

Apollo 600

Supplied-Air Respirator for Abrasive Blasting

Now with Optional
**DLX Comfort-Fit
Suspension!**



CLEMCO



The Clemco Apollo 600 is a hallmark of safety, comfort, and performance in personal protective equipment. The 600 incorporates the most popular features of the Apollo 60 as well as many feature improvements to make it more comfortable to wear, easier to maintain, and more durable, promising a long service life.

PERFORMANCE

- Large view window provides an exceptional field of vision—largest in the industry—unparalleled for safety and productivity
- High-performance 3-lens system
- *Optional* rectangular outer lens

SAFETY

- NIOSH-approved type-CE supplied air respirator
- ANSI-approved hard hat classification
- OSHA approved for lead dust protection at 1000 x PEL
- High-visibility red-orange color enhances job site safety

COMFORT

- *Optional* DLX comfort-fit suspension fits like a motorcycle helmet providing cushioned comfort with the same rugged performance and safety of standard Apollo HP and LP models.
- *Optional* adjustable six-point web suspension fits head sizes from 6.5 to 8; replaceable sweatband mounts on suspension head band
- Generous crown-mounted air distribution channel delivers ample air supply to the operators head and face
- Air inlet is located at center rear of helmet for operator balance and comfort

SERVICE

- Replaceable inlet fitting prolongs helmet service life
- Cape attachment band with ratchet-style fastener eases cape replacement
- Zip-in-and-out inner collar can be easily removed for cleaning

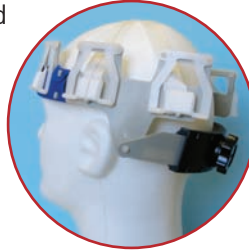
• DLX Comfort-Fit Suspension

features multiple soft, washable fabric-covered pads, which easily attach to the helmet shell and fit snugly around the operator's head.



• Web Suspension

features a convenient, knob-style adjustment mechanism and a replaceable sweatband.



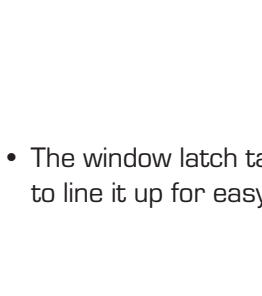
• 3-Lens System

Fixed inner
Intermediate
Perforated Outer

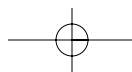
- The Apollo 600 window frame is extra-long to protect the top of the cape from exposure to abrasive rebound.



- The washable zip-in zip-out inner collar makes keeping it clean a snap.



- The window latch tab fits into a slot to line it up for easy closure.



The **Apollo 600**

From top to bottom –
a fresh look at respiratory safety

- The Apollo 600 has a robust, durable shell and an air baffle that delivers a generous amount of air to the operator's head and face area.
- Integral 1" deep visor prevents media from lodging between the lenses.
- The replaceable inlet fitting extends the service life of the helmet.



- The cape attachment band wraps around the bottom rim of the helmet shell and easily fastens with a ratchet-style buckle to secure the cape in place.



- The window latch is screw-mounted and easily replaced without danger of damaging the helmet shell.

- The silver-grey cape reflects light minimizing heat absorption.

The Clemco Apollo 600 offers blast operators the very latest in respiratory safety and comfort. The 600 now is available with a choice of suspension systems—a DLX comfort-fit suspension, which provides a luxurious, cushioned fit around the head, or the classic-fit adjustable web suspension.

The 600 can be purchased with either DLX or web suspension and set up for high-pressure (HP compressed) or low-pressure (LP ambient) air supply sources.

