

# 2019 EQUIPMENT SELECTION GUIDE

## AUGER BORING

Company	Model	Type Drive	Weight (lbs)	Boring Diameter (in)	Pit Size (ft)	Total Thrust (lbs)
American Augers	24/30-150	mechanical	4,142	4 - 30	10 x 33	150,000
	36-600	mechanical	5,100	12 - 36	14 x 36	600,000
	36/42-600E	mechanical	9,337	12 - 42	14 x 36	600,000
	48/54-900	mechanical	6,150	24 - 54	14 x 37	900,000
	60-1200	mechanical	8,900	24 - 60	16 x 37	1,200,000
	72-1200	mechanical	12,000	24 - 72	16 x 37	1,200,000
Barbco	24-150	mechanical	4,900	4 - 24	8 x 34	157,000
	30-200	mechanical	5,573	4 - 30	8 x 34	213,000
	36-500	mechanical	9,800	4 - 36	8 x 34	500,000
	36-700	mechanical	10,500	4 - 36	8 x 34	738,000
	42-700	mechanical	11,500	4 - 42	8 x 34	738,000
	48-950	mechanical	14,000	12 - 48	8 x 34	9,500,000
	48-1100	mechanical	15,200	12 - 48	10 x 34	1,106,000
	60-1100	mechanical	16,000	12 - 60	10 x 34	1,106,000
	60-1200HD	mechanical	21,000	24 - 60	10 x 34	1,166,000
	72-1200	mechanical	22,500	24 - 72	10 x 34	1,166,000
	72-1800	mechanical	24,000	24 - 72	10 x 36	1,822,000
	84-1800	mechanical	27,000	24 - 84	10 x 36	1,822,000
	84-2600	mechanical	39,000	24 - 84	12 x 36	2,622,000
	96-2600	mechanical	45,000	36 - 96	12 x 36	2,622,000
Bor-It Mfg.	12H*	hydraulic	960	2 - 12	3 x 9	30,000
	20D*	mechanical	2,200	4 - 20	4 x 28	51,500
	24**	mechanical	4,200	8 - 24	6 x 31	100,000
	30**	mechanical	6,500	12 - 30	7 x 31	200,000
	36**	mechanical	7,800	12 - 36	8 x 31	300,000
	42**	mechanical	14,000	12 - 42	10 x 35	500,000
	48**	mechanical	19,000	24 - 48	10 x 35	753,000
	54**	mechanical	23,000	24 - 54	10 x 35	1,000,000
	60**	mechanical	23,800	24 - 60	10 x 35	1,200,000
	McLaughlin	McL-12HB Zipper	hydraulic	320	3 - 10	5 or 7
McL-24C		mechanical	6,000	4 - 24	30	98,000
McL-36/42C		mechanical	14,500	12 - 42	30	400,000
McL 175 Work Horse		mechanical	36,000 split	16-42	32	800,000
McL 225 Work Horse		mechanical	43,000 split	16-72	32	1,200,000
The Robbins Company		ABM 36-630	mechanical	20,000*	12 - 36	12 x 35
	ABM 48-950	mechanical	23,000*	12 - 48	12 x 35	950,000
	AMB 60-1270	mechanical	35,000*	24 - 60	16 x 38	1,270,000
	ABM 72-1500	mechanical	45,000*	24 - 72	16 x 38	1,500,000

## BORING—HARD ROCK ATTACHMENTS

Company	Model	Casing Diameter (in)	Hex Size (in)	No. Cutters	Cutter Size (in)	Torque (ft/lbs)	Thrust Range (lbs)
Akkerman	RBU 24	24	4	9	6.5	as required	50,000
	RBU 30	30	4	9	6.5	as required	50,000
	RBU 36	36	4	11	6.5	as required	68,000
	RBU 42	42	5	16	6.5	as required	90,000
American Augers	24RH	24	4	9	6.5	7,800	94,995
	30RH	30	4	11	6.5	11,900	116,105
	36RH	36	4	13	6.5	16,900	137,215
	42RH	42	5	14	6.5	25,800	168,880
	48RH	48	5	19	6.5	32,900	200,545
Bohrtec	FSBU36	36	4			16,900	65,000/130,000
	NOTE: FSBU is not designed with cutters and is a Rock Attachment with Integrated Down the Hole Hammer).						
Herrenknecht	AVN800B rock	37.8	n/a	5	12.5	40,566	200,080
	TBM 1200 rock	58.66	n/a	14	11	123,910	427,137
	TBM 1600 rock	76.38	n/a	17	11	304,613	741,870
	TBM 2000 rock	98.43	n/a	19	13	737,562	1,090,324
	TBM 2200 rock	106.30	n/a	20	14	885,075	1,236,450
	TBM 2500 rock	114.17	n/a	21	14	958,831	1,348,854
ICON Tunnel Systems/	FSBU16	16	3	N/A	N/A	7,800	45,000/90,000
	FSBU24	24	3 or 4			7,800	45,000/90,000
	FSBU30	30	4			11,900	45,000/90,000

McLaughlin Boring Systems	Model	Weight (lbs)	Boring Diameter (in)	Pit Size (ft)	Total Thrust (lbs)
SRS 30	30	5	12		20,000
SRS 36	36	5	12		20,000
SRS 42	42	5	12		25,000
SRS 48	48	5	12		30,000
SRS 60	60	5	12		50,000

The Robbins Company	Model	Weight (lbs)	Boring Diameter (in)	Pit Size (ft)	Total Thrust (lbs)
SBUA-24	24	3 (4" opt)	9	6.5	5,800/7,800
SBUA-30	30	4	9	6.5	5,800/7,800
SBUA-36	36	4	13	6.5, 9.5	12,600/16,900
SBUA-42	42	4	16	6.5, 9.5	19,300/25,800
SBUA-48	48	5 (4" opt)	19	6.5, 9.5, 11.5	24,600/32,900
SBUA-54	54	5 (4" opt)	21	6.5, 9.5, 11.5	30,600/40,900
SBUA-60	60	5	14	6.5, 9.5, 11.5	38,200/50,900
SBUA-66	66	5	15	11.5, 14	47,100/62,800
SBUA-72	72	5	16	11.5, 14	64,100/79,800
SBU-M 48	50	N/A	19	6.5	N/A
SBU-M 54	56	N/A	21	6.5	N/A
SBU-M 60	62	N/A	14	11.5	N/A
SBU-M 66	68	N/A	15	11.5	N/A
SBU-M 72	74	N/A	16	11.5	N/A
SBU-M 78	80	N/A	16	14	N/A
SBU-RC 36	38	N/A	13	6.5	N/A

## BACKHOE-LOADERS

Company	Model	Operating Weight (lbs)	Max. Reach (height to pin)	Backhoe Dig Depth	HP
Case	580N EP	15,810	18' 6"	15'	68
	580N	16,589	18' 4"	14' 9"	83
	580 Super N	17,269	18' 2"	14' 6"	95
	580 Super N WT	20,077	18' 3"	14' 6"	95
	590 Super N	20,532	19' 7"	15' 6"	108
Caterpillar	415F2	15,207	11' 11"	14' 3"	68
	416F2	15,207	11' 11"	14' 3"	87
	420F2	17,033	11' 11"	14' 4"	93
	420F2 IT	17,732	11' 11"	14' 4"	93
	430F2	18,364	13'	15' 4"	108
	440	21,544	11' 11"	15' 6"	104
	450	24,039	12'	17'	131
John Deere	310L	14,669	17' 9"	14' 1"	93
	310L EP	13,822	17' 9"	14' 1"	69
	310 SL	15,872	18' 1"	14' 3"	99
	310SL HL	16,571	18' 8"	15' 1"	110
	315SL	17,554	17' 10"	13' 5"	99
	410L	17,786	19' 9"	15' 11"	113
Kubota	B26TLB	4,001	94.5	8.3'	24.3
	L47TLB	7,205	113.9	10'	47.1
	M62TLB	8,925	126.1	14.2'	63
New Holland	B95C	16,416	14' 9"	14' 4"	97
	B95C TC	18,443	14' 9"	14' 4"	97
	B110C	16,526	14' 9"	15' 3"	110

## CABLE LAYING EQUIPMENT

Company	Model	HP	Operating Weight (lbs)	Max. Installation Depth (in)	Max. Reel Capacity (lbs)
BRON	150	225	36,500	60	8,000
	250	300	57,000	72	20,000
	450	440	81,000	88	38,000
	550	540	84,000	88	38,200
	Ditch Witch	100SX	13.5	720	12
410SX		49.6	3,910	26	n/a
RT45		49	3,240	63	n/a
RT55		62	5,610	62	1,500
RT80		74	7,655	62	2,000
RT80 Quad		74	11,580	93	n/a
RT105		107	9,700	97	n/a
RT120		121	8,700	97	2,500
RT120 Quad		121	13,600	93	3,000
RT125		121	9,700	97	2,500
RT125 Quad		121	15,300	93	3,000
VP30		31	1,993	12	n/a
Zahn Plow		30	1,290	18	n/a

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## CABLE LAYING EQUIPMENT (cont.)

Company	Model	HP	Operating Weight (lbs)	Max. Installation Depth (in)	Max. Reel Capacity (lbs)
Felling Trailers	FT-14 R	8	2,900	12	*
	*capacity for up to 120" reel				
Toro	Pro Sneak 365	35.5	2,770	36	300
	RT600	65	6,050*	60	2,500
	RT1200	121	14,000	84	3,780
	*base unit				
Vermeer	PTX40	46.8	2,740	42	500
	PTX42	46.8	3,240	42	500
	PTX44	46.8	2,940	42	500
	RTX450	49	4,575	60	500
	RTX550	65/67	7,700	60	1,500
	RTX750	74	9,330	60	2,000
	RTX1250i2	127	16,160	72	5,000
	SPX25	25	1,600	12	150

## CABLE PLOWS

Company	Model	HP	Max. Depth (in)	Plow Offset Range (in)	Approximate Weight (lb)
BRON	V65	50 - 75	38	42	2,100
	V75-1	75 - 130	42	48	3,200
	V75-2	120 - 150	48	51	4,200
	V100	130 - 164	60	60	6,400
	HS X-1	75 - 120	42	48	2,600
	HS-I	170 - 250	66	66	8,700
	HS-II	280 - 350	72	65	11,200
	HS-III	320 - 500	78	72	14,750
	HS-III R	N/A72	138	21,500	

Ditch Witch (see listing under Cable Laying Equipment)

Toro (see listing under Cable Laying Equipment)

Vermeer (see listing under Cable Laying Equipment)

## COMPACT TRACK LOADERS

Company	Model	HP	Operating Weight (lbs)	Rated Operating Capacity (lbs)	Machine Length (in)	Machine Height (in)	Machine Width (in)
Bobcat	T450	61	6,148	1,400	126.6	77.8	55
	T550	66	7,662	1,995	133	77.8	67
	T590	66	7,822	2,100	133	77.8	67
	T595	74	8,055	2,200	133	77.8	67
	T630	74	8,555	2,100	136.8	81.3	72.9
	T650	74	9,113	2,570	136.8	81.3	72.9
	T740	74	10,127	3,200	141.6	81.3	70
	T770	92	10,515	3,475	141.6	81.3	78
	T870	100	12,925	3,650	153.9	83.6	82.8
Case	TR270	68	8,270	2,700	129.6	78.7	65.9
	TR310	68	8,880	3,100	129.6	78.7	74.3
	TR340	84	10,000	3,400	143.5	80.4	76
	TV370	74	9,630	3,700	142.9	80.4	76
	TV380	84	10,550	3,800	143.2	80.4	76
Caterpillar	239D	60	7,289	1,435	127	80	66
	249D	60	7,685	1,610	127	80	66
	257D	73	8,048	1,960	137.3	83.8	66
	259D	73	8,846	2,030	137.3	83.1	66 / 69
	279D	73	9,893	2,055	146.2	83.2	76 / 78
	289D	73	10,533	2,660	146.2	83.2	76 / 78
	299D2	95	11,275	3,200	154.7	83.6	76 / 78
	299D2 XHP	106	11,608	3,308	154.7	83.7	76
John Deere	317G	65	8,195	2,125	137.4	78.5	65.1
	325G	74	9,500	2,590	136.3	81.1	71.5
	331G	91.2	11,900	3,100	146	86.7	78.9
	333G	100	12,100	3,700	146	86.7	78.9
Kubota	SVL65-2	62.5	8,035	3,000	136.4	79.9	65.2
	SVL75-2	68.8	9,039	3,285	140.8	82	68
	SVL95-2S	87	11,299	4,571	154.6	83.3	80
New Holland	C227	70	8,200	2,700	105.1	78.7	65.9
	C232	76	9,630	3,200	117.8	80.4	76
	C234	84	10,000	3,400	118.7	80.4	76
	C237	68	9,945	3,700	117.6	80.4	76
	C245	84	10,610	4,500	120.2	80.4	76
Volvo	MCT85C	62	8,355	1,900	139	78.7	66.1
	MCT110D	74	10,622	2,526	150	81.9	76
	MCT125D	74	11,003	2,733	150	81.9	76
	MCT135D	74	8,047	3,000	150	81.9	76

## CRAWLER DOZERS/TRACTORS

Company	Model	HP	Operating Weight (lbs)	Blade Capacity (yd³)
Case	650L LT	74	16,250	1.69
	650L LGP	74	17,550	2.15
	650L WT	74	16,800	2.0
	650M LT	68	15,803	1.58
	650M LGP	68	16,405	2.15
	650M WT	68	16,839	2
	750M LT	92	20,040	1.69
	750M WT	92	20,679	2.00
	750M LGP	92	21,180	2.22
	850M LT	112	21,560	2.35
	850M WT	112	22,330	2.53
	850M LGP	112	22,830	2.62
	1150M LT	127.4	31,134	3.75
	1150M WT	127.4	32,174	4.16
	1150M LGP	127.4	32,657	4.16
	1650M WT	150	38,650	5.28
	1650M XLT	150	37,750	4.28
	1650M LGP	150	39,550	5.28
	2050M LT	214	44,563	7.29
	2050M WT	214	46,891	7.15
	2050M XLT	214	45,414	7.15
	2050M LGP	214	48,773	7.12
Caterpillar	D3K2 LGP	80	18,896	2.17
	D3K2 XL	80	17,465	1.99
	D3K2 Mulcher LGP	80	24,698	N/A
	D4K2 LGP	92	18,686	2.42
	D4K2 XL	92	18,007	2.59
	D5	170	37,875	5.6
	D5 LGP	170	42,263	5.1
	D5K2 LGP	104	20,992	3.06
	D5K2 XL	104	20,313	2.86
	D6	215	48,500	7.5
	D6 LGP (30 in.)	215	50,130	7.6
	D6 LGP (36 in.)	215	52,615	5
	D6 XE	215	48,500	7.5
	D6 XE LGP (30 in.)	215	50,130	7.6
	D6 XE LGP (36 in.)	215	52,615	5
	D6 WH	215	52,166	14.6
	D6 WH LGP (30 in.)	215	52,751	16.1
	D6 WH LGP (36 in.)	215	55,674	12.3
	D6 XE WH	215	52,166	14.6
	D6 XE WH LGP (30 in.)	215	52,751	16.1
	D6 XE WH LGP (36 in.)	215	55,674	12.3
	D6K2 XL (Tier 4 Final)	128	29,258	4.01
	D6K2 LGP (Tier 4 Final)	128	30,664	4.98
	D7E LGP (Tier 4 Final)	238	62,886	7.7
	D7E LGP WH (Tier 4 Final)	238	68,123	25
	D7E (Tier 4 Final)	238	57,441	8.98
	D7E WH (Tier 4 Final)	238	65,537	17.6
	D8T	354	87,600	13.4
	D8T LGP	354	83,200	13.4
	D8T WH	354	87,400	13.4
	D8T WH LGP	354	92,300	13.4
	D9T	410	94,265	17.7
	D9T WH	410	109,705	37.6
	D9T (Tier 4 F)	436	95,917	17.7
	D9T WH (Tier 4F)	436	110,471	37.6
	D10T2	600	139,010	24.2
	D11T	850	208,589	45
	D11T CD	850	220,385	57
John Deere	450K	80	17,510-18,752	2.6
	550K	92	19,758-21,000	2.6
	650K	104	21,320-22,343	2.9
	650K SmartGrade	104	21,320-22,343	2.9
	700K	130	30,275-31,290	4.1
	700K SmartGrade	130	30,275-31,290	4.1
	750K	165	34,527-37,745	5.6
	750K SmartGrade	165	34,527-37,745	5
	850K	205	42,558-48,005	7.8
	850K SmartGrade	205	45,152-46,376	5.9
	950K	265	65,300-73,700	11.2
	950K SmartGrade	265	65,300-73,700	11.2
	1050K	350	94,300-95,000	14.9
Komatsu	D37EX-24	89	19,842	2.5
	D37PX-24	89	20,503	2.79
	D39EX-24	105	21,891	2.89
	D39PX-24	105	22,817	3.14
	D39EXi-24	105	21,848	2.89
	D39PXi-24	105	23,148	3.14
	D51PX-24	131	31,438	4.4
	D51EX-24	131	30,821	3.5
	D51PXi-24	131	31,438	4.4
	D51EXi-24	131	30,380	3.5
	D61PX-24	168	42,902	4.98
	D61EX-24	168	40,830	4.41

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## CRAWLER DOZERS/TRACTORS (cont.)

