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The Performance

#### TECHNICAL DATA SHEET

**System** 

Note: For safe, efficient blasting, read and follow the owner's manual and seek training for everyone who will use this equipment.

#### **Purpose**

The Apollo 600 HP is designed for use with compressed air. It meets OSHA standards for respiratory protection and air noise limitations. The Apollo 600's full-helmet design protects the blast operator's head from rebounding abrasive and from job-site impact hazards.

The heavy-duty silver-grey cape protects the operator's neck, shoulders, and chest from rebounding abrasive.

#### **Requirements for Operation**

- Source of Grade D or better quality compressed breathing air, as defined by the Compressed Gas Association specification G-7.1
- · Volume of compressed air for breathing: 15 cfm at 65 to 100 psi when using ACV; or 20 cfm at 90 to 100 psi when using Clem-Cool, CAT or
- A breathing-air filter, such as Clemco CPF, to remove oil mist, moisture, particles, and odors
- Protective clothing, hearing and eye protection

#### **Description of Operation**

The Apollo 600 is a single-shell helmet with two adjustable suspension options. The DLX comfort-fit suspension (2 sizes) surrounds the operators head with comfortable padding. The adjustable web suspension fits head sizes 6.5 to 8. Adjustable chin strap holds the helmet in position on the operator's head.

The wide, full-view window provides an expansive field of vision. A series of lenses preserves the operator's clear view of the work surface and protects the operator from dust and abrasive in the ambient air. A replaceable fixed inner lens securely fits inside a molded rubber gasket. An intermediate lens protects the inner lens; and up to 3 tear-away (perforated) outer lenses complete the system. The tear-away lenses are removed one at a time to expose a clean lens beneath. The multi-lens system is held in place by a hinged frame with replaceable latch.

## **Description**

The Apollo 600 HP is a type CE, continuous-flow, supplied-air respirator as defined by the National Institute for Occupational Safety and Health (NIOSH) for abrasive blasting to be used with a respirable compressed air source. The Apollo 600 is high-visibility red and offered with two suspension options.

## Apollo 600 HP Supplied-Air Respirators

for use with compressed air supply



To suit differing customer needs, the respirator is available in several configurations with one of the following air control devices:

- Constant-flow Connector (CFC) fixed air flow
- Air-control Valve (ACV) adjustable air volume
- Cool-air Tube (CAT) cools incoming breathing air
- Climate-control Tube (CCT) heats and cools incoming air

All breathing-air valves have minimum and maximum flow points as specified by NIOSH.

A flexible breathing tube maintains air flow between the inlet fitting on the operator's belt and a replaceable inlet fitting at the center rear of the helmet crown for maximum operator comfort and maneuverability. The tube contains specially-formulated sound-deadening materials to reduce noise levels of incoming air to 80 dBA.

The helmet is generously sized to allow ear plugs or ear muffs and safety glasses or goggles as needed.

Incoming air enters the system through the air control device on the operator's belt. It continues through the breathingair tube to enter the helmet at the inlet fitting at the center rear of the helmet crown. An air-distribution channel guides air over the head to the operator's face.

The incoming air to the respirator system maintains positive pressure inside the helmet. Exhaled air exits through the knit collar, which must fit snugly around the operator's neck. All helmet features work together to protect the operator from exposure to harmful dust and abrasive.

#### Advantages

- Two suspension options: web-style or DLX comfort-fit style
- Expansive, 180° full-view window
- Multi-lens system with rugged, positive-latching window frame
- Built-in mini visor prevents media ingress between lenses
- User-friendly cape attachment system
- Zip-in-and-out washable inner collar
- · Replaceable inlet fitting
- · Replaceable window latch
- · Generous interior dimension allows supplementary hearing and eye protection
- Optional rectangular lens

### **Approvals and Certification**

The Apollo 600 HP is NIOSH-approved as a type CE, continuous-flow supplied-air respirator; approval number: TC-19C-130. The respirator is recognized by OSHA as having an assigned protection factor (APF) of 1000 times the permissible exposure limit (PEL) for lead dust. It also meets the American National Standards Institute (ANSI) requirement for industrial head protection as stated in ANSI 289.1-2003 as a Type I, Class G protective helmet.

NOTE: Prior to use, ensure that the Apollo, type CE, supplied-air respirator is appropriate for your specific blasting conditions and requirements.

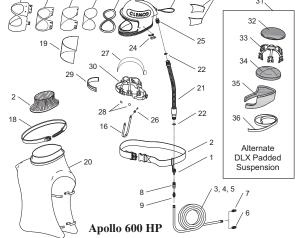


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Stock No.