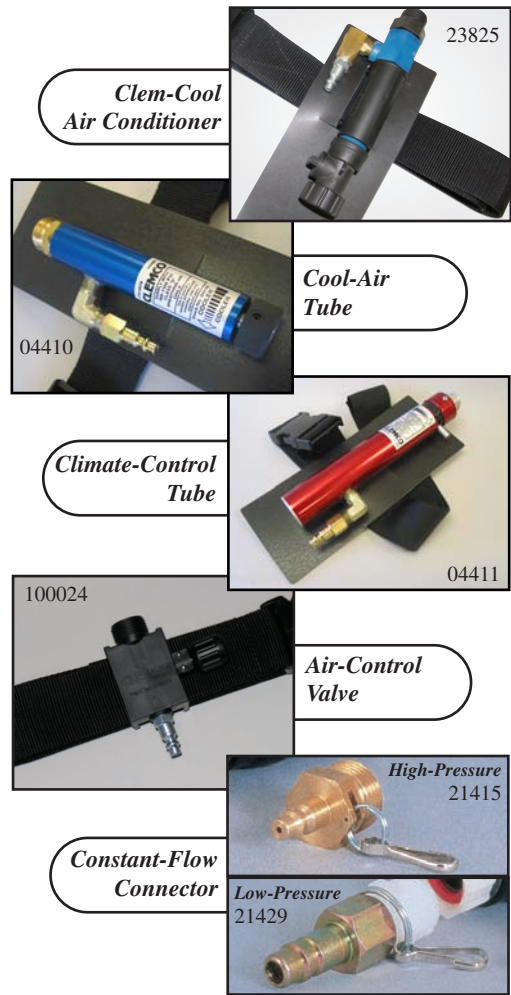
The 600 carries NIOSH and ANSI approvals for respiratory and hard hat protection respectively and carries the APF1000-rating by OSHA, meaning it can be placed in service in lead-dust environments up to 1000 times the permissible exposure limit (PEL). The rugged helmet features numerous improvements over the venerable Apollo 60 with more replaceable components than ever to ensure long service life, operator hygiene, and comfort.

The 3-lens system outperforms all predecessor models: a snug-fitting molded window gasket firmly grips the fixed inner lens and seals out nuisance

abrasive and dust; an intermediate non-perforated lens protects the inner lens and completes the seal of the window; three tear-away perforated lenses are the first line of defense against rebounding abrasive. The tear-away lenses have glove-friendly tabs to ease removal and expose a clean, clear lens beneath. Once the tear-away lenses are used up, the intermediate lens protects the inner lens from damage until a new set of lenses is installed. An optional rectangular lens can be used alone as the outer lens to protect the fixed inner lens.

The heavy-duty, silver-grey Apollo 600 cape, with red inner collar, is easily installed on the helmet shell and secured with a flexible and durable attachment band with an easy-to-use ratchet-style fastener.

For additional operator comfort, the Apollo 600 HP can be used with Clemco air conditioning devices: the Apollo Cool Air Tube, stock no. 04410, Climate Control Tube, stock no. 04411, or Clem-Cool Air Conditioner, stock no. 23825.



ORDERING INFORMATION

Apollo 600 HP With:	Respirator with air-control/conditioning device		Respirator with air-control/conditioning device and 50ft x 3/8" ID respirator hose		Respirator with air-control device, 50ft respirator hose, and CPF20 Filter	
	Web Susp.	DLX Susp.	Web Susp.	DLX Susp.	Web Susp.	DLX Susp.
Constant-Flow Connector	24001	25190	24771	25200	24772	25201
Air-Control Valve	24002	25191	24210	25202	24213	25203
Clem-Cool Air Conditioner	24932	25194	24933	25208	25299	25209
Cool-Air Tube	24003	25192	24211	25204	24214	25205
Climate-Control Tube	24004	25193	24212	25206	24215	25207
Apollo 600 LP With:	Respirator with air-control device		Respirator with air-control device and 50ft x 1/2" ID respirator hose		NOTE: LP respirators are used with ambient air pump; no breathing-air filter or HP cooling devices can be used with LP model	
Constant-flow connector	24010	25195	24011	25210		
DLX Comfort-Fit Suspension kit (retrofit kit) for Apollo 600 Includes everything needed to replace DLX suspension, or to convert from web suspension to DLX suspension25189			Option for LP model 1/2" ID x 50 ft LP respirator hose22510 1/2" ID x 100 ft LP respirator hose21413			

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Clemco is committed to continuous product improvement. Specifications are subject to change without notice. ISO 9001-2000 certified

CLEMCO

Operator Safety Equipment



**Protection & Comfort For
Abrasive Blast Operators**

Protection Equals Productivity

Abrasive blast cleaning requires specially designed protective clothing and an air-fed respirator. Clemco's Apollo helmets, blast suits, filters, and related equipment deliver the highest level of protection you can buy.

