



 Chicago
Pneumatic

Hoist & Balancers



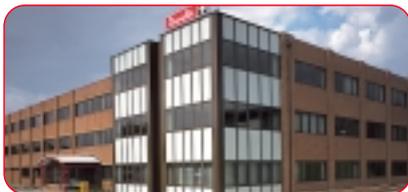
Introduction and Safety Instructions

Working together

The International Alliance features three product companies based in USA, UK and France, utilizing state of the art CNC machining and 3D CAD systems to aid innovative product development.



Chicago Pneumatic, Rock Hill, USA Focused on impact wrenches and hammers.



Desoutter, Hemel Hempstead, England. Focused on manufacturing of drills, pneumatic and electric screwdrivers and autofeed drills.



Georges Renault, Nantes, France Focused on manufacturing of abrasive tools, electric tools and torque measurement equipment.



Power Tools Distribution Center, Hoeselt, Belgium. All power tools, accessories and spare parts reach our customers from our Global Warehouse in Hoeselt, where a direct delivery system is operated to distribute stocked items.

General Safety Instructions for the Operation of Hoists & Balancers

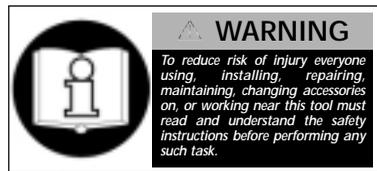
The goal of Chicago Pneumatic is to produce tools that help the operator work safely and efficiently.

The most important safety device for this or any other tool is the operator. Care and good judgement are the best protection against injury.

All possible hazards cannot be covered here, but we have tried to highlight some of the important ones.

Individuals should look for and obey Caution, Warning and Danger signs placed on tools, and displayed in the workplace. Operators should read and follow safety instructions packed with each tool. For a copy of these instructions, contact your local Chicago Pneumatic representative.

Learn how each tool works. Even if you have previously used similar tools, carefully check out each tool before you use it. Get the 'feel' of it and know its capabilities, limitations, potential hazards, how it operates and how it stops.



All tools are designed to operate at a line pressure of 6.3 bar +/- 0.15bar in accordance with ISO2787.

Specifications subject to change without prior notice.

Further occupational health and safety information can be obtained from the following web site: <http://www.osha.gov>



Compressed Air Hazards

- Air under pressure can cause injury. Never point an air hose at yourself or anyone else. Never blow your clothes free of dust with compressed air. Always direct exhaust air away from yourself and others in the work area.
- Always check for damaged or loose hoses and fittings before using an air tool, and replace if necessary. Whipping hoses can cause serious injury.
- Disconnect the tool from the air supply when not in use, before changing accessories, setting the torque, or when making repairs.
- Do not exceed rated air pressure to increase the output of the tool. This could cause injury and shorten tool life.
- Do not assemble quick coupler on the tool. Vibration can cause breakage resulting in a whipping air hose. Instead, use quick couplers on the end of a short leader hose.
- When universal twist couplings are used, lock pins must be installed to prevent accidental hose disconnection.



Installation and Use Hazards

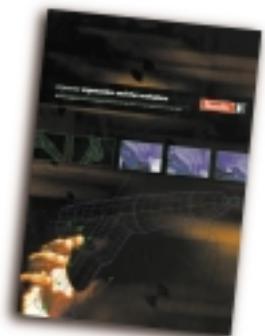
- Make sure the balancer or hoist suspension method and supports have a minimum safety factor of **five times** the combined maximum load capacity plus balancer or hoist weight.
- Attach an additional support cable or chain to a support independent of the one holding the balancer or hoist.
- To reduce the risk of injury from entanglement, do not wear loose clothing.
- Examine suspension hooks, cables, cable stops and chains daily for wear. Replace worn parts before installation or further use.
- Never lift people or lift loads over people.
- Never use balancer cable or hoist chain as a sling.
- Load chain must not be twisted, kinked or damaged when lifting a load.
- Centre balancer or hoist over load before lifting.



Additional Hazards

- Slip/Trip/Fall is a major cause of serious injury or death. Beware of excessive hose/cord left on the walking or work surface.
- Operators and maintenance personnel must be physically fit to perform job tasks, and handle the bulk, weight and power of the tool.
- Hard hats are recommended in areas where balancers or hoists are in use.
- Balancers and hoists are not insulated from coming into contact with electric power sources and are not intended for use in potentially explosive atmospheres.
- Wear gloves to protect hands from sharp edges.
- Always wear impact resistant eye and face protection when involved with or near the operation or repair of tools.

