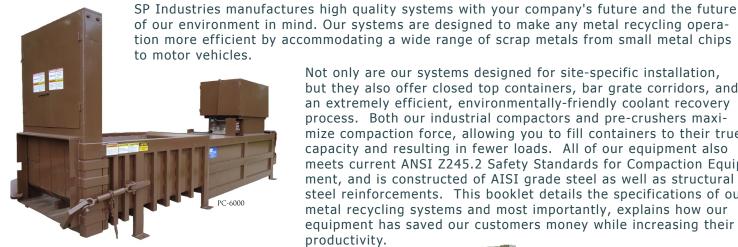


The FUTURE of Metal Recycling



of our environment in mind. Our systems are designed to make any metal recycling operation more efficient by accommodating a wide range of scrap metals from small metal chips Not only are our systems designed for site-specific installation, but they also offer closed top containers, bar grate corridors, and an extremely efficient, environmentally-friendly coolant recovery

process. Both our industrial compactors and pre-crushers maxi-

mize compaction force, allowing you to fill containers to their true capacity and resulting in fewer loads. All of our equipment also meets current ANSI Z245.2 Safety Standards for Compaction Equipment, and is constructed of AISI grade steel as well as structural steel reinforcements. This booklet details the specifications of our metal recycling systems and most importantly, explains how our equipment has saved our customers money while increasing their productivity.

Pre-crushers

- 3, 4, 6, 7 & 9 cu. yd. capacity models
- Standard controls for compactor-only or pre-crusher operations with up to 8 precrush cycles
- Structural and alloy grade steel provides maximum strength and integrity
- Hydraulic and electrical components specified for their reliability and availability
- Engineering and design services available for both standard and special applications
- Industry's leading warranty
 - -3 years on ram and frame weldment
 - -1 year on hydraulic and electrical components









Compactors

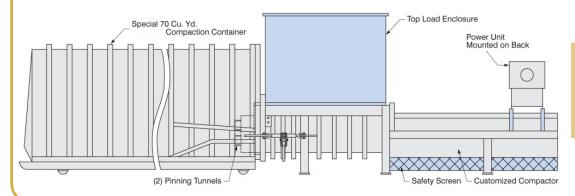
- 2, 3, 4, 6, 7, 8, & 13 cu. yd. capacity models
- From 16" to 30" of ram penetration
- Up to 165,000 lbs. of compaction force maximizes load size/density of container
- Fast 39 to 77 second cycle times
- Specified components for dependability, serviceabil ity, and nation-wide availability
- Large clear top openings
- Industry's leading warranty
 - -3 years on ram and frame weldment
 - -1 year on hydraulic and electrical components

Custom Installations

Metal Clip and Scrap Compaction

Our equipment has saved scrap processors and metal recyclers thousands of dollars in transportation costs. Take for instance a customer of ours who creates a large amount of valuable scrap throughout the production of several metal components for cars and trucks. Prior to installing our metal compaction system, the scrap was loaded into four 80 yard containers averaging 7,000 to 15,000 lbs. These light loads resulted in a constant flow of trucks to and from the recycling facility. The four containers were replaced with two CP-6002-D high density compactors each attached to a 70 yard container.

These systems produce trailer loads of scrap metal that weigh an average of 50,000 lbs. (permissible with Michigan's 80 ton hauling limit) in as little as 90 minutes! Loads this heavy equate to significantly less trailer hauling and a much more efficient use of people and resources. This system boasts a 55 second cycle time for maximum efficiency and a programmable start system that automatically starts the compactor when the chamber is full. Also, pinning tunnels mounted on the ram face have been installed to eliminate material spillage when the container is pulled away from the compactor.