Company	Model	HP	Operating Weight (lbs)	Blade Capacity (yd <sup>3</sup> )
Komatsu	D61PXI-24	168	43,167	4.98
	D61EXI-24	168	41,094	4.41
	D65WX-18	217	50,618	7.7
	D65EX-18	217	46,892	7.3
	D65PX-18	217	50,331	5.8
	D65PXI-18	217	50,331	5.8
	D65EXI-18	217	46,892	7.3
	D65EX-18 WH	217	50,259	14.8
	D65PX-18 WH	217	53,136	15.1
	D65WX-18 WH	217	53,350	17.2
	D85PX-18	264	63,800	7.7
	D85EX-18	264	68,165	9.4
	D85PXI-18	264	65,080	7.7
	D85EXI-18	264	67,439	9.4
	D85PX-18 WH	264	70,702	15.4
	D85EX-18 WH	264	69,922	18.4
	D155AX-8	354	89,300	15.6
	D155AXI-8	354	90,610	12.3
	D155AXI-8 RC	354	102,060	12.3
	D375A-8	748	165,655	28.8
D475A-5E0	890	238,960	45	

Company	Model	HP	Operating Weight (lbs)	Blade Capacity (yd <sup>3</sup> )
LiuGong N. America	TD-95 LT	94	22,046	6-Way 2.4
	TD-85 LGP	94	22,707	6-Way 2.6
	TD-95 LT	113	24,251	6-Way 2.9
	TD-95 LGP	113	24,912	6-Way 3.1
	TD-15R	201	44,864	Semi-U 7.45
	TD-20R	248	53,660	Semi-U 9.2
	TD-25R	375	90,720	Semi-U 12.5
	TD-R40R	528	149,252	Semi-U 24.3

## DIRECTIONAL DRILLING RIGS, MINI (Under 50,000 pounds pullback)

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Torque (ft/lbs)	Pullback (lbs)
Barbco	BD40HP	rack & pinion	27,000	varies	6,600	40,000
Ditch Witch	JT5	rack & pinion	3,690	varies	550	5,000
	JT10	rack & pinion	7,380 (w/pipe)	varies	1,100	10,000
	JT20	rack & pinion	11,890	varies	2,200	20,000
	JT20XP	rack & pinion	11,890	varies	2,500	20,000
	JT25	rack & pinion	20,760	varies	4,000	27,000
	JT30	rack & pinion	17,080	varies	4,000	30,000
	JT30AT	rack & pinion	17,660	varies	4,000	30,000
					800 (inner)	
	JT40	rack & pinion	20,500	varies	5,500	40,000
	AT40	rack & pinion	21,600	varies	5,500	40,000

NOTE: Operating weight varies depending on selected options

McLaughlin	Mcl 10H (5')	hydraulic	1,100	3 - 12	1,030	13,250
	Mcl 10H (7')	hydraulic	1,200	3 - 12	1,030	13,250
TT Technologies	Grundopit 40/60	hydraulic	440	2.1	442	8,800
	Grundopit K (24" Keyhole)		1,510	2.5	626	8,925
	Grundodrill 4X	hydraulic	4,100	2.5	950	9,800
	Grundodrill 15X	hydraulic	15,400	3.15	3,100	33,000
	Grundodrill 18ACS		35,510	6.5	7,375	40,000
Toro	2024	quad rack & pinion	8,500	2.25	2,400	20,000
	2226	quad rack & pinion	9,485	2.25	2,600	22,000
	4045	quad rack & pinion	20,000	2.25	4,500	40,000
	4050	quad rack & pinion	17,460	2.75	5,000	40,000

Vermeer	D8x12	rack & pinion	6,600	N/A	1,200	7,850
	D10x15 S3	rack & pinion	7,200		1,500	10,000
	D20x22 S3	rack & pinion	10,850	N/A	2,250	19,550
	D23x30 S3	rack & pinion	14,080	N/A	3,000 (2.38")	24,000
					2,600 (2.06")	
	D23x30DR S3	rack & pinion	16,500	n/a	3,000	24,000
	D24x40 S3	rack & pinion	20,700		4,200	28,000
	D24x40 Series II	rack & pinion	20,200 - 22,250	N/A	4,200	28,000
	D40x55 S3	rack & pinion	23,380	N/A	5,500 (2.38")	40,000
					5,000 (2.06")	
	D40x55DR S3	rack & pinion	31,500	N/A	5,500	40,000

## DIRECTIONAL DRILLING RIGS, MID (50,000-100,000 pounds pullback)

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Torque (ft/lbs)	Pullback (lbs)
American Augers	DD-110	rack & pinion	42,000	varies	15,000	110,000
	DD-240T	rack & pinion	84,600	varies	43,900	240,000

## DIRECTIONAL DRILLING RIGS, MID (cont.)

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Torque (ft/lbs)	Pullback (lbs)
Barbco	BD60HP	rack & pinion	37,500	varies	12,500	60,000
	BD80HP	rack & pinion	38,000	varies	15,000	80,000
	BD100HP	rack & pinion	40,000	varies	15,000	100,000
Ditch Witch	JT60	rack & pinion	31,080	varies	9,000	60,000
	JT60AT	rack & pinion	31,080	varies	9,000	60,000
					2,000 (inner)	
	JT100	rack & pinion	47,770	varies	12,000	100,000
	JT100AT	rack & pinion	50,740	varies	12,000	100,000
				2000 (inner)		
JT100AT	rack & pinion	47,260				
Vermeer	D60X90 S3	rack & pinion	39,392	N/A	9,000	60,000
	D100x140 S3	rack & pinion	50,500 - 58,600	N/A	14,000	110,000
	15' rod					
	D100x140 S3	rack & pinion	50,500 - 58,600	N/A	14,000	110,000
	20' rod					
	D220x300 S3	rack & pinion	74,000	N/A	30,750	242,100

## DIRECTIONAL DRILLING RIGS, MAXI (over 100,000 pounds pullback)

Company	Model	Type Drive	Weight (lbs)	Torque (ft/lbs)	Pullback (lbs)
American Augers	DD-440T	rack & pinion	90,260	60,000	440,000
	DD-660RS	rack & pinion	100,300	80,000	660,000
	DD-1100RS	rack & pinion	106,300	100,000	1,100,000
Barbco	BD120HP	rack & pinion	48,500	20,000	120,000
	BD160HP	rack & pinion	55,000	30,000	160,000
	BD200HP	rack & pinion	62,250	35,000	200,000
	BD250HP	rack & pinion	66,500	45,000	250,000
	BD380	rack & pinion	87,760	60,000	380,000
Herrenknecht	HK100C	rack & pinion	61,800	44,500	224,800
	HK150C	rack & pinion	74,000	51,650	337,000
	HK250C	rack & pinion	89,300	66,400	562,000
	HK250C High Torque	rack & pinion	91,500	88,500	562,000
	HK150T	rack & pinion	57,300	51,650	337,000
	HK250T	rack & pinion	63,940	66,400	562,000
	HK250T High Torque	rack & pinion	67,240	88,500	562,000
	HK400T	rack & pinion	96,000	88,500	882,000
	HK400T High Torque	rack & pinion	107,000	103,300	882,000
	HK500T	rack & pinion	99,200	103,300	1,125,000
	HK500T High Torque	rack & pinion	110,000	147,500	1,125,000
	HK600T	rack & pinion	112,500	147,500	1,323,000
	HK400M	rack & pinion	94,800	88,500	882,000
HK500M	rack & pinion	103,600	103,300	1,125,000	
HK600M	rack & pinion	108,000	147,500	1,323,000	
Vermeer	D330x500	rack & pinion	90,000	50,000	330,000
	D750x900	rack & pinion	101,000	102,500	784,000
	D1000x900	rack & pinion	101,000	102,500	1,000,000
	D1320x900	rack & pinion	101,000	102,500	1,360,000

## EXCAVATORS, COMPACT (under 25,000 pounds)

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach (height to pin)	Machine Width
Bobcat	418	2,593	9.9	0.54	6'	10' 2"	2' 3" - 3' 6"
	E20	4,306	13.3	1.1	8' 6"	14'	3' 3" - 4' 6"
	E26	5,763	22.5	2.9	8' 10"	14' 9"	5' 1"
	E32	7,340	24.1	3.9	10' 3"	16' 4"	5' 1"
	E35	7,699; 7,909	24.1; 31.2	3.9	10' 3"	17' 2"	5' 10"
	E42	9,246	40.9	3.9	10' 6"	17' 3"	5' 8.8"
	E45	10,077	40.9	5.9	10' 10"	18' 7"	6' 5.2"
	E50	10,677	47.7	5.9	11' 7"	19' 6"	6' 5.2"
	E55	12,004	47.7	5.9	12' 10"	20'	6' 5.2"
	E63	13,779	59.4	5.9	13' 6"	20' 5"	6' 6"
	E85	18,977	65	9.5	15' 6"	23' 6"	7' 7"
Case	CX75C SR	16,200	55	0.21 - 0.59	13' 7"	20' 7"	7' 7"
	CX80C	18,800	55	0.24 - 0.59	13' 9"	22' 9"	7' 7"
	CX17C	3,910	16	0.04	7' 3"	10' 8"	4' 3"
	CX26C	5,520	23	0.07	7' 11"	12' 4"	4' 11"
	CX30C	6,020	24.8	0.08	8' 2"	14' 10"	5' 1"
	CX33C	7,110	24	0.09	9' 11"	14' 3"	5' 1"
	CX37C	7,990	24	0.11	10' 3"	14' 11"	5' 9"
	CX57C	12,050	65	0.18	12' 6"	17'	6' 4"
	CX60C	12,940	63	0.18	11' 9"	16' 8"	6' 6"
Caterpillar	300.9D	2,250	13	0.02 - 0.04	5' 8"	9' 11"	2' 5" - 2' 10"
	300.9D VPS	2,400	13	0.02 - 0.04	5' 8"	9' 11"	2' 5" - 2' 10"
	301.4C 301.5	3,880	19.2	0.6 - 3.11	8' 4"	12' 9"	3' 3" - 4' 3"

NOTE: Bucket Capacity is shown in cubic feet.

## EXCAVATORS, COMPACT (cont.)

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach (height to pin)	Machine Width
Caterpillar	301.7D CR 301.7 CR	4,045	19.2	0.6 - 3.11	8' 4"	13' 4"	3' 3" - 4' 3"
	301.7D 301.8	4,464	19.2	0.6 - 3.11	8' 5"	13'	3' 3" - 4' 3"
	302 CR	4,850	19.2	0.97 - 6.11	8' 5"	13' 10"	3' 7" - 4' 7"
	302.4D	5,115	17.7	0.04 - 0.23	8' 10"	13' 10"	4' 7"
	302.7D	6,500	20.7	0.04 - 0.23	8' 10"	15' 4"	5' 2"
	303E CR	7,780	23.5	0.06 - 0.3	9'	15' 9"	5' 1"
	303.5E CR	8,540	31.6	0.06 - 0.3	10' 5"	17' 5"	5' 10"
	303.5E2	8,540	23.5	0.06 - 0.3	10' 5"	17' 5"	5' 10"
	304E2 CR	8,980	40.2	0.06 - 0.3	11' 2"	17' 11"	6' 4"
	304.5E2 XTC	9,040	40.2	0.06 - 0.3	11' 2"	17' 11"	6' 4"
	305E2 CR	11,645	40.2	0.08 - 0.43	12'	19'	6' 6"
	305.5E2 CR	12,250	44.1	0.08 - 0.43	12' 8"	19' 9"	6' 6"
	307E2 307.5	18,152	55.9	3.4 - 18.4	15' 3"	21' 11"	7' 3"
	308E2 VAB 308 CR	20,678	70.3	3.4 - 18.4	15' 3"	24' 6"	7' 7"
	308E2 CR SB 308 CR VAB	20,906	70.3	3.4 - 18.4	11' 5"	25' 5"	7' 7"
	309 CR (Long Undercarriage)	20,731	70.3	3.4 - 18.4	15' 3"	24' 6"	8' 1"
309 CR VAB	21,054	70.3	3.4 - 18.4	11' 5"	25' 5"	8' 1"	
310	22,447	70.3	6.4 - 19.2	17' 1"	24' 8"	8' 1"	
Doosan	DX35-5	7,909	33.5	0.10	10' 3"	17' 2"	69"
	DX42-5	9,246	42.6	0.14	10' 6"	17' 4"	69"
	DX50-5	10,677	49.7	0.20	11' 7"	19' 6"	77"
	DX63-3	13,779	59	0.08 - 0.38	13' 6"	20' 5"	77"
	DX85R-3	18,960	59	0.13 - 0.53	15' 6"	23' 11"	90"

NOTE: Maximum Reach is based on reach at ground level.

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach
Hitachi	ZX17U-5	3,790	14.5	0.02 - 0.05	7' 2"	12' 6"
	ZX26U-5	6,110	20	0.05 - 0.16	8' 6"	15' 2"
	ZX30U-5	6,850	23	0.05 - 0.16	9' 2"	13' 1"
	ZX35U-5	7,760	23.3	0.05 - 0.22	11' 4"	18' 11"
	ZX50U-5	10,560	35.9	0.08 - 0.31	12' 7"	20' 6"
	ZX60USB-5	13,547	53	0.12 - 0.46	13' 6"	21' 6"
	ZX75US-5	17,952	56.9	0.31 - 0.64	15' 1"	22' 2"
	ZX85USB-5	19,244	56.9	0.4 - 0.66	14' 1"	24' 9"

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach
Hyundai	R17Z-9A	3,920	15.8	0.05	7' 2"	12' 7"
	R25Z-9AK	5,360/5,690*	23.2	0.09	7' 11"	14' 8"
	R30Z-9AK	6,380/6,625*	23.2	0.10	8' 2"	15' 3"
	R35Z-9A	7,800/8,470*	23.7	0.14	10' 3"	17' 5"
	R55-9A	12,570	65.1	0.24	12' 6"	20' 2"
	R60CR-9A	13,450	63	0.24	11' 9"	20' 2"
	R80CR-9A	19,290	65.1	0.37	13' 7"	22' 10"

\* canopy/cab

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach
John Deer	17G	3,790	14.5	0.03	7' 2"	12' 6"
	26G	5,780	20	0.03	8' 6"	15' 2"
	30G	6,850	23	0.03	9' 2"	16' 1"
	35G	7,760	23.3	0.14	10'	17' 1"
	50G	10,560	35.9	0.21	11' 7"	19' 7"
	60G	13,620	53	0.25	12' 4"	20' 5"

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach
Kobelco	SK17SR-5E	3,671	14.5	1.77	7' 3"	12' 2"
	SK25SR-6E	5,644	19.7	2.84	9' 2"	15' 7"
	SK30SR-6E	7,320	23.1	3.18	9' 2"	17' 1"
	SK35SR-6E	8,555	23.1	3.88	11'	18' 6"
	SK45SRX-6E	10,300	37.4	4.94	11' 3"	19' 2"
	SK55SRX-6E	11,860	37.4	5.64	12' 10"	20' 6"
	SK75SR-7	17,840	70	0.14 - 0.46	15'	22' 7"
	SK85CS-7	19,270	70	0.14 - 0.46	14' 7"	24' 7"

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach
Komatsu	PC30MR-5	6,836	24.4	0.21	9' 1"	16' 7"
	PC35MR-5	8,324	24.4	0.24	11' 4"	18' 6"
	PC45MR-5	11,001	38	0.21	11' 11"	19' 10"
	PC55MR-5	11,618	38	0.24	12' 4"	20' 4"
	PC78US10	17,747	65.5	0.53	15' 5"	22' 8"
	PC88MR-10	19,290	65.5	0.53	15'	24' 1"

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach
Kubota	K008-3T4	2,200	10.1	0.3 - 0.78	5' 8"	9' 11"
	U17	3,703	15.2	0.49 - 1.5	7' 8"	12' 8.4"
	KX018-4	3,747	15.2	0.49 - 1.5	7' 7"	12' 9"
	U27-4	5,625	20	0.49 - 3.4	9' 3.6"	15' 4"
	KX71-3S	6,305	24.4	1.9 - 4.2	9' 9"	16'
	KX033-4	7,420	23.9	1.9 - 6.6	10' 6"	16' 10"
	KX033-4 Angle Blade	7,781	23.9	1.9 - 6.6	10' 6"	16' 10"
	KX033-4 Extendable Dipper Arm	8,221	23.9	1.9 - 6.6	12' 2"	17' 10"
	U35-4	8,129	23.9	1.9 - 4.25	9' 10.8"	16' 1.3"
	U35-4 Angle Blade	8,129	23.9	1.9 - 4.25	9' 8.9"	16' 11.3"
	KX040-4	9,195	40.9	1.9 - 6.6	11' 3.6"	17' 10.8"
	KX040-4 Angle Blade	9,545	40.9	1.9 - 6.6	11' 2.6"	17' 9"
	KX040-4 6-in-1 Blade	9,900	40.9	1.9 - 6.6	11' 2.6"	17' 9"
	U55-4	11,915	47.6	3.0 - 8.5	11' 1.2"	19' 6"
	U55-4 Angle Blade	11,915	47.6	3.0 - 8.5	11' 10"	19' 6"
	KX057-4	12,200	47.6	3.0 - 8.5	12' 9.6"	20'
	KX057-4 Angle Blade	12,200	45.2	3.0 - 8.5	12' 8.2"	20'
	KX080-4S	18,280	62.3	6.5 - 13.5	15' 1"	23' 6.3"
	KX080-4S Angle Blade	19,200	62.3	6.5 - 13.5	15' 1"	23' 6.3"

NOTE: Bucket Capacity=SAE heaped min-max; Max. Reach=at grade/ground level; Machine Width=transport width

## EXCAVATORS, COMPACT (cont.)

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach (height to pin)	Machine Width
LiuGong N. America	9035ZTS	8,510	23.2	0.14	11' 3"	15' 11"	5' 7"
	909E2CR	18,960	59	0.37	14' 11"	23' 10"	7' 10"
New Holland	E17C	3,910	15.8	0.05	7' 3"	12' 10"	3' 3"
	E26C	5,850	23.2	0.09	7' 11"	14' 8"	4' 11"
	E30C	6,636	23.2	0.1	8' 2"	15' 3"	5' 1"
	E33C	7,396	23.7	0.12	9' 11"	17'	5' 1"
	E37C	8,300	23.7	0.14	10' 3"	17' 5"	5' 9"
	E57C	12,050	65.1	0.23	12' 6"	20' 2"	6' 4"
	E60C	12,940	63	0.23	11' 9"	20' 2"	6' 6"
Volvo	ECR18E	3,748	16	0.02 - 0.07	7' 4"	12' 10"	4' 5"
	EC20D	4,300	16	0.04 - 0.1	9' 1"	14'	4' 5"
	EC20E	4,322	16	0.04 - 0.1	7' 6"	13' 1"	4' 5"
	ECR25D	5,490 - 5,737	21	0.04 - 0.16	9' 9"	15' 1"	4' 11"
	EC27D	6,019	21	0.04 - 0.16	10' 2"	15' 4"	5' 1"
	EC35D	7,782 - 8,686	25	0.07 - 0.2	11' 11"	17' 5"	5' 10"
	ECR40D	8,554 - 9,835	25	0.07 - 0.2	12' 3"	18' 8"	5' 10"
	ECR58D	12,550 - 15,440	49	0.11 - 0.31	12' 11"	20' 11"	6' 10"
	EC60E	12,700 - 15,440	59	0.09 - 0.35	13' 1"	20' 6"	6' 4"
	EW60E	11,360 - 12,900	63	0.09 - 0.35	10' 10"	19' 1"	6' 1"
ECR88D	18,959 - 20,944	55	0.1 - 0.44	14' 10"	23' 7"	8'	