For further information on Ergonomics and Workplace Design ask for Desoutter publication LT198



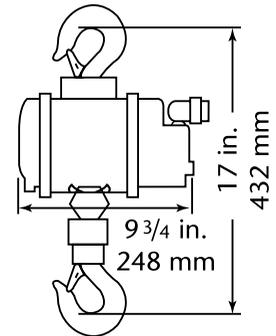
CP-1100 Hoist

Applications

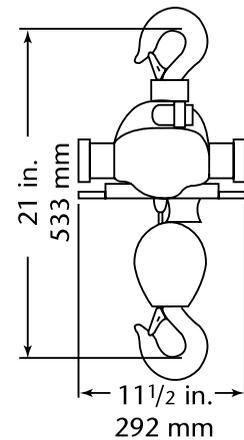
The CP-1100 portable lightweight, high-speed hoist is used for fast-moving production operations in hazardous environments, and applications where space is limited for materials handling, production, assembly operations in medium-to heavy-manufacturing, processing industries, automotive, machinery, construction equipment, steel fabrication, chemical, petrochemical, petroleum industries and maintenance.

Features

- thrust bearing-mounted latch hooks – for hoist positioning
- latch hooks – allow free load rotation, lessen accidental unhooking
- safety cable attachment point – provides secure installation
- automatic limit stops – prevent overtravel, even at fastest speeds
- external screw adjustment – for lift and descent rates
- withstands constant stopping, starting and stalling – without damage
- operator controllable speed – for precise load positioning
- swivel-mounted air inlet – permits free hoist movement
- built-in lubricator – reduces friction
- exhaust muffler – reduces sound level
- remote pendant control – available in all sizes



250kg & 500kg models with single chain drop



1000kg models uses sheave block and double chain

All Models: 15' (4.6m) lift hook travel; 3/8" (NPTF) air inlet thread. Pull Cord: 10' (3m) long. Pendant Control: 11' (3.4m) long.

PICTURE REF	CATALOG NUMBER	PULL CORD	PENDANT CONTROL	RATED CAPACITY		LIFTING SPEED AT RATED CAPACITY		NET WEIGHT	
				lb	kg	ft/min	m/min	lb	kg
A	CP-1100-250	✓		550	250	65	20	37	16.8
A	CP-1100-250R		✓	550	250	65	20	41	18.6
A	CP-1100-500	✓		1100	500	50	15	37	16.8
A	CP-1100-500R		✓	1100	500	50	15	41	18.6
A	CP-1100-1000	✓		2200	1000	21	6.4	50	22.7
A	CP-1100-1000R		✓	2200	1000	21	6.4	54	24.5

Standard Equipment: Exhaust muffler, latch hooks, built-in lubricator and air strainer.

Optional Equipment: Remote Pendant Control Kit, Part No. KF131935. Chain bucket and trolley – see page 5. Non standard lift heights available – contact Chicago Pneumatic.

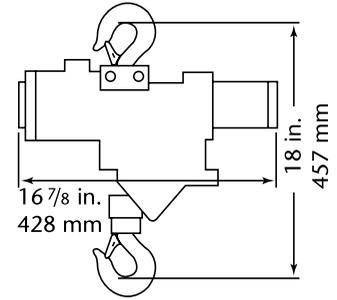
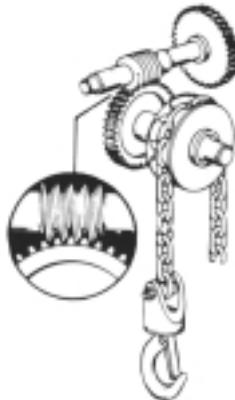
CP-1200 Hoist

Applications

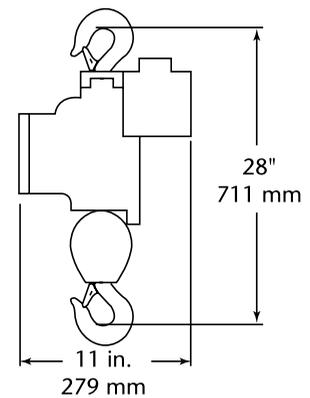
The CP-1200 extra-heavy-duty hoist is designed to lift raw or processed materials in steel manufacturing plants, heavy assemblies in automobile, truck, tractor factories, aerospace industries, heavy machinery manufacture, petrochemical plants operations. Excellent for accurate heavy load positioning over machining centres.