- Get 12x Greater Compaction
- Eliminate water contamination
- Significantly Reduce Hauling

Recycle 90% of coolant

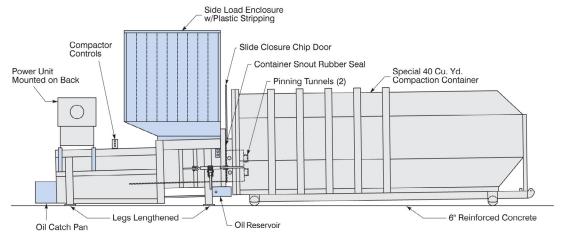
Automatic start chamber

Save \$200.00 per load

Green, Efficient Fluid Collection

SP designs compaction systems that greatly increase a processor's revenue by removing cutting fluids or other coolants from scrap metal that would otherwise be worth significantly less when recycled. Companies that produce a great deal of metal turnings often find that this scrap is saturated with cutting fluids. Because this scrap is very valuable in the recycling market, they often need a way to remove the fluid safely and efficiently. Centrifuge systems that spin fluids out of turnings are expensive and high-maintenance while gravity draining fluids often results in ground contamination problems. To overcome these problems, SP approaches both problems from the high-density compaction angle.

One of our solutions for an ammunition company consists of two CP-3002 chip systems with the narrow style bar grate, fluid collection tank, angled footprint, closed-top hoppers with curtains, and two liquid tight 40 yard containers. This system provided savings and added revenue. With the cutting fluid no longer contaminated, it can now be recycled and reused within their operation, ultimately reducing new fluid expenses. Not only are their payloads maximized, but they reduce transportation overhead and increase their per-pound-price for the scrap. Also, the scrap recycler greatly reduces their labor, fuel, transportation, and fluid contamination allowing them to offer a more competitive price for the scrap.



Pre-crusher Features



Precrusher Remote Power Unit

The power unit can be placed in any location to protect it from weather, accidents, and vandalism.

Standard Features

- Removable Access Panels
- Ratchet Binders and Hooks
- Remote Power Unit w/ 10' hoses
- Reservoir: PC-3000 & D, 4000 & D, 6000 & D, 7000 & D 140 Gallon
 PC-9000 200 Gallon
- Oil All Weather Hi-grade (-30° F Pour Point)
- Oil Sight Gauge with Thermometer
- Cylinders: PC-3000, 4000, 6000, 7000 (2) 6" Bore x 4.5" Rod PC-3000-D, 4000-D, 6000-D, 7000-D, & 9000 - (2) 7" Bore x 5" Rod
- Pump: PC-3000 & D, 4000 & D, 6000 & D, 7000 & D 18/25.5 GPM, Hi-Lo, Vane; PC-9000 - 21/45 GPM, Hi-Lo, Vane
- UL Listed Electrical Components
- Motor: PC-3000 & D, 4000 & D, 6000 & D, 7000 & D 30 HP 230/460 3PH PC-9000 - 50 HP 460 3PH
- Automatic Multicycle System
- Full/Jam Automatic Shut-off
- Adjustable Timer Inside Main Control Panel to Set 1-8 Precrush Cycles
- Keyed Pinning Boost/Override & Pre-crusher Gate/Compactor Ram Jog Control Station Mounted on the Front Left Hand Side of the Machine
- Remote Control Station (on 10' cable):
- -Key Lock On/Off Switch
- -Start Push Button
- -Stop Push Button with Container Full Light
- -Compactor/Pre-crusher Selector Switch

Optional Features

- Safety Hand and Toe Rails
- Safety Gate with Interlock
- Side or Rear Load Hopper
- Full Enclosure
- Custom Hoppers
- Trailer Loading Stand
- Hydraulic Cart Dumper System
- Pinning Tunnel(s) Built into the Ram Face
- Ram & Compaction Chamber Bar Grating for chips or clips
- Container Guide System
- Decks 1,000#, 10,000# and Special Capacities



Pinning/Boost Override & Precrusher Gate/Compactor Ram Jog System Controls

These controls are mounted on the left-front of the compactor charge opening. This system is key activated and allows the operator to manually extend and retract the ram, raise and lower the gate, and boost the pressure for pinning the container. The Pinning/Boost Override System provides additional force to clear the compaction chamber allowing the hauler to pin the scrap load into the container for transportation.