## EXCAVATORS, LARGE (over 25,000 pounds)

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach	
Case	CX130D	30,140	102	0.32 - 1.12	18' 3"	26' 10"	
	CX145C SR	31,967	100	0.43 - 1.02	19' 8"	28' 2"	
	CX160D	34,400	112	0.32 - 1.12	19' 11"	30' 4"	
	CX210D	48,973	160	0.55 - 1.76	21'	31' 11"	
	CX250D	56,909	177	0.68 - 1.90	22' 8"	33' 2"	
	CX300D	67,271	207	0.72 - 2.42	23' 4"	34' 5"	
	CX350D	82,483	268	0.88 - 2.72	24' 1"	36'	
	CX245D SR	56,900	160	0.65 - 1.2	20' 1"	30' 1"	
	CX490D	109,300	362	2.03 - 3.37	25' 4"	38' 6"	
	CX750D	158,300	460	2.47 - 5.91	27' 7"	42' 11"	
	CX750D ME	159,600	460	2.47 - 5.91	24' 2"	37' 11"	
	Caterpillar	311F	30,600	70	0.27 - 1	18' 4"	26' 7"
		313F	33,080	91	0.27 - 1	19' 10"	28' 3"
		313F GC	32,200	89	0.27 - 1	19' 9"	28' 3"
		315F	32,600	97	0.27 - 1	19' 6"	28' 6"
		316F	38,801	113	0.46 - 1.19	21' 7"	30' 5"
		318F	41,670	117	0.46 - 1.19	21' 7"	30' 1"
320		49,600	162	0.61 - 2.09	21' 9"	32'	
320 GC		48,281	121	0.61 - 2.09	21' 9"	32'	
325		55,336	162	0.61 - 2.09	21' 9"	32'	
325F		57,115	161	0.72 - 2.08	22'	32' 1"	
326F		64,831	203	0.68 - 2.46	22' 4"	36' 2"	
330		68,100	272	2.3	23.8	35.1	
330 GC		67,460	204	2.01	23.8	35.1	
330F		68,209	239	0.68 - 2.58	25' 6"	36' 7"	
330F SLR		68,180	239	0.75 - 0.9	41' 8"	60' 5"	
335F	83,703	200	0.68-2.58	22' 11"	34' 11"		
336	81,900	311	2.97	26.9	38' 5"		
336 GC	80,500	273	2.46	27	38' 6"		
349F	107,200	396	1.2 - 5	26' 11"	39' 10"		
352F	117,500	396	1.2 - 5	26' 5"	39' 9"		
374F	156,461	472	2.5 - 6	28' 2"	43' 2"		
390F	190,204	524	2.8 - 8.5	31' 8"	48' 2"		
Doosan	DX140LC-5	32,783	109	0.30 - 0.85	20' 1"	27' 11"	
	DX140LCR-5	34,987	113	0.30 - 0.85	19' 7"	27' 11"	
	DX170LC-5	37,038	131	0.5 - 1.22	20'	28' 10"	
	DX180LC-5	43,224	129	0.38 - 1.26	20'	29' 7"	
	DX225LC-5	52,086	162	0.59 - 1.41	21' 7"	31' 10"	
	DX225LC-5 SLR	55,731	162	0.27 - 0.82	38' 2"	50'	
	DX235LCR-5						

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## EXCAVATORS, LARGE (cont.)

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach	
Hitachi	ZX210LC-6	47,402	160	0.9 - 1.29	21' 4"	30' 4"	
	ZX245USLC-6	56,830	159	0.51 - 1.55	21' 9"	32' 6"	
	ZX250LC-6	56,136	177	1 - 1.9	25'	35' 3"	
	ZX300LC-6	64,924	249	0.9 - 1.6	25' 10"	36' 5"	
	ZX345USLC-6	78,710	249	1.2 - 2.1	24' 10"	37' 7"	
	ZX350LC-6	77,598	271	1.3 - 2.78	26' 10"	38' 3"	
	ZX380LC-6	82,515	271	1.3 - 2.78	26' 10"	38' 3"	
	ZX470LC-6	110,804	362	1.8 - 4.2	27' 2"	40' 3"	
	ZX670LC-6	154,103	463	1.7 - 6.6	30'	44' 8"	
	ZX870LC-6	188,716	512	2 - 7.6	31' 5"	48'	
	EX1200-7	253,352	760	6.8	30' 9"	50' 4"	
	EX1200-7 Shovel	260,146	760	7.7 - 8.5	15' 8"	N/A	
	EX1900-6	423,280	1,039	5.7	26' 10"	48' 6"	
	EX1900-6 Shovel	421,075	1,039	19.6	19' 5"	N/A	
	EX2600-7	566,588	1,500	22.2	27' 1"	52' 8"	
	EX2600-7 Shovel	570,997	1,500	19.6 - 21.6	12' 3"	N/A	
	EX3600-6	791,500	1,994	29	28' 2"	57' 9"	
	EX3600-6 Shovel	795,900	1,994	30	12'	N/A	
	EX5600-7	1,210,338	3,000	44.5	28' 11"	63' 8"	
	EX5600-7 Shovel	1,199,315	3,000	35.3 - 38	15' 9"	N/A	
	EX8000-6 Shovel	1,787,900	3,880	52.3	13' 5"	N/A	
	Hyundai	HX130LCR	29,750	71	0.52	18' 4"	27' 0"
		HX140L	32,044	116	0.76	19' 10"	28' 10"
HX145LCR		35,420	116	0.68	18' 1"	27' 3"	
HX160L		41,513	128	0.92	21' 6"	31'	
HX180L		42,955	128	0.99	21' 6"	31'	
HX220L		51,500	173	1.2	22' 1"	32' 9"	
HX220LR		54,720	173	0.68	38' 7"	50'	
HX235LCR		54,140	173	1.05	22'	32' 6"	
HX260L		58,860	179	1.41	23'	34'	
HX300L		69,780	230	1.66	24' 3"	35' 6"	
HX300LR		72,910	230	0.68	48' 7"	60' 9"	
HX330L		77,270	270	1.88	24' 2"	36' 7"	
HX380L		88,890	344	2.12	24' 8"	36' 7"	
HX480L		112,520	424	2.87	25' 6"	39' 6"	
HX520L		118,340	424	2.87	25'	39' 6"	
John Deere		75G	17,952	56.9	0.41	15' 1"	22' 8"
		85G	19,244	56.9	0.41	14' 10"	25' 3"
	130G	29,531 - 30,573	98	0.65	19' 19"	28' 9"	
	135G	31,500 - 33,920	101	0.65	20'	29' 2"	
	160G LC	39,526	122	0.78	21' 4"	30' 7"	
	180G LC	45,170	128	1.31	23' 2"	32' 7"	
	210G/210G LC	51,061 - 52,097	159	1.19	21' 11"	32' 7"	
	245G LC	56,830	159	1.43	21' 8"	33' 4"	
	250G LC	56,100	188	1.38	25'	35' 10"	
	300G LC	69,223	223	1.88	25' 10"	37'	
	345G LC	78,710	240	1.81	24' 10"	37' 7"	
	350G LC	79,655	271	2.41	26' 10"	38' 11"	
	380G LC	84,234	271	2.3	26' 10"	38' 11"	
	470G LC	112,916	367	3.06	27' 2"	41'	
	470G LC ME	112,916	367	3.06	20' 5"	35' 8"	
	670G LC	154,103	463	4.04	30'	45' 5"	
	670G LC ME	154,103	463	4.04	23' 4"	38' 9"	
870G LC	188,716	512	4.57	31' 5"	48' 11"		
870G LC ME	188,716	532	4.57	23' 5"	40' 6"		
Kobelco	ED160-5 Blade Runner	36,200	95.6	0.3 - 0.88	19' 1"	28' 10"	
	SK140SRLC-5	31,500	95.6	0.3 - 0.88	19' 7"	28' 10"	
	SK170LC-10	38,800	127	0.45 - 1.36	21' 3"	31' 1"	
	SK230SRLC-5	56,400	160	0.68 - 1.6	21' 7"	31' 10"	
	SK270SRLC-5	60,000	160	0.68 - 1.8	21' 9"	32' 3"	
	SK210LC-10	49,400	160	0.91 - 1.8	22'	32' 6"	
	SK210LC-10 Hybrid	52,500	160	0.92 - 1.22	22'	32' 6"	
	SK260LC-10	59,300	178	0.875 - 2.25	23'	33' 10"	
	SK300LC-10	68,800	252	0.875 - 1.875	23' 7"	35' 8"	
	SK350LC-10	83,300	270	0.875 - 2.75	24' 10"	36' 11"	
	SK500LC-10	114,000	369	1.5 - 4.26	25' 7"	39' 7"	
	SK210LC-10 High & Wide	56,700	160	1.05	20' 10"	32' 6"	
	SK260LC-10 High & Wide	63,100	178	1.31	21' 10"	33' 10"	
	SK300LC-10 High & Wide	73,600	252	1.57	22' 7"	35' 8"	
	SK350LC-10 High & Wide	87,700	270	1.83	23' 9"	36' 11"	
	SK500LC-10 High & Wide	124,800	369	2.49	24' 6"	39' 7"	
	SK210LC-10 Long Reach	52,000	160	0.6	39' 5"	51' 11"	
SK260LC-10 Long Reach	62,000	178	0.5	48' 4"	60' 10"		
SK500LC-10 Mass Excavator	118,000	369	4.45	21' 3"	35' 8"		
Komatsu	PC138USLC-11	37,547	97.3	1.0	19' 4"	28' 7"	
	PC170LC-11 (Standard)	40,277	121	1.24	19' 7"	29' 5"	
	PC170LC-11 (Heavy)	42,657	121	1.24	20' 6"	30' 4"	
	HB215LC-3	48,175	139	1.57	21' 9"	32' 5"	
	PC210LC-11	51,588	165	1.57	21' 9"	32' 5"	
	PC210LC-11	53,882	165	1.57	21' 9"	32' 5"	
	PC240LC-11	56,380	177	1.85	23' 5"	34' 9"	
	PC238USLC-11	55,660	165	1.85	21' 9"	32' 5"	
	PC290LC-11	72,091	196	2.12	22' 8"	35' 9"	
	PC360LC-11	79,807	257	2.56	23' 11"	39' 1"	

## EXCAVATORS, LARGE (cont.)

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach
Komatsu	PC360LC-11	80,320	257	2.56	24' 3"	39' 1"
	HB365LC-3	80,909	269	2.56	26' 10"	39' 1"
	PC390LC-11	89,940	257	2.91	23' 10"	39' 0"
	PC490LC-11	107,850	359	4.15	25' 5"	43' 10"
	PC490LC-11	107,850	359	4.15	25' 5"	41' 3"
	PC490LC-11 (Var. Gauge)	110,220	359	4.15	25' 5"	43' 10"
	PC650LC-11	145,284	436	4.98	33' 7"	48' 0"
	PC650LC-11 SE	146,390	436	7	23' 2"	37' 9"
	PC800LC-8	188,670	487	5.93	34' 9"	51' 4"
	PC1250LC-11	272,600	758	9.5	38' 0"	57' 3"
	PC1250SP-11	265,900	758	10.9	25' 11"	46' 2"
	PC2000-11	445,054	1046	15.7	30' 4"	51' 9"

NOTE: Bucket digging and arm (stick) forces - Normal digging forces are listed, or boost values are shown.

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach
Liebherr	R914 Compact	36,000	122	0.42 - 1.05	19'	29' 4"
	R920 Compact	41,340-48,280	150	0.40 - 1.25	19'	29' 14"
	R924	56,328	157	1.24 - 2.16	22' 6"	33'
	R926	60,848	190	0.70 - 2.30	23' 2"	33' 8"
	R926 Compact	57,760	173	0.72 - 1.96	22' 6"	31' 10"
	R936	74,031	231	1.30 - 2.80	23' 2"	35' 1"
	R936 Compact	75,620	255	1.31 - 2.62	23' 7"	35' 9"
	R946	91,700	299	1.30 - 3.92	23' 11"	36' 7"
	R956	119,380	326	1.63 - 4.58	28' 3"	40' 8"
	R966	158,510	435	1.95 - 7.20	38' 11"	53' 2"
R976	202,824	544	2.61 - 7.58	40' 8"	57' 3"	
LiuGong N. America	915E	35,935	113	0.47	19' 3"	28' 6"
	922E	51,522	160	1.3	21' 6"	32' 5"
	925E	56,218	173	1.6	22' 9"	33' 11"
	930E	71,650	209	1.8	23' 9"	34' 11"
	936E	80,689	280	2.09	24' 1"	35' 9"
	950E	105,822	378	2.9	25' 9"	35' 5"
Volvo	ECL40E	28,880 - 35,620	121	0.33-1.01	19' 7"	29'
	ECR145E	31,770-36,790	121	0.33-1.07	20' 2"	29' 5"
	ECH60E	36,266-45,592	148	0.39-1.26	21' 3"	30' 2"
	EC200E	44,974 - 54,388	154	0.36 - 1.44	22' 3"	32' 9"
	EC220E	45,350-55,360	173	0.63-1.88	20' 8"	31' 9"
	ECR235E	52,250-61,440	173	0.47-1.88	20' 2"	29' 5"
	EC250E	56,430-63,790	215	0.6-2	23' 2"	33' 4"
	EC300E	64,720-72,760	241	0.7-2	24' 1"	34' 7"
	ECR355E	75,200-83,800	241	1.24-2.69	22' 4"	34' 7"
	EC350E	78,940-92,760	303	1.1-2.5	24' 11"	36' 2"
	EC380E	83,330-94,800	303	1.09-3.31	26' 6"	37' 9"
EC480E	100,310-117,510	373	2.03-4.32	24' 6"	38'	
ECT50E	162,040-166,008	516	4.3-6.7	25' 4"	40' 5"	

## EXCAVATORS, WHEELED

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach	Travel Speed (mph)
Caterpillar	M314F	34,746	141	0.2 - 1.31	19'	29' 9"	23
	M315F	36,971	150	0.26 - 1.31	18' 3"	28' 8"	19
	M316F	36,102	141	0.46 - 1.9	20'	30' 10"	22
	M317F	40,896	150	0.26 - 1.31	19' 3"	29' 11"	19
	M318F	40,587	169	0.46 - 1.9	20'	30' 10"	22
	M320F	43,982	169	0.5 - 1.65	20' 9"	31' 5"	22
M322F	48,722	169	0.5 - 1.65	21' 10"	33' 5"	19	
Doosan	DX140W-5	34,203	124	0.3 - 0.77	14' 8"	24' 2"	23
	DX190W-5	43,431	168	0.5 - 1.22	18' 9"	29' 8"	21.8
	DX210W-5	47,179	186	0.67 - 1.67	19' 4"	31' 10"	21.7

NOTE: Maximum reach is based on reach at ground level.

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach
Hitachi	ZX190W-6*	44,530	173	0.5 - 1.5	19' 2"	31' 5"
	ZX190W-6	45,300	173	0.5 - 1.5	19' 5"	31' 1"

\*mono-block boom

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach
Hyundai	R55W-9A	12,240	65.1	0.24	11' 6"	20' 2"
	HW140	30,600	149	0.93	15' 11"	26'
	HW180	39,240	171	1.37	19' 5"	30' 3"
	HW210	46,740	174	1.75	20' 11"	32' 8"
John Deere	190G W*	43,431	173	1.81	19' 2"	31' 5"
	190G W	44,533	173	1.81	19' 5"	31' 1"

\*mono-block boom

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (yd <sup>3</sup> )	Max. Digging Depth	Max. Reach
Liebherr	A918	41,000	161	2.2-1.37	18' 8"	30'
	A920	45,700	163	0.72-1.57	20' 5"	32' 8"
	A924	45,700	188	0.72-2.16	21' 4"	33' 4"

## GROUND PENETRATING RADAR

Company	Model	Frequency	Display Type	Depth (ft.)	Max. Survey Length	GPS	Battery Life (hours)	Unit Weight (lbs)	
GSSI	UtilityScanPro	270 MHz	10.4**	18	unlimited	no**	3***	86.5	
	UtilityScanPro	400 MHz	10.4**	12	unlimited	no**	3***	60 - 79****	
	UtilityScanPro	300/800 MHz	10.4**	16	unlimited	no**	3***	70	
	UtilityScanPro	350 MHz-HyperStacking	10.4**	35	unlimited	no**	3***	60-69****	
	UtilityScan	350 MHz-HyperStacking	B2 ToughPad	35	unlimited	yes	Tablet = 10; GPR = 7	34	
	UtilityScan	350 MHz-HyperStacking	Consumer Grade Tablet	35	unlimited	yes	Tablet = 3; GPR = 7	34	
	UtilityScan DF	300/800 MHz	G1 ToughPad	16	unlimited	no**	8	51 or 66****	
	UtilityScan HS	350 MHz-HyperStacking	G1 ToughPad	35	unlimited	no**	8	50 or 65****	
*enhanced LED display with internal high brightness; **supports external GPS; ***user replaceable battery; ****cart dependent									
Radiodetection/SPX	RD1100	250 MHz Ultra Wide Band	8" Touch Screen	27	3,000'	yes	4-6	48	
	RD1500	250 MHz Ultra Wide Band	8" Touch Screen	27	3,000'	yes	4-6	48	
Sensors and Software	Noggin 250	250	8 in. Touch Screen	3-40	5.7 miles	yes	6	49	
	LMX100	250	8 in. Touch Screen	26	3,000'	no	6	48	
	LMX200	250	8 in. Touch Screen	26	3,000'	yes	6	49	
	Conquest 100	1,000	8 in. Touch Screen	3	21'	no	6	7.2	
Subsite Electronics	2450 GR	250 MHz/700MHz	Xplore Tablet PC	19/8	unlimited	yes	PC = 4; GPR = 10	73.9	
	2550 GR	250MHz/700MHz	Intel Core	19/8	unlimited	yes	GPR = 10	73.9	
US Radar	Seeker Spr 100	100	10.4**	100	unlimited	yes	5hr x 2	50	
	Seeker Spr 250	250	10.4**	50	unlimited	yes	5hr x 2	90	
	Seeker Spr 270	270	10.4**	48	unlimited	yes	5hr x 2	90	
	Seeker Spr 400	400	10.4**	16	unlimited	yes	5hr x 2	90	
	Seeker Spr 500	500	10.4**	15	unlimited	yes	5hr x 2	90	
	Seeker Spr 900	900	10.4**	6.5	unlimited	yes	5hr x 2	50	
	Seeker Spr 1000	1,000	10.4**	6	unlimited	yes	5hr x 2	50	
	Seeker Spr 2000	2,000	10.4**	2	unlimited	yes	5hr x 2	50	
	OSC	500/400 MHz	10.1**	15	unlimited	yes	5hr x 2	50	
	Quantum Imager	200/400/900 MHz	10.4**	30	unlimited	yes	5hr x 2	70	
	*Full Color Daylight Readable Touchscreen; **Handheld Full Color Daylight Readable Touchscreen								