High-speed abrasive turns paint and rust into a cloud of dust, and the rebounding particles continuously bombard you. At a typical blast site, the dust can contain pulverized lead, asbestos, silica crystals, and any other material on the surface being cleaned or in the abrasive being used.

Wearing Clemco Operator Safety Equipment lets you concentrate on the job of abrasive blasting. Inside your comfortable Apollo helmet, you breathe clean, filtered air, while the Clemco blast suit and gloves protect you from rebounding abrasive.

Apollo Helmets ~ 1,000 times the protection

The Occupational Safety and Health Administration (OSHA) has assigned Apollo helmets a protection factor of 1000 times the exposure limit for lead dust.

Apollo helmets are the most comfortable supplied-air respirators you can buy; with spacious interiors which permit additional hearing protection and inclusion of a two-way FM radio, a significant safety feature.

Apollo helmets are equipped with fully adjustable suspensions and come in high and low-pressure versions. The high-pressure models need 15 cfm of Grade D breathing-air at 65 to 100 psi.

The Apollo 60 LP and the Apollo 20 LP are to be used only with an ambient air pump capable of providing 6 to 15 cfm of Grade D breathing-air at 8 to 12 psi.

The Apollo 60 HP and the Apollo 20 HP can be used with Clemco's complete line of respirator air control valves. Both Apollo low-pressure models require Clemco's Constant Flow Connector.

The National Institute for Occupational Safety and Health (NIOSH) has approved Clemco's Apollo helmets for use in all blast applications.



Apollo 60 ~ The king of comfort

- Double-shell construction allows complete circulation of air
- Acoustical foam suppresses incoming air noise, providing exceptional quiet
- Large lens opening permits peripheral vision and lets in more light - feels less confining
- Full, nylon, four-clasp cape with washable zip-out collar keeps out dust and abrasive



Apollo 20 ~ Economical protection

- Single-shell construction has simple air distribution
- Lens replacement is economical and easy
- Long-lasting sewn-in collar and 3/4 length nylon cape add operator protection
- Reliable Apollo protection at a lower price makes the Apollo 20 an ideal safety choice for blast operators and for secondary personnel in a blast cleaning environment

APF 1000 What It Means To You

The APF 1000 rating is your assurance that your Apollo helmets will protect you from airborne lead dust at the concentrations commonly found at abrasive blasting sites.

For years, paint manufacturers used lead as a corrosion barrier for coatings on structural steel. Eventually, lead became widely used in paints for nearly all surfaces, from concrete to wood to pottery.

When lead, a heavy metal, reaches the bloodstream, it causes myriad short-term and long-term illnesses – including memory loss, liver and kidney disease, infertility, and nerve damage.

Lead gets into the bloodstream when it is ingested or inhaled. Abrasive blasting turns lead paint into dust, which an unprotected blast operator inhales.

To earn the APF 1000 rating, the Apollo 20 and 60 underwent extensive testing at the independent facilities of Los Alamos National Laboratories.

The test subjects wore Apollo helmets as they took part in exercises designed to mimic the movement and physical exertion experienced by blast operators.

The high-pressure helmets were tested at various air flow settings, and with and without the different approved options installed. Low-pressure helmets were fitted only with the Constant Flow Connector and attached to an ambient air pump.

To pass, the Apollo 20 and 60 supplied-air respirators had to maintain a continuous flow of air through the helmet at a slightly positive pressure – even when worn by test subjects undergoing strenuous exercise.

All models passed the test to earn their APF 1000 ratings.

So, what does APF 1000 mean to you, the blast operator or employer? It means you can be certain your Apollo respirator delivers the highest level of protection against toxic dust.

