



WORK TOOLS





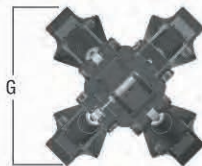
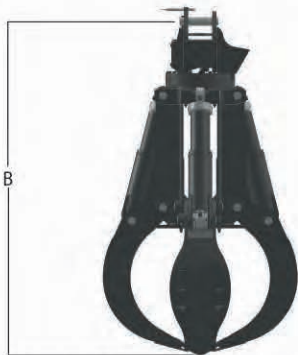
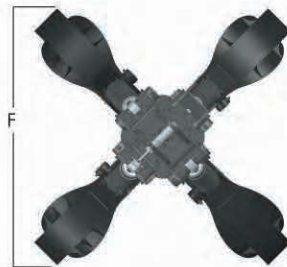
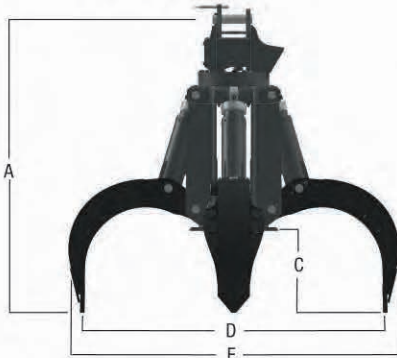
ORANGE PEEL GRAPPLES

Heavy-duty scrap handling meets its match with Pierce orange peel grapples. Hardened, long-wearing grapple tips complement the T-1 steel mainframe and AR400 grapple tines. Together, they deliver a tough-as-nails scrap grapple. Combine that with heavy-duty protection armor and four high-pressure cylinders for greater closing power, and you have a work tool designed for high duty cycle extreme applications.

EVERYTHING YOU NEED TO MAXIMIZE UPTIME AND PRODUCTION

- 360° continuous power rotation.
- Heavy-duty bearing and rotate motor.
- Oversized, induction-hardened, heat-treated, and chromed pins.
- Aluminum bronze bushings for extended service lubrication/greasing intervals.
- Completely protected hydraulic system with access cover plates for easy maintenance.
- (4) high-pressure cylinders for greater closing power with heavy-duty protection armor.
- Work tool-to-link pin.

- Optimum arm shape to maximize payload.
- 2YD³ and smaller grapples designed to fit inside dump trailers for easy unloading.
- OPTIONAL:
Crosshead link to interface with stick: includes stick tip pin.
- Quick Change Work Tool System.
- Fixed grapples also available in knock-about and non-rotating configurations.



ORANGE PEEL SPECIFICATIONS

SIZE	MODEL	A	B	C	D	E	F	G	WEIGHT
.75 YD ³	OP75	85"	98"	25"	86"	95"	74"	47"	3,700#
1.0 YD ³	OP100	89"	101"	31"	91"	103"	79"	49"	3,900#
1.5 YD ³	OP150	88"	104.8"	30"	101"	112"	86"	55"	4,450#
2.0 YD ³	OP200	94"	113"	36"	112"	122"	92"	58"	4,800#
2.5 YD ³	OP250	96"	118"	39"	121"	134"	100"	64"	5,600#
3.0 YD ³	OP300	104"	126"	43"	129"	143"	108"	72"	6,500#

CHOOSE FROM OPEN, SEMI-ENCLOSED, AND FULLY ENCLOSED ORANGE PEEL GRAPPLES.



MAKE A QUICK CHANGE

Save money while adding material handling flexibility with our Quick Change Work Tool System. It lets you change from clamshell to grapple to skip dump to C-hook in as little as 30 minutes. Power rotate assembly stays with your machine. And, of course, you can count on our Quick Change Work Tool System to maintain rugged design and construction you expect from Pierce.



QUICK CHANGE TOOL SYSTEM



GENERATOR PACKAGES

Keep your motor running—and your work flowing—with generator packages specially engineered to power your magnets efficiently, while maximizing your payload.





INCLUDED:

- Baldor generator directly coupled to hydraulic motor.
- Hubbell controller with fusing 24V DC relay package.
- Cab-mounted volt-meter magnet "on/off" indicator.
- 75' magnet cable and connectors, brackets, and mounts (as required).
- Cab-mounted on/off system control.
- Continuous oil supply from dedicated pump.
- Convenient control handles.
- Installation fully within 48", 60", 72", or 120" Pierce cab riser or at right front corner location.