## HDD MUD SYSTEMS

Company	Model	Mud Storage Capacity (gal)	Mud Cleaning Capacity (gpm)	Pump Type	Mixing Method	Screens	Desander, Desilter Cones	Mounting Option (skid/trailer)
American Augers	M-2000*	3,000	200	centrifugal	jets	yes	yes	both
	M-3000*	3,100	300	centrifugal	jets	yes	yes	both
	M-5000P*	6,000	500	tri-plex	jets	yes	yes	rockover
	MCD-1000*	10,000	1,000	centrifugal		yes	yes	rockover
	P600**	N/A	N/A	tri-plex	N/A	N/A	N/A	skid
	P750**	N/A	N/A	quintiplex	N/A	N/A	N/A	skid
*cleaning systems; **mud pumps								
Ditch Witch	MR90	450	90	centrifugal	venturi	2	yes	both
Elgin Separation Systems	KEMTRON 100HDZ	500	65 - 130	centrifugal	venturi/recirculation	yes	1 to 2 (4")	both
	KEMTRON 200HDZ	1,000	195	centrifugal	venturi/recirculation	yes	3 (4")	both
	KEMTRON 400HDZ	2,350	400	centrifugal	venturi/recirculation	yes	6 (4")	both
	KEMTRON 600HDZ	4,500	600	centrifugal	venturi/recirculation	yes	8 (4")	both
	KEMTRON 1000HDX	6,000	1,000	centrifugal	venturi/recirculation	yes	10 (5"), 2(12")	both
	KEMTRON 1500HDX	9,000	1,500	centrifugal	venturi/recirculation	yes	18 (5"), 3 (10")	both
Herrenknecht	Separation HKS300	5,280	1,320	centrifugal	N/A	yes	yes	20' container
	Separation HKS300 FineStage	5,280	1,320	centrifugal	N/A	yes	yes	20' container
	HK Mud Mixing Unit	5,020	mixing: 240	centrifugal	jet/venturi	N/A	N/A	20' container
	High Pressure Mud Pump 925 GPM	N/A	N/A	tri-plex	N/A	N/A	N/A	20' container
	High Pressure Mud Pump 740 GPM	N/A	N/A	tri-plex	N/A	N/A	N/A	20' container
	High Pressure Mud Pump 530 GPM	N/A	N/A	tri-plex	N/A	N/A	N/A	20' container
McLaughlin	McL-230P	230	N/A	high pressure reciprocating	agitator	no	no	skid
Mud Technology	MCT-450	2,400	450+	centrifugal	jet	yes	yes	both
	MCT-550	3,300	500+	centrifugal	jet	yes	yes	both
	MCT-750	3,300	800+	centrifugal	jet	yes	yes	both
	MCT-800	5,000	800+	centrifugal	jet	yes	yes	both
	MCT-1000	6,500	1000+	centrifugal	jet	yes	yes	both
	MCT-1500	6,500	1500+	centrifugal	jet	yes	yes	both
	MCT-2000	6,500	2000+	centrifugal	jet	yes	yes	both
	MPCT-800	5,130	800+	triplex	jet	yes	yes	trailer
	MPCT-1000	7,000	1000+	triplex	jet	yes	yes	trailer
	MPCT-1500	6,270	1500+	triplex	jet	yes	yes	trailer
	MTP-475	N/A	N/A	triplex	N/A	N/A	N/A	skid
	MTPAWS-440	N/A	N/A	triplex	N/A	N/A	N/A	skid
	MTPAWS-446	N/A	N/A	triplex	N/A	N/A	N/A	skid
	RST 1200	1,200	400+	centrifugal	jet	yes	yes	trailer
	RST 1400	1,400	400+	centrifugal	jet	yes	yes	trailer
	TP 7.5		500+	trash pump				
TP 10		625+	trash pump					

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## HDD MUD SYSTEMS (cont.)

Company	Model	Mud Storage Capacity (gal)	Mud Cleaning Capacity (gpm)	Pump Type	Mixing Method	Screens	Desander, Desilter Cones	Mounting Option (skid/trailer)
Mud Technology	TP 15		700+	trash pump				
	TP 20		800+	trash pump				
TT Technologies	DS225	225	N/A	diaphragm	centrifugal pump	N/A	N/A	skid
	DS500	500	N/A	piston	tank propeller	N/A	N/A	skid
	DS1000	1,000	N/A	piston	tank propeller	N/A	N/A	skid
	GS225 Combo	225	N/A	diaphragm	tank propeller	N/A	N/A	skid
	GS225	225	N/A	diaphragm	centrifugal pump	N/A	N/A	skid
Toro	FM330	500/1,000	330	centrifugal	venturi/jet	no	no	both
Tulsa Rig Iron	MCS-330	2,200	240+	centrifugal	venturi/jet	yes	yes	trailer
	MCS-355	3,000	350+	centrifugal	venturi/jet	yes	yes	both
	MCS-425	4,900	400+	centrifugal	venturi/jet	yes	yes	trailer
	MCS-750	9,000	1,000+	centrifugal	venturi/jet	yes	yes	rockover
	MCS-1000	6,400	700+	triplex	venturi/jet	yes	yes	rockover
	TT-100			Triplex				Skid
	TT-150			Triplex				Skid
	TT-250			Triplex				Skid
	TT-540			Triplex				Skid
	TT-560			Triplex				Skid
	TT-660			Triplex				Skid
	TT-680			Triplex				Skid
	Vermeer	MX125	300 or 500	n/a	centrifugal	venturi/recirculation	n/a	n/a
MX240		750 or 1,000	n/a	centrifugal	venturi/recirculation	n/a	n/a	modular
MX300		750 or 1,000	n/a	centrifugal	venturi/recirculation	n/a	n/a	modular
R9x12T		8,650	600	centrifugal	venturi/recirculation	4	3/10", 16/5"	trailer
R250C		8,361	250	centrifugal	venturi/recirculation	yes	yes	trailer

## KEYHOLE EQUIPMENT

Company	Model	Core Diameter (in)	Core Depth (in)	Power Source (hydraulic/gas)	Mounting Option
SIMCO	Z55PTC	2 - 18	36+	hydraulic	medium pickup/truck w/flat bed, trailer w/Z5hp Kubota diesel
Utilicor Technologies	Series 500 Heavy Duty Coring Unit	2 - 24	30	PTO/hydraulic	medium duty truck
	MD-300 Multi-Directional Coring Unit	2 - 24	30	PTO/hydraulic	medium duty truck
	Minicor-2 Skid Steer Coring Attachment	2 - 24	30	auxiliary hydraulic	skid steer
	MC-450 Skid Steer Coring Attachment	2 - 18	30	auxiliary hydraulic	mini track loader/skid steer
	MPX-SS Multi-Platform Coring Unit	2 - 24	30	26 HP EFI gas / hydraulic	trailer/pickup truck/flat deck
	ROVER Self-Propelled and Towable Coring Unit	2 - 24	30	26 HP EFI gas / hydraulic	towable & self-propelled
Vermeer MV Solutions	Compact Core Drill CS418	6, 8, 10, 4-18	12	hydraulic pump, 25-hp Kohler engine	vacuum excavator Vermeer vac w/sliding offset
	CS418B	4-18	24	25-hp Kohler ECH740 Command Pro EFI	trailer

## LOCATORS (WALKOVER and UTILITY)

Company	Model	Type	Operating Voltage	Battery Life (h)	Audio Output Frequency (kHz)	Weight (lbs)	Operating Temp. (°F)	Overall Length (in)
DCI (W)	DigiTrak Falcon F5	Receiver	Lithium Ion	8 - 12	0.3 - 45	8.5	-4 to 140	15
	DigiTrak Falcon F2	Receiver	Lithium Ion	10 - 14	4.5 - 45	7.6	-4 to 140	15
	DigiTrak Falcon F1	Receiver	Lithium Ion	5 - 7	9 - 13.5	7.6	-4 to 140	15
	DigiTrak Aurora	Remote	12 - 28 VDC	N/A	N/A	6.4	-4 to 140	11.5
	DigiTrak Aurora	Remote	12 - 28 VDC	N/A	N/A	4.3	-4 to 140	9.8
	DigiTrak FCD	Remote	NIMH	8 - 12	N/A	4.5	-4 to 140	8.5
	FTRSp	Transmitter	2 Cell	20	0.3 - 18	1.7	-4 to 140	15
	FTRSp	Transmitter	Lithium Ion	70	0.3 - 18	2	-4 to 140	19
	FTSp	Transmitter	2 Cell	20	4.5 - 45	1.7	-4 to 220	15
	FTSp	Transmitter	Lithium Ion	40	4.5 - 45	2	-4 to 220	19
	FTRSS	Transmitter	123 - 3v Lithium	12	0.3 - 18	1.4	-4 to 220	8
	FT2	Transmitter	2 Cell	20	4.5 - 45	1.7	-4 to 220	15
	FT2s	Transmitter	123 Lithium	12	4.5 - 45	0.5	-4 to 220	8
	FT1	Transmitter	2 Cell	20	9 - 13.5	1.7	-4 to 220	15
	FT1s	Transmitter	123 Lithium	12	9 - 13.5	0.5	-4 to 220	8
	FSDpx	Transmitter	2 Cell	20	12, 19	1.7	-4 to 220	15
	FSDLpx	Transmitter	Lithium Ion	20	12, 19	2	-4 to 220	19
	FSDp	Transmitter	2 Cell	20	12, 1.3	1.7	-4 to 220	15
	FSD 19/12	Transmitter	2 Cell	20	12, 19	1.7	-4 to 220	15
	FSD 12/1.3	Transmitter	2 Cell	20	12, 1.3	1.7	-4 to 220	15
	FX 12	Transmitter	2 Cell	20	12	1.7	-4 to 220	15
	FX 19	Transmitter	2 Cell	20	19	1.7	-4 to 220	15
	FC	Transmitter	12 - 28 VDC	N/A	12	1.9	-4 to 220	19
	FXL 12	Transmitter	Lithium Ion	40	12	2	-4 to 220	19
	FXL 19	Transmitter	Lithium Ion	40	19	2	-4 to 220	19
	FS	Transmitter	1 - AA	10	12	0.5	-4 to 220	8
	ST 12	Transmitter	2 Cell	20	12	1.7	-4 to 220	15
	SES	Transmitter	1 - AA	10	12	0.5	-4 to 180	8
	EDF	Transmitter	2 Cell	10	12, 1.5	1.4	-4 to 220	15
	ET	Transmitter	2 Cell	20	12	1.4	-4 to 220	15
Heath Consultants (U)	Sure-Lock All Pro	Transmitter	lead acid 6 VCD, 7 AH	10-100	8.1, 81, 480	8	-25 to 150	9.25
	Sure-Lock All Pro	Receiver	6 AA-alkaline	90-120	8.1, 81, 480	4.4	-25 to 150	30.5
	Sure-Lock Utility Pro	Transmitter	6 D-alkaline	110-190	81	4	-25 to 150	8.1

## LOCATORS (WALKOVER and UTILITY) (cont.)

Company	Model	Type	Operating Voltage	Battery Life (h)	Audio Output Frequency (kHz)	Weight (lbs)	Operating Temp. (°F)	Overall Length (in)
<b>Heath Consultants (U)</b>	Sure-Lock Utility Pro	Receiver	6 AA-alkaline	90-120	81	4.4	-25 to 150	30.5
	Magna-Lock	Magnetic	6 1.5V AA	100		3	0 to 120	24
	Split-Lock	Transmitter	4 C-alkaline	50	126	3.5	-5 to 158	8.5
	Split-Lock	Receiver	4 C-alkaline	50	126	3.5	-5 to 158	8.5
	vLoc Pro2	Receiver	6 AA or Lithium Ion	12 or 40	Configurable 16 Hz to 200	4.6	-4 - 122	26
	vLoc ML2+	Receiver	6 AA or Lithium Ion	6 or 20	Configurable 16 Hz to 200	5.95	-4 - 122	26
	vLoc 55Tx	Transmitter	8 D-cells; Optional NIMH	5-15; 6-30	Configurable 16 Hz to 200	12.75	-4 - 122	14
	vLoc 105Tx	Transmitter	12 D-cells; Optional NIMH	4-25; 7-60	Configurable 16 Hz to 200	15.05	-4 - 122	18
<b>Radiodetection</b>	RD5100 H2O	Receiver	Li-ion/2x Alkaline D-Cells	35/13	83 (D-Cells)	4.0 (Li-Ion) / 4.2	14-122	25
	RD5100S	Receiver	Li-ion/2x Alkaline D-Cells	35/13	512/640Hz, 8, 33, 65	4.0 (Li-Ion) / 4.2 (D-Cells)	14-122	25
	RD5100H2O+	Receiver	Li-ion/2x Alkaline D-Cells	35/13	4kCD, 8, 9, 8, 33, 65, 83, 131, 200	4.0 (Li-Ion) / 4.2 (D-Cells)	14-122	25
	RD8100 PXL	Receiver	Li-ion/2x Alkaline D-Cells	35/13	577Hz, 640Hz, 870Hz, 940Hz, 4, 8, 33, 65, 83, 131, 200	4.0 / 4.2	-4 to 122	25.5
	RD8100 PXLG	Receiver	Li-ion/2x Alkaline D-Cells	35/13	577Hz, 640Hz, 870Hz, 940Hz, 4, 8, 33, 65, 83, 131, 200	4.0 / 4.2	-4 to 122	25.5
	RD8100 PDL	Receiver	Li-ion/2x Alkaline D-Cells	35/13	577Hz, 640Hz, 870Hz, 940Hz, 4, 8, 33, 65, 83, 131, 200	4.0 / 4.2	-4 to 122	25.5
	RD8100 PDLG	Receiver	Li-ion/2x Alkaline D-Cells	35/13	577Hz, 640Hz, 870Hz, 940Hz, 4, 8, 33, 65, 83, 131, 200	4.0 / 4.2	-4 to 122	25.5
	RD8100 PDLG	Receiver	Li-ion/2x Alkaline D-Cells	35/13	577Hz, 640Hz, 870Hz, 940Hz, 4, 8, 33, 65, 83, 131, 200	4.0 / 4.2	-4 to 122	25.5
	RD8100 PTL	Receiver	Li-ion/2x Alkaline D-Cells	35/13	577Hz, 640Hz, 870Hz, 940Hz, 4, 8, 33, 65, 83, 131, 200	4.0 / 4.2	-4 to 122	25.5
	RD8100 PTLG	Receiver	Li-ion/2x Alkaline D-Cells	35/13	577Hz, 640Hz, 870Hz, 940Hz, 4, 8, 33, 65, 83, 131, 200	4.0 / 4.2	-4 to 122	25.5
	RD7100 SL	Receiver	Li-ion/2x Alkaline D-Cells	35/13	8, 33, 65, 83	4.0 / 4.2	-4 to 122	25.5
	RD7100 DL	Receiver	Li-ion/2x Alkaline D-Cells	35/13	512Hz, 640Hz, 8, 33, 65	4.0 / 4.2	-4 to 122	25.5
	RD7100 DLG	Receiver	Li-ion/2x Alkaline D-Cells	35/13	512Hz, 640Hz, 8, 33, 65	4.0 / 4.2	-4 to 122	25.5
	RD7100 PL	Receiver	Li-ion/2x Alkaline D-Cells	35/13	512Hz, 640Hz, 8, 33, 65	4.0 / 4.2	-4 to 122	25.5
	RD7100 PLG	Receiver	Li-ion/2x Alkaline D-Cells	35/13	512Hz, 640Hz, 8, 33, 65	4.0 / 4.2	-4 to 122	25.5
	RD7100 TL	Receiver	Li-ion/2x Alkaline D-Cells	35/13	512Hz, 640Hz, 8, 33, 65, 131, 200	4.0 / 4.2	-4 to 122	25.5
	RD7100 TLG	Receiver	Li-ion/2x Alkaline D-Cells	35/13	512Hz, 640Hz, 8, 33, 65, 131, 200	4.0 / 4.2	-4 to 122	25.5
	11W	Transmitter	Li-ion/4x Alkaline D-Cells	20/8	83	3.5	14-122	13.75
	10W	Transmitter	Li-ion/8x Alkaline D-Cells	8/4	163Hz, 208Hz, 273Hz, 340Hz, 400Hz, 440Hz, 460Hz, 480Hz, 484Hz, 491Hz, 512Hz, 560Hz, 570Hz, 577Hz, 584Hz, 624Hz, 640Hz, 760Hz, 815Hz, 870Hz, 920Hz, 940Hz, 982Hz, 1090Hz, 1450Hz, 4, 8, 8.44, 9.8, 33, 65, 82, 83, 131, 200	8.3 (Li-Ion) / 8.6 (D-Cells)	14-122	13.75
	TX-1	Transmitter	Li-ion/8x Alkaline D-Cells	8/4	512Hz, 570Hz, 577Hz, 640Hz, 760Hz, 870Hz, 920Hz, 940Hz, 8, 9, 8, 33, 65, 83, 131, 200	8.3/8.6	14-122	13.75
	TX-5	Transmitter	Li-ion/8x Alkaline D-Cells	8/4	512Hz, 570Hz, 577Hz, 640Hz, 760Hz, 870Hz, 920Hz, 940Hz, 8, 9, 8, 33, 66, 83, 131, 200	8.3/8.6	14-122	13.75
	TX-5B	Transmitter	Li-ion/8x Alkaline D-Cells	8/4	512Hz, 570Hz, 577Hz, 640Hz, 760Hz, 870Hz, 920Hz, 940Hz, 8, 9, 8, 33, 65, 83, 131, 200	8.3/8.6	14-122	13.75
	TX-10	Transmitter	Li-ion/8x Alkaline D-Cells	8/4	512Hz, 570Hz, 577Hz, 640Hz, 760Hz, 870Hz, 920Hz, 940Hz, 8, 9, 8, 33, 65, 83, 131, 200	8.3/8.6	14-122	13.75
	TX-10B	Transmitter	Li-ion/8x Alkaline D-Cells	8/4	165-1000Hz, 512Hz, 570Hz, 577Hz, 640Hz, 760Hz, 870Hz, 920Hz, 940Hz, 1090Hz, 1450Hz, 4096Hz, 8, 8440Hz, 9, 8, 33, 65, 82, 83, 131, 200	8.3/8.6	14-122	13.75
<b>Schonstedt (U)</b>	Rex	Pipe & Cable (Receiver & Transmitter)	Receiver: One 9V Transmitter: Rechargeable NIMH 12V	Rx: 12 Tx: 8	512 Hz, 33 kHz, 82 kHz	Receiver: 2.8 Transmitter: 3.5	-4 - 140	Rx Open: 27.7 Rx Closed: 17.5 Tx: 10
	MPC-Rex	Magnetic + Pipe & Cable (Receiver & Transmitter)	Magnetic: One 9V Receiver: One 9V	Mag: 24 Rx: 12	512 Hz, 33 kHz, 82 kHz	Mag: 2.4 Receiver: 2.8	-4 - 140	Mag Open: 26 / Closed: 15.5 Receiver Open: 27.7 / Closed: 17.5 Transmitter: 10
	Loki-Contractor	Pipe & Cable (Receiver & Transmitter)	Transmitter: Rechargeable NIMH 12V D Cells	Tx: 8 Rx: 13	512 Hz, 8 kHz, 131 kHz	Transmitter: 3.5 Receiver: 4.9	-4 - 122	Rx: 28 Tx: 10.8
	Loki-Utilities	Pipe & Cable (Receiver & Transmitter)	D Cells	Rx: 13 Tx: 8 - 20	512 Hz, 8 kHz, 82 kHz	Receiver: 4.9 Transmitter: 4	-4 - 122	Rx: 28 Tx: 10.8
	XT-512	Sonde & Camera (Receiver)	One 9V	18	Passive 50/60 Hz	2.5	-4 - 140	Open: 27.7 Closed: 17.5
	Maggie	Magnetic	One 9V	24	N/A	2.6	-13 - 140	32.5
	Spot	Magnetic	One 9V	24	N/A	2	-13 - 140	42.3
	GA-92XTd	Magnetic	One 9V	24	N/A	2.4	-13 - 140	Open: 26 Closed: 15.5
	GA-72Cd	Magnetic	Two 9V	40	N/A	2.6	-13 - 140	34.5
	GA-52Cx	Magnetic	Two 9V	40	N/A	2.5	-13 - 140	42.3
<b>Subsite Electronics (U)</b>	830R	Receiver	2 C-cell alkaline	75	83	5.1	4 to 122	12.1
	830T	Transmitter	6 C-cell alkaline	150	83	4.6	4 to 122	11.1
	UtiliGuard	Receiver	D-cell selectable alkaline	30	0.05-200	4.8	4 to 122	27.2
	UtiliGuard	Transmitter	D-cell selectable alkaline	100	0.256-200	7.7	4 to 122	12
	TK Recon 1	Receiver	4 C-cell alkaline, NIMH*	10-16	29	9	-4 to 122	30
	TK Recon 2	Receiver	4 C-cell alkaline, NIMH*	10-16	12, 29	9	-4 to 122	30
	TK Recon 4	Receiver	4 C-cell alkaline, NIMH*	10-16	1.5, 12, 20, 29	9	-4 to 122	30
	Commander 7	Remote	12V DC	N/A	N/A	2	-4 to 140	6
	TD Recon	Remote	12V DC	N/A	N/A	2	-4 to 140	7
	TDR Recon	Remote	12V DC	N/A	N/A	2	-4 to 140	7
	TK	Receiver	4 C-cell alkaline	12	29	9	-4 to 122	30
	TKD	Receiver	4 C-cell alkaline	12	12, 29	9	-4 to 122	30
	TKQ	Receiver	4 C-cell alkaline	12	1.5, 12, 20, 29	9	-4 to 122	30



