATEX-certified blowers for Zone 1 or Zone 2 refinery and petrochemical areas
4. Consider battery runtime versus shift length and whether hot-swap batteries are needed

### Request a quotation

Send quantity, sizes and delivery location. We reply with an itemised quotation and certificates within one working day.

**WhatsApp / call +971 54 541 4145 · faizal@albarakaservices.com**

Product page: albarakaservices.com/products/safety-products/powered-air-purifying-respirators/

Typical specifications for this product class, compiled by Al Baraka Diyar for quotation and tender preparation. This is not a manufacturer datasheet. Exact values, markings, sizes and certificates depend on the brand and model supplied and are confirmed in our quotation and in the manufacturer's test certificates. Always verify suitability with your site HSE officer. Information is subject to change without notice.