

# Equipment Selection Guide

## AUGER BORING

Company	Model	Type Drive	Weight (lbs)	Boring Diameter (in)	Pit Size (ft)	Total Thrust (lbs)	
<b>American Augers</b>	24/30-150	mechanical	4,050	4 - 30	10 x 33	150,000	
	36-600	mechanical	5,100	12 - 36	14 x 36	600,000	
	42/48-600	mechanical	5,100	12 - 48	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	
84/96-1800	mechanical	13,800	24 - 96	20 x 40	1,800,000		
<b>Barbco</b>	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	26 - 96	12 x 36	2,622,000	
	<b>Bor-It Mfg.</b>	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	
*includes master track; **machine splits for lighter lifts (master track not included)							
<b>McLaughlin</b>	McL-12HB Zipper	hydraulic	320	3-10	7	24,500	
	McL-24B	mechanical	3,000	4-24	32	115,000	
	McL-30/36B	mechanical	5,960	10-36	32	230,000	
	McL-36/42C	mechanical	7,500	12-42	34	400,000	
	McL-54/60	mechanical	7,600	16-60	35	950,000	
	CBM 48	mechanical	17,000	16-48	N/A	60,000	
	CBM = cradle boring machine						
<b>The Robbins Company</b>	ABM 36-630	mechanical	20,000*	12 - 36	12 x 35	630,000	
	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	
*machine splits for lighter lifts (master track not included)							

## BORING - HARD ROCK ATTACHMENTS

Company	Model	Casing Diameter (in)	Hex Size (in)	No. Cutters	Cutter Size (in)	Torque (ft/lbs)	Thrust Range (lbs)
<b>Akkerman</b>	RBU 24	24	4	8/9	6.5	as required	90,000
	RBU 30	30	4	8/9	6.5	as required	90,000
	RBU 36	36	4	10/11	6.5	as required	110,000
	RBU 42	42	5	15/16	6.5	as required	160,000
<b>American Augers</b>	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
<b>Herrenknecht</b>	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

Note: torque is maximum ft/lbs; thrust force indicated refers to steering

<b>ICON Tunnel Systems/Bohrtec</b>	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
	FSBU36	36	4			16,900	65,000/130,000

NOTE: model FSBU is not designed with Cutters and is a Rock Attachment with Integrated DTH (Down the Hole Hammer); Hammers range in diameter size from 8"-16" depending on model.

<b>The Robbins Company</b>	SBUA-24	24	3 (4" opt)	9	6.5	5,800/7,800	45,000/90,000
	SBUA-30	30	4	9	6.5	5,800/7,800	45,000/90,000
	SBUA-36	36	4	13	6.5, 9.5	12,600/16,900	65,000/130,000
	SBUA-42	42	4	16	6.5, 9.5	19,300/25,800	85,000/170,000
	SBUA-48	48	5 (4" opt)	19	6.5, 9.5, 11.5	24,600/32,900	95,000/190,000
	SBUA-54	54	5 (4" opt)	21	6.5, 9.5, 11.5	30,600/40,900	105,000/210,000
	SBUA-60	60	5	14	6.5, 9.5, 11.5	38,200/50,900	187,500/350,000
	SBUA-66	66	5	15	11.5	47,100/62,800	200,000/375,000
	SBUA-72	72	5	16	11.5, 14	64,100/79,800	225,000/400,000
	SBU-M 48	50	N/A	19	6.5	N/A	190,000
	SBU-M 54	56	N/A	21	6.5	N/A	210,000
	SBU-M 60	62	N/A	14	11.5	N/A	350,000
	SBU-M 66	68	N/A	15	11.5	N/A	375,000
	SBU-M 72	74	N/A	16	11.5	N/A	400,000
SBU-M 78	80	N/A	16	14	N/A	640,000	
SBU-RC 36	38	N/A	13	6.5	N/A	130,000	