Front Wall of Gate and Wear Plates

The compaction wall of the pre-crusher gate is constructed with 1" steel plate. The lower sections of the outside plates are 1/2" removable wear liners and cylinder access panels.



Standard Controls

• Custom Ratchet Binder System

• Safety Interlock System

• UL Certified Panel

· Thermo Oil Heater

• TEFC Motor

• Deodorizer Spray System

· Advance Full Load Indicator

· Low/Hot Oil Shutdown with Indicator

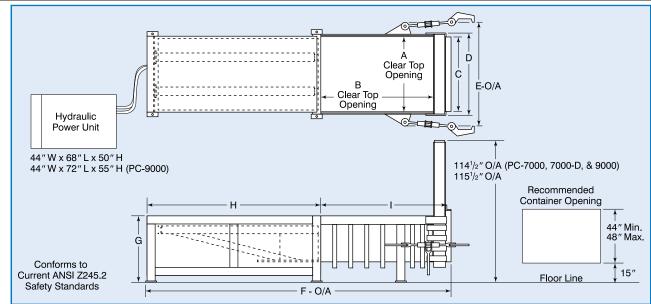
· Power Unit Weather Shield or Cover

The remote controls consist of a Key Lock On/Off Switch, Start Button, Stop Button, Compactor/Pre-crusher Mode Switch, and Container Full Warning Light. This control unit is shown with an optional Hot/Low Oil Indicator and Advance Full Warning Light.



Pre-crusher Specifications

Precrusher/ Compactor Model	Mfr's Ratings (cu. yds.)	WASTEC Type Rating (cu. vds.)	Ram Stroke (in.)	Ram Penetration (in.)		(Ram PSI at rces lbs.)	Hydraul Pressu		Ram F	ace (in.)		lacement (cu. er hr.)		Cycle Ti	ime (sec.)	Base Unit Weight (lbs.)
, , , , , , , , , , , , , , , , , , ,	(cur yusi)	(curyusi)	()	()	Normal	Max.	Normal	Max.	Width	Height	Precrusher	Compactor Only	Motor H.P.	Precrusher	Compactor Only	
PC-3000	3	2.3	74	16	56.5/101,800	66/118,800	1800	2100	60	30	154	231	30	54	36	20,900
PC-3000-D	3	2.3	74	16	76.9/138,500	89.8/161,600	1800	2100	60	30	117	158	30	69	51	21,150
PC-4000	4	2.9	90	16	56.5/101,800	66/118,800	1800	2100	60	30	169	239	30	62	44	22,500
PC-4000-D	4	2.9	90	16	76.9/138,500	89.8/161,600	1800	2100	60	30	131	169	30	80	62	22,900
PC-6000	6	3.86	116	16	56.5/101,800	66/118,800	1800	2100	60	30	188	248	30	74	56	24,500
PC-6000-D	6	3.86	116	16	76.9/138,500	89.8/161,600	1800	2100	60	30	143	176	30	97	79	24,900
PC-7000	7	5.1	116	16	42.4/101,800	49.5/118,800	1800	2100	80	30	248	328	30	74	56	27,300
PC-7000-D	7	5.1	116	16	57.7/138,500	67.3/161,600	1800	2100	80	30	191	234	30	97	79	27,700
PC-9000	9	6.9	15	16	57.7/138,500	67.3/161,600	1800	2100	80	30	292	382	50	85	65	31,700



Standard Dimensions (in inches)

Dimension	PC-3000 & D	PC-4000 & D	PC-6000 & D	PC-7000 & D	PC-9000
Α	57	56	57	76	76
В	47.75	64	89.5	89.5	123.75
С	61.5	61.5	61.5	82.5	82.5
D	70	69.75	69.75	89.75	89.75
E - O/A	81	81	81	101	101
F - O/A	160	194	247	247	323.75
G	51.5	51.5	51.5	51.5	51.5
Н	96	116	142	142	182
	58	74	100	100	134
J	63" Min. / 68" Max.	63" Min. / 68" Max.	63" Min. / 68" Max.	83" Min. / 88" Max	83" Min. / 88" Max.