# 2019 EQUIPMENT SELECTION GUIDE

## LOCATORS (WALKOVER and UTILITY) (cont.)

Company	Model	Type	Operating Voltage	Battery Life (h)	Audio Output Frequency (kHz)	Weight (lbs)	Operating Temp. (°F)	Overall Length (in)
<b>Subsite Electronics (U)</b>	TD	Remote	12V DC	N/A	N/A	2	-4 to 140	7
	TDR	Remote	12V DC	N/A	N/A	2	-4 to 140	7
	15T1	Beacon Transmitter	3.6V lithium	60	29	2	-4 to 221	15
			2 C-cell	16				
	15T3	Beacon Transmitter	3.6V lithium	60	12,20,29	2	-4 to 221	15
			2 C-cell	16				
	17T1	Beacon Transmitter	3.6V lithium	60	29	2	-4 to 221	17.8
			2 C-cell	16				
	17T1H	Beacon Transmitter	3.6V lithium	60	29	2	-4 to 221	17.8
			2 C-cell	16				
	17T4	Beacon Transmitter	3.6V lithium	60	1.5, 12, 20, 29	2	-4 to 221	17.8
			2 C-cell	16				
	17T4G	Beacon Transmitter	3.6V lithium	60	1.5, 12, 20, 29	2	-4 to 221	17.8
			2 C-cell	16				
	19T3	Beacon Transmitter	3.6V lithium	60	12,20,29	2	-4 to 221	15
			2 C-cell	16				

\*Rechargeable or Inspired Energy NB2038 Li ion rechargeable.

<b>Vermeer MV Solutions (U)</b>	Verifier G3	Utility	9V	18	9.5, 38	4.7	-4-122	26
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## Microtunneling/Pilot Tube

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size	Total Thrust (t)
<b>Akkerman</b>	TBM 485C	hydraulic	12,500	48-52	varies	12x20	400
	TBM 420	hydraulic	14,000	51-55	varies	12x20	400
	TBM 480	hydraulic	14,500	58-62	varies	12x20	400
	TBM 540	hydraulic	16,500	65-69	varies	12x20	800
	TBM 600	hydraulic	23,000	72-76	varies	12x20	800
	TBM 660	hydraulic	24,000	79-83	varies	12x20	800
	TBM 720	hydraulic	29,000	86-90	varies	12x20	1,200
	TBM 780	hydraulic	40,000	93-100	varies	12x20	1,200
	EBS 840	hydraulic	33,400	100	varies	20x30	1,200
	EBS 960	hydraulic	3,600	114	varies	20x30	1,200
	EBS 1080	hydraulic	50,500	127	varies	20x30	1,200
	EBS1200	hydraulic	53,000	144	varies	20x30	1,200
	EBS 1440	hydraulic	60,000	168	varies	20x30	1,200
	MTBM SL30C	electric	13,000	30-38	varies	10x14	400
	MTBM SL34C	electric	16,000	34-42	varies	10x14	400
	MTBM SL36C	electric	18,500	36-44	varies	10x14	400
	MTBM SL44C	electric	21,500	44-52	varies	10x14	400
	MTBM SL46C	electric	23,500	48-56	varies	10x14	800
	MTBM SL51C	electric	25,500	51-59	varies	10x14	800
	MTBM SL60C	electric	36,000	60-72	varies	12x14	1,200
	MTBM SL74C	electric	42,000	74-102	varies	12x14	1,200
	MTBM SL72P	electric	varies	72+	varies	varies	1,200
	MTBM SL86P	electric	varies	86+	varies	varies	1,200
	MTBM SL100P	electric	varies	100+	varies	varies	1,200
	MTBM SL114P	electric	varies	114+	varies	varies	1,200
	GBM 240A	4,500	4.25 - 24	400+	10x10		100
	GBM 308A	6,000	4.25 - 28.5	400+	8x8		100
	GBM 339A	6,600	4.25 - 31.5	400+	9x9		100
	GBM 4800 Series	13,000	4.25 - 48	400+	12x12		265

<b>Herrenknecht</b>	AVN250	hydraulic	varies	14.29 - 16.34	varies	2M	115
	AVN300	hydraulic	varies	16.34 - 22.24	varies	3M	260
	AVN400	hydraulic	varies	22.24 - 26.18	varies	3M	260
	AVN500	hydraulic	varies	26.18 - 30.12	varies	3M	260
	AVN600	hydraulic	varies	30.12 - 34.45	varies	3M	260
	AVN700	hydraulic	varies	34.45 - 38.38	varies	3.2M	260
	AVN800B	hydraulic	varies	38.38 - 43.70	varies	3.2M	260
	AVN800A	hydraulic	varies	43.70 - 50.98	varies	4.5 x 3.5M	340
	AVN1000	hydraulic	varies	50.98 - 60.63	varies	4.5 x 3.5M	340
	AVN1200	hydraulic	varies	57.11 - 72.44	varies	5 x 4M	510
	AVN1500	hydraulic	varies	72.44 - 77.17	varies	5 x 4M	510
	AVN1600 (D)	hydraulic	varies	74.01 - 85.04	varies	5.5 x 4.5M	850
	AVN1800 (D)	hydraulic	varies	84.25 - 98.43	varies	6 x 4.5M	850
	AVN2000 (D)	hydraulic	varies	94.49 - 118.11	varies	6 x 4.5M	850 - 1,400
	AVN2200 (D)	hydraulic	varies	100.3 - 125.98	varies	varies	1,220 - 1,400
	AVN2400 (D)	hydraulic	varies	118.11 - 141.73	varies	varies	1,220 - 2,100
	EPB1400	hydraulic	varies	66.92 - 70.08	varies	varies	610 - 700
	EPB1500	hydraulic	varies	70.08 - 76.38	varies	varies	610 - 700
	EPB1600	hydraulic	varies	76.38 - 85.04	varies	varies	610 - 700
	EPB1800	hydraulic	varies	84.25 - 98.43	varies	varies	1,220 - 1,400
	EPB2000	hydraulic	varies	94.49 - 118.11	varies	varies	1,220 - 1,400
	EPB2200	hydraulic	varies	106.3 - 125.98	varies	varies	1,220 - 1,400
	EPB2400	hydraulic	varies	118.11 - 141.73	varies	varies	1,220 - 1,400
	AVN800B (rock)	hydraulic	varies	37.8 - 42.91	varies	varies	260
	TBM 1200 (rock)	hydraulic	varies	58.68 - 66.93	varies	varies	610 - 700
	TBM 1600 (rock)	hydraulic	varies	76.38 - 85.04	varies	varies	610 - 700
	TBM 2000 (rock)	hydraulic	varies	94.49 - 118.11	varies	varies	1,220 - 1,400
	TBM 2200 (rock)	hydraulic	varies	106.3 - 125.98	varies	varies	1,220 - 1,400
	TBM 2500 (rock)	hydraulic	varies	118.11 - 141.73	varies	varies	1,220 - 1,400

Note: (D) Slurry machines available with D-Mode/pressure compensation by air cushion in the working chamber

## Microtunneling/Pilot Tube (cont.)

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size	Total Thrust (t)
<b>ICON Tunnel Systems/Bohrtec</b>	BM400	hydraulic	5,511	8 - 24	0-500	10	100
	BM500	hydraulic	12,100	8 - 40	0-500	12	150
	BM400LS	hydraulic	6,930	8 - 36	0-500	16	150
	BM400LSC	hydraulic	8,599	8 - 36	0-500	13.5	200
	BM600LS	hydraulic	9,460	8 - 48	0-500	20	262
	BM600LSC	hydraulic	12,345	8 - 48	0-500	16	262
	BM800L	hydraulic	17,636	8 - 57.5	0-500	22 - 24	320
	BM800LS	hydraulic	17,636	8 - 57.5	0-500	22 - 24	320

## PIERCING TOOLS

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size (ft)	Cycles/Minute
<b>Footage Tools</b>	U215	pneumatic	23	2	150	3 x 6	400
	U262	pneumatic	56	2.5	150	3 x 6	400
	U300	pneumatic	75	3	150	3 x 6	400
	U400	pneumatic	108	4	150	3 x 6	400
<b>HammerHead Trenchless Equipment</b>	2" AH PP BL SW	pneumatic	19	2	75	1 x 2.7	714
	2" RH SR	pneumatic	28	2.06	75	1 x 3.5	470
	2" RH PP BL	pneumatic	24	2.06	75	1 x 3	515
	2" AH PP BL	pneumatic	24	2	75	1 x 3	515
	2.5" CAT PP DF	pneumatic	50	2.64	100	1 x 3	385
	2.5" AH PP DF	pneumatic	50	2.64	100	2 x 4	385
	2.5" RH PP DF	pneumatic	50	2.64	100	4 X 7.6	385
	2.5" RH SR	pneumatic	50	2.64	100	4 X 7.6	385
	2.5" RH SR MT	pneumatic	52	2.64	100	4 X 7.6	385
	2.5" RH PP DF MT	pneumatic	51	2.64	100	4 X 7.6	385
	2.5" RH PP SW DF	pneumatic	31	2.64	75	4 X 7.6	600
	2.5" RH PP SW DF MT	pneumatic	35	2.64	75	4 X 7.6	600
	3" CAT PP DF	pneumatic	69	76.00	150	4 X 7.6	370
	3" AH PP DF	pneumatic	67	76.00	150	4 X 7.6	370
	3" RH PP DF	pneumatic	67	76.00	150	4 X 7.6	370
	3" RH SR	pneumatic	67	3.00	150	4 X 7.6	370
	3" RH PP DF MT	pneumatic	67	76.00	150	4 X 7.6	370
	3" RH SR MT	pneumatic	67	3.00	150	4 X 7.6	370
	3" RH PP SW DF	pneumatic	50	3.00	75	4 X 7.6	484
	3" RH PP SW DF MT	pneumatic	54	3.00	75	4 X 7.6	484
	3.5" CAT PP DF	pneumatic	71	3.50	150	5 X 7.6	370
	3.5" RH PP DF	pneumatic	71	3.50	150	5 X 7.6	370
	3.5" RH PP DF MT	pneumatic	71	3.50	150	5 X 7.6	370
	4" RH PP DF	pneumatic	131	3.88	150	6 X 7.6	317
	4" RH PP DF MT	pneumatic	133	3.88	150	6 X 7.6	317
	4" CAT PP DF	pneumatic	148	3.96	150	6 X 7.6	330
	4" RH SR	pneumatic	136	3.88	150	6 X 7.6	370
	4" RH SR MT	pneumatic	136	3.88	150	6 X 7.6	370
	4.38" CAT PP DF	pneumatic	102	4.38	150	7 X 7.6	315
	5.125" SR	pneumatic	214	5.25	150	8 X 7.6	333
	5.125" CAT PP DF	pneumatic	257.4	5.13	150	8 X 7.6	362
	5.125 PP DF	pneumatic	244.8	5.13	150	8 X 7.6	334
	5.5" SR BU	pneumatic	170	5.50	150	6 X 7.6	370
	5.5" SR BU MT	pneumatic	170	5.50	150	6 X 7.6	370
	5.625" PP BU DF	pneumatic	247.9	5.63	150	8 X 7.6	334
	5.75" SR	pneumatic	305	5.88	150	8 X 7.6	300
<b>Hudco</b>	HP200	pneumatic	28	2	75	1 x 4	500
	HP200Q	pneumatic	28	2	75	1 x 4	500

## PIERCING TOOLS (cont.)

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size (ft)	Cycles/Minute
<b>Hudco</b>	HP310	pneumatic	78	3.1	150	2 x 5	500
	HP310Q	pneumatic	78	3.1	150	2 x 5	500
	HP300SS	pneumatic	50	3	75	1 x 4	600
	HP312	pneumatic	78	3.1	150	2 x 5	500
	HP400	pneumatic	136	4	200	2 x 6	400
	HP400Q	pneumatic	136	4	200	2 x 6	400
<b>TT Technologies</b>	Grundosteer 70	pneumatic	85	3	200	2 x 7	400
	P45 Grundomat 1-3/4	pneumatic	20	1-3/4	75	1 x 3.5	580
	P55 Grundomat 2	pneumatic	31	2	75	1 x 3.5	480
	P65 Grundomat 2-1/2	pneumatic	55	2-1/2	100	2 x 4	460
	P65-PK Grundomat	pneumatic	41	2-1/2	100	2 x 3.5	640
	P75 Grundomat 3	pneumatic	70	3	150	2 x 5	400
	P75-PK Grundomat 3	pneumatic	62	3	100	2 x 4	460
	P85 Grundomat 3-1/3	pneumatic	101	3-1/3	150	2 x 5	390
	P85-PK Grundomat 3-1/3	pneumatic	88	3-1/3	100	2 x 4	480
	P95 Grundomat 3-3/4	pneumatic	143	3-3/4	200	2 x 5	320
	P95-PK Grundomat 3-3/4	pneumatic	123	3-3/4	150	2 x 5	360
	P100 Grundomat 4	pneumatic	148	4	200+	2 x 5.5	320
	P100-PK Grundomat 4	pneumatic	124	4	200	2 x 5	400
	P110 Grundomat 4-1/4	pneumatic	215	4-1/4	200+	2 x 5.5	325
	P130 Grundomat 5	pneumatic	258	5	300+	2 x 6	340
	P145 Grundomat 5-3/4	pneumatic	370	5-3/4	300+	2 x 7	310
	P160 Grundomat 6-1/4	pneumatic	457	6-1/4	300+	2 x 7	320
	P180 Grundomat 8	pneumatic	573	7	300+	2 x 8	280
<b>Vermeer MV Solutions</b>	Hole Hammer VHH180	pneumatic	18	1.8	100	1x37	580
	Hole Hammer VHH180RT	pneumatic	19	1.8	100	1x38	580
	Hole Hammer VHH200	pneumatic	29	2	100	1x38	480
	Hole Hammer VHH200RT	pneumatic	29	2	100	1x39	480
	Hole Hammer VHH250	pneumatic	48	2.5	100	1x48	460
	Hole Hammer VHH250RT	pneumatic	49	2.5	100	1x49	460
	Hole Hammer VHH300	pneumatic	71	3	100	1x53	400
	Hole Hammer VHH300RT	pneumatic	72	3	100	1x54	400
	Hole Hammer VHH330	pneumatic	91	3.3	100	1x53	400
	Hole Hammer VHH330RT	pneumatic	92	3.3	100	1x54	400
	Hole Hammer VPT200	pneumatic	28	2	100	1x46	470
	Hole Hammer VPT250	pneumatic	58	2.6	100	1x39	385
	Hole Hammer VPT250 Short	pneumatic	34	2.5	100	1x39	385
	Hole Hammer VPT250 RT	pneumatic	57	2.6	100	1x39	385
	Hole Hammer VPT300	pneumatic	76	3	100	1x57	370
	Hole Hammer VPT300 RT	pneumatic	74	3	100	1x57	370
	Hole Hammer VPT400	pneumatic	136	4	100	1x64	370
	Hole Hammer VPT500	pneumatic	214	5.25	100	1x80	333