Note: metric sizes available

## BACKHOE-LOADERS

Company	Model	Operating Weight (lbs)	Max. Reach (height to pin)	Backhoe Dig Depth	HP
<b>Case</b>	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
<b>Caterpillar</b>	450F	24,141	14' 7"	17' 3"	127
	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
430F2 IT	19,063	13'	15' 4"	108	
<b>John Deere</b>	310L	14,669	17' 10"	14'	93
	310L EP	14,430	17' 10"	14'	71
	310 SL	15,872	18' 1"	14' 3"	100
	310SL HL	18,231	18' 5"	14' 10"-18' 1"	110
	315SL	17,554	17' 10"	13' 8"	100
	410L	17,786	19' 9"	15' 10"	113
	710L	25,588	22' 5"	17' 3"	148
<b>Kubota</b>	B26-TL500-BT820	4,001	94.5"	8' 4"	23.3
	L47-TL1300-BT100B	7,205	113.9"	10' 8"	44.7
	M62-TL1800-BT1400	8,925	126.1"	14' 2"	59.1
<b>New Holland</b>	B95C	16,416		14' 4"	97
	B95C TC	18,443		14' 4"	97
	B95C LR	16,105		15' 3"	97
	B110C	16,526		15' 3"	110

## CABLE LAYING EQUIPMENT

Company	Model	HP	Operating Weight (lbs)	Max. Installation Depth (in)	Max. Reel Capacity (lbs)
<b>BRON</b>	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
<b>Ditch Witch</b>	100SX	11	720	12	N/A
	410SX	49.6	3,910	18 blade, 36 chain	N/A
	RT45	42.2	4,200	63	N/A
	RT55	60	5,610	62	1,500
	RT80	74	11,580	62	2,000
	RT80 Quad	83	11,580	62	N/A
	RT100	100	8,880	97	N/A
	RT105	107	22,000	97	N/A
	RT120	121	19,300	96	2,500



<b>Ditch Witch</b> (cont'd)	RT120 Quad	121	26,200	96	2,500
	RT125	121	22,000	97	2,500
	RT125 Quad	121	27,200	93	3,000
	Zahn Plow	30	1,290	18	N/A

<b>Felling Trailers</b>	FT-14 R	8*	2,900**	12	***
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*\*w/electric start Honda 270; \*\*on 3" diameter shaft; \*\*\*capacity for up to 120" reel*

<b>Toro</b>	Pro Sneak 365	35.5	2,770	36	300
	RT600	65	6,050*	60	2,500
	RT1200	121	14,000	84	3,780
	<i>*base unit</i>				

<b>Vermeer</b>	RTX550	65/67	7,800	60	1,500
	RTX750	74	9,330	60	2,000
	RTX1250	120	13,920	72	3,000

## CABLE PLOWS

Company	Model	HP	Max. Depth (in)	Plow Offset Range (in)	Approximate Weight (lb)	
<b>BRON</b>	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-IIIR	N/A	N/A	72	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)	
<b>Bobcat</b>	T450	61	6,148	1,400	126.6	77.8	55	
	T550	66	7,557	1,995	133	77.8	67	
	T590	66	7,822	2,100	133	77.8	67	
	T595	74	8,022	2,200	133	77.8	67	
	T630	74	8,655	2,100	136.8	81.3	72.9	
	T650	74	9,320	2,570	136.8	81.3	72.9	
	T740	74	10,263	3,200	141.6	81.3	70	
	T750	85	10,465	3,325	141.6	81.3	78	
	T770	92	10,465	3,475	141.6	81.3	78	
	T870	100	12,925	3,525	153.9	83.4	83	
	<i>Note: machine length is w/bucket; machine width is over tracks.</i>							

<b>Case</b>	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	76.0
	TV380	84	10,550	3,800	143.2	80.4	76.0

<b>Caterpillar</b>	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
	277D	73	9,293	2,303	146.2	83.2	78
	289D	73	10,533	2,660	146.2	83.2	76 / 78
	287D	72.9	9,929	2,800	146.2	83.2	78
	297D2	95	10,692	3,290	155.2	83.2	76.2
	297D2 XHP 106	109.18	10,918	3,360	155.2	83.2	76.2
	299D2	95	11,275	3,200	154.7	83.6	76 / 78
	299D2 XHP 106	116.08	11,608	3,308	154.7	83.7	76