Material	Specifications

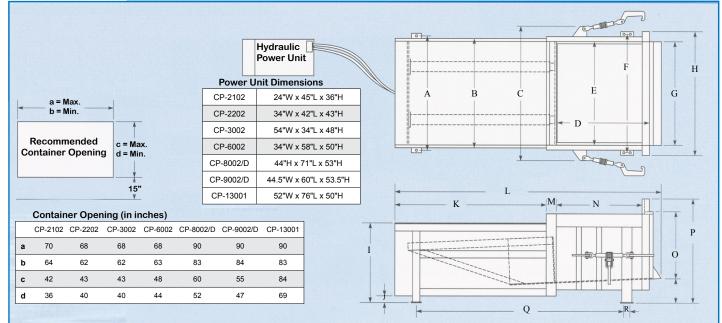
Frame:	Floor	5/8"	5/8"	5/8"	5/8"	1"
	Floor Supports	(1) S 5 x 10#	(1) S 5 x 10#	(1) S 5 x 10#	(1) S 6 x 17.25#	(1) 8" x 6" x 1/2" Tube
		(6) S 4 x 7.7#	(7) S 4 x 7.7#	(7) S 4 x 7.7#	(11) S 5 x 10#	(14) S 6 x 12.5#
	Sides	1/2"	1/2"	1/2"	1/2"	1/2"
	Side Supports	3" x 3" x 1/4" Tube	3" x 3" x 1/4" Tube	3" x 3" x 1/4" Tube	3" x 3" x 1/4" Tube	3" x 3" x 1/4" Tube
		6" x 3" x 1/4" Tube	6" x 3" x 1/4" Tube	6" x 3" x 1/4" Tube	6" x 3" x 1/4" Tube	8" x 3" x 1/4" Tube
		8" x 3" x 1/4" Tube	8" x 3" x 1/4" Tube	8" x 3" x 1/4" Tube	8" x 3" x 1/4" Tube	10" x 3" x 1/4" Tube
	Main Breaker Bar		1-1/2" x	8" Vertical Cold Rolled S	Steel Bar	
	Secondary Break	er Bar		8" x 6" x 1" Steel Angle		
Ram:	Face	3/4"	3/4"	1"	1"	1"
	Floor	3/4"	3/4"	1"	1"	1"
	Тор	1/2"	1/2"	1/2"	1/2"	1/2"
	Top Supports	(11) C 5 x 6.7#	(13) C 5 x 6.7#	(15) C 6 x 13#	(15) C 6 x 13#	(18) C 6 x 13#
	Sides	3/8"	3/8"	3/8"	3/8"	3/8"
	Guides		P	Adjustable Nylatron Block	(S	

Precrusher Material Specifications

Frame:		Gate Track Fabricated from 1" Cold Rolled, Steel Bar						
Gate:	Front Wall	1/2"	1/2"	1/2"	1/2"	1/2"		
	Rear Wall	1"	1"	1"	1"	1"		
	Supports 6" x 6"	x 3/8" & 6" x 4" x 3/8" Stru	ctural Steel Tubes (6" x	6" x 1/2" & 6" x 4" x 1/2"	Structural Steel Tubes or	n PC-9000)		