## PIPE FUSION

Company	Model	Input Voltage Required	Min. Power Required	Pipe Diameter Range (in)	Wheel/Track	
<b>GF Piping Systems</b>	BS4	120 VAC/240VAC	3 KW	1/2 IPS - 4 IPS	no	
	14M	120 VAC/240 VAC	3 KW	3/4 CTS - 4 DIPS	opt wheel cart	
	28CQ	120 VAC/240 VAC	4 KW	2 IPS - 8 DIPS	opt wheel cart	
	28HP	120 VAC/240 VAC	4 KW	2 IPS - 8 DIPS	wheel	
	28EP	120 VAC/240 VAC	7 KW	2 IPS - 8 DIPS	wheel	
	414CQ	120 VAC/240 VAC	5 KW	4 IPS - 14 IPS	wheel	
	414HP	120 VAC/240 VAC	5 KW	4 IPS - 14 IPS	wheel	
	414EP	240 VAC	7 KW	4 IPS - 14 IPS	wheel	
	414SC	240 VAC	self contained	4 IPS - 14 IPS	wheel	
	414HD	240 VAC	self contained	4 IPS - 14 IPS	4WD/steering wheel	
	620SC	240 VAC	self contained	6 IPS - 20 IPS	wheel	
	824EP	240 VAC 3 phase	12 KW, 240V	8 IPS - 24 IPS	wheel	
	1442EP	208 VAC 3 phase Y 208V 3 phase Y	40 KW	14 IPS - 42 IPS	wheel	
	<b>Integrity Fusion Products</b>	1 Fuse 105	240 VAC	7 KW	1/2 IPS - 48 IPS	no

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size	Total Thrust (t)
<b>McElroy</b>	Mini-Mc	100 - 120V, 50/60Hz, 1Ph	300 Watts	1/2 CTS - 1 IPS			no
	1LC (locking cam)	100 - 120V, 50/60Hz, 1Ph	100 Watts	1/2 CTS - 1 IPS			no
	2LC (locking cam)	100 - 120V, 50/60Hz, 1Ph	800 Watts	1/2 CTS - 2 IPS			opt
	2CU (combination unit)	100 - 120V, 50/60Hz, 1Ph	800 Watts	1/2 CTS - 2 IPS			no
	Acrobat 180	120V, 60Hz, 1 Ph	1.2 KW	2" IPS - 6" DPS			no
	Acrobat 250	220-240V, 50/60Hz, 1 Ph	1.75 KW	63 mm - 250 mm			no
		110-120V, 50/60Hz, 1 Ph	3 KW				
		220-240V, 50/60Hz, 1 Ph					
		110-120V, 50/60Hz, 1 Ph					
		220-240V, 50/60Hz, 1 Ph					
		110-120V, 50/60Hz, 1 Ph					
		220-240V, 50/60Hz, 1 Ph					
		110-120V, 50/60Hz, 1 Ph					
		220-240V, 50/60Hz, 1 Ph					
		110-120V, 50/60Hz, 1 Ph					
		220-240V, 50/60Hz, 1 Ph					
		110-120V, 50/60Hz, 1 Ph					
		220-240V, 50/60Hz, 1 Ph					

## PIPE FUSION (cont.)

Company	Model	Input Voltage Required	Min. Power Required	Pipe Diameter Range (in)	Wheel/Track
<b>McElroy</b>	Acrobat 315	110-120V, 60Hz, 1 Ph	1.85 KW	200 mm - 315 mm	
		220-240V, 60Hz, 1 Ph	3 KW		
	Pit Bull 14	100 - 120V, 50/60Hz, 1Ph	3 KVA, 2.5 KW	1 IPS - 4 DIPS	opt wheel cart
	Pit Bull 26	200 - 240V, 50/60Hz, 1Ph	3 KVA, 2.5 KW	2 IPS - 6 DIPS	opt wheel cart
	Pit Bull 28	220 - 240V, 50/60Hz, 1Ph	1.75 KW	2 IPS - 8 DIPS	no
	DynaMc 28 HP (hand pump)	100 - 120V, 50/60Hz, 1Ph	3 KVA, 2.9 KW	2 IPS - 8 DIPS	no
	DynaMc 28 EP (electric pump)	100 - 120V, 50/60Hz, 1Ph	3 KVA, 2.9 KW	2 IPS - 8 DIPS	no
	Rolling 28	100V, 50Hz, 1Ph	4.1 KVA, 3.7 KW	2 IPS - 8 DIPS	wheel
		110V, 50Hz, 1Ph	3.4 KVA, 3.2 KW		
		120V, 60Hz, 1Ph			
	Rolling 28 HP	208 - 240V, 60Hz, 1Ph	3.5 KVA, 3.2 KW		
	TracStar 28	120V, 50/60Hz, 1Ph	3.28 KVA, 3 KW		
		on-board generator	self-contained	2 IPS - 8 DIPS	diesel track
	Pit Bull 250	240V, 60Hz, 1Ph/220 - 240V, 50/60Hz, 3Ph	3 KW	63mm - 250mm	no
	DynaMc 250 HP (hand pump)	220 - 240V, 50/60Hz, 1Ph	4.2 KVA, 4.2 KW	63mm - 250mm	no
	DynaMc 250 EP (electric pump)	100 - 120V, 50/60Hz, 1Ph	4.2 KVA, 4.2 KW	63mm - 250mm	no
	DynaMc 250 Auto	100 - 120V, 50/60Hz, 1Ph	3 KVA, 3 KW	63mm - 250mm	no
		220 - 240V, 50/60Hz, 1Ph			
	Rolling 250	220 - 240V, 50Hz, 1Ph	5.2 KVA, 4.8 KW	63mm - 250mm	wheel
	TracStar 250	on-board generator	self-contained	63mm - 250mm	track
	Pit Bull 412	240V, 50/60Hz, 1Ph	3 KW	4 IPS - 12 DIPS	no
	DynaMc 412 HP (hand pump)	220 - 240V, 50/60Hz, 1Ph	4.2 KVA, 4.2 KW	4 IPS - 12 DIPS	no
	DynaMc 412 EP (electric pump)	100 - 120V, 50/60Hz, 1Ph	4.2 KVA, 4.2 KW	4 IPS - 12 DIPS	no
	DynaMc 412 Auto	110 - 200V, 50/60Hz, 1Ph	3 KVA, 3 KW	4 IPS - 12 DIPS	no
		220 - 240V, 50/60Hz, 1Ph			
	Rolling 412	220 - 240V, 50/60Hz, 3Ph	6.2 KVA, 5.8 KW	4 IPS - 12 DIPS	wheel
		on-board generator	self-contained	4 IPS - 12 DIPS	gas track
	TracStar 412	on-board generator	self-contained	4 IPS - 12 DIPS	diesel track
	Pit Bull 618	220 - 240V, 50/60Hz, 1Ph	3 KW	6 IPS - 18 OD	no
Rolling 618	220 - 240V, 50/60Hz, 3Ph	8.0 KVA, 7.4 KW	6 IPS - 18 OD	wheel	
	on-board generator	self-contained	6 IPS - 18 OD	gas track	
TracStar 618	on-board generator	self-contained	6 IPS - 18 OD	diesel track	
Pit Bull 500	240V, 50/60Hz, 1Ph	4 KW	180mm - 500mm	no	
TracStar 500	on-board generator	self-contained	180mm - 500mm	track	
MegaMc 824	220 - 240V, 50/60Hz, 3Ph	29.8 KVA, 28.1 KW	8 IPS - 24 OD	wheel	
TracStar 630	on-board generator	self-contained	8 IPS - 24 OD	track	
MegaMc 1236	220 - 240V, 50/60Hz, 3Ph	39.4 KVA, 37.7 KW	12 IPS - 36 OD	wheel	
TracStar 900	on-board generator	self-contained	12 IPS - 36 OD	track	
TracStar 1200	on-board generator	self-contained	16 OD - 48 OD	track	
MegaMc 1648	220 - 240V, 50/60Hz, 3Ph	45 KVA, 43.8 KW	16 OD - 48 OD	wheel	
MegaMc 2065	220 - 240V, 50/60Hz, 3Ph	50 KVA, 48.8 KW	20 OD - 65 OD	wheel	
	380 - 415V, 50Hz, 3Ph	65 KVA, 61 KW			
MegaMc 1600	220 - 240V, 50/60Hz, 3Ph	65 KVA, 61 KW	500mm - 1,600mm	wheel	
	380 - 415V, 50Hz, 3Ph		20 OD - 65 OD		
Talon 2000	on-board generator	self-contained	54 OD - 2,000 mm OD	track	

## PIPE JACKING/TBM/SBU

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size	Total Thrust (t)
<b>Akkerman</b>	TBM 485C	hydraulic	12,500	48-52	varies	12x20	400
	TBM 420	hydraulic	14,000	51-55	varies	12x20	400
	TBM 480	hydraulic	14,500	58-62	varies	12x20	400
	TBM 540	hydraulic	16,500	65-69	varies	12x20	800
	TBM 600	hydraulic	23,000	72-76	varies	12x20	800
	TBM 660	hydraulic	24,000	79-83	varies	12x20	800
	TBM 720	hydraulic	29,000	86-90	varies	12x20	1,200
	TBM 780	hydraulic	40,000	93-100	varies	12x20	1,200
	EBS 840	hydraulic	33,400	100	varies	20x30	1,200
	EBS 960	hydraulic	3,600	114	varies	20x30	1,200
	EBS 1080	hydraulic	50,500	127	varies	20x30	1,200
	EBS1200	hydraulic	53,000	144	varies	20x30	1,200
	EBS 1440	hydraulic	60,000	168	varies	20x30	1,200
	MTBM SL30C	electric	13,000	30-38	varies	10x14	400
	MTBM SL34C	electric	16,000	34-42	varies	10x14	400
	MTBM SL36C	electric	18,500	36-44	varies	10x14	400
	MTBM SL44C	electric	21,500	44-52	varies	10x14	400
MTBM SL46C	electric	23,500	48-56	varies	10x14	800	
MTBM SL51C	electric	25,500	51-59	varies	10x14	800	

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## PIPE JACKING/TBM/SBU (cont.)

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size	Total Thrust (t)
Akkerman	MTBM SL60C	electric	36,000	60-72	varies	12x14	1,200
	MTBM SL74C	electric	42,000	74-102	varies	12x14	1,200
	MTBM SL72P	electric	varies	72+	varies	varies	1,200
	MTBM SL86P	electric	varies	86+	varies	varies	1,200
	MTBM SL100P	electric	varies	100+	varies	varies	1,200
	MTBM SL114P	electric	varies	114+	varies	varies	1,200
	GBM 240A	4,500	4.25 - 24	400+	10x10		100
	GBM 308A	6,000	4.25 - 28.5	400+	8x8		100
	GBM 339A	6,600	4.25 - 31.5	400+	9x9		100
	GBM 4800 Series	13,000	4.25 - 48	400+	12x12		265

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size	Total Thrust (t)
Herrenknecht	AVN250	hydraulic	varies	14.29 - 16.34	varies	2M	115
	AVN300	hydraulic	varies	16.34 - 22.24	varies	3M	260
	AVN400	hydraulic	varies	22.24 - 26.18	varies	3M	260
	AVN500	hydraulic	varies	26.18 - 30.12	varies	3M	260
	AVN600	hydraulic	varies	30.12 - 34.45	varies	3M	260
	AVN700	hydraulic	varies	34.45 - 38.38	varies	3.2M	260
	AVN800B	hydraulic	varies	38.38 - 43.70	varies	3.2M	260
	AVN800A	hydraulic	varies	43.70 - 50.98	varies	4.5 x 3.5M	340
	AVN1000	hydraulic	varies	50.98 - 60.63	varies	4.5 x 3.5M	340
	AVN1200	hydraulic	varies	57.11 - 72.44	varies	5 x 4M	510
	AVN1500	hydraulic	varies	72.44 - 77.17	varies	5 x 4M	510
	AVN1600 (D)	hydraulic	varies	74.01 - 85.04	varies	5.5 x 4.5M	850
	AVN1800 (D)	hydraulic	varies	84.25 - 98.43	varies	6 x 4.5M	850
	AVN2000 (D)	hydraulic	varies	94.49 - 118.11	varies	6 x 4.5M	850-1,400
	AVN2200 (D)	hydraulic	varies	100.3 - 125.98	varies	varies	1,220-1,400
	AVN2400 (D)	hydraulic	varies	118.11 - 141.73	varies	varies	1,220-2,100
	EPB1400	hydraulic	varies	66.92 - 70.08	varies	varies	610-700
	EPB1500	hydraulic	varies	70.08 - 76.38	varies	varies	610-700
	EPB1600	hydraulic	varies	76.38 - 85.04	varies	varies	610-700
	EPB1800	hydraulic	varies	84.25 - 98.43	varies	varies	1,220-1,400
	EPB2000	hydraulic	varies	94.49 - 118.11	varies	varies	1,220-1,400
	EPB2200	hydraulic	varies	106.3 - 125.98	varies	varies	1,220-1,400
	EPB2400	hydraulic	varies	118.11 - 141.73	varies	varies	1,220-1,400
	AVN800B (rock)	hydraulic	varies	37.8 - 42.91	varies	varies	260
	TBM 1200 (rock)	hydraulic	varies	58.66 - 66.93	varies	varies	610-700
	TBM 1600 (rock)	hydraulic	varies	76.38 - 85.04	varies	varies	610-700
	TBM 2000 (rock)	hydraulic	varies	94.49 - 118.11	varies	varies	1,220-1,400
	TBM 2200 (rock)	hydraulic	varies	106.3 - 125.98	varies	varies	1,220-1,400
	TBM 2500 (rock)	hydraulic	varies	118.11 - 141.73	varies	varies	1,220-2,100

Note: (D) Slurry machines available with D-Mode/pressure compensation by air cushion in the working chamber

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size	Total Thrust (t)
ICON Tunnel Systems/Bohrtec	BM400	hydraulic	5,511	8" - 24"	0-500'	10'	100T
	BM500	hydraulic	12,100	8" - 40"	0-500'	12'	150T
	BM400LS	hydraulic	6,930	8" - 36"	0-500'	16'	150T
	BM400LSC	hydraulic	8,599	8" - 36"	0-500'	13.5'	200T
	BM600LS	hydraulic	9,460	8" - 48"	0-500'	20'	262T
	BM600LSC	hydraulic	12,345	8" - 48"	0-500'	16'	262T
	BM800L	hydraulic	17,636	8" - 57.5"	0-500'	22-24'	320T
	BM800LS	hydraulic	17,636	8" - 57.5"	0-500'	22-24'	320T

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size	Total Thrust (t)
Robbins Company	DN250	electric	varies	14.5	varies	varies	147T
	DN300	electric	varies	16.2	varies	varies	147T
	DN400	electric	varies	22.24	varies	varies	196T
	DN450	electric	varies	24.22	varies	varies	196T
	DN500	electric	varies	26.18	varies	varies	294T
	DN600	electric	varies	30.71	varies	varies	294T
	DN800	electric	varies	43.7	varies	varies	392T
	DN900	electric	varies	47.64	varies	varies	392T
	DN1,000	electric	varies	50.98	varies	varies	392T
	DN1,200	electric	varies	59.25	varies	varies	588T
	DN1,350	electric	varies	65.35	varies	varies	588T
	DN1,500	electric	varies	71.26	varies	varies	588T
	DN1,600	electric	varies	75.98	varies	varies	784T
	DN1,800	electric	varies	84.65	varies	varies	784T
	DN2,000	electric	varies	95.47	varies	varies	784T
	DN2,200	electric	varies	107.28	varies	varies	1,176T
	DN2,400	electric	varies	119.1	varies	varies	1,176T
	DN2,600	electric	varies	123.11	varies	varies	1,176T
	DN3,000	electric	varies	142.72	varies	varies	1,568T

## PIPELAYERS

Company	Model	HP	Operating Weight (lbs)	Lifting Capacity (lbs)
Caterpillar	PL61	125	37,480	40,000
	PL83	310	106,807	160,000
	PL87	366	120,119	214,000
Midwestern Mfg.	John Deere 1050K	350	78,700-82,079	170,000-220,000
	M10R-JD410K/CAT 420E	107/89	18,000	10,000
	M16R-JD444K/CAT 930H	124/149	26,500	16,000
	M33R-JD744K/CAT 980H	304/318	45,000	33,000
	M510C-JD450J/CAT D4K	70/92	23,000	10,000

## PIPELAYERS (cont.)

Company	Model	HP	Operating Weight (lbs)	Lifting Capacity (lbs)
Midwestern Mfg.	M515C-JD550K/CAT D4K	85/92	24,000	15,000
	M520C-JD650/CAT D5K	101/104	26,000	20,000
	M540C-JD700K	125	42,000	40,000
	M540CK-CAT D6K (2)	125	40,000	40,000
	M550C-CAT D6N	150	50,000	50,000
	M560C-JD750K	165	48,000	60,000
	M572C-CAT D6T	205	65,000	90,000
	M572CXL-JD850K	205	70,000	100,000
	M583C-JD1050J/CAT D8R	335/305	105,000	140,000
	M594C-CAT D9H	410	128,500	200,000
	561MMC-CAT 561*	105	35,000	40,000
	571MMC-CAT 571*	200	50,800	60,000
	572MMC-CAT 572*	200	61,300	90,000
	583MMC-CAT 583*	300	90,300	140,000
	594MMC-CAT 594*	410	123,600	200,000

\*hydraulic conversion kits

Company	Model	HP	Operating Weight (lbs)	Lifting Capacity (lbs)
Volvo	PL4809E	381	129,191	242,508
	PL3005E	241	77,228	121,000

## PIPE LIFTING/HANDLING

Company	Model	Capacity (lbs)	Pipe Diameter (in)	Dimensions (beam)	Weight (lbs)	Carrier Type
LaValley Industries	DHS	20,000	4 - 24	83" x 22" x 45.3"	2,100	12-20 metric ton excavator
	DH	30,000	4 - 24	83" x 33" x 64"	2,892	20-36 metric ton excavator
	DHL	40,000	20 - 48	112" x 46" x 69"	3,650	36-49 metric ton excavator
	DHXL	50,000	28 - 56	112" x 46" x 70"	4,000	65-75 metric ton excavator
	DHXXL	60,000	40 - 60	129" x 46" x 71"	5,000	80-90 metric ton excavator
Vacuworx	MC 3	6,600	4 - 12	59" x 65.5" x 18.5"	1,183	hydraulic excavator, crane, pipelayer, wheel/track loader
	MC 5	11,000	4 - 18	64.5" x 65.5" x 20"	1,828	hydraulic excavator, crane, pipelayer, wheel/track loader
RC 10	RC 10	22,000	4 - unlimited	103" x 77" x 21"	2,132	hydraulic excavator, crane, pipelayer, wheel/track loader
	RC 12	26,400	4 - unlimited	103" x 77" x 21"	2,132	hydraulic excavator, crane, pipelayer, wheel/track loader
	RC 16	35,200	4 - unlimited	103" x 74" x 22"	2,397	hydraulic excavator, crane, pipelayer, wheel/track loader
	RC 20	44,000	4 - unlimited	103" x 76.5" x 21"	2,560	hydraulic excavator, crane, pipelayer, wheel/track loader
	RC 25	55,000	4 - unlimited	103" x 76.5" x 21"	2,560	hydraulic excavator, crane, pipelayer, wheel/track loader