<b>John Deere</b>	317G	61	8,195	2,125	137.4	78.5	65.1
	323E	70	9,440	2,590	136.8	80.6	71.8
	331G	89	11,900	3,100	155.9	86.7	78.9
	333G	97	12,100	3,700	155.9	86.7	78.9

*Note: machine length is with bucket.*

<b>Kubota</b>	SVL75-2	68.8	9,315*	2,300**	140.8	82	66
	SVL90-2s	87	11,574*	3,200**	154.6	83.3	77

*\*weight with cab; \*\*at 35%*

<b>New Holland</b>	C227	70	8,200	2,700*	105.1	78.7	65.9
	C232	76	9,630	3,200*	117.8	80.4	76
	C238	84	10,100	3,800*	117.6	80.4	76
	<i>*50%</i>						

<b>Volvo</b>	MCT85C	59.9	8,355	1,900	139	78.7	12.6
	MCT110C	74	10,216	2,250	145.3	82	18
	MCT125C	84	10,756	2,796	145.3	82	18
	MCT135C	92	11,827	3,019	148.8	82	18

## CRAWLER DOZERS/TRACTORS

Company	Model	HP	Operating Weight (lbs)	Blade Capacity (cu. yd.)
<b>Case</b>	650L LT	74	16,250	1.69
	650L LGP	74	17,550	2.15
	650L WT	74	16,800	2.0
	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	32,637	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	
<b>Caterpillar</b>	D6K2 LGP	130	30,574	4.38
	D6N DS-LGP (Tier 4i)	150	39,646	4.13
	D6N DS-LGP Waste Handler (Tier 4i)	150	42,988	7.8
	D6T LGP (Tier 4F)	207	50,490	4.83
	D6T LGP Waste Handler (Tier 4F)	207	55,792	12.3
	D7E LGP (Tier 4F)	238	62,886	7.7
	D7E LGP Waste Handler (Tier 4F)	238	68,123	25
	D8T LGP (Tier 4F)	312	82,496	12.9
	D8T LGP Waste Handler (Tier 4F)	312	91,270	26.1
	D3K2 LGP	80	18,442	2.17
	D4K2 LGP	92	18,686	2.42
	D5K2 LGP	104	20,992	3.06
	D6K2 XL	130	29,346	4.01
	D6N XL (Tier 4i)	150	36,392	4.16
	D6N XL Waste Handler (Tier 4i)	150	38,224	4.16
	D6T XL (Tier 4F)	207	46,263	6.94
	D6T XL Waste Handler (Tier 4F)	207	51,563	14.3
	D6T XW (Tier 4F)	207	48,034	6.6
	D7E (Tier 4F)	238	57,441	8.98
	D7E Waste Handler (Tier 4F)	238	63,537	17.6
	D8T (Tier 4F)	312	86,900	11.3
	D8T Waste Handler (Tier 4F)	312	85,650	26.1
	D9T	410	94,265	17.7
	D9T Waste Handler	410	109,705	37.6
	D9T (Tier 4F)	436	95,917	17.7
D9T Waste Handler (Tier 4F)	436	110,471	37.6	
D10T2	600	139,010	24.2	
D11T	850	208,589	45	
D11T CD	850	220,385	57	
D3K2 XL	80	17,465	1.99	
D4K2 XL	92	18,007	2.59	
D5K2 XL	104	20,313	2.86	
<b>John Deere</b>	450K	80	17,510-18,752	2.6
	550K	92	19,758-21,000	2.6
	650K	104	21,320-22,343	2.9
	700K	130	30,275-31,290	4.1
	700K SmartGrade	130	31,290	4.1
	750K	165	34,527-37,745	5.6
	750K SmartGrade	165	37,745	5
	850K	205	42,558-48,005	7.8
	850K SmartGrade	205	45,152-46,376	5.9
	950K	265	71,200-75,300	11.2
	1050K	350	94,300-95,000	14.9