Features

- self-locking worm gear stops load and holds it securely when air flow to motor stops – never requires adjustment
- operator speed control – for precise load spotting
- Power Vane motor – provides positive high-torque starting characteristics
- all rotating parts supported on antifriction bearings – for smooth operation
- automatic, adjustable limit stops – prevent over-travel, even at fastest speeds
- withstands constant stopping, starting, and stalling – without damage or overheating
- remote pendant control – available in all sizes
- standard safety cable attachment point – provides secure installation



500lb to 2000lb models with single chain drop



4000lb models includes sheave block and double chain

CP "Worm-Drive" – CP Air Hoists are powered by a smooth-running, long-wearing rotary vane motor which drives the chain sprocket through a spur gear reduction and a worm gear.

It is the self-locking characteristic of this worm gear that provides the unparalleled controllability and reliability of these hoists. When air flow to the motor is stopped, the worm gear stops the load quickly and holds it securely.

All Models: 1/2" (NPTF) air inlet thread. Pull Chain: 11' (3.4m) long. Pendant Control: 10' (3m) long.

PICTURE REF	CATALOG NUMBER	PULL CHAIN	PENDANT CONTROL	RATED CAPACITY		LIFTING SPEED AT RATED CAPACITY		MAX HOOK TRAVEL*		NET WEIGHT	
				lb	kg	ft/min	m/min	ft	m	lb	kg
A	CP-1200-VANHED	✓		500	227	42	12.8	15	4.6	60	27.3
A	CP-1200-VANHAB		✓	500	227	42	12.8	15	4.6	63	28.6
A	CP-1200-MANHED	✓		1000	455	20	6.1	15	4.6	60	27.3
A	CP-1200-MANHAB		✓	1000	455	20	6.1	15	4.6	63	28.6
A	CP-1200-TANHED	✓		2000	907	12	3.7	15	4.6	60	27.3
A	CP-1200-TANHAB		✓	2000	907	12	3.7	15	4.6	63	28.6
A	CP-1200-FUNFED	✓		4000	1814	5	1.5	15	4.6	109	49.5
A	CP-1200-FUNFAB		✓	4000	1814	5	1.5	15	4.6	112	50.9

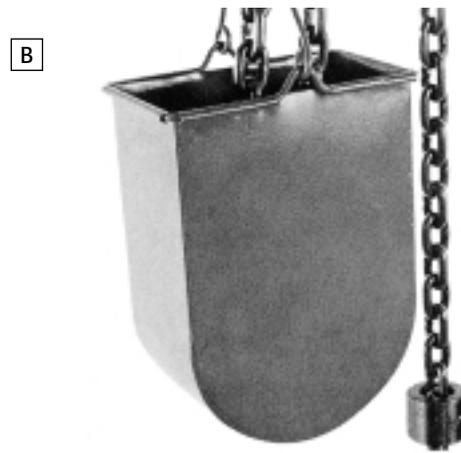
Standard Equipment: Latch hooks, built-in lubricators and air strainer, exhaust muffler.

Optional Equipment: Chain bucket and trolleys – see page 5. * Non standard lift heights available – contact Chicago Pneumatic.

Hoist Accessories – Chain Buckets and Trolleys



For CP-1100 Hoist



For CP-1200 Hoist

CHAIN BUCKETS

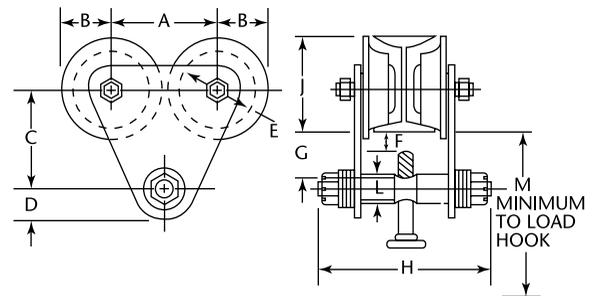
PICTURE REF	FOR HOIST MODELS	PART NUMBER	CHAIN CAPACITY	
			ft	m
A	CP-1100	KF-130797	50	15.3
B	CP-1200	C-088945 for 2000 lb. (907 kg) hoists and under	20	6.1

Hoist Trolleys

Furnished with suitable extra spacers to permit adjustment to American Standard Section "I" beams. 1000 lb. trolley fits 4" to 10" beams; 2000 lb. trolley fits 5" to 12" beams; and 4,000 lb. trolley fits 6" to 18" beams. All steel wheels are fitted with zerk grease fittings.