Wearing an Apollo helmet does not preclude the need to monitor air quality in the blast area, and does not replace the OSHA requirements for containment ventilation or the EPA requirements for dust collection and disposal.

Clemco Respirator Air Control Valves

NIOSH-approved options for high- and low-pressure respirators

All four of Clemco's respirator control valves feature quick connectors and come with web belts to keep the weight of the air line from interfering with the operator's head movement.

Climate Control Tube



Heats or cools incoming respirator air

Cool Air Tube



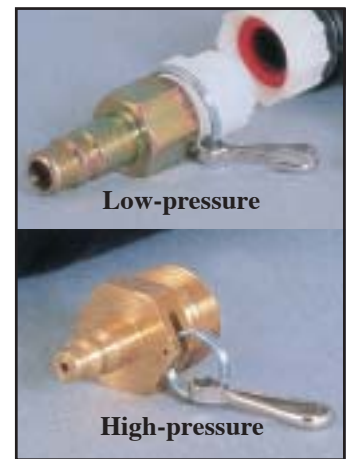
Cools respirator air efficiently

Air Control Valve



Allows control of respirator air volume

Constant Flow Connector



Maintains proper air volume at all pressures

Clemco's Climate Control Tube lets the operator increase or decrease the incoming air temperature through a range of plus or minus 25° F to conform to ambient temperatures in the work environment. The Cool Air Tube allows the operator to cool breathing-air as much as 25° F making the air more comfortable to breathe. The Air Control Valve permits the operator to adjust the volume of air flow into his helmet. The Constant Flow Connector is a fixed orifice valve; one model is designed for use with Apollo LP helmets, another for use with Apollo HP helmets.

Protect Breathing Air Quality *and Safety*

Contamination common to compressed air can make working conditions miserable, ruin the respirator, and, in the case of carbon monoxide (CO), threaten the operator's health and life.

Clemco's CPF filters are designed to remove most of the moisture and oil vapors that can occur with compressors providing Grade D breathing-air. Clemco's Carbon Monoxide Alarms, CMS-1 and CMS-2, alert your operators to the presence of carbon monoxide, allowing them ample time to shut off a contaminated air supply.

CMS-1 and CMS-2

Detecting carbon monoxide

Carbon monoxide (CO) is odorless, colorless, and deadly.

Clemco's CMS-1 and CMS-2 continuously sample the breathing air supply and sound an alarm if CO concentrations exceed safe levels.



CMS-2

- Wall mounted CMS-1 for industrial applications
- Portable CMS-2 for contractor job-site
- Factory set to trigger at 10 ppm - alerts to CO as low as 2 ppm
- State-of-the-art electronics and sensors simplify calibration
- One CMS system serves all operators connected to that air source
- Output leads let you generate a permanent record of CO levels or monitor the CMS from a remote panel, PC, or strip printer

Note: CMS systems do not remove CO from an air supply.

CPF Filters

Protection from moisture, oil, dirt, and odors

- Graded activated charcoal to trap odors
- Desiccant to collect moisture
- Dense fiber pads and compressed wadding to trap dirt

The Clemco CPF system separates most of the moisture and oil mist from Grade D breathing-air before they reach the filter cartridge. Compressed air expands as it enters the CPF, releasing moisture and oil to fall to the bottom.

Clemco filter cartridges are assembled in Clemco's USA plant with all new materials.

Clemco mounts the pressure gauge and regulator on the clean-air side of the filter for longer life and more accurate control.

Clemco's CPF 20 filters air for one operator, the CPF 80 filters air for one to four operators.

Note:

The CPF will not remove carbon monoxide or other toxic gases.





CAP-1



CAP-4 with optional cart

Ambient Air Pumps

Low-pressure, big savings

Oil-free ambient air pump supplies clean air to any NIOSH-approved low-pressure helmet.

If your compressor does not produce Grade D air, consider the air pump and a low-pressure helmet.

The air pump transfers air from a “clean air”

location to the low-pressure respirator.