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

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Torque (ft/lbs)	Pullback (lbs)
Barco	BD40HP	rack & pinion	27,000	varies	6,600	40,000
Ditch Witch	JT5	hydraulic	3,690	2.5	550	5,000
	JT9	hydraulic	7,120	3	1,100	9,000
	JT10	hydraulic	7,120	3	1,100	10,000
	JT20	hydraulic	10,800	3.5 - 5	2,200	20,000
	JT25	hydraulic	20,200	3.5 - 5	4,000	27,000
	JT30	hydraulic	17,075	3.5 - 5	4,000	30,000
	JT30 AT	hydraulic	17,655	3.5 - 5	4,000	30,000
	JT40	hydraulic	20,500	4.5	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		33,510	6.5	7,375	40,000
Toro	DD2024	quad rack & pinion	8,500		2,400	20,000
	DD4045	quad rack & pinion	20,000		4,500	40,000
	DD4050	quad rack & pinion	17,460	2.375	5,000	40,000
Vermeer	D6x6	chain	3,240	N/A	550	5,500
	D9x13 S3	rack & pinion	6,300	N/A	1,300	9,000
	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 (2.60")
	D24x40 Series II	rack & pinion	20,200 - 22,250	N/A	4,200	28,000
	D36x50DR Series II	rack & pinion	28,900 - 29,300	N/A	5,500	38,000
	D40x55 S3	rack & pinion	23,380	N/A	5,500 (2.63")	40,000 (2.38")

## 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	36,728	N/A	13,600	110,000
	DD-110S	rack & pinion	36,728	N/A	13,600	110,000
	DD-220T	rack & pinion	65,000	N/A	30,000	220,000
	DD-155T	rack & pinion	57,000	N/A	30,000	155,000
Barco	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	31,250	5	9,000	60,000
	JT60AT	rack & pinion	31,250	6.25	9,000	60,000
	JT100	rack & pinion	45,300	6	12,000	100,000
	JT100AT	rack & pinion	47,260			

\*Operating weight varies depending on selected options.

## 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	95,400	60,000	440,000
	DD-660RS	rack & pinion	100,300	80,000	660,000
	DD-1100RS	rack & pinion	105,300	100,000	1,100,000
Barco	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	66,380	562,000
	HK250C High Torque	rack & pinion	91,500	88,507	562,000
	HK400T	rack & pinion	96,000	103,300	882,000
	HK400T High Torque	rack & pinion	107,000	147,500	882,000
	HK500T	rack & pinion	99,200	103,300	1,125,000
	HK600T	rack & pinion	112,500	147,500	1,323,000
	HK250T	rack & pinion	63,940	66,400	562,000
	HK250T High Torque	rack & pinion	67,240	88,507	562,000

Herrenknecht (cont'd)	HK150T	rack & pinion	57,300	51,650	337,000
	HK400M	rack & pinion	94,800	103,300	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
	D500x500	rack & pinion	82,000	50,000	500,000
	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 (cu. yd.)	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	5,666	22.5	2.9	8' 10"	15' 4"	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	18,960	59.4	9.5	15' 6"	23' 11"	7' 7"

Note: bucket capacity is shown in cubic feet; maximum reach is based on reach at ground level.

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"
	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	3,770	17.7	0.02 - 0.12	7' 3"	11' 11"	3' 3" - 4' 3"
	301.7D CR	3,725	17.7	0.02 - 0.12	8' 2"	13' 1"	3' 3" - 4' 3"
	301.7D	4,365	17.7	0.02 - 0.12	7' 11"	12' 9"	3' 3" - 4' 3"
	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	16,270	50.6	0.13 - 0.68	13' 4"	20' 3"	7' 3"
	308E2 VAB	19,180	65	0.13 - 0.68	14' 1"	25'	7' 7"
	308E2 CR SB	18,560	65	0.13 - 0.68	15' 5"	24' 1"	7' 7"

Note: bucket capacity is in cubic feet.

Doosan	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. DX85R-3 is a reduced-tail-swing excavator.