OPTIONAL:

- EMAG solid-state controller.

WORK TOOLS



MAGNETS
COMPLETE THE PACKAGE WITH
THE OPTIMUM MAGNET SIZE
FROM PIERCE.

MACHINE SIZE	ALUMINUM COIL MAGNET		GENERATOR PACKAGE
	DIAMETER	WEIGHT	SIZE
15-19	30"	900#	5KW
20-21	34"-40"	1,200#-1,850#	5KW, 7.5KW
22-26	40"	1,850#	7.5KW, 10KW
27-29	48"	2,700#-2,900#	10KW
30-39	57"	4,100#-4,400#	15KW
40-49	66"	6,200#-6,400#	20KW
60-75	66"-72"	6,400#-8,300#	25KW, 33KW
80-90	72"-78"	8,300#-10,300#	33KW, 40KW
115-130	92"	15,400#	45KW

MAGNET AND GENERATOR PACKAGE SIZES ABOVE SHOULD BE CONSIDERED GUIDELINES ONLY. ALL MAGNETS REQUIRE MAGNET LINK. FOR GENERATOR PACKAGE INSTALLATION, MACHINE MUST BE EQUIPPED WITH APPROPRIATE AUXILIARY PUMP DRIVE. PIERCE PACKAGE DOES NOT INCLUDE PUMP OR PUMP INSTALLATION.

OPTIONAL:

- Magnet equipped with grapple post for clean-up operations.
- Magnet fixed to excavator linkage for C&D sweeping applications.



FIXED MAGNET LINK



GRAPPLE POST



DANGLING MAGNET LINK

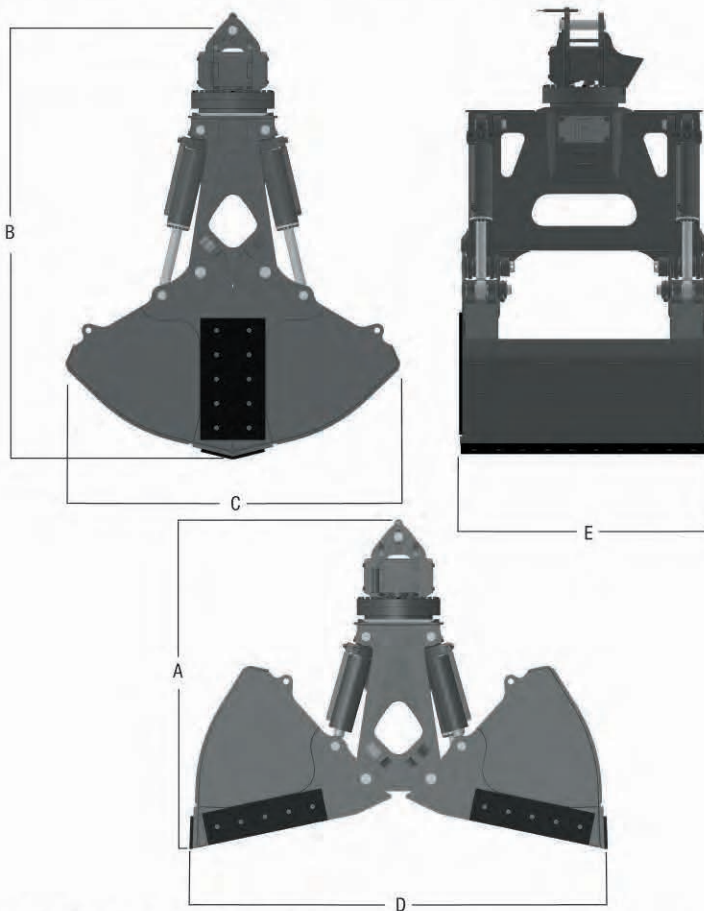
A large orange excavator is shown in a construction or mining environment. The focus is on the clamshell bucket, which is a large, heavy-duty metal bucket with a curved, clamshell-like shape. The bucket is filled with dark, wet earth and debris. The excavator's arm and tracks are visible, and the background shows a hilly, wooded area under a bright sky.

GRAB THE BULK OF THE JOB. IT'S ALL IN A DAY'S WORK.