<b>Respirator Systems and Acc</b>				lacement Parts
Item Description		k No.		Description
Apollo 600 HP	DLX.	Web Suspension	1.	Constant-flow connector without belt
Less Respirator Hose			2.	Belt, 2" web with buckle
With CFC			3.	Respirator hose, 3/8" x 2
With ACV			4.	includes items 6 and 7. Respirator hose, 3/8" x 3
With CAT			٦.	includes Items 6 and 7.
With CCT			5.	Respirator hose, 3/8" x
With Clem-Cool	25194	24932	6.	includes items 6 and 7. Adaptor, 3/8" hose to 3/
With 50 ft x 3/8" Respirator Hose	25200	24771	7.	Union, 3/8" hose to 3/8"
With CFCWith ACV			8.	Disconnect, 1/4 NPT fer
With CAT			9. 10.	Adaptor, 3/8" hose to 1/4 Acoustical foam kit, bot
With CCT			10.	Not used with padded si
With Clem-Cool			11.	Gasket, window
With 50 ft x 3/8" Respirator Hose and			12. 13.	Inner lens, .040", packag Outer lens, .0075", perf
With CFC			14.	Intermediate lens, .020"
				package of 5
With ACV With CAT			15.	package of 25 Window frame assembly
With CCT			16.	Chin strap
With Clem-Cool			17.	Handle strap
with Clem-Cool	23209	23233	18. 19.	Cape attachment band. Outer lens, .015", rectan
<b>Options and Accessories</b>			20.	Cape, grey, includes iter
Constant Flow Connector with belt		21422	21.	Breathing tube assembly
Cool-Air Tube with belt			22. 23.	O-ring, 7/8" OD, 2 requ
Clem-Cool Air Conditioner with belt			23. 24.	Inner collar Latch kit, window frame
Climate Control Tube with belt				includes base, screws an
CPF-20 filter (for 1 to 2 operators)			25. 26.	Inlet fitting, breathing to
CPF-80 filter (for up to 4 operators)			27.	Chin strap holder kit (2 Partition, air baffle
Carbon monoxide alarm, stationary CMS			28.	Clips, suspension (pack
Carbon monoxide alarm, portable CMS-2			29. 30.	Sweatband, used with it Web suspension with sw
Heavy-duty blast suit (leather front, cotton			31.	DLX padded suspension
S M L XL 2XL	3XL			includes items 27 and 32
08920 08921 08922 08923 24201	24202		32. 33.	Pad, top Suspension web (for DL
Light-weight seasonal blast suit (nylon fro	ont, cotton ba	ck)	34.	Pad, middle
S M L XL 2XL	3XL	4XL	35.	Pad, side
22913 22914 22915 22916 22917	25022	24689		black/grey fits most hea
Leather gloves			36.	black/blue for smaller he Hook-fastener tape, 1" a
Comfort Vest with Clem-Cool			20.	3-ft. used, specify feet r
Low pressure conversion kit			Apollo	600 HP Owner's Manual
Converts HP helmet to LP helme	et	24812		/15 /13 /14 /12 /11
Noise reduction ear muffs				$\frac{15}{100}$ $\frac{13}{100}$ $\frac{14}{100}$ $\frac{12}{100}$ $\frac{11}{100}$
Outer lens, rectangular, .015" (pk of 25).				
Shipping Dimensions and W	Veights			19 27 2
Apollo 600 Respirator, 14-1/2 x 13 x 15.		9 lbs		30
50 ft x 3/8" Respirator Hose, 12 x 12 x 5				29
CPF-20 Breathing-air Filter, 21 x 20 x 10			2 \	
<i>8</i> ,			_ `	28 / "
Authorized Distributor:			18 \	16 \
			6	20
			\	
			\	and and

Ittiii	Description	Stock 110.
1.	Constant-flow connector, HP (alternate),	
	without belt	21415
2.	Belt, 2" web with buckle	04430
3.	Respirator hose, 3/8" x 25 ft. (alternate),	
	includes items 6 and 7	04397
4.	Respirator hose, 3/8" x 50 ft, (alternate).	
	includes Items 6 and 7	04415
5.	Respirator hose, 3/8" x 100 ft. (alternate),	
	includes items 6 and 7	04398
6.	Adaptor, 3/8" hose to 3/8 NPT	00022
7.	Union, 3/8" hose to 3/8" hose	
8.	Disconnect, 1/4 NPT female	00025
9.	Adaptor, 3/8" hose to 1/4 NPT	01019
10.	Acoustical foam kit, both sides	
10.	Not used with padded suspension	04369
11.	Gasket window	23810
12.	Gasket, window	0/367
13.	Outer lens, .0075", perf'ed, package of 25	04261
13.	Intermediate lens, .020",	04301
14.	package of 5	24042
1.5	package of 25	
15.	Window frame assembly	
16.	Chin strap	
17.	Handle strap	
18.	Cape attachment band	23801
19.	Outer lens, .015", rectangular package of 25	24005
20.	Cape, grey, includes item 23	23818
21.	Breathing tube assembly w/ (2) item 22	22811
22.	O-ring, 7/8" OD, 2 required	
23.	Inner collar	08740
24.	Latch kit, window frame	
	includes base, screws and nuts	
25.	Inlet fitting, breathing tube	
26.	Chin strap holder kit (2 w/ fasteners)	24008
27.	Partition, air baffle	
28.	Clips, suspension (pack of 4)	
29.	Sweatband, used with item 30	
30.	Web suspension with sweatband (alternate)	23802
31.	DLX padded suspension kit (alternate)	
	includes items 27 and 32 thru 36	25189
32.	Pad, top	25181
33.	Suspension web (for DLX only)	25184
34.	Pad, middle	
35.	Pad. side	
	black/grey fits most head sizes	25183
	black/blue for smaller head sizes	25187
36.	Hook-fastener tape, 1" adhesive backed,	
20.	3-ft. used, specify feet required	25185
A m o 11 -		
Apollo	600 HP Owner's Manual	23930
/	15 /13 /14 /12 /11 /17 /10	24
6		31
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#### TECHNICAL DATA SHEET

Note: For safe, efficient blasting, read and follow the owner's manual and seek training for everyone who will use this equipment.

### **Purpose**

The Apollo 600 LP is designed for use with an ambient air pump. It meets OSHA standards for respiratory protection and air noise limitations. The Apollo 600's full-helmet design protects the blast operator's head from rebounding abrasive and from job-site impact hazards.

The heavy-duty silver-grey cape protects the operator's neck, shoulders, and chest from rebounding abrasive.

### **Requirements for Operation**

The following items are required or recommended for operation, but may not be included with this respirator:

- An ambient air pump capable of delivering 7 to 15 cfm of air at 8 to 12 psi
- Output from the ambient air pump must meet the standard for Grade D breathing air, as defined by the Compressed Gas Association, Commodity Specification: G-7.1 (www.cganet.com)
- Approved 1/2-inch ID x 50 or 100 feet long respirator hose from the ambient air pump to the helmet connection
- Protective clothing, gloves, and shoes suitable for a heavy construction site
- · Primary hearing and eye protection

#### **Description of Operation**

The Apollo 600 is a single-shell helmet with two adjustable suspension options. The DLX comfort-fit suspension (2 sizes) surrounds the operators head with comfortable padding. The adjustable web suspension fits head sizes 6.5 to 8. Adjustable chin strap holds the helmet in position on the operator's head.