The ambient air pump eliminates the need for high-temperature compressor shut-offs and in-line filter cartridges. Available for one to four operators.

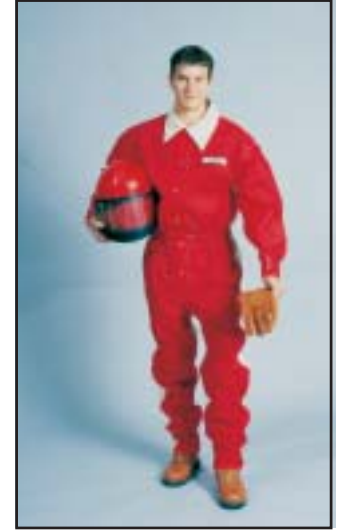


Blast Suits & Gloves

Clemco’s industrial and seasonal blast suits protect you completely

Industrial Blast Suit

Heavy cotton fabric back, durable leather front, double rows of industrial snaps, protect from rebound and keep out dust and abrasive.



Seasonal Blast Suit

Protects the operator from the impact of rebounding abrasive. Represents a cost-effective alternative to an industrial suit for occasional or short-term blasting, and for nearby personnel.

Gloves

Made from supple, durable split leather, Clemco gloves protect your hands from rebounding abrasive and help keep dust and abrasive from entering the blast suit at the wrists.



Helmet Communicator

Enhancing safety and productivity

Clemco’s two-way FM radio set lets operators communicate with supervisors, pot tenders, and each other without stopping work. This can increase the productivity of experienced operators and reduce the training

time required for new personnel.

The headset and microphone mount inside the helmet. The transmitter attaches to a harness worn under the Apollo cape.