Loading and handling bulk material is gritty, rigorous work that can put a world of hurt on your equipment. Pierce clamshell buckets have the muscle you need to power through every step of the process. Safely, reliably, and profitably.

REHANDLING CLAMSHELL BUCKETS

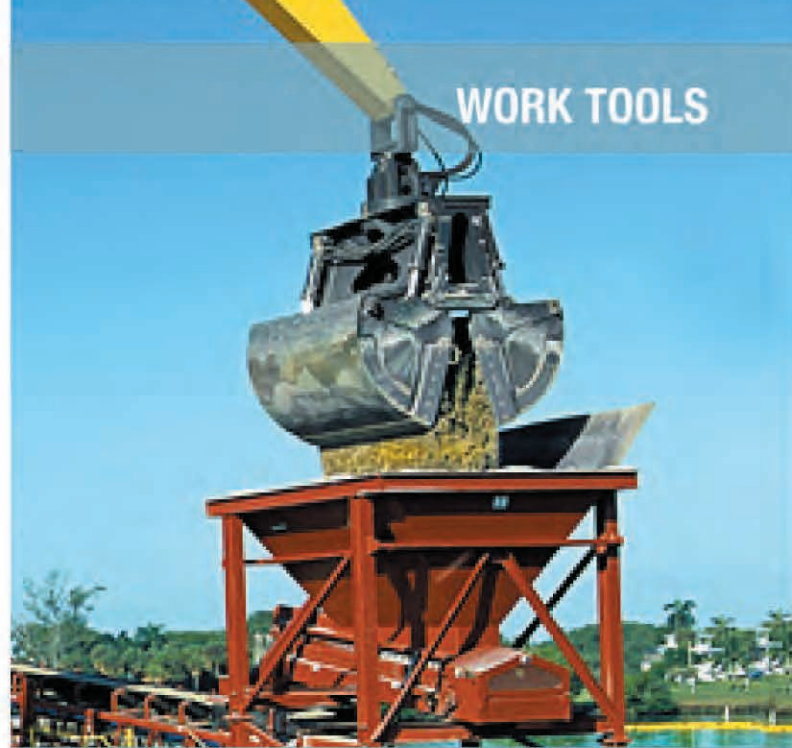
Maximize your payload with super tough buckets made with strong materials including a T-1 steel mainframe and hardened, wear-resistant AR400 bucket halves for heavy-duty material handling.



CLAMSHELL SPECIFICATIONS

MODEL	CAPACITY YD ³	A	B	C	D	E	WEIGHT
QC 200	2 YD ³	76	101	75	95	62	5,325#
QC 250	2.5 YD ³	77	106	82	103	62	5,750#
QC 300	3 YD ³	78	110	90	111	62	6,090#
QC 350	3.5 YD ³	83	114	89	108	74	6,900#
QC 400	4 YD ³	84	118	94	115	74	7,350#
QC 450	4.5 YD ³	85	120	99	120	74	7,800#
QC 500	5 YD ³	84	119	95	117	86	9,100#
QC 550	5.5 YD ³	85	122	101	122	86	9,600#
QC 600	6 YD ³	86	124	105	127	86	10,100#
QC 700	7 YD ³	97	130	106	128	100	11,500#
QC 800	8 YD ³	98	134	112	136	100	13,000#
QC 900	9 YD ³	102	137	111	135	114	14,200#
QC 1000	10YD ³	102	140	116	141	114	15,100#
QC 1100	11 YD ³	103	143	121	147	114	16,000#

BUCKETS SUITED FOR LIGHT WEIGHT MATERIAL (LESS THAN 1,800#/YD³) AVAILABLE UPON REQUEST.
BUCKETS FOR HEAVY-DUTY DIGGING CONFIGURATIONS AVAILABLE UPON REQUEST.



HERE'S THE SCOOP ON OUR CLAMSHELL BUCKETS.

INCLUDED:

- High-strength material to reduce unnecessary weight.
- T-1 steel main frame.
- 360° continuous power rotation.
- Hardened, wear-resistant AR400 bucket halves.
- Heavy-duty bearing and rotating motor.
- Oversized, induction-hardened, heat-treated, and chromed pins.
- Aluminum bronze bushings for extended service lubrication/greasing intervals.
- Completely protected hydraulic components with access cover guards for easy maintenance.
- (4) high pressure cylinders for greater closing power and structural stability.
- Work tool-to-link pin.