The wide, full-view window provides an expansive field of vision. A series of lenses preserves the operator's clear view of the work surface and protects the operator from dust and abrasive in the

## **Description**

The Apollo 600 LP is a type CE, continuous-flow, supplied-air respirator as defined by the National Institute for Occupational Safety and Health (NIOSH) for abrasive blasting to be used with an ambient air pump. The Apollo 600 is high-visibility red and offered with two suspension options.

## Apollo 600 LP Supplied-Air Respirators

for use with ambient-air pump



surrounding air. A replaceable fixed inner lens securely fits inside a molded rubber gasket. An intermediate lens protects the inner lens; and up to 3 tear-away (perforated) outer lenses complete the system. The tear-away lenses are removed one at a time to expose a clean lens beneath. The multi-lens system is held in place by a hinged frame with replaceable latch.

The Apollo 600 LP comes with a Constant-Flow Connector (CFC) that provides a fixed flow of air. It is engineered for flow settings as specified by NIOSH.

A flexible breathing tube maintains air flow between the inlet fitting on the operator's belt and a replaceable inlet fitting at the center rear of the helmet crown for maximum operator comfort and maneuverability. The tube contains specially-formulated sound-deadening materials to reduce noise levels of incoming air to 80 dBA.

The helmet is generously sized to allow ear plugs or ear muffs and safety glasses or goggles as needed.

Incoming air enters the system through the air control device on the operator's belt. It continues through the breathingair tube to enter the helmet at the inlet fitting at the center rear of the helmet crown. An air-distribution channel guides air over the head to the operator's face.

### **Advantages**

- Two suspension options: web-style or DLX comfort-fit style
- Expansive, 180° full-view window
- Multi-lens system with rugged, positive-latching window frame
- Built-in mini visor prevents media ingress between lenses
- · User-friendly cape attachment system
- · Zip-in-and-out washable inner collar
- Replaceable inlet fitting
- Replaceable window latch
- Generous interior dimension allows supplementary hearing and eye protection
- · Optional rectangular lens

## **Approvals and Certifications**

The Apollo 600 LP helmet is a NIOSH-approved type CE respirator (approval number TC# 19C - 358) and is recognized by OSHA as having an assigned protection factor (APF) for lead dust of 1000 times the permissible exposure limit (PEL) for lead dust. It also meets the American National Standards Institute (ANSI) requirement for industrial head protection as stated in ANSI 289.1-2003 as a Type I, Class G protective helmet.

NOTE: Prior to use, ensure that the Apollo, type CE, supplied-air respirator is appropriate for your specific blasting conditions and requirements.



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Respirator Systems and Accessories				1		
Descri	ption				Stock	No.
Apollo 60	00 LP, les	s respirat	or hose,	Susp	LX ension	Web Suspension
with con	nstant flov	w connect	or	25	195	24010
Apollo 60	00 LP, wit	th 50 ft. r	espirator h	ose,		
and con	stant flow	connecto	or	252	210	24011
-			ssories ner front, c	cotton back)	)	
$\mathbf{S}$	$\mathbf{M}$	$\mathbf{L}$	XL	XXL	XXX	KL
08920	08921	08922	08923	24201	2420	02
Light-we	ight seas	onal blast	t suit (nylo	on front, cot	tton bac	ek)
S	M	$\mathbf{L}$	XL	XXL	XXX	KL
22913	22914	22915	22916	22917	2502	22
Leather g	gloves					02243
High pre	ssure cor	version 1	kit			
	Converts	LP helm	et to HP h	nelmet		24811
Noise reduction ear muffs						
Clemco	Do-rag					23814

#### **Related Clemco Literature**

Ambient Air Pump,

Related Clemes Elterature	
Description	Stock No.
Contractor Series Catalog	21385
Abrasive Blasting Safety Practices	22090
Blast Off 2	09294
Safety Equipment Product Study	07764

# **Shipping Dimensions and Weights Respirator**

Stock No.	<b>Dimensions</b>	Weight
24010	14-1/2" x 13" x 15"	7.5 lb
24011	14-1/2" x 13" x 15"	18.5 lb

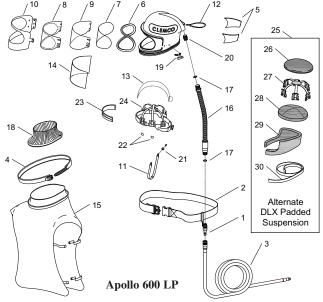
## Respirator Hose (in separate poly bag)

Stock No.	. Dimensions	Weight
22510	1/2" x 50 ft. (18" x 18" x 4")	11 lb
21413	1/2" x 100 ft. (18" x 18" x 6")	22 lb

Authorized Distributor:

ı	Replac	cincit i aits	
	Item	Description	Stock No.
	1.	Constant-flow connector, LP w/o belt	21429
	2.	Belt, 2" web with buckle	04430
	3.	Respirator hose,	
		1/2" x 50-foot (alternate)	22510
		1/2" x 100-foot (alternate)	21413
	4.	Cape attachment band	23801
	5.	Acoustical foam kit, both sides	
		not used with padded suspension	04369
	6.	Gasket, window	
	7.	Inner lens, .040", package of 5	
	8.	Outer lens, .0075", perf'ed, pack of 25	
	9.	Intermediate lens, .020",	
		package of 5	24943
		package of 25	
	10.	Window frame assembly	
	11.	Chin strap	
	12.	Handle strap	
	13.	Partition, air baffle	
	14.	Outer lens, .015", rectangular, pkg. of 25	24005
	15.	Cape, black with inner collar	
	16.	Breathing tube assembly w/ (2) item 17	
	17.	O-ring, 7/8" OD, 2 required	22815
	18.	Inner collar, cape	08740
	19.	Latch kit, window frame	
		includes base, screws and nuts	24006
	20.	Inlet fitting	
	21.	Chin strap holder kit (2 w/ fasteners)	24008
	22.	Clips, suspension (pack of 4)	24773
	23.	Sweatband, used with item 24	23817
	24.	Web suspension with sweatband (alternate)	23802
	25.	DLX padded suspension kit (alternate)	
		includes items 13 and 26 thru 30	25189
	26.	Pad, top	
	27.	Suspension web	25184
	28.	Pad, middle	25182
	29.	Pad, side	
		black/grey fits most head sizes	25183
		black/blue for smaller head sizes	
	30.	Hook-fastener tape, 1" adhesive backed,	
		3-ft. used, specify feet required	25185
	Apollo	600 LP Owner's Manual	

| Replacement Parts

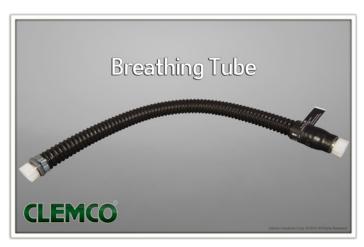


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CLEMCO Cool-Air Tube HP RESIPRATORS