## PIPE RAMMING

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Surface Launch (ft)
HammerHead	4" RH SR	air	136	2 - 4	300	2 X 5
	5.125" SR	air	214	4 - 8	300	2 X 5
	5.50" SR	air	170	2 - 4	300	2 X 5
	5.75" SR	air	305	6 - 12	300	3 X 30
	7" AR	air	911	8 - 20	300	3 X 30
	8" AR	air	500	8 - 24	300	3 X 30
	12" AR	air	1,568	12 - 30	300	3 X 30
	16" AR	air	2,701	16 - 48	300	3 X 30
	20" AR	air	5,750	20 - 54	300	3 X 30
	26" XPR	air	12,500	24 - 84	300	3 X 40
	34" AR	air	27,500	36 - 180	300	3 X 40

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Surface Launch (ft)
Poweram	2020	hydraulic	1,300	up to 12	300+	2' x 7' 3"
	1425	hydraulic	400	up to 4	100+	3' x 4' 4"
	1825	hydraulic	615	up to 6	150+	3' x 4' 2"
	1915	hydraulic	1,000	up to 12	200+	3' x 6'
	7000	hydraulic	3,400	up to 16	500+	3' 6" x 11"

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Surface Launch (ft)
TT Technologies	Mini-Atlas	air	132	2 - 8	50	3 x 20
	Titan	air	302	8 - 15	80	3 x 30
	Mini-Olympus	air	385	4 - 16	80	3 x 30
	Olympus	air	507	8 - 20	115	3 x 30
	PCG180 Reversible	air	490	8 - 20	115	
	Hercules	air	811	12 - 20	130	3 x 30

## PIPE RAMMING (cont.)

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Surface Launch (ft)
TT Technologies	HV220 Reversible	air	945	12 - 20	130	3 x 30
	Mini-Gigant	air	1,014	8 - 24	115	3 x 20
	Gigant	air	1,356	15 - 32	165	3 x 30
	PCG210	air	866	10 - 20	150	3 x 30
	PCG270 Reversible	air	1,540	15 - 32	165	3 x 30
	Koloss	air	2,601	20 - 48	230	3 x 30
	Goliath	air	5,434	24 - 56	265	3 x 30
	Goliath Reversible	air	5,434	24 - 56	265	3 x 30
	Taurus	air	10,580	56 - 78	265	3 x 30
	Apollo	air	25,000	56 - 122	300	3 x 30

## SKID STEER LOADERS (mini crawlers/all surface loaders)

Company	Model	HP	Operating Weight (lbs)	Lift Capacity (lbs)	Max. Reach (height to pin) (in)	Bucket Capacity (ft³)
Bobcat	S70	23.5	2,795	700	94.5	4.7
	S450	49	5,027	1,300	109.5	10.8
	S550	61	6,213	1,750	114.5	14
	S570	61	6,480	1,950	119	14
	S590	66	6,593	2,100	119	14
	S595	74	6,793	2,200	119	14
	S630	74	7,610	2,180	121	15.4
	S650	74	8,061	2,690	124	15.4
	S740	74	8,794	3,100	132	15.4
	S770	92	9,314	3,350	132	15.4
	S850	100	10,237	3,950	144	16.7
	A770	92	9,623	3,325	132	15.4
	Case	SR130	46	5,180	1,300	112
SR160		57	5,645	1,600	112	11.3 - 23.3
SR175		64	6,270	1,750	122	11.3 - 23.3
SV185		57	6,570	1,850	120	13.1 - 27.5
SR210		68	6,970	2,100	123	13.1 - 27.5
SR240		68	7,400	2,400	125.1	14.1 - 27.5
SR270		84	8,117	2,700	125.1	14.1 - 27.5
SV280		68	8,090	2,800	130	14.1 - 27.5
SV300		84	8,655	3,000	130	14.1 - 27.5
SV340		84	9,100	3,400	130	14.1 - 27.5
Caterpillar	226D	66	5,705	1,550	111	12.7
	232D	66	6,213	1,850	118	12.7
	236D	73	6,559	1,800	122.9	14
	242D	73	6,980	2,150	121.1	14
	246D	73	7,424	2,150	124.2	15.4
	262D	73	8,011	2,700	124.9	15.4
	272D2	95	8,768	3,400	127.1	15.4
	272D2 XHP	106	9,255	3,650	128.6	16.7
	Ditch Witch	SK600	24.8	2,418	600	76
SK800		24.8	2,920	860	83	varies
SK1050		37.0	3,435	1,062	83	varies
SK1550		43.5	3,990	1,558	94.5	varies
John Deere		312GR	51	5,995	1,550	115.1
	314G	51	6,315	1,760	120	12.3 - 16.2
	316GR	65	6,375	1,750	115.1	12.3 - 16.2
	318G	65	6,475	1,945	120	12.3 - 16.2
	320G	69	7,150	2,190	122.2	15.8 - 21.6
	324G	74	7,700	2,690	126	15.8 - 21.6
	330G	91.2	9,900	3,000	132	16 - 53.9
	332G	100	10,000	3,600	132	17.8 - 53.9
	Kubota	SSV65	61.3	6,790	1,950@ 50%	121.5
SSV75		74.3	8,157	2,690@ 50%	128.3	15.8

NOTE: Bucket Capacity based on short lip with cutting edge

LiuGong N. America	385B	72	8,250	2,300	129	17.8	
	New Holland	L213	46	5,070	1,300	18.5	11.5 - 23.7
		L216	57	5,510	1,600	18.5	11.5 - 23.7
		L218	57	6,230	1,800	30.8	15.2 - 27.9
		L220	64	6,470	2,200	29.8	15.2 - 27.9
		L221	74	6,970	2,100	20.3	16.7 - 27.9
		L228	68	8,245	2,800	32.3	16.7 - 27.9
		L234	84	8,900	3,400	30.7	18.4 - 27.9
	Vermeer	S450TX	24.8	2,300	500	72	4-6
		CTX50	24.8	2,100	600	72	4-6
S925TX (Diesel)		24.5	3,350	925	84.5	4-6	
S925TX (Gas)		40	3,350	925	84.5	4-6	
CTX100		40	3,400	1,035	88	4-6	

## SKID STEER LOADERS (cont.)

Company	Model	HP	Operating Weight (lbs)	Lift Capacity (lbs)	Max. Reach (height to pin) (in)	Bucket Capacity (ft³)
Volvo	MC70C	56	6,355	1,550	118.1	0.47 - 0.64
	MC85C	56	6,724	1,753	118.1	0.51 - 0.75
	MC100C	73.8	6,885	2,114	118	0.51 - 0.75
	MC105C	73.8	7,253	2,112	118	0.51 - 0.75
	MC110D	73.6	8,214	2,526	126	0.56 - 0.86
	MC115D	73.6	8,680	2,723	126	0.56 - 0.86
	MC135D	73.8	9,288	3,186	126	0.56 - 0.86

NOTE: Bucket Capacity is cubic yards.

## TRACK TRENCHERS, CHAIN

Company	Model	HP	Max. Dig Depth (in)	Max. Dig Width (in)	Operating Weight (lbs)	
Ditch Witch	CT2X	12	24	6	1,360	
	C16X	16	36	6	1,895	
	C24X	22	36	6	1,915	
	C30X	31	48	6	2,100	
	RT45	49	63	12	3,240	
	RT55	62	62	12	5,610	
	RT80 Quad	74	93	24	11,580	
	RT105	107	97	24	9,700	
	RT120	121	97	24	8,700	
	RT120 Quad	121	93	24	13,600	
	RT125	121	97	24	9,700	
	RT125 Quad	121	93	24	15,300	
Tescmec USA	TRS-775**	220	96	24	43,000	
	TRS-885**	205	60	18	46,000	
	TRS-975**	300	120	36	70,000	
	TRS-985**	335	72	24	78,000	
	TRS-1150**	440	144	36	117,000	
	TRS-1150XHD**	440	168	42	116,000	
	TRS1075**	335	120	36	90,000	
	TRS-1085**	335	96	28	95,000	
	TRS-1100**	385	144	36	110,000	
	TRS-1175XHD**	440	144	42	147,000	
Toro	Pro Sneak 365	35.5	36	6	2,770	
	RT600	65	60	16	6,050*	
	RT1200	121	84	18	14,000	
	TRX-16	16	48	6	1,114	
	TRX-20	20	48	6	1,133	
	TRX-26	26	48	8	1,248	
	Trencor	T1060	350	144	36	85,000
		T1360	440	142	42	148,000
		T1460	630	240	54	185,000
		T1660	800	300	60	250,000
T1760		950	360	72	325,000	
Vermeer	PTX40	46.8	42	6	2,740	
	PTX42	46.8	3,240	42	500	
	PTX44	46.8	42	6	2,940	
	RTX100	13	30	6	910	
	RTX150	20.5	36	6	1,000	
	RTX250	25	48	8	1,550	
	RTX450	49	60	12	6,205	
	RTX550	65/67	60	12	7,800	
	RTX750	74	60	12	9,330	
	RIX1250i2	127	72	12	16,160	
	T555 III	185	96	24	36,500	
	T558 III	185	72	24	52,000	
	T655 III	250	96	26	59,500	
	T755 III	275	120	36	82,000	
	T855 III	350	144	36	94,000	
T858 III	350	96	30	98,000		
T955 III	415	144	42	109,000		
T1055 III	415	168	42	124,000		
T1155 III	540	192	42	170,000		
T1255 III	600	216	48	205,000		

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## TRACK TRENCHERS, QUAD

Company	Model	HP	Max. Dig Depth (in)	Max. Dig Width (in)	Operating Weight (lbs)
Ditch Witch	RT80 Quad	74	93	24	11,580
	RT120 Quad	121	93	24	13,600
	RT125 Quad	121	93	24	15,300
Toro	RT1200	121	84	18	14,000
Vermeer	RTX450	49	60	12	6,205
	RTX550	65/67	60	12	7,800
	RTX750	74	60	12	9,330
	RTX1250i2	127	72	12	16,160

## TRENCHERS, ROCKSAW

Company	Model	HP	Max. Digging Depth (in)	Max. Digging Width (in)	Operating Weight (lbs)
Tescmec USA	TRS-975	300	48	12	68,000
	TRS-1075	335	48	12	90,000
	TRS-1100	385	54	14	105,000
	TRS-1275	540	60	16	150,000
Vermeer	RTX550	65/67	60	12	7,800
	RTX1250i2	127	72	12	16,120
	RTX750	74	60	12	5,900
	T555III	185	96	24	36,500
	T855III	350	144	36	94,000

## TRENCHERS, RUBBER TIRE

Company	Model	HP	Max. Digging Depth (in)	Max. Digging Width (in)	Operating Weight (lbs)
Ditch Witch	C12	12	24	6	1,195
	C14	13.5	24	6	1,191
	C16	16	36	6	1,528
	RT45	49	63	12	3,240
	RT55	62	62	12	5,610
	RT80	74	62	24	7,655
	RT105	107	97	24	9,700
	RT120	121	97	24	8,700
	RT125	121	97	24	9,700
	Toro	RT600	65	60	16

## VACUUM EXCAVATORS

Company	Model	Air/ Water	HP	Capacity (gal)	Compressor (cfm/psi)	Vacuum (cfm/Hg)	Mounting Option
AmeriVac Group	MV700		300	650 / 1,250	3,000	16"	truck
	MV700T		300	1,300 / 1,250	3,000	16"	truck
	MV1000TW		300	1,300 / 1,250	3,000	16"	truck
	MV1000TD		300	650 / 1,900	3,200	16"	truck
	MV1400		370	1,300 / 2,500	3,200	16"	truck
NOTE: Capacity shows water / debris values							
Ditch Witch	FX20	water	25.0	150	N/A	543/15	trailer
	FX25	water	31	500	N/A	543/15	trailer
	FX50	water	49	1,200	N/A	1,027/16	trailer
	FX150	both	49	500/800	10 Series - 200/200	1,020/15"	truck
	FX65	water	74	500/800/1,200	12 Series - 300/250	N/A	trailer
	FX65	water	74	1,200	n/a	1,215/16"	trailer
	FX165	both	74	500/800	10 Series: 200/200	1,027/16	truck
	HX30	water	24.8	500/800	n/a	512	trailer
	HX50	water	50	500/800	n/a	1,005	trailer
	HX75	water	75	500/800	n/a	1315	trailer
MV800	water	31	800	n/a	36	trailer	
Hi-Vac/X-Vac	X-8	air/water	370	600/8 Yards	200/200	4000/27"	truck
	X-12	n/a	450	1,150/12 Yards	N/A	5250/27"	truck
	X-13	air/water	450	1,150/13 Yards	200/200	5800/27"	truck
	X-15	n/a	450	1,700/15 Yards	N/A	5250/27"	truck
Ox Equipment	MTS/City DINO	air	350	800	300/116	16,000	truck
	MTS/DINO 4.5	air	450	1,200	300/116	24,000	truck
	MTS/DINO 8	air	450	2,100	300/116	24,000	truck
	MTS/DINO 12	air	450	3,200	300/116	24,000	truck
Ring-O-Matic	FT150	water	25	150		600/15	skid/trailer/truck
	VL150	water	31	150		600/15	skid/trailer/truck
	VL275	water	31	250		600/15	skid/trailer/truck
	VL350	water	31	350		600/15	skid/trailer/truck
	VL550	water	31	550		600/15	skid/trailer/truck
	VL850	water	31	800		600/15	skid/trailer/truck
	VL1000	water	31	1,000		600/15	skid/trailer/truck

## TRENCHERS, RUBBER TIRE (cont.)

Company	Model	HP	Max. Digging Depth (in)	Max. Digging Width (in)	Operating Weight (lbs)
Vermeer	PTX40	46.8	2,740	42	500
	PTX42	46.8	3,420	42	500
	PTX44	46.8	42	6	2,940
	RTX450	49	60	12	4,507
	RTX550	65/67	60	12	5,600
	RTX750	74	60	12	5,900
	RTX1250i2	127	72	12	16,160

## TRENCHERS, WHEEL

Company	Model	HP	Max. Digging Depth (in)	Max. Digging Width (in)	Operating Weight (lbs)
Buckeye	7200	350	7' 4"	24"	50,000
	9200 RT	400	7' 4"	30"	57,500
	9200 Magnum Tracked	400	8'	30"	90,000
	9200 T	550	9'	48"	12,000
Ditch Witch	C12	12	24	6	1,195
	C14 - 13.5 HP	14	24	6	1,191
	C16	16	36	6	1,528
	RT45	49	63	12	3,240
	RT55	62	62	12	5,610
	RT80	74	62	24	7,655
	RT80 Quad	83	62	24	9,700
	RT100	100	96	24	19,300
	RT105	107	97	24	9,700
	RT120	121	97	24	8,700
	RT120 Quad	121	93	24	13,600
	RT125	121	97	24	9,700
	RT125 Quad	121	93	24	15,300
	ST37X	37	36	16	4,110
Tescmec USA	TRS-1075	335	96	40	90,000
	TRS-1175XHD	440	108	54	147,000
	TRS-1375	540	108	66	175,000
	TRS-1575	630	120	72	242,000
	TRS-1675	800	120	93	275,000
Trencor	T1060	375	144	36	90,000 - 110,000
	T13-48/509	509	192	48	127,000-173,000
	T14-54/617	617	240	54	236,000-278,000
	T1660	801	288	60	240,000-320,000
	T1760	950	360	72	246,000-326,000