OPTIONAL:

- Crosshead link to interface with stick: includes stick-tip pin.
- AR400 (or greater) cutting edges.
- Quick Change Work Tool System.
- Fixed buckets also available in knock-about and non-rotating configurations.



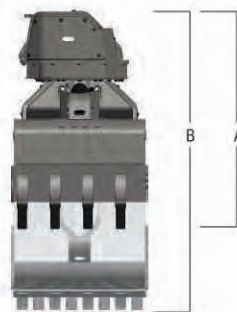
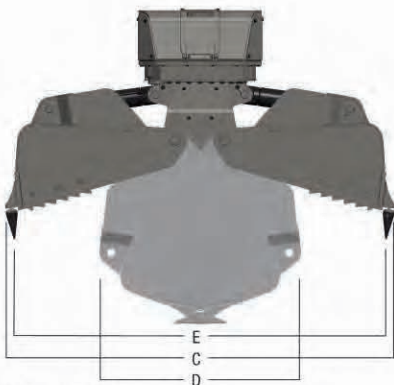


POWER ATTACHMENTS

Go to extremes with Pierce power attachments, specially made to stand up to the rigors of heavy construction, forestry, demolition, and extreme climate and work conditions. Pierce power attachments are perfect for ground level demolition, road building, and heavy-duty excavation.

All of our power attachments offer controlled articulation and positioning from the excavator's bucket cylinder and linkage. They can be adapted to quick couplers for further versatility, and offer proportional control for opening, closing, rotating, and other precision handling.

POWER ATTACHMENT SIZES (CLAMSHELL BUCKET SHOWN)			
MODEL	PPA-25	PPA-27	PPA-30
CAPACITY	.50 YD ³	.75 - 1.00 YD ³	1.25 - 1.5 YD ³
RECOMMENDED MACHINE SIZE	16-26 MT	22-39 MT	30-49MT
WEIGHT (SINGLE DRIVE, NO LUGGING)	3,600#	4,700#	5,600#
A HEIGHT (OPEN)	62"	66"	70"
B HEIGHT (CLOSED)	77"	86"	96"
C OVERALL WIDTH (OPEN)	87"	103"	120"
D OVERALL WIDTH (CLOSED)	51"	54"	62"
E MAXIMUM OPENING	81"	96"	114"
F DEPTH	35"	37"	43"
NOTE: SPECIFICATIONS AND MEASUREMENTS WILL VARY DEPENDING ON CONFIGURATION. MEASUREMENTS ABOVE REFLECT CLAMSHELL BUCKET CONFIGURATION.			
ROTATE GEAR/BEARING DIAMETER	25"	27"	30"
MAIN BEARING RATING	120,000 LBS @ 0 FT. LBS 40,000 LBS @ 52,000 FT. LBS.	120,000 LBS @ 0 FT. LBS 40,000 LBS @ 52,000 FT. LBS.	160,000 LBS @ 0 FT. LBS 50,000 LBS @ 70,000 FT. LBS.
ROTATION	360°, CONTINUOUS	360°, CONTINUOUS	360°, CONTINUOUS
STANDARD DRIVE	SINGLE DRIVE	SINGLE DRIVE	SINGLE DRIVE
OPTIONAL DRIVE	DUAL DRIVE (-D)	DUAL DRIVE (-D)	DUAL DRIVE (-D)
CYLINDER SIZE	4"	4"	4.5"