Hook-on Swivel Trolley for CP-1100 & CP-1200 Hoists

For use with all hoists equipped with swivel top hook. Hoist is free to swivel below trolley.

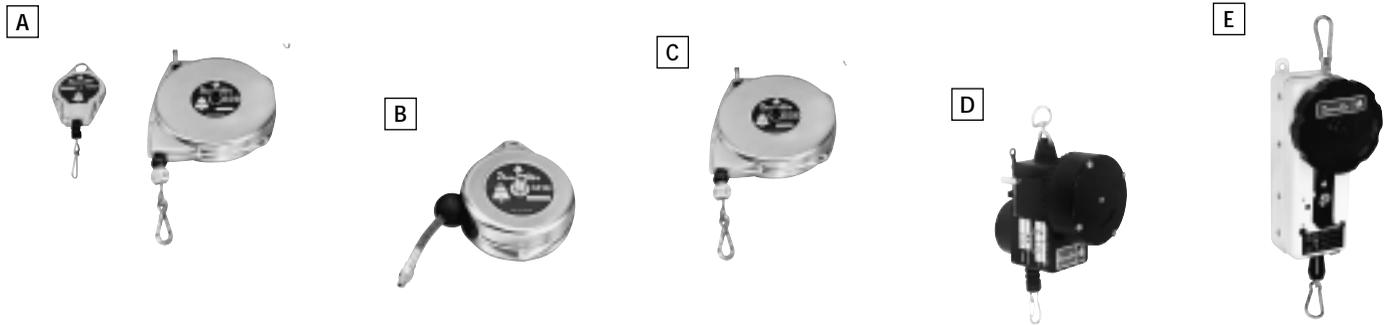


Note: Observe correct spacer installation to suit beam profile.

PICTURE REF	PART NUMBER	DIMENSIONS IN INCHES										
		A	B	C	D	E	F	G	H	J	L	M
C	C-087092	4 ³ / ₈	2 ¹ / ₈	4 ¹ / ₈	1	3 ¹ / ₈	2 ⁵ / ₃₂	12 ⁹ / ₃₂	7 ⁹ / ₁₆	3 ¹⁵ / ₁₆	7/8	19
C	C-055643	6 ¹ / ₈	3 ⁹ / ₁₆	5 ¹ / ₈	1 ¹ / ₈	4	1 ¹ / ₈	2 ¹ / ₄	8 ¹ / ₄	4 ⁷ / ₈	1	19 ⁹ / ₁₆
C	C-122878	6 ⁷ / ₈	3 ¹³ / ₁₆	5 ³ / ₄	1 ⁵ / ₁₆	4 ¹⁵ / ₁₆	2 ⁹ / ₃₂	2 ¹ / ₄	8 ³ / ₄	6	1 ¹ / ₈	19 ⁹ / ₁₆

PICTURE REF	HOIST MODEL	CAPACITY		TYPE SUSPENSION	TROLLEY	APPROXIMATE MIN/ MAX I-BEAM SIZE		MIN/MAX FLANGE WIDTH		MINIMUM CURVE RADIUS	
		lb	kg			in	mm	in	mm	in	mm
C	CP-1100	550	250	Swivel Hook	C-087092	4/10	102/254	2 ⁵ / ₈ /4 ⁵ / ₈	67/117	30	762
C	CP-1100	1100	500	Swivel Hook	C-087092	4/10	102/254	2 ⁵ / ₈ /4 ⁵ / ₈	67/117	30	762
C	CP-1200	500	228	Swivel Hook	C-087092	4/10	102/254	2 ⁵ / ₈ /4 ⁵ / ₈	67/117	30	762
C	CP-1200	1000	455	Swivel Hook	C-087092	4/10	102/254	2 ⁵ / ₈ /4 ⁵ / ₈	67/117	30	762
C	CP-1100	2200	1000	Swivel Hook	C-055643	5/12	127/305	3/5	76/127	36	914
C	CP-1200	2000	909	Swivel Hook	C-055643	5/12	127/305	3/5	76/127	36	914
C	CP-1200	4000	1818	Swivel Hook	C-122878	6/18	152/457	3 ³ / ₈ /6	86/152	48	1220