Compactor Specifications

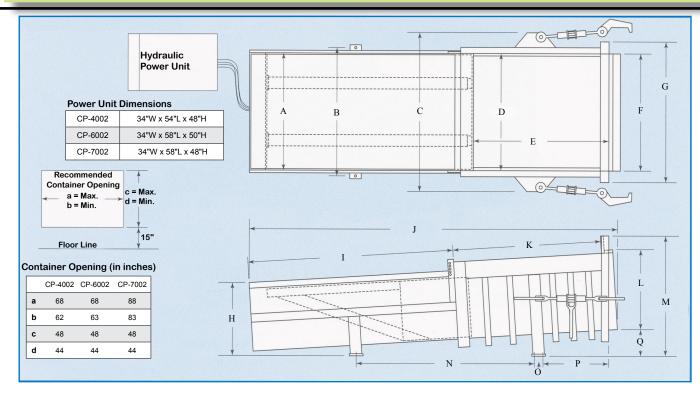
Compactor Model	Mfr's Ratings (cu. vds.)	WASTEC Type Rating (cu. vds.)	Ram Stroke (in.)	Ram Penetration (in.)	Force Rating stated fo	(Ram PSI at rces lbs.)	Hydraul Pressu		Ram F	ace (in.)	Volume Displacement (cu. yds. per hr.)	Motor H.P.	Cycle Time (sec.)	Discha	arge Openi	ng (in.)	Base Unit Weight (lbs.)
	(***,	(,,		()	Normal	Max.	Normal	Max.	Width	Height	(,,			Width	Height	From Gnd	` ′
CP-2102	2	1.47	60	16.5	44.8/70,700	49.8/78,500	1800	2000	59.5	26.5	84	10	63	61.5	33.5	16	6,200
CP-2202	2	1.76	74	26	50.5/84,800	60.6/101,800	1500	1800	60	28	100	20	52	60	37	15	8,897
CP-3002	3	2.02	74	18	50.5/84,800	60.6/101,800	1500	1800	60	28	139	20	52	60.5	37.5	16	9,025
CP-4002	4	3.05	90	16	44.2/84,800	53/101,800	1500	1800	60	32	170	20	63	60.75	42	16	10,700
CP-6002	6	3.86	116	16	47.1/84,800	56.5/101,800	1500	1800	60	30	257	30	54	61	41	16	14,650
CP-6002-D	6	3.86	116	16	64.1/115,400	76.9/138,500	1500	1800	60	30	180	30	77	61	41	16	24,900
CP-7002	7	5.14	116	16	35.3/84,800	42.4/101,800	1500	1800	80	30	357	30	54	81	41	16	20,816
CP-7002-D	7	5.35	116	16	48.1/115,500	57.7/138,550	1500	1800	80	30	238	30	77	81	41	16	20,984
CP-8002	8	6	116	16	36.4/101,800	43.4/121,600	1800	2150	80	35	554	50	39	81	50	16	22,100
CP-8002-D	8	6	116	16	49.5/138,500	59.1/165,500	1800	2150	80	35	393	50	55	81	50	16	24,100
CP-9002-D	9	7.5	150	25	49.5/138,500	59.1/165,500	1800	2150	80	35	399	50	67.7	81	45	16	26,891
CP-13001	13	10.3	150	30	29.5/117,800	35.4/141,400	1500	1800	80	50	742	75	50	81	67	16	38,600



Standard Dimensions (in inches)

Dimension	CP-2102	CP-2202	CP-3002	CP-8002 & D	CP-9002 & D	CP-13001
Α	69	68.25	68.5	92.25	93	96
В	63.625	64	64.375	89	89	87
С	74	75.5	77	98	98	101
D	42	48.25	56	100	125	120
E	59.5	60.75	60	81.5	81.5	80
F	69	71.5	72	93	93	96
G	61.5	60	60.75	81	81	81.25
Н	71	72	72.75	93	93	97.25
I	48	48	48	58	58	74
J	5	5	5	5	5	6
K	119.75	90	90	131.75	173	185
L	126.5	150.5	160	250	333	323
М	6	6	6	10	10	12
N	42	45	52	96	121	126
0	33.5	37	37.25	50	55	67
Р	56	62.625	62.5	79	74	95
Q	105	114	122	210.25	240	279.5
R	4	4	4	8	8	8

Compactor Specifications (cont.)