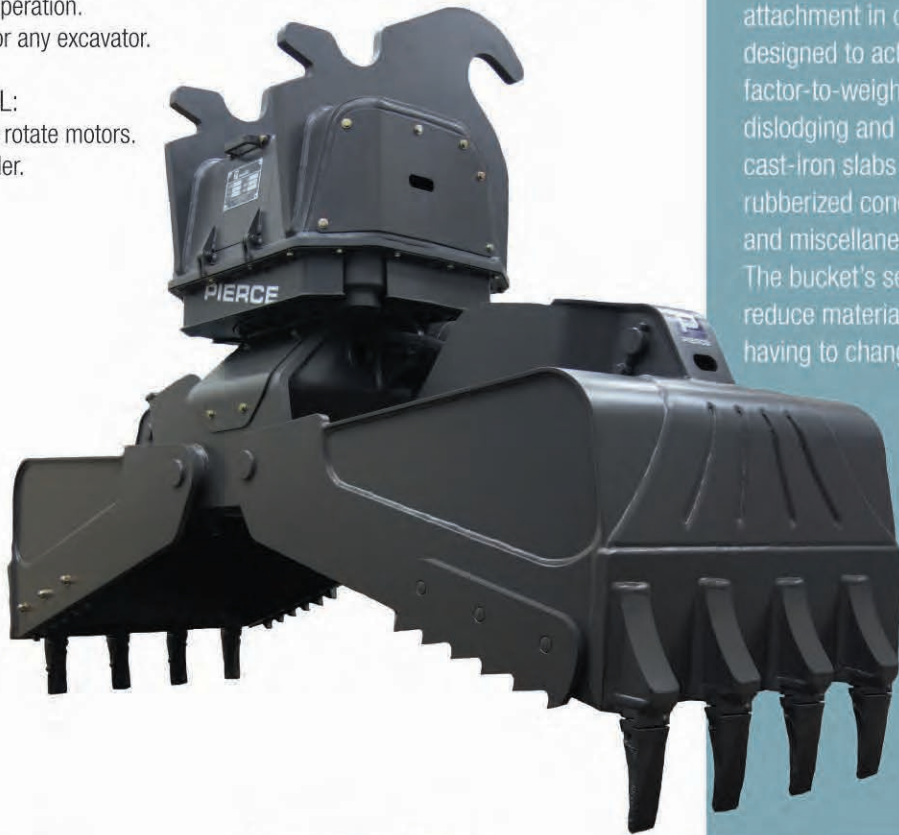
- AVAILABLE CONFIGURATIONS:
- Clamshell bucket
 - 3 x 3 contractor's grapple (-C)
 - Forestry grapple (-F)
 - Rake (-R)
 - Demolition grapple (-D)

INCLUDED:

- T-1 steel for superior strength and AR400 for abrasive resistant surfaces.
- Common upper structure integrates lugging interface to any excavator.
- Enclosed upper structure protects hydraulic components from debris and impact.
- Bolt-on replaceable, serrated side edges.
- Replaceable bucket teeth.
- Common upper structure allows for interchangeability between various bucket/grapple tines, eliminating the need for multiple dedicated work tools.
- Large diameter, 4140 HRHT alloy pins.
- Aluminum bronze bushings.
- 360° continuous rotation.
- (2) cylinders with high pressure seals.
- 'Valve in head' configuration minimizes machine's hydraulic requirements.
- Open/close/rotate 'proportional' control (in lieu of 'on/off' control).
- Momentary rotational float allows payload's momentum to pivot work tool.
- Direct coupled rotate drive with double supported pinion gear and high output motor(s).
- Rugged main bearing, large capacity through-bolted external gear slewing ring.
- Easy access to all service and maintenance locations.
- Front access door pivots open and main valve slides out for easy serviceability (shown below).
- Bolt-on cover guards protect main bearing and other serviceable locations during operation.
- Lugging for any excavator.

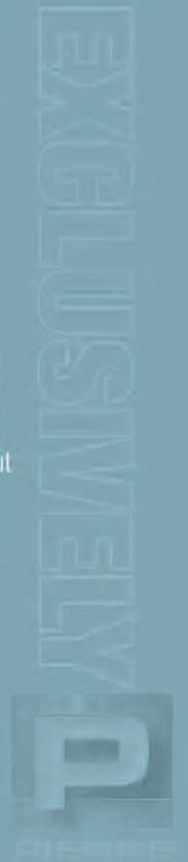
OPTIONAL:

- Dual drive rotate motors.
- Tool cylinder.



PROJECT: T-REX

Specially developed for a nuclear reactor removal project for the DOE, this power attachment in clamshell configuration was designed to achieve a very high performance factor-to-weight/size ratio. It is ideal for dislodging and grappling materials such as cast-iron slabs and blocks, structural steel, rubberized concrete, rectangular graphite bars, and miscellaneous tubing up to 4" in diameter. The bucket's severing feature makes it easy to reduce material size for easier handling, without having to change to a standard shear.





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