Balancers – Light and Medium



SPRING SUSPENSION BALANCERS

PICTURE REF	TOOL TYPE	PART NUMBER	CAPACITY MINIMUM		CAPACITY MAXIMUM		CABLE TRAVEL		WEIGHT		OVERALL HEIGHT	
			lb	kg	lb	kg	ft	m	lb	kg	ins	mm
A	1DU	52542	0	0	1.1	0.5	4.9	1.5	1.3	0.6	9.1	230
A	2DU	50522	1.1	0.5	2.2	1	4.9	1.5	1.3	0.6	9.1	230
A	3DU	52862	2.2	1	3.1	1.5	4.9	1.5	1.3	0.6	9.1	230
A	4DU	50532	2.2	1	4.4	2	4.9	1.5	1.3	0.6	9.1	230
A	5DU	50542	3.1	1.4	5.3	2.4	4.9	1.5	1.3	0.6	9.1	230
A	10D	50052	4.4	2	11.0	5	7.8	2.4	6.0	2.7	14.5	369
A	15D	50062	11.0	5	15.4	7	7.8	2.4	7.1	3.2	14.5	369
A	22D	50072	13.2	6	22.0	10	7.8	2.4	7.1	3.2	14.5	369

Additional support chain fitted as standard

HOSE REEL SUSPENSION BALANCERS

PICTURE REF	TOOL TYPE	PART NUMBER	CAPACITY MINIMUM		CAPACITY MAXIMUM		FLOW RATE		HOSE TRAVEL		WEIGHT		OVERALL HEIGHT	
			lb	kg	lb	kg	scfm	l/s	ft	m	lb	kg	ins	mm
B	1HU	52702	0	0	1.1	0.5	15.0	7.1	4.9	1.5	2.6	1.2	6.8	173
B	3HU	51462	1.1	0.5	3.1	1.4	15.0	7.1	4.1	1.25	2.6	1.2	6.8	173
B	4HU	51472	1.5	0.7	4.4	2	15.0	7.1	4.1	1.25	3.1	1.4	6.8	173
B	4HI	51722	1.5	0.7	4.4	2	19.7	9.3	3.2	1	3.1	1.4	6.8	173

Additional support chain fitted as standard

Hose reel balancer conversion kit for pistol grip tools

3HU and 4HU Balancers – Part No. 107403

4HI Balancer – Part No. 115193

SPRING SUSPENSION BALANCERS WITH DRUM LOCK FEATURE (Operates only on spring failure)

PICTURE REF	TOOL TYPE	PART NUMBER	CAPACITY MINIMUM		CAPACITY MAXIMUM		CABLE TRAVEL		WEIGHT		OVERALL HEIGHT	
			lb	kg	lb	kg	ft	m	lb	kg	ins	mm
C	10S	50572	4.4	2	11.0	5	7.8	2.4	6.0	2.7	14.5	369
C	15S	50582	11.0	5	15.4	7	7.8	2.4	7.1	3.2	14.5	369
C	22S	50592	13.2	6	22.0	10	7.8	2.4	7.1	3.2	14.5	369

Additional support chain fitted as standard

REACTION FREE SELF-LOCK BALANCERS

PICTURE REF	TOOL TYPE	PART NUMBER	CAPACITY MINIMUM		CAPACITY MAXIMUM		CABLE TRAVEL		WEIGHT		OVERALL HEIGHT	
			lb	kg	lb	kg	ft	m	lb	kg	ins	mm
D	2R	54422	1.5	0.7	2.9	1.3	5.5	1.7	1.1	0.5	4.9	124
D	4R	54432	2.2	1	4.4	2	5.5	1.7	1.1	0.5	12.3	313
E	5R	54442	3.7	1.7	7.7	3.5	7.8	2.4	5.1	2.3	12.3	313
E	10R	54452	6.6	3	13.2	6	7.8	2.4	5.1	2.3	12.3	313