Material Specifications

			•		
	CP-2102	CP-2202	CP-3002	CP-4002	CP-6002
Frame:	eel				
Floor	3/8"	1/2"	1/2"	1/2"	5/8"
Floor Support	(6)C3x4.1#	C3x4.1#	(4)S3x5.7#	(7)S4x7.25#	(9)S4x7.7#
Sides	1/4"	3/8"	3/8"	3/8"	1/2"
Side Support	(3)C6x8.2#	TS 3x3x.25	(2)TS3x3x3/16	(10)TS 3x3x3/16	(7)TS 3x3x1/4
Breaker Bar	1.5x8	1.5x10	1.5x10	1.5x10	1.5x12
Ram:				,	
Face	5/8"	3/4"	3/4"	3/4"	1"
Floor	5/8"	5/8"	5/8"	3/4"	1"
Тор	1/4"	1/2"	1/2"	1/2"	1/2"
Top Support	(8)C4x5.4#	C4x5.4#	(12)c4x5.4#	(13)C5x6.7#	(15) C6x13#
Sides	3/16"	3/8"	3/8"	3/8"	3/8"

Material Specifications (Cont.)

	CP-7002	CP-8002 & D	CP-9002 & D	CP-13001
Frame:		AISI 1045	steel	
Floor	5/8"	5/8"	5/8"	1"
Floor Support	6"x9"x1/2" TS	S4x7.7#	S5x10#	S5x10#
Sides	1/2"	1/2"	1/2"	5/8"
Side Support	TS 8x3x1/4	TS4x3x1/4	TS 4x3x1/4	T4x4x1/4
Breaker Bar	1.5x12	2x15	2.25x15	2.5x8
Ram:				
Face	1"	1"	1"	1.25"
Floor	1"	1"	1"	1.25"
Тор	1/2"	1/2"	1/2"	3/4"
Top Support	C6x13#	C6x13#	6x13#	C6x13#
Sides	3/8"	3/8"	1/2"	1/2"

Standard Dimensions (in inches)

Dimension	CP-4002	CP-6002	CP-7002
Α	60.5	60.5	80
В	72	70	92
С	77	80	98
D	60	60	80.75
Е	74	96	96
F	60.75	61	80.75
G	73	73	92.75
Н	41.25	40.5	40.375
I	109.25	135.75	137.75
J	194	250	247
K	76	102	100
L	42	40	40.25
М	67	67	67.5
N	94	147	63
0	4	4	4
Р	36	33.625	33.5
Q	16	16	16
		·	

Compactor Features



Bar Grate System

A bar grate system helps to keep metal clips from working their way under and around the ram, as well as interfering with ram movement. The pinning tunnels attached to the ram face allow the operator to pin the load in the container to reduce material fall-out when the container is pulled away from the compactor.