Hitachi	ZX17U-5	3,790	14.5	0.02 - 0.05	7' 2"	12' 6"	3' 3"
	ZX26U-5	6,110	20	0.05 - 0.16	8' 6"	15' 2"	4' 11"
	ZX30U-5	6,850	23	0.05 - 0.16	9' 2"	13' 1"	5' 1"
	ZX35U-5	7,760	23.3	0.05 - 0.22	11' 4"	18' 11"	5' 9"
	ZX50U-5	10,560	35.9	0.08 - 0.31	12' 7"	20' 6"	6' 7"
	ZX60USB-5	13,547	53	0.12 - 0.46	13' 6"	21' 6"	6' 7"
	ZX75US-5	17,952	56.9	0.31 - 0.64	15' 1"	22' 2"	7' 7"
	ZX 85USB-5	19,244	56.9	0.4 - 0.66	14' 1"	24' 9"	7' 3"

Hyundai	R17Z-9A	3,747	16.4	0.05	7' 7"	12' 9"	3' 2"
	R25Z-9AK	5,690	24.9	0.09	7' 11"	14' 3"	4' 11"
	R35Z-9	8,050	26.5	0.14	10' 4"	17' 2"	5' 9"
	R55-9A	12,460	65.1	0.24	12' 6"	19' 9"	6' 4"
	R60CR-9A	13,010	66.9	0.24	11' 9"	19' 9"	6' 7"
	R80CR-9	18,190	59.6	0.37	13' 7"	22' 5"	7' 7"
	R80CR-9A	18,190	65.1	0.37	13' 7"	22' 5"	7' 7"

John Deere	17G	3,790	14.5	-----	7' 2"	12' 6"	as-is
	26G	5,780	20	-----	8' 6"	15' 2"	as-is
	30G	6,850	23	0.05 - 0.16	9' 2"	16' 1"	5' 1"
	35G	7,760	23.3	-----	10'	17' 1"	as-is
	50G	10,560	35.9	-----	11' 7"	19' 7"	as-is
	60G	13,547	53	7.8*	12' 4"	20' 5"	as-is

\*cubic feet

Kobelco	SK17SR-5E	3,836	15	1.77	7' 3"	12' 2"	4' 2"
	SK25SR-6E	5,930	20.4	2.84	9' 2"	15' 7"	4' 11"
	SK30SR-6E	7,670	23	3.18	9' 3"	17' 1"	5' 1"
	SK35SR-6E	8,555	23.1	3.88	10'	17' 7"	5' 7"
	SK45SRX-6E	10,300	37	4.94	11' 3"	19' 2"	6' 5"
	SK55SRX-6E	11,860	37.4	5.64	12' 10"	20' 6"	6' 5"
	SK75SR-3E	17,100	55	3.78 - 12.42	13' 8"	21' 3"	8'
	SK85CS-3E	18,700	55	6.48 - 9.99	13' 9"	23' 9"	8'