## VACUUM EXCAVATORS (cont.)

Company	Model	Air/ Water	HP	Capacity (gal)	Compressor (cfm/psi)	Vacuum (cfm/Hg)	Mounting Option
Ring-O-Matic	VL1300	water	31	1,300		600/15	skid/trailer/truck
	275VX	water	42	250		600/15	skid/trailer/truck
	350VX	water	42	350		600/15	skid/trailer/truck
	550VX	water	42	550		600/15	skid/trailer/truck
	850VX	water	42	800		600/15	skid/trailer/truck
	1000VX	water	42	1,000		600/15	skid/trailer/truck
	1300VX	water	42	1,300		600/15	skid/trailer/truck
	350VX HI CFM	both	49/50/81	350	150/185	1,000/15	skid/trailer/truck
	550VX HI CFM	both	49/50/81	550	150/185	1,000/15	skid/trailer/truck
	850VX HI CFM	both	49/50/81	800	150/185	1,000/15	skid/trailer/truck
	1000VX HI CFM	both	49/50/81	1,000	150/185	1,000/15	skid/trailer/truck
	1300VX HI CFM	both	49/50/81	1,300	150/185	1,000/15	skid/trailer/truck
	1600VX HI CFM	both	49/50/81	1,600	150/185	1,000/15	skid/truck
	2000VX HI CFM	both	49/50/81	2,000	150/185	1,000/15	skid/truck
	550 Vac Extreme	both	81/100	550	150/185	1,700/14	skid/trailer/truck
	850 Vac Extreme	both	81/100	800	150/185	1,700/14	skid/trailer/truck
	1000 Vac Extreme	both	81/100	1,000	150/185	1,700/14	skid/trailer/truck
	1300 Vac Extreme	both	81/100	1,300	150/185	1,700/14	skid/truck
	1600 Vac Extreme	both	81/100	1,600	150/185	1,700/14	skid/truck
	2000 Vac Extreme	both	81/100	2,000	150/185	1,700/14	skid/truck
	2600 Vac Extreme	both	81/100	2,600	150/185	1,700/14	skid/truck
	3000 Vac Extreme	both	81/100	3,000	150/185	1,700/14	skid/truck
	1000 Vac Extreme II	water	100	1,000		2,500/13	skid/truck
	1300 Vac Extreme II	water	100	1,300		2,500/13	skid/truck
	1600 Vac Extreme II	water	100	1,600		2,500/13	skid/truck
	2000 Vac Extreme II	water	100	2,000		2,500/13	skid/truck
	2600 Vac Extreme II	water	100	2,600		2,500/13	skid/truck
	3000 Vac Extreme II	water	100	3,000		2,500/13	skid/truck
	1000 Vac Extreme III	water	139	1,000		3,000/12	skid/truck
	1300 Vac Extreme III	water	139	1,300		3,000/12	skid/truck
	1600 Vac Extreme III	water	139	1,600		3,000/12	skid/truck
	2000 Vac Extreme III	water	139	2,000		3,000/12	skid/truck
	2600 Vac Extreme III	water	139	2,600		3,000/12	skid/truck
3000 Vac Extreme III	water	139	3,000		3,000/12	skid/truck	
Super Products	Mud Dog 1200	water-air	425	1,500	6,000	28"	truck
	Mud Dog 1600	water-air	485	2,000	6,000	28"	truck
	Camel 1200 (HDX)	water	370	1,500	3,500 - 6,000	18" - 27"	truck
Utiliscope	VE-75		80	75	850	23"	N/A
	MV-300		80	300	850	23"	N/A
	MV-560		80	560	850	23"	N/A
	MV-800		80	800	850	23"	N/A
	MV-1200		80	1,200	850	23"	N/A
Vacmasters	System 1000	both	68	300/500	100/150	780/15"	truck, trailer
	System 3000	both	100	300	165/185	1,000/15"	truck
	System 4000	both	155	450/800	300/220	1,000/15"	truck
	SYSTEM 5000	both	173	550 / 700	300 / 220	1,400 / 15"	truck
	System 6000	both	250	950 gal	350/250	1,866/15"	
	SpoilVac- Gas	water	25	200-1200	n/a	476 / 15"	truck/trailer/skid
	SpoilVac- Diesel	water	49	200-1200	n/a	780 / 15"	truck/trailer/skid
HD SpoilVac	water	49	500-1200	n/a	1,000 / 15"	truck/trailer/skid	
Vacstar	VSH500DT	water	28	500	N/A	22	trailer
	VSH800DT	water	28	800	N/A	22	trailer
	VSH500GT	water	25	500	N/A	22	trailer
	VSH800GT	water	25	800	N/A	22	trailer
Vactor	HXX-PD	both	430	1,300*/12/15 yard**	185/150	5,250/28"	chassis
	HXX QuietPak	both	500	1,300*/12/15 yard**	185/150	6,200/28"	chassis
	HXX-824	both	380	1,300*/12/15 yard**	185/150	5,000/18"	chassis
	HXX-FN	both	380	1,300*/12/15 yard**	185/150	N/A	chassis
	HXX-Prodigy	both	300	600*/6 yard**	185/150	3,200/16"	chassis
	*water; **debris				350/150		
Vermeer MV Solutions	McLaughlin VX25 Gas	water	24	500, 800, 1200	n/a	575/15	skid/trailer
	McLaughlin VX30 Gas	water	31	500, 800, 1200	n/a	575/15	skid/trailer
	McLaughlin VX30	water	31	250, 300, 500, 800, 1200	n/a	575/15	skid/trailer
	McLaughlin VX50	water	49	500, 800, 1200	n/a	1,025/15	skid/trailer
	McLaughlin VX75	water	74	500, 800, 1200	n/a	1,200/15	skid/trailer
	McLaughlin ECO 50	water	49	500, 800, 1200	n/a	1,025/15	truck
	McLaughlin ECO 75	water	74	500, 800, 1200	n/a	1,200/15	truck
	McLaughlin MEGA VAC VXT6 PTO	water	350	1,200	n/a	3,200/18" Hg	truck
	McLaughlin MEGA VAC VXT8 PTO	water	350	1,600	n/a	3,200/18" Hg	truck
	McLaughlin MEGA VACT VXT10 PTO	water	350	2,000	n/a	3,200/18" Hg	truck
	Vac-Tron EV 150 G	water	27 gas	150	n/a	580	skid/trailer
	Vac-Tron LP Mini 373	water	27 gas	300	n/a	580	skid/trailer
	Vac-Tron LP 573 XDT	water	24 diesel	500	n/a	580	skid/trailer
	Vac-Tron LP 573 SDT	water	49 diesel	500	n/a	1,000	skid/trailer
	Vac-Tron LP 573 SGT	water	37 gas	500	n/a	1,000	skid/trailer
	Vac-Tron LP 873 XDT	water	24 diesel	800	n/a	580	skid/trailer
	Vac-Tron LP 873 SDT	water	49 diesel	800	n/a	1,000	skid/trailer
	Vac-Tron LP 873 SGT	water	37 gas	800	n/a	1,000	skid/trailer
	Vac-Tron LP 1273 XDT	water	24 diesel	1,200	n/a	580	skid/trailer
	Vac-Tron LP 1273 SDT	water	49 diesel	1,200	n/a	1,000	skid/trailer
	Vac-Tron LP 1273 SGT	water	37 gas	1,200	n/a	1,000	skid/trailer
	Vac-Tron CV 570 GT	water	27 gas	500	n/a	580	skid/trailer
	Vac-Tron CV 870 GT	water	27 gas	800	n/a	580	skid/trailer
	Vac-Tron CV 1270 GT	water	27 gas	1,200	n/a	580	skid/trailer
	Vac-Tron CV 570 SGT	water	37 gas	500	n/a	1,000	skid/trailer
	Vac-Tron CV 870 SGT	water	37 gas	800	n/a	1,000	skid/trailer
	Vac-Tron CV 1270 SGT	water	37 gas	1,200	n/a	1,000	skid/trailer
	Vac-Tron MC 573 SDT	water	83 diesel	500	n/a	1,000	skid/trailer
	Vac-Tron MC 873 SDT	water	83 diesel	800	n/a	1,000	skid/trailer
	Vac-Tron AIR 573 SDT	both	83 diesel	500	185@175	1,000	skid/trailer
	Vac-Tron AIR 873 SDT	both	83 diesel	800	185@175	1,000	skid/trailer
	Vac-Tron CS 500 GT	n/a	27 gas	500	n/a	580	skid/trailer
	Vac-Tron CS 800 GT	n/a	27 gas	800	n/a	580	skid/trailer
Vac-Tron HTV 373 PTO	both	300 HP PTO	300	150@170	1,000	truck	
Vac-Tron HTV 573 PTO	both	270 HP PTO	500	150@170	1,000	truck	
Vac-Tron HTV 873 PTO	water	300 HP PTO	800	n/a	1,000	truck	

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## WHEEL LOADERS

Company	Model	HP	Operating Weight (lbs)	Standard Bucket (yd <sup>3</sup> )	Tip Load (lbs)	Travel Speed (Fwd/Rev) (mph)
Case	521G	131	24,203	2.1 - 4	17,062	22.3 / 14.1
	521G XT	131	25,404	2.1 - 4	16,767	22.3 / 14.1
	521G XR	131	24,485	2.1 - 4	17,276	22.3 / 14.1
	621G	162	28,159	2.5 - 4.5	24,715	24 / 15.6
	621G XT	162	29,076	2.5 - 4.5	19,587	24 / 15.6
	621G XR	162	29,332	2.5 - 4.5	20,709	24 / 15.6
	721G	179	32,492	2.6 - 5.5	27,355	25 / 19.3
	721G XT	179	33,392	2.6 - 5.5	25,624	25 / 19.3
	721G XR	179	32,851	2.6 - 5.5	25,078	25 / 19.3
	821G	211	40,057	3 - 6	33,583	24.9 / 17.2
	821G XR	211	40,648	3 - 6	26,828	24.9 / 17.2
	921G	242	45,070	3 - 6	38,941	25 / 17.2
	921G XR	242	45,651	3 - 6	31,222	25 / 17.2
	1021G	296	55,282	4.5 - 6.5	45,444	23.6 / 16.5
	1021G XR	296	58,711	4.5 - 6.5	38,219	23.6 / 16.5
1121G	320	61,570	4.5 - 7	49,094	23.2 / 15.8	
1121G XR	320	63,443	4.5 - 7	43,234	23.2 / 15.8	
Caterpillar	903D	74	9,392	0.8 - 1.3	5,707	10
	906M	74	12,331	1 - 1.6	7,507	6 / 6
	907M	74	9,666	1 - 1.6	7,716	6 / 6
	908M	74	14,026	1.2 - 2	8,311	6 / 6
	910M	92	17,838	1.7 - 2.5	13,237	25 / 25
	914M	92	19,262	1.7 - 2.5	11,845	25 / 25
	918M	112	20,869	1.7 - 2.5	13	25 / 25
	918M High Lift	115	21,682	1.7 - 2.5	12,439	25 / 25
	926M	153	28,770	2.5 - 5	19,383	25 / 25
	926M High Lift	153	29,383	2.5 - 5	19,383	25 / 25
	930M	164	30,876	2.7 - 5.5	21,928	25 / 25
	930M High Lift	164	31,390	2.7 - 5.5	21,928	25 / 25
	938M	188	36,216	3.3 - 6.5	26,097	25 / 25
	938M High Lift	188	35,995	3.3 - 6.5	26,097	25 / 25
	950M	230	42,357	3.3 - 12	28,144	24.9 / 16
	962M	250	44,491	3.3 - 12	29,877	24.9 / 16
	966M	276	51,176	4.19 - 9.68	36,711	24.9 / 24.9
	966M High Lift	276	51,716	4.19 - 9.68	36,711	24.9 / 24.9
	966M XE	298	51,176	4.19 - 9.68	36,711	24.4 / 17.1
	966M XE High Lift	298	51,716	4.19 - 9.68	36,711	24.4 / 17.1
	972M	299	54,871	4.19 - 13	40,779	24.9 / 24.9
	972M High Lift	299	54,871	4.19 - 13	40,779	24.9 / 24.9
	972M XE	311	54,871	4.19 - 13	40,779	24.4 / 17.1
	972M XE High Lift	311	54,871	4.19 - 13	40,779	24.4 / 17.1
	980M	386	66,337	5.25 - 16	49,897	24.9 / 24.9
	980M High Lift	386	66,337	5.25 - 16	49,897	24.9 / 24.9
	982M	398	78,402	6 - 15.75	54,640	23.3 / 24.9
	986K	373	98,806	6.5 - 13.5	63,404	24 / 25.4
	986K High Lift	373	98,806	6.5 - 13.5	63,404	24 / 25.4
	988K	541	112,574	6.2 - 17	75,506	24.4 / 15.8
	988K High Lift	541	112,574	6.2 - 17	75,506	24.4 / 15.8
	988K XE	541	116,362	6.2 - 17	86,941	21.6 / 14.4
	990K	699	179,233	9.7 - 19.5	108,644	15.2 / 16.4
	990K High Lift	699	179,233	9.7 - 19.5	108,644	15.2 / 16.4
	992K	814	220,089	14 - 25	136,365	14.2 / 15.4
	992K High Lift	814	220,089	14 - 25	136,365	14.2 / 15.4
	993K	1,024	292,748	16 - 31	183,563	14.1 / 15.6
	993K High Lift	1,024	292,748	16 - 31	183,563	14.1 / 15.6
	994K	1,739	529,149	25 - 52	346,263	15.2 / 16.8
	994K High Lift	1,739	529,149	25 - 52	346,263	15.2 / 16.8
Doosan	DL200-5	142	25,794	2.5	21,076 / 18,618	23.6 / 15.8
	DL200HL-5	142	26,566	2.5	17,957 / 15,851	23.6 / 15.8
	DL200TC-5	142	26,224	2.5	18,827 / 16,623	24 / 12
	DL220-5	160	27,381	3.0	21,231 / 18,750	23.6 / 15.8
	DL220HL-5	160	28,296	3.0	19,412 / 17,141	23.6 / 15.8
	DL250-5	172	30,115	3.5	23,997 / 21,186	23.5 / 15
	DL250HL-5	172	31,130	3.5	21,440 / 18,927	23.5 / 15
	DL250TC-5	172	31,592	3.5	20,470 / 18,076	23.5 / 15
	DL280-5	172	34,262	3.5	26,486 / 23,389	22.1 / 15
	DL280HL-5	172	35,168	3.5	22,273 / 19,667	22.1 / 15
	DL300-5	271	41,844	4.0	33,907 / 29,939	22.4 / 16.8
	DL300HL-5	271	42,869	4.2	26,918 / 23,766	22.4 / 16.8
	DL350-5	271	45,541	4.5	34,855 / 30,777	22.4 / 17.1
	DL350HL-5	271	44,743	4.8	27,470 / 24,251	22.4 / 17.1
	DL420-5	345	50,783	5.5	40,257 / 35,550	22.4 / 11.5
DL420HL-5	345	51,919	5.5	32,320 / 28,550	22.4 / 11.5	
DL450-5	345	56,868	6.0	45,228 / 39,937	22.4 / 16.4	
DL450HL-5	345	57,618	6.3	42,902 / 37,875	22.4 / 16.4	
DL550-5	380	69,897	7.5	53,175 / 46,947	22.4 / 16.1	
DL550HL-5	380	71,617	7.5	45,453 / 38,371	22.4 / 16.1	
Hyundai	HL940	156	29,542	3	19,842	24.9
	HL940TM	156	29,980	3	16,310	24.9
	HL940XT	156	29,542	3	15,610	24.9
	HL955	197	33,995	3.7	23,766	23.9
	HL955TM	197	34,390	3.5	19,510	23.9
	HL955XT	197	34,780	3.7	18,075	23.9
	HL960	222	42,825	4.3	30,049	24.5
	HL960XT	222	43,211	4.3	24,030	24.5
	HL960HD	222	44,092	4.3	29,705	24.2
	HL960HDX	222	43,940	4.3	24,570	24.2
	HL965	269	44,313	4.7	30,810	23.2
	HL965XT	269	46,209	4.7	25,395	23.2
	HL970	308	52,909	5.5	36,729	24.9

Hyundai	HL970XT	308	53,352	5.5	30,534	24.9
	HL975	331	58,420	6.3	40,455	22.7
	HL975XT	331	60,175	6.3	37,015	22.7
	HL980	376	69,600	7.3	48,700	22.7
	HL980XT	376	69,887	7.3	42,329	22.7
John Deere	204L	61	11,806	1 - 1.4	7,231	12 / 12
	244L	71	12,258	1 - 1.4	8,091	23.5 / 23.5
	304L	65	12,778	1 - 2.1	8,091	12 / 12
	324L	71	14,110	1 - 2.1	9,766	23.5 / 23.5
	344L	103	19,533	2 - 2.6	11,795	24.9 / 24.9
	444K Z-Bar	124	25,022 - 26,649	2.5 - 4	14,733 - 15,893	22.4 / 15
	444K High Lift	124	25,360 - 27,066	2.5 - 4	12,496 - 13,561	22.4 / 15
	444K Powerlifter	124	27,364 - 28,104	2.5 - 4	12,639 - 13,825	22.4 / 15
	524L Z-Bar	152	28,931 - 30,359	2.75 - 4	19,742 - 20,212	24.1/16.8
	524L High Lift	152	29,412 - 30,841	2.75 - 4	16,526-17,568	24.1/16.8
	524L High Lift Plus	152	29,667 - 31,097	2.5 - 4.0	15,504 - 17,564	24.8 / 16.8
	524L Tool Carrier	152	29,520 - 30,004	2.75 - 4.0	18,486 - 19,160	24.8 / 16.8
	544L Z-Bar	166	30,520 - 32,000	3 - 4.5	21,853 - 23,221	24.8 / 18.3
	544L High Lift	166	30,847 - 32,277	2.75 - 4.5	16,526 - 17,568	24.8 / 18.3
	544L High Lift Plus	166	31,257 - 32,827	2.5 - 4.0	14,040 - 16,336	24.8 / 18.3
	624L Z-Bar	192	34,715 - 36,365	3.5 - 5.25	22,690 - 25,218	24.8 / 19.0
	624L High Lift	192	35,171 - 36,641	3.5 - 4.5	19,158-21,153	24.8 / 19.0
	624L High Lift Plus	192	35,703 - 37,174	3.5 - 4.0	17,581 - 19,483	24.8 / 19.0
	624L Tool Carrier	192	31,140 - 35,556	3.5 - 4.5	21,912 - 22,031	24.8 / 19.0
	624K-II Waste Handler	186	40,817 - 41,952	4 - 6	13,856 - 20,370	24.9 / 17.5
	644K Z-Bar	232	41,188 - 42,050	4 - 4.25	25,476 - 28,214	24.9 / 17.9
	644K High Lift	232	42,088 - 42,951	4 - 4.25	21,051 - 23,250	24.9 / 17.9
	644K Powerlifter	232	44,685	4	24,523	24.9 / 17.9
	644K Hybrid	229	41,188 - 44,685	4 - 4.25	25,476 - 28,214	24.9 / 24.9
	644K Waste Handler	232	50,928 - 51,812	5 - 7	20,614 - 24,653	22.7 / 15.5
	644K Hybrid	229	50,928 - 51,812	5 - 7	20,614 - 24,653	24.9 / 24.9
	Waste Handler					
	724K Z-Bar	264	42,812 - 43,674	4 - 4.75	28,503 - 31,451	24.9 / 17.9
	724K High Lift	264	43,311 - 44,173	4 - 4.75	22,964 - 25,278	24.9 / 17.9
	724K Waste Handler	264	50,928 - 51,812	5 - 7	20,614 - 24,653	22.1 / 15.1
744K-II Z-Bar	303	55,808 - 56,701	5.25 - 5.85	36,500 - 37,880	24.9 / 20.1	
744K-II High Lift	303	57,106	5.25	29,749	24.9 / 20.1	
744K-II Waste Handler	303	63,186 - 65,102	6 - 8	22,682 - 29,808	24.9 / 18.6	
824K-II Z-Bar	333	59,083 - 59,677	6 - 6.75	37,384 - 38,795	24.9 / 21.1	
824K-II High Lift	333	60,113 - 60,301	6	32,062 - 32,307	24.9 / 21.1	
844K-III	380	74,534 - 76,372	6.3 - 8	45,726 - 47,668	24.9 / 18.3	
844K-III	401	80,052 - 80,318	9.3 - 9.8	52,126 - 52,439	24.9 / 16.2	
Aggregate Handler						
944K	536	119,607 - 124,614	8.5 - 10	64,445 - 75,288	24.2 / 24.2	
Komatsu	WA200-8	126	25,827	2.6	19,235	23.6 / 23.6
	WA200-8 High Lift	126	26,180	2.2	15,598	23.6 / 23.6
	WA270-8	149	28,396	3	22,774	23.6 / 23.6
	WA270-8 High Lift	149	28,462	2.5	21,848	23.6 / 23.6
	WA320-8	165	34,128	3.7	25,353	23.6 / 23.6
	WA320-8 High Lift	165	34,568	3.0	20,227	23.6 / 23.6
	WA380-8	191	40,686	4.3	34,039	23.3 / 23.3
	WA380-8 High Lift	191	41,932	3.8	26,577	23.3 / 23.3
	WA470-8	272	53,352	5.5	44,688	23.8 / 24.2
	WA470-8 High Lift	272	55,579	5.0	36,376	23.8 / 24.2
	WA480-8	299	56,262	6.0	41,998	24.0 / 24.2
	WA500-8	353	77,250	7.6	60,142	23.3 / 23.6
	WA500-8 High Lift	353	76,897	5.9	50,861	23.3 / 23.6
	WA600-8	529	124,473	9.2	83,855	21.0 / 23.0