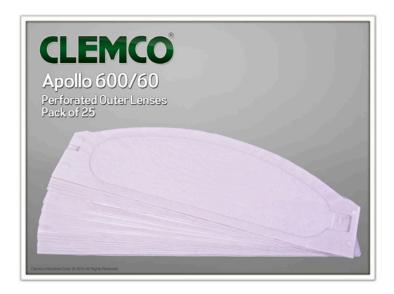




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#### TECHNICAL DATA SHEET

Note: For safe, efficient blasting, read and follow the owner's manual and seek training for everyone who will use this equipment.

### **Purpose**

The Apollo 60 HP meets ANSI standards for impact protection and OSHA standards for respiratory protection and noise limitations. The Apollo 60's full-helmet design protects the blast operator's head from rebounding abrasive and from construction-site impact hazards.

The heavy-duty cape protects the operator's neck, shoulders, and chest from rebounding abrasive.

## **Requirements for Operation**

The following items are required or recommended for operation, but are not included with this respirator:

- Source of Grade D (or better quality) breathing-air providing 7 to 15 cfm at 65 to 100 psi (If CAT or CCT is used, increase cfm to 20)
- A breathing-air filter (such as the Clemco CPF) to remove oil, moisture, particles, and odors
- Carbon monoxide monitor and alarm (such as the CMS-2)
- 3/s-inch respirator hose from the breathing-air filter to the helmet connection
- Protective clothing, gloves, and shoes suitable for a heavy construction site
- Primary hearing and eye protection

#### **Description of Operation**

The Apollo 60 includes a double-shell construction helmet supported by an adjustable suspension. The operator adjusts the suspension to fit, then installs it in the helmet. A chin strap holds the helmet firmly in place.

The wide, full-view window provides an expansive field of view. An inner fixed lens seals out dust and abrasive. Up to five lightweight, disposable outer lenses, held in place by a hinged frame, protect the inner lens from pitting. As the outermost disposable lens becomes pitted, it can be torn off to expose the next lens.

## **Description**

The Apollo 60 HP is a Type CE, continuous-flow, supplied-air respirator for abrasive blasting, to be used with compressed air systems. The high visibility red helmet has a full-view window, and a waist-length protective cape.

## Apollo 60 HP Supplied-Air Respirators

Stock No. 10505, 10508, 10509, 10510, 10511, 10512, 10513, 10514, 10515, 20213, 20214, 21300



The helmet can be purchased with one of the following:

- Constant-Flow Connector fixed air flow (no adjustment possible)
- Air Control Valve to adjust flow rate of incoming air
- Cool Air Tube to cool incoming air
- Climate Control Tube to cool or warm incoming air as needed

With all but the Constant-Flow Connector, the operator can adjust the flow of air. None of the valves can be adjusted beyond preset minimum and maximum settings specified by OSHA.

A flexible breathing tube between the valve and the helmet allows free movement of the operator's head. This tube contains specially-formulated sound-deadening materials that help the respirator comply with 80 dBA maximum noise level while allowing free air flow. While blasting, the operator must wear ear plugs or other suitable hearing protection and safety glasses or goggles.

The air enters the helmet at the rear, travels through a sound-attenuating distribution system at the top, and circulates about the operator's head and face. The incoming air maintains positive pressure inside the helmet, so exhaled air exits via the knit collar. Maintaining positive pressure inside the helmet helps keep out potentially harmful dust and abrasive.

#### **Advantages**

- · Wide, full-view window
- Lightweight construction
- Nylon carrying strap
- Allows operator to wear supplementary hearing and primary eye protection

## Approvals and Certification

The Apollo 60 helmet is a NIOSH-approved, type CE respirator (approval number TC-19C-130) and is recognized by OSHA as having an assigned protection factor (APF) against lead dust of 1000 times the permissible exposure limit (PEL). It also meets the American National Standards Institute (ANSI) requirement for hard hat protection.

#### WARNING!

Prior to use, ensure that the Apollo, type CE, supplied-air respirator is appropriate for your specific blasting conditions and requirements.



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Related Clemco Literature	
Description	Stock No.
Contractor Series Catalog	21385
Abrasive Blasting Safety Practices	22090
Blast Off 2	09294
Safety Equipment Product Study	07764
Apollo 60 HP Owner's Manual	10533
<b>Options and Accessories</b>	
Description	Stock No.
CPF-20 air filter (for one operator)	03578
-	03578
CPF-20 air filter (for one operator)	03578 03527
CPF-20 air filter (for one operator)	03578 03527 22894
CPF-20 air filter (for one operator)	03578 03527 22894 , XL (08923)
CPF-20 air filter (for one operator)	03578 03527 22894 , XL (08923)
CPF-20 air filter (for one operator)	

## **Respirator Systems and Accessories**

NOTE: Respirators do not include alternate respirator hose.

Alternate respirator hose must be ordered separately.