Kubota	K008-3T4	2,200	10.1	0.02	5' 8"	9' 11"	2' 10"
	KX018-4	3,747	15.5	0.04	7' 9.7"	12' 8"	4' 3.2"
	KX71-3S	6,305	23.1	0.10	9' 9"	16'	4' 11"
	KX033-4	7,420	23.9	0.12	10' 6"	16' 1.2"	5' 1"
	KX040-4	9,195	38.9	0.16	11' 2.7"	17' 9"	5' 6.9"
	KX404-4	9,900	38.9	0.16	11' 2.6"	17' 9"	5' 6.9"
	6-in-1 Blade						
	KX404-4	9,545	38.9	0.16	11' 2.6"	17' 9"	5' 6.9"
	Angle Blade						
	KX057-4	12,200	45.2	0.23	12' 8.2"	20' 1"	6' 5.2"
	KX057-4	12,620	45.2	0.23	12' 8.2"	20' 1"	6' 5.2"
	Angle Blade						
	KX080-4s	18,280	62.3	0.45	15' 1.1"	23' 6.3"	7' 2.6"
	KX080-4s	19,255	62.3	0.45	15' 1.1"	23' 6.3"	7' 2.6"
	Angle Blade						
	KX71-3ST4	6,305	23.1	0.10	9' 9"	16'	4' 11"
	U17	3,703	15.1	0.04	7' 7"	12' 7"	4' 1"
	U25S	5,625	20.9	0.07	9' 3"	15' 4"	4' 11"
	U35-4	8,129	23.9	0.12	9' 8.9"	16' 11.3"	5' 6.9"
	U35-4	8,478	23.9	0.12	9' 8.9"	16' 11.3"	5' 6.9"
Angle Blade							
U55-4	11,915	45.2	0.23	11' 10"	19' 6"	6' 5.2"	
U55-4	12,335	45.2	0.23	11' 10"	19' 6"	6' 5.2"	
Angle Blade							
New Holland	E18B	3,638	15.2	0.05	7' 1"	12' 9"	4'
	E27B	5,557	21.3	0.1	8' 4"	14' 10"	4'
	E35B	7,960	28.4	0.12	10' 1"	16' 9"	5'
	E50B	10,275	40.8	0.21	11' 9"	18' 1"	6'
	E55Bx	12,295	39	0.1 - 3.6	12' 10"	18' 11"	6' 5"
	Volvo	ECR25D	5,235	----	0.097	8' 1"	14' 2"
ECR58D		12,830	47	0.08 - 0.24	11' 7"	19' 2"	6' 7"
EC20D		4,330	----	1 - 2.75	7' 5"	13'	3' 4"
EC60E		12,830	57	0.09 - 0.35	12' 2"	19' 7"	6' 4"
ECR88D		19,420	56	0.1 - 0.44	13' 7"	22' 4"	7' 7"
EC35D		7,782	----	3.24	12' 3"	18' 8"	5' 10"
ECR40D		8,554	----	0.07 - 0.2	11' 3"	18' 8"	5' 10"

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

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (cu. yd.)	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	314E CR	32,600	89	0.39 - 0.97	19' 6"	28' 6"
		312E	33,080	91	0.27 - 1.0	19' 10"	28' 3"
		316E	38,801	113	0.46 - 1.19	21' 7"	30' 5"
318E		41,010	113	0.59 - 1.40	21' 7"	30' 5"	
321D LCR		53,704	148	0.61 - 2.05	22'	32' 1"	
320E		54,450	153	0.61 - 2.08	22' 1"	30' 9"	
324E		55,395	194	0.75 - 2.46	22' 4"	33' 2"	
320E RR		56,440	152	0.61 - 2.08	22' 1"	32' 4"	
329E		64,060	232	0.75 - 2.46	23' 9"	35'	
336F		80,617	316	1.23 - 3.52	24' 7"	36' 2"	
336E H		81,600	308	1.23 - 3.52	24' 7"	36' 2"	
349EF		105,400	425	1.2 - 5.0	25'	38' 5"	
311F RR		27,300	70	0.27 - 1.0	18' 4"	26' 7"	
323F L ES		56,438	156	0.61-2.08	22' 1"	32' 4"	
335F L		87,946	192	0.83-2.58	22' 9"	34' 9"	
374F		156,461	472	4.97 - 6.0	31' 8"	46' 8"	
390F		156,461	524	4.0 - 8.5	38' 8"	56' 7"	
320E LR		54,450	153	0.80	38' 4"	51' 6"	
324E LR		64,990	194	0.75	48' 4"	60' 6"	
329E LR	68,958	232	0.75	48' 5"	60' 5"		