For increased safety use of an additional support chain is advised

Balancers – Super Duty

Features



- rugged malleable iron housing construction – for strength and durability
- internal latch – positively locks drum to prevent load from falling if spring breaks
- tapered drum – compensates for increased spring tension, insuring uniform cable tension throughout travel
- external worm gear load adjustment – permits exact external load balancing to achieve zero gravity
- manual safety-lock – positively stops drum rotation, allowing cable replacement without disassembly

PICTURE REF	CATALOG NUMBER	CAPACITY		PICTURE REF	CATALOG NUMBER	CAPACITY	
		lb	kg			lb	kg
CP-2100: hook-to-hook distance as shipped: 90" (2286 mm); min. possible: 17" (432 mm); net weight: 46 lb (20.9 kg).							
A	CP-2100-ABER	10 to 15	4.6 to 6.8	A	CP-2100-AFER	35 to 50	15.9 to 22.7
A	CP-2100-ACER	14 to 25	6.4 to 11.4	A	CP-2100-AGER	49 to 60	20.5 to 27.3
A	CP-2100-ADER	25 to 40	4.6 to 6.8	A	CP-2100-AHER	55 to 75	25 to 34.1
CP-2200: hook-to-hook distance as shipped: 83" (2108 mm); min. possible: 17.7" (450 mm); net weight: 61 lb (27.7 kg).							
A	CP-2200-EJER	70 to 85	31.8 to 38.6	A	CP-2200-EPER	155 to 180	70.5 to 81.8
A	CP-2200-EKER	80 to 110	36.4 to 50.0	A	CP-2200-ERER	175 to 200	79.5 to 90.0
A	CP-2200-ELER	105 to 145	47.7 to 65.9	A	CP-2200-ESER	195 to 210	88.6 to 95.5
A	CP-2200-EMER	135 to 160	61.4 to 72.7	A			
CP-2300: hook-to-hook distance as shipped: 87" (2210 mm); min. possible: 17.7" (450 mm); net weight: 77 lb (35 kg).							
A	CP-2300-UTER	205 to 235	93 to 107	A	CP-2300-UWER	250 to 275	114 to 125
A	CP-2300-UVER	230 to 255	105 to 116	A	CP-2300-UZER	270 to 300	123 to 136

All models: 7 ft (2.1 m) max. hook travel; rugged, maleable iron housing and steel cable; external load adjustment.

Safety Tips

For safety's sake, always observe these basic rules of hoist and balancer use

- ANSI code B30.16, "Safe Operation of Overhead Hoists" should be read by anyone supervising operators of overhead hoists. Copies may be obtained from ASME, 345 E, 47 St., New York, N.Y. 10017. Among many other requirements, this code calls for the use of safety latch hooks and for a tag located near the operator warning against various unsafe practices.
- Operators should follow the cautions listed on the warning tag. Among these are:
 - DON'T** lift more than rated load.
 - DON'T** lift people or loads over people.
 - DON'T** operate with twisted, kinked or damaged chain.
 - DON'T** remove or obscure the warning label.
- Inspect all air supply and control hoses frequently and replace abraded or cut sections. Be sure your hoists have control systems in which no hoist action will occur should any of the hoses be broken or cut.
- Hoist load chain and hooks should be inspected regularly. Check for stretch, wear, gouge marks, open welds and any indications of peened, hammered or excessively polished surfaces. When chain requires replacement, always use load chain recommended by the hoist manufacturer. Bent hooks should be discarded ... never straightened and re-used.
- Always use a safety chain between the hoist or balancer and some rigid overhead member. The chain must be strong enough to hold the balancer or hoist plus its load if the suspension hook should fail for any reason. Remember too, that balancer capacity is only as great as the beam or member you suspend it from. Check all overhead beams for load carrying capacity! Hooks, their swivels or mounting parts and safety latches, should be inspected periodically for signs of wear. Replace worn parts immediately. Never remove safety latches.
- Hang balancers with drum axis horizontal. This prevents the cable from chafing within the drum. Check the condition of the balancer cable periodically by running a piece of cheesecloth along its entire length. The cloth will "snag" at points beginning to wear. Inspect safety chains and nylon-covered cables visually for signs of wear. Replace any cable or chain and fitting immediately if it shows the slightest wear.