Standard Features

- Removable Access Panels
- Ratchet Binders and Hooks
- Remote Power Unit w/ 10' hoses
- Reservoir: CP-2102: 40 gallon; CP-2202, CP-3002, CP-4002: 75 gallon; CP-6002, CP-7002: 100 gallon; CP-8002: 200 gallon; CP-9002: CP-13001: 300 gallon
- Oil All Weather Hi-grade (-40° F Pour Point)
- Oil Sight Gauge with Thermometer
- Cylinders: CP-2102: (2) 5" Bore x 3" Rod x 60" Stroke; CP-2202, CP-3002: (2) 6" Bore x 4.5" Rod x 74" Stroke; CP-4002 (2) 6" Bore x 4.5" Rod x 90" Stroke; CP-6002, CP-7002: (2) 6" Bore x 4.5" Rod x 116" Stroke; CP-8002: (2) 6" Bore x 5" Rod x 116" Stroke; CP-8002-D: (2) 7" Bore x 5" Rod x 116" Stroke; CP-9002: 6" Bore x 4.5" Rod x 150" Stroke; CP-9002-D: 7" Bore x 5" Rod x 150" Stroke; CP-13001: (1) 10" Bore x 7.25" Rod x 150" Stroke
- Pump: CP-2102 16 GPM; CP-2202, CP-3002, CP-4002 30 GPM; CP-6002, CP-7002 45 GPM; CP-8002/D, CP-9002/D 63 GPM; CP-13001 GPM 90 GPM
- UL Listed Electrical Components
- Motor: CP-2102 10 HP; CP-2202, CP-3002, CP-4002 20 HP; CP-6002, CP-7002 30 HP; CP-8002/D, CP-9002/D 50 HP; CP-13001 75 HP
- Automatic Multicycle System
- Full/Jam Automatic Shut-off
- Keyed Ram Jog control mounted in main panel
- Remote Control Station:
- -Key Lock On/Off Switch
- -Start Push Button
- -Stop Push Button with Container Full Light
- -Compactor/Pre-crusher Selector Switch

Optional Features

- Side or Rear Load Hopper
- Full Enclosure
- Transfer Station Hopper
- Transfer Trailer Loading Stand
- Hydraulic Cart Dumper System
- Pinning Tunnel(s) Built into the Ram Face
- Ram & Compaction Chamber Bar Grating for chips or clips
- Container Guide System
- Decks 1,000#, 10,000# & Special Capacities
- Multi-wiper system

- TEFC Motor
- Thermo Oil Heater
- Safety Hand and Toe Rails
- Safety Gate with Interlock
- Safety Interlock System
- Deodorizer Spray System
- UL Certified Panel
- Advance Full Load Indicator
- Through Wall Ratchet Binder System
- · Low/Hot Oil Shutdown with Indicator
- Power Unit Weather Shield or Cover



Nylatron Ram Guide System

The ram guide system is constructed with a set of Nylatron blocks that run along a steel tube on each side of the ram. This guide system maintains the ram against bucking and fishtailing during operation.



Ram Wiper Blade

The floating wiper blade is a 2" x 3/8" steel wear bar attached to a hinged mechanism that allows it to ride on top of the ram. The wiper cleans the top of the ram during backward movement to prevent material build-up behind the ram.

Cart Dumpers From SP

The many possibilities for adding a cart dumper to a metal recycling system almost always save our customers additional money in operating costs. Our wide selection of cart dumpers offer you piece of mind by reducing back injuries, improving production, eliminating bottlenecks, and helping to keep your facility clean. SP will help determine your needs and present you with a cart dumper that can dump any size load from a few hundred pounds, to 10,000 lbs. as high as 30 feet.

Below are a few of our most popular machines, but we regularly custom fabricate systems to fit any business. With a custom system, you can utilize existing carts to capitalize on your current processes by reducing labor, costs, and eliminating problems associated with moving metals throughout production.



DD Dumpers

DD dumpers extend to a160 degree angle in order to ensure that odd-shaped or sticky materials fall out. The DD-160 pictured has a single center cylinder placement and a smaller footprint than most dumpers allowing it to fit in tight spaces. These dumpers can handle weights up to 4,000 lbs and provide a great alternative to heavy lifting while preventing injuries due to repetitive motion.



Our Extended Height Dumpers provide solutions for companies that have different operation levels or need more "fall" for the load in question. Each EHD is custom designed to meet cart specifications and to ensure stability under extreme conditions. Reliable, safe, and easy to use, these machines add value and reduce labor.



ROLO Dumpers

ROLO dumpers dump 1,000 to 10,000 lb. loads at a 135 degree angle. These dual-cylinder machines provide strong and consistent performance while dumping carts, bins, and cans up to 84" high.