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

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (cu. yd.)	Max. Digging Depth	Max. Reach
<b>Doosan</b>	DX140LC-5	32,783	113	0.30 - 0.85	20' 1"	27' 11"
	DX140LCR-5	34,987	113	0.30 - 0.85	19' 7"	27' 11"
	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	56,019	181	0.59 - 1.41	21' 10"	31' 7"
	DX255LC-5	57,752	184	0.61 - 1.45	22' 4"	32' 9"
	DX300LC-5	68,764	267	0.69 - 2.09	23' 11"	34' 6"
	DX300LC-5 SLR	72,462	267	0.27 - 0.82	45' 2"	57'
	DX350LC-5	80,654	313	1.06 - 2.46	24' 8"	35' 11"
	DX420LC-5	94,799	338	1.5 - 3.23	25' 4"	37'
	DX490LC-5	112,206	373	2 - 3.81	25' 6"	38' 11"
	DX530LC-5	116,576	373	2 - 3.81	24'	37' 6"
	DX530LC-5 SLR	117,112	373	0.67 - 1.84	49' 7"	63' 9"
<i>Note: maximum reach is based on reach at ground level; SLR = super-long reach.</i>						
<b>Hitachi</b>	ZX130-6	26,674	101	0.47 - 0.99	19' 11"	28' 5"
	ZX135US-6	32,820	101	0.47 - 0.99	19' 7"	28' 7"
	ZX160LC-6	38,366	116	0.47 - 1.17	21' 4"	30' 1"
	ZX180LC-6	40,419	116	0.51 - 1.31	23' 2"	32' 1"
	ZX210-6	46,586	160	0.9 - 1.29	21' 4"	30' 4"
	ZX210LC-6	47,548	160	0.9 - 1.29	21' 4"	30' 4"
	ZX245USLC-6	56,170	159	0.51 - 1.55	21' 9"	32' 6"
	ZX250LC-6	55,689	177	1 - 1.9	25'	35' 3"
	ZX300LC-6	64,375	249	0.9 - 1.6	25' 10"	36' 5"
	ZX350LC-6	77,360	271	1.3 - 2.78	26' 10"	38' 3"
	ZX380LC-6	82,276	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'
	EX1200-6	246,917	740	8.8	26' 5"	43' 10"
	EX1200-6 Shovel	251,327	740	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
	EX2600-6	556,000	1,500	22.2	27' 1"	52' 8"
	EX2600-6 Shovel	556,000	1,500	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
	EX5600-6	537,000	3,000	44.5	28' 11"	63' 8"
	EX5600-6 Shovel	533,000	3,000	38	15' 9"	N/A
	EX8000-6 Shovel	1,787,900	3,880	52.3	13' 5"	N/A
<b>Hyundai</b>	R125LCR-9A	27,560	100	0.59	16' 7"	24' 10"
	R145LCR-9A	32,610	116	0.93	18' 1"	28' 4"
	R235LCR-9A	53,620	157	1.75	22'	32' 2"
	R140LC-9A	30,820	116	0.93	20'	28' 4"
	R160LC-9A	39,240	128	1.16	19' 11"	29' 1"
	R180LC-9A	41,560	128	1.37	19' 11"	29' 1"
	R220LC-9A	49,640	157	1.75	20' 5"	32' 3"
	R260LC-9A	56,880	178	1.96	23'	33' 5"
	R300LC-9A	68,260	212	2.42	24' 3"	34' 10"
	R330LC-9A	74,960	268	2.75	24' 2"	35' 11"
	R380LC-9A	86,200	290	3.03	24' 8"	38' 3"
	R480LC-9A	108,420	352	3.96	25' 7"	40' 11"
	R520LC-9A	114,820	352	4.19	26' 11"	40' 9"
	R1200LC-9A	118,000	352	8.76	26' 3"	43' 11"
<b>John Deere</b>	75G	17,752	56.9	0.41	15' 1"	22' 8"
	85G	19,244	56.9	0.41	14' 10"	25' 3"
	130G	31,604-32,134	98	0.65	19' 9"	28' 9"
	135G	31,500-33,920	101	0.81	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	50,905-51,940	159	1.19	21' 11"	32' 7"
	245G LC	56,830	159	1.43	21' 9"	33' 2"
	250G LC	57,800	188	1.38	25'	35' 10"
	300G LC	66,674	223	1.88	25' 10"	37'
	350G LC	78,550	271	2.3	26' 10"	38' 11"