Stock No.
21300
10505
10508
10509
20213
10510
10511
10512
20214
10513
10514
10515

## **Packaging**

Respirator Systems

respirator systems			
Stock No.	Dimensions	Weight	
21300	13 <sup>1</sup> / <sub>2</sub> " x 13" x 11"	7.5 lb	
10505	(same)	7.5 lb	
10508	(same)	8.4 lb	
10509	(same)	8.9 lb	
20213	(same)	15.5 lb	
10510	(same)	15.5 lb	
10511	(same)	16.4 lb	
10512	(same)	16.9 lb	
20214	(same)	35.5 lb	
10513	(same)	35.5 lb	
10514	(same)	36.4 lb	
10515	13 <sup>1</sup> /." x 13" x 11"	36.9 lb	

#### **Respirator Hose (in poly bag)**

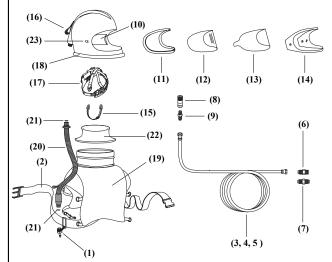
Stock No.	<b>Dimensions</b>	Weight
04397 (25 ft)	10" x 10" x 3"	2.8 lb
04415 (50 ft)	12" x 12" x 5"	5.8 lb
04398 (100 ft)	14" x 14" x 5"	11.6 lb

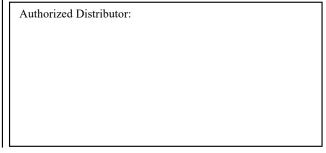
## CPF (in box)

Stock No.	<b>Dimensions</b>	Weight
03578 (CPF-20)	21" x 12" x 9 <sup>1</sup> / <sub>2</sub> "	20 lb
03527 (CPF-80)	(same)	22 lb

## **Replacement Parts**

Item	Description	Stock No.
1.	Constant-Flow Connector, without belt	21415
2.	Belt assembly, 2"	04430
3.	Respirator hose, <sup>3</sup> / <sub>8</sub> " x 25' (includes 7 & 8)	04397
4.	Respirator hose, <sup>3</sup> / <sub>8</sub> " x 50' (includes 7 & 8)	04415
5.	Respirator hose, <sup>3</sup> / <sub>8</sub> " x 100' (includes 7 & 8)	) 04398
6.	Adaptor, 3/8" hose to 3/8" pipe	00022
7.	Union, 3/8" hose to 3/8" hose	01020
8.	Disconnect, 1/4" female	00025
9.	Adaptor, <sup>3</sup> / <sub>8</sub> " hose to <sup>1</sup> / <sub>4</sub> " pipe	01019
10.	Acoustical foam kit, sides	04369
11.	Gasket, window	04452
12.	Inner lens, .040" (5)	04367
13.	Outer lens, .0075", perforated (25)	04361
14.	Window frame kit	08741
15.	Chin strap	04460
16.	Handle strap	03623
17.	Suspension	10532
18.	Cape attachment strap	10534
19.	Cape, red, with black inner collar	04435
20.	Breathing tube assembly w/swivel ends	22811
21.	O-ring, 11/16" ID x 7/8" OD, 2 required	22815
22.	Inner collar kit	08740
23.	Window latch kit	04368





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#### TECHNICAL DATA SHEET

Note: For safe, efficient blasting, read and follow the owner's manual and seek training for everyone who will use this equipment.

### **Purpose**

The Apollo 60 LP is designed for use with an ambient air pump. It meets OSHA standards for respiratory protection and noise limitations. The Apollo 60's full-helmet design protects the blast operator's head from rebounding abrasive and from construction-site impact hazards.

The heavy-duty cape protects the operator's neck, shoulders, and chest from rebounding abrasive.

#### **Requirements for Operation**

The following items are required or recommended for operation, but are not included with this respirator:

- An ambient air pump that is NIOSH approved for use with respirators, capable of delivering 7 to 15 cfm of air at 8 to 12 psi
- 1/2-inch x 100 feet respirator hose from the ambient air pump to the helmet connection
- Protective clothing, gloves, and shoes suitable for a heavy construction site
- Primary hearing and eye protection

### **Description of Operation**

The Apollo 60 includes a double-shell construction helmet supported by an adjust-able suspension. The operator adjusts the suspension to fit, then installs it in the helmet. A chin strap holds the helmet firmly in place.

The wide, full-view window provides an expansive field of view. An inner fixed lens seals out dust and abrasive. Up to five lightweight, disposable outer lenses, held in place by a hinged frame, protect the inner lens from pitting. As the outermost disposable lens becomes pitted, it can be torn off to expose the next lens.

The Apollo 60 LP comes with a Constant-Flow Connector that provides a fixed flow of air.

## **Description**

The Apollo 60 LP is a Type CE, continuous flow, supplied-air respirator with Constant-Flow Connector for abrasive blasting, for use with an ambient air pump. The high visibility red Apollo 60 LP is a double-shell helmet, with a full-view window, and a protective cape.

## Apollo 60 LP Supplied-Air Respirator

Stock No. 22081, 22082



A flexible breathing tube between the Constant-Flow Connector and the helmet allows free movement of the operator's head. This tube contains specially-formulated sound-deadening materials that help the respirator comply with 80 dBA maximum noise level while allowing free air flow. For maximum protection while blasting, the operator must wear ear plugs or other suitable hearing protection and safety glasses or goggles.

The air enters the helmet at the rear, travels through a sound-attenuating distribution system at the top, and circulates about the operator's face. The incoming air maintains slightly positive pressure inside the helmet, so exhaled air exits via the knit collar. Maintaining positive pressure inside the helmet helps keep out the potentially harmful dust and abrasive.

#### **Advantages**

- Requires no compressor, breathing air filter, or CO monitor
- Wide, full-view window
- · Lightweight construction
- Nylon carrying strap
- Allows operator to wear supplementary hearing and primary eye protection

## **Approvals and Certifications**

The Apollo 60 LP helmet is a NIOSH-approved type CE respirator (approval number TC# 19C - 358) and is recognized by OSHA as having an assigned protection factor (APF) against lead dust of 1000 times the permissible exposure limit (PEL). It also meets the American National Standards Institute (ANSI) requirement for hard hat protection.