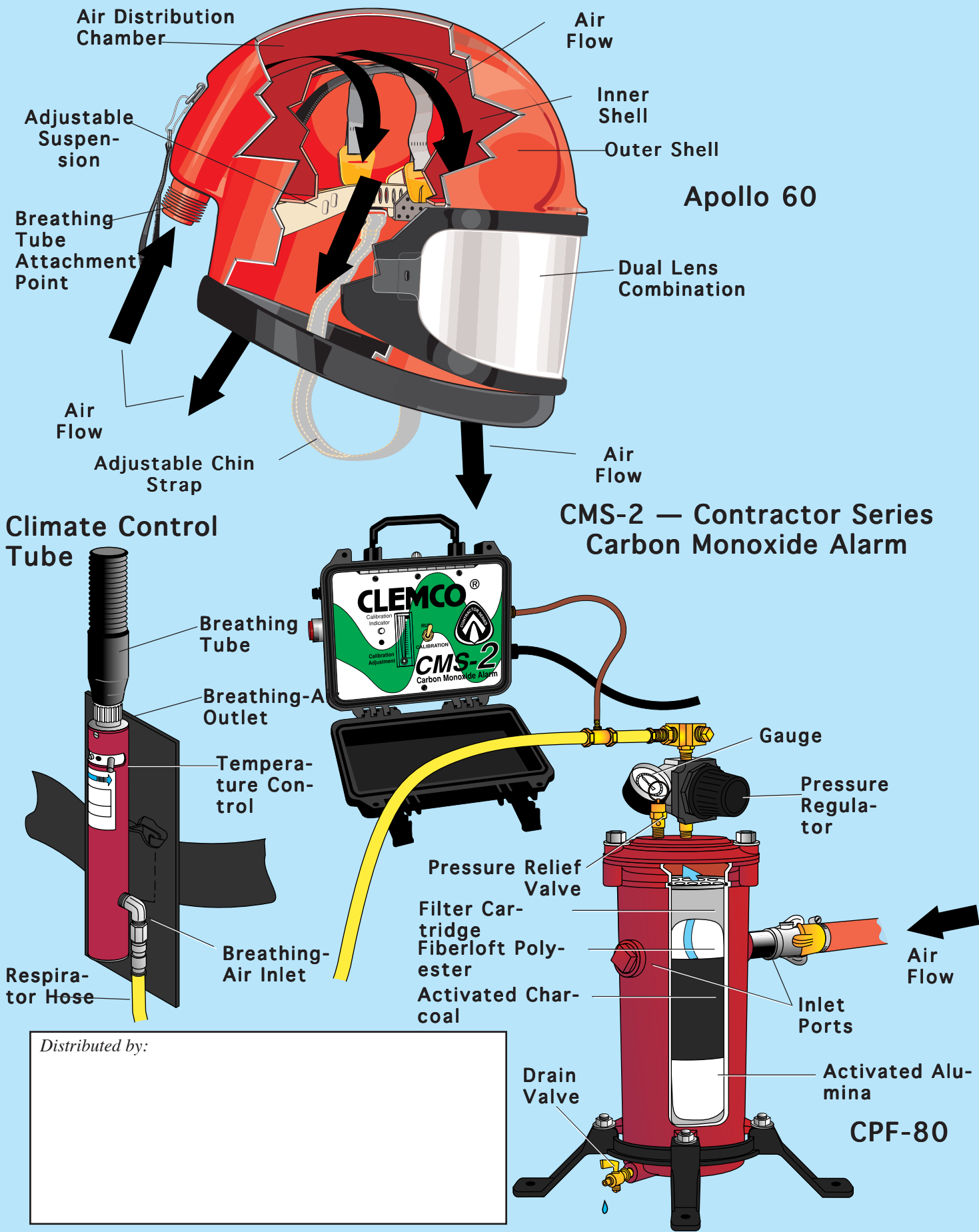
USE GENUINE CLEMCO SPARE PARTS

Clemco manufactures safety equipment using the finest materials available. From the optical clarity of the lenses to the filtering efficiency of the CPF cartridge, quality is continuously monitored by our in-house technicians. This is your assurance that Clemco parts and accessories meet the rigid standards for performance, reliability, and safety you deserve from your respirator system.

To gain NIOSH approval, Clemco submits samples of each respirator in all its variations and with all its optional equipment. Any change in material, manufacturing process, or supplier requires a new submittal to NIOSH.

Warning

Clemco safety equipment conforms to rigid standards and must be approved by NIOSH. Using replacement parts from other manufacturers voids the NIOSH approval and the Clemco warranty and subjects the blast operator to increased risk of injury and death.



Air Distribution Chamber

Air Flow

Adjustable Suspension

Inner Shell

Outer Shell

Apollo 60

Breathing Tube Attachment Point

Dual Lens Combination

Air Flow

Adjustable Chin Strap

Air Flow

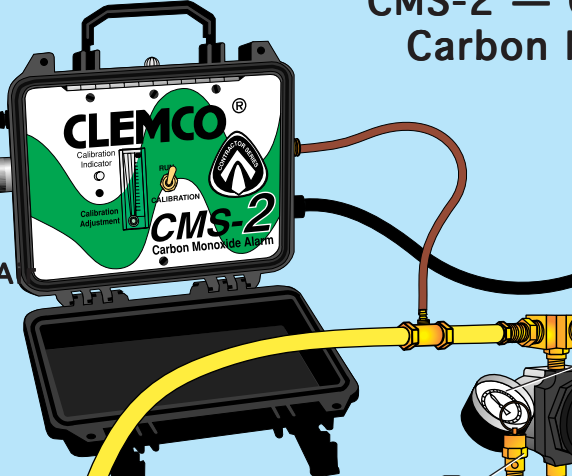
Climate Control Tube

CMS-2 — Contractor Series Carbon Monoxide Alarm

Breathing Tube

Breathing-Air Outlet

Temperature Control



Gauge

Pressure Regulator

Pressure Relief Valve

Filter Cartridge
Fiberloft Polyester
Activated Charcoal

Inlet Ports

Air Flow

Respirator Hose

Breathing-Air Inlet

Drain Valve

Activated Alumina

CPF-80

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Availability and specifications of products are subject to change without notice. Consult owner's manual for specifications applicable to the equipment purchased.

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