#### WARNING!

Prior to use, ensure that the Apollo, type CE, supplied-air respirator is appropriate for your specific blasting conditions and requirements.



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## Related Clemco Literature

Description	Stock No.
Contractor Series Catalog	21385
Abrasive Blasting Safety Practices	22090
Blast Off 2	09294
Safety Equipment Product Study	07764
Apollo 60 LP Owner's Manual	22084
<b>Options and Accessories</b>	
Description	Stock No.
Blast Suit S (08920), M (08921), L (0892	22), XL (08923)
Leather gloves	02243

## **Respirator Systems and Accessories**

Description	Stock No.
Apollo 60 LP, without respirator hose	22081
Apollo 60 LP, with 1/2" x 100' respirator hose	22082

Converts LP helmet to HP helmet ......22080

Weight

#### **Packaging**

Stock No.

All helmet systems boxes are 13 1/," x 13" x 11"

#### **Respirator Systems**

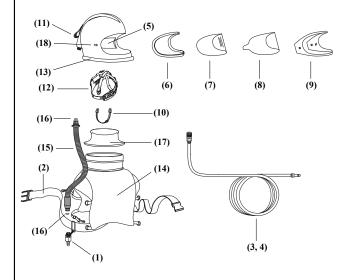
High pressure conversion kit.

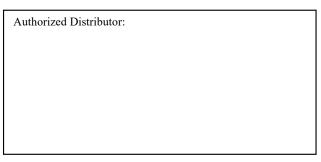
22081	13 <sup>1</sup> / <sub>2</sub> " x 13" x 11"	7.5 lb
22082	(same)	15.5 lb
Respirator Ho	se (in poly bag)	
Stock No.	<b>Dimensions</b>	Weight
21413 (100 ft)	14" x 14" x 5"	11.6 lb

**Dimensions** 

## **Replacement Parts**

Item	Description	Stock No.
1.	Constant-Flow Connector, LP, without belt	21429
2.	Belt assembly, 2"	04430
3.	Respirator hose, <sup>1</sup> / <sub>2</sub> " x 100'	21413
4.	Respirator hose, <sup>1</sup> / <sub>2</sub> " x 50'	22510
5.	Acoustical foam kit, sides	04369
6.	Gasket, window	
7.	Inner lens, .040" (5)	04367
8.	Outer lens, .0075", perforated (25)	04361
9.	Window frame kit	08741
10.	Chin strap	04460
11.	Handle strap	03623
12.	Suspension	10532
13.	Cape attachment strap	10534
14.	Cape, with inner collar	04435
15.	Breathing tube assembly w/swivel ends	22811
16.	O-ring, 11/16" ID x 7/8" OD, 2 required	22815
17.	Inner collar kit	08740
18.	Window latch kit	04368







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#### TECHNICAL DATA SHEET

Note: For safe, efficient blasting, read and follow the owner's manual and seek training for everyone who will use this equipment.

### **Purpose**

The Apollo 20 HP is designed for use with compressed air systems. It meets OSHA standards for respiratory protection and noise limitations. The Apollo 20's full-helmet design and heavy-duty cape protect the blast operator's head, neck, shoulders, and chest from rebounding abrasive.

#### **Requirements for Operation**

The following items are required or recommended for operation, but are not included with this respirator:

- Source of Grade D (or better quality) breathing air providing 7 to 15 cfm at 65 to 100 psi (if Clem-Cool or CCT is used, increase cfm to 20)
- A breathing air filter (such as the Clemco CPF) to remove oil, moisture, particles, and odors
- Carbon monoxide monitor and alarm (such as the Clemco CMS-2)
- 3/8-inch x 50-feet approved respirator hose from the breathing air filter to the helmet connection, stock no. 04415
- Protective clothing, gloves, and shoes suitable for a heavy construction site
- Primary hearing and eye protection

#### **Description of Operation**

The Apollo 20 is a single-shell construction helmet supported by an adjustable suspension. The DLX comfort-fit suspension surrounds the operator's head with comfortable padding. A chin strap holds the helmet firmly in place. The rectangular window provides a clear field of view. An inner fixed lens and one middle lens seal out dust and abrasive.

Up to three lightweight, disposable outer lenses, held in place by a hinged frame, protect the middle lens from pitting. As the outermost disposable lens becomes pitted, it can be torn off to expose the next lens.

## **Description**

The Apollo 20 HP is a Type CE, continuous-flow, supplied-air respirator for abrasive blasting, to be used with a compressed air source. The bright green helmet has a box-front window, and a protective cape. The Apollo 20 comes standard with DLX comfort-fit suspension.

## Apollo 20 HP Supplied-Air Respirator

For use with compressed air supply



The helmet can be purchased with one of the following:

- Constant-Flow Connector fixed air flow (no adjustment possible)
- Air Control Valve to adjust flow rate of incoming air
- Clem-Cool Air Conditioner to cool incoming air
- Climate Control Tube to cool or warm incoming air as needed

With all but the Constant-Flow Connector, the operator can adjust the flow of air. None of the valves can be adjusted beyond pre-set minimum and maximum settings specified by NIOSH.

A flexible breathing tube between the valve and the helmet allows free movement of the operator's head. This tube contains specially-formulated sound-deadening materials that help the respirator comply with 80 dBA maximum noise level while allowing free air flow. For maximum protection while blasting, the operator should wear ear plugs or other suitable hearing protection and safety glasses or goggles.

The air enters the helmet at the rear, travels through a sound-attenuating

distribution system at the top, and circulates about the operator's face. The incoming air maintains positive pressure inside the helmet, so exhaled air exits via the knit collar. Maintaining positive pressure inside the helmet helps keep out potentially harmful dust and abrasive.

#### Advantages

- DLX comfort-fit suspension
- Box-front window features economical replacement lenses
- Sound-attenuating, air-distribution channel
- Lightweight construction
- · Molded-in carrying handle
- Allows operator to wear supplementary hearing and primary eye protection

### **Approvals and Certifications**

The Apollo 20 HP helmet is a NIOSH-approved, type CE respirator (approval number TC-19C-338) and is recognized by OSHA as having an assigned protection factor (APF) against lead dust of 1000 times the permissible exposure limit (PEL).

NOTE: Prior to use, ensure that the Apollo, type CE, supplied-air respirator is appropriate for your specific blasting conditions and requirements.



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## **Respirator Systems and Accessories**

NOTE: The respirators listed DO NOT include respirator hose. Respirator hose must be ordered separately.

Respi	rator hose must be ordered separately.	
(-)	Apollo 20 HP DLX w/Constant-Flow Connector	20975
(-)	Apollo 20 HP DLX w/Air Control Valve	21419
(-)	Apollo 20 HP DLX w/Clem-Cool Air Conditioner	21420
(-)	Apollo 20 HP DLX w/Climate Control Tube	21421
(-)	Constant-Flow Connector with belt	21422
(-)	Air Control Valve with belt	04440
(-)	Clem-Cool Air Conditioner with belt	23825
(-)	Cool-Air Tube with belt	04410
(-)	Climate Control Tube with belt	04411
(-)	Low pressure conversion kit.	
	Converts HP helmet to LP helmet	22680
(-)	DLX Suspension Kit	
	(for replacement or conversion to DLX style)	25215

## **Options and Accessories**

Description	Stock No.
-------------	-----------

CPF-20 Air Filter (for one or two operators)	03578
CPF-80 Air Filter (for up to four operators)	03527
Carbon monoxide alarm, CMS-2	22894
Heavy-duty blast suit (leather front, cotton back)	

Heavy-duty blast suit (leather front, cotton back)						
<b>S</b> 08920	<b>M</b> 08921	L 08922	<b>XL</b> 08923	<b>XXL</b> 24201	XXXL 24202	
S	M	L	$\mathbf{XL}$	on front, cot XXL 22917	XXXL	
Leather gloves						
Comfort Vest with Clem-Cool25266						

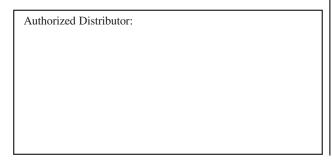
## **Packaging**

## Respirators

Stock No.	Dimensions	Weight
20975	14-1/2" x 13" x 15"	8 lb
21419	(same)	8 lb
21420	(same)	8.9 lb
21421	(same)	9.4 lb

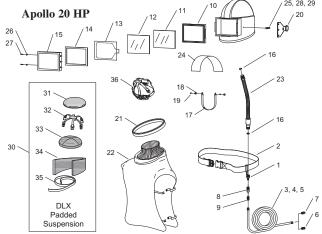
## Respirator Hose (in poly bag)

Stock No.	<b>Dimensions</b>	Weight
04397 (25 ft)	10" x 10" x 3"	2.8 lb
04415 (50 ft)	12" x 12" x 5"	5.8 lb
04398 (100 ft)	14" x 14" x 5"	11.6 lb



## **Replacement Parts**

Kepia	Cement Faits	
Item	Description	Stock No.
1.	Constant-flow connector, HP, (alternate),	
	does not include belt	21415
2.	Belt, 2" web with buckle	04430
3.	Respirator hose, 3/8" x 25 ft. (alternate),	
	includes items 6 and 7	04397
4.	Respirator hose, 3/8" X 50 ft. (alternate),	
	includes Items 6 and 7	04415
5.	Respirator hose, 3/8" x 100 ft. (alternate),	
	includes items 6 and 7	04398
6.	Adapter, 3/8" hose to 3/8" pipe	00022
7.	Union, 3/8" hose to 3/8" hose	
8.	Disconnect, 1/4" female	
9.	Adapter, 3/8" hose to 1/4" pipe	
10.	Gasket, molded window	99996
11.	Inner lens, 4-5/8" x 6-5/8" nom., .125"	
11.	package of 5	21409
12.	Middle lens, 5" x 7" nom., .094"	2140)
12.	package of 5	21410
13.	Cover lens, perforated, .0075"	21110
13.	package of 25	21411
14.	Gasket, lens frame	
15.	Lens frame	
16.	O-Ring, 7/8" OD, 2 required	
17.	Chin Strap	
18.	Chin strap holder, 2 required	
19.	Screw, 8-32 x 1/2" ph hd, 2 required	21119
20.	Latch, lens frame, rubber	21208
21.	Cape attachment strap	
22.	Cape with inner collar	
23.	Breathing tube assembly	21301
23.	includes two of item 16	22811
24.	Partition, air baffle	
25.	Button, latch	
26.	Nut, lens frame	
27.	Screw, lens frame	
28.	Screw, 8-32 x 1/2" sm	
29.	Screw, 8-32 x 1" sm	
30.	DLX padded suspension kit	21403
30.	includes items 31 thru 35	25215
31.	Pad, top	
32.	Suspension web	
33.	Pad, middle	
34.	Pad, side	
35.	Hook-fastener tape, 1" adhesive backed,	23210
33.	2-ft. used, specify feet required	25105
36.	Web suspension w/sweatband (alternate)	10522
Apollo 2	20 HP Owner's Manual	21990
	ollo 20 HP	25, 28, 29
Ap	ollo 20 HP /12 / 11 /	/ /20



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#### TECHNICAL DATA SHEET

Note: For safe, efficient blasting, read and follow the owner's manual and seek training for everyone who will use this equipment.

### **Purpose**

The Apollo 20 LP is designed for use with an ambient air pump. It meets OSHA standards for respiratory protection and noise limitations. The Apollo 20's full-helmet design and heavy-duty cape protect the blast operator's head, neck, shoulders, and chest from rebounding abrasive.

#### **Requirements for Operation**

The following items are required or recommended for operation, but are not included with this respirator:

- An ambient air pump approved for use with respirators, capable of delivering 7 to 15 cfm of air at 8 to 12 psi
- 1/2-inch x 50-feet respirator hose from the ambient air pump to the helmet connection, stock no. 22510
- Protective clothing, gloves, and shoes suitable for a heavy construction site
- Primary hearing and eye protection
- Output from the ambient air pump must meet the standard for Grade D breathing air, as defined by the Compressed Gas Association, Commodity Specification: G-7.1 (www.cganet.com)

#### **Description of Operation**

The Apollo 20 is a single-shell construction helmet supported by an adjustable suspension. The DLX comfort-fit suspension (2 sizes) surrounds the operators head with comfortable padding. A chin strap holds the helmet firmly in place. The rectangular window provides a clear field of view. An inner fixed lens and one middle lens seal out dust and abrasive.

Up to three lightweight, disposable outer lenses, held in place by a hinged frame, protect the middle lens from pitting. As the outermost disposable lens becomes pitted, it can be torn off to expose the next lens.

## **Description**

The Apollo 20 LP is a Type CE, continuous flow, supplied-air respirator with Constant-Flow Connector for abrasive blasting, to be used with an ambient air pump. The bright green helmet has a box-front window, and a protective cape. The Apollo 20 comes standard with DLX comfort-fit suspension.

## Apollo 20 LP Supplied-Air Respirator

For use with ambient-air pump



The Apollo 20 LP comes with a Constant-Flow Connector that provides a fixed flow of air. It is engineered for flow settings as specified by NIOSH.

A flexible breathing tube between the Constant-Flow Connector and the helmet allows free movement of the operator's head. This tube contains specially formulated sound-deadening materials that help the respirator comply with 80 dBA maximum noise level while allowing free air flow. For maximum protection while blasting, the operator must wear ear plugs or other suitable hearing protection and safety glasses or goggles.

The air enters the helmet at the rear, travels through a sound-attenuating distribution system at the top, and circulates about the operator's face. The incoming air maintains slightly positive pressure inside the helmet, so exhaled air exits via the knit collar. Maintaining positive pressure inside the helmet helps keep out the potentially harmful dust and abrasive.

## Advantages

- Requires no compressor, breathing air filter, or CO monitor
- DLX comfort-fit suspension
- Box-front window features economical replacement lenses
- Sound-attenuating, air-distribution channel
- Lightweight construction
- · Molded-in carrying handle
- Allows operator to wear supplementary hearing and primary eye protection

# Approvals and Certifications

The Apollo 20 LP helmet is a NIOSH-approved type CE respirator (approval number TC-19C-339) and is recognized by OSHA as having an assigned protection factor (APF) against lead dust of 1000 times the permissible exposure limit (PEL).

NOTE: Prior to use, ensure that the Apollo, type CE, supplied-air respirator is appropriate for your specific blasting conditions and requirements.



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Stock No.

#### **Respirator Systems and Accessories** Item Description Stock No. (-) Apollo 20 LP DLX w/Constant-Flow Connector, without respirator hose ......21299 (-) Apollo 20 L, DLX w/Constant-Flow Connector and 1/2" x 50' respirator hose ......21423 (-) High pressure conversion kit. Converts LP helmet to HP helmet ......22690 Comfort Vest with Clem-Cool......25266 (-) (-) DLX Suspension Kit (for replacement or conversion to DLX style) ......25215

Ontions	and	Accessories
Options	anu	Accessories

Heavy-duty blast suit (leather front, cotton back) XXXL  $\mathbf{M}$ L XLXXL 08921 08920 08922 08923 24201 24202 Light-weight seasonal blast suit (nylon front, cotton back) XXXL XXL 22913 22914 22915 22916 22917 25022

## **Packaging**

#### Respirator

Stock No.	<b>Dimensions</b>	Weight
21299	14-1/2" x 13" x 15"	8 lb

#### Respirator Hose (Bagged)

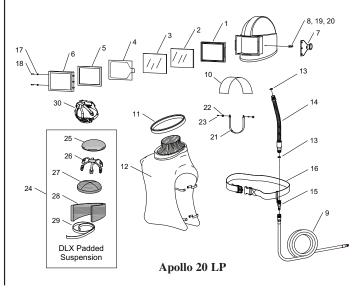
Stock N	No. Dimensions	Weight
22510	Respirator hose 1/2" x 50ft Approximate 17-1/2" x 17-1/2" x 4"	11 lb
21413	Respirator hose 1/2" x 100ft Approximate 17-1/2" x 17-1/2" x 6"	22 lb

#### Authorized Distributor:

1.	Gasket, molded window	99996
2.	Inner lens, 4-5/8" x 6-5/8" nom., .125"	
	package of 5	21409
3.	Middle lens, 5" x 7" nom., .094"	
	package of 5	21410
4.	Cover lens, perforated, .0075" package of 25	21411
5.	Gasket, lens frame	
6.	Lens frame	20976
7.	Latch, lens frame, rubber	21298
8.	Button, latch	21040
9.	Respirator hose,	
	1/2" x 50 ft. (alternate)	22510
	1/2" x 100 ft. (alternate)	
10.	Partition, air baffle	
11.	Cape attachment strap	
12.	Cape with inner collar	
13.	O-Ring, 7/8" OD, 2 required	22815
14.	Breathing tube assembly	
	includes two of item 13	22811
15.	Constant-flow connector, LP w/o belt	21429
16.	Belt, 2" web with buckle	04430
17.	Nut, lens frame, 2 required	90041
18.	Screw, lens frame, 2 required	90295
19.	Screw, 8-32 x 1/2" for latch, 2 required	
20.	Screw, 8-32 x 1" for latch, 2 required	
21.	Chin Strap	
22.	Chin strap holder, 2 required	21696
23.	Screw, 8-32 x 1/2" Ph Hd, 2 required	
24.	DLX padded suspension kit	
	includes items 25 thru 29	25215
25.	Pad, top	25216
26.	Suspension web	
27.	Pad, middle	
28.	Pad, side	25218
29.	Hook-fastener tape, 1" adhesive backed,	

2-ft. used, specify feet required ......25185 Web suspension w/sweatband (alternate) ......10532 Apollo 20 LP Owner's Manual ......21991

**Replacement Parts** Item Description



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