<b>John Deere</b>	380G LC	83,992	271	2.3	26' 10"	38' 11"
	470G LC	112,916	367	3.06	27' 2"	41'
	470G LC ME	108,423	367	3.06	20' 5"	35' 8"
	670G LC	154,103	463	4.04	30'	45' 5"
	670G LC ME	157,803	463	4.04	23' 4"	38' 9"
	870G LC	188,716	512	4.57	31' 5"	48' 11"
	870G LC ME	193,232	532	4.57	23' 5"	40' 6"
<b>Kobelco</b>	SR140SRLC-5	31,500	95.6	0.3 - 0.88	19' 7"	28' 10"
	ED160-5 Blade Runner 36,200	95.6	0.3 - 0.88	19' 1"	29' 8"	
	SK210LC-10	49,400	160	0.91 - 1.8	21' 5"	32' 6"
	SK230SRLC-5	56,400	160	0.68 - 1.6	21' 7"	31' 10"
	SK260LC-10	59,300	178	0.875 - 2.25	23'	33' 10"
	SK350LC-10	83,300	270	0.875 - 2.75	24' 10"	36' 11"
	SK500LC-10	114,400	369	1.5 - 4.26	25' 7"	39' 7"
	SK270SRLC-5	60,000	160	0.68 - 1.8	21' 9"	32' 3"
	SK170LC-10	38,800	127	0.45 - 1.36	21' 3"	31' 5"
	SK300LC-10	68,100	252	0.875 - 1.875	23' 7"	35' 8"
	SK260LC-10 High & Wide 63,100	178	1.06 - 1.31	21' 10"	33' 9"	
	SK300LC-10 High & Wide 73,600	252	1.57	22' 7"	35' 8"	
	SK500LC-10 Mass Excavator 118,000	369	4.45	21' 3"	35' 8"	
	SK210LC-10 Long Reach 52,000	157	0.6	39' 5"	51' 11"	
	SK260LC-10 Long Reach 62,600	178	0.5	48' 4"	60' 6"	
<b>Volvo</b>	EC380E	94,800	302	1.1 - 3.5	26' 6"	37' 9"
	EC480E	100,310	277	1.2 - 2.7	30' 1"	43' 2"
	EC380EHR	111,900	302	0.7 - 2.2	36'	47' 11"
	EC480EHR	140,200	371	-----	-----	-----
	EC140E	31,660	119	0.33 - 1	18' 3"	27'
	EC160E	45,592	148	0.39 - 0.76	21' 3"	30' 2"
	EC220E	49,490	172	0.63 - 1.66	22' 1"	32' 1"
	ECR145E	33,950	119	0.33 - 1	18' 2"	26' 11"
	ECR235E	55,780	172	0.63 - 1.66	22' 2"	31' 11"
	EC350E	82,180	302	1.1 - 2.5	24' 11"	36' 2"
	EC250E	59,290	213	0.73 - 1.98	23' 2"	33' 4"
	EC300E	68,330	240	0.72 - 2.69	24' 1"	34' 6"
	EC750E	166,040	502	2.6 - 6.28	29' 8"	44' 4"
	ECR305C	81,320	192	0.72 - 2.30	22' 10"	34' 3"

## EXCAVATORS, WHEELED

Company	Model	Operating Weight (lbs)	HP	Bucket Capacity (cu. yd.)	Max. Digging Depth	Max. Reach	Travel Speed (mph)
<b>Caterpillar</b>	M313D	33,270	128	0.24 - 1.20	17' 4"	27' 10"	23
	M315D	37,633	137	0.50 - 1.65	18' 8"	29' 5"	21
	M322D	49,052	165	0.57 - 2.05	21' 3"	33' 10"	15.6
	M318F	42,549	169	0.5 - 1.65	19' 4"	30' 2"	22
	M320F	46,385	169	0.5 - 1.65	20' 7"	32'	22
<b>Doosan</b>	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
<i>Note: maximum reach based on reach at ground level.</i>							
<b>Hitachi</b>	ZX190W-5*	44,530	159	0.52 - 1.97	19' 2"	31' 5"	21.7
	ZX190W-5**	45,300	159	0.52 - 1.97	19' 5"	31' 1"	21.7
<i>*monoblock boom; **2-piece boom; NOTE: all modes are front blade, rear outrigger.</i>							
<b>Hyundai</b>	R55W-9A	5,910		0.24	11' 6"	19' 7"	6' 4"
	R140W-9A	30,200		0.93	15' 11"	25' 3"	8' 2"
	R180W-9A	40,960		1.37	19' 5"	28' 4"	8' 2"
	R210W-9A	45,200		1.75	20' 11"	32'	8' 4"
<b>John Deere</b>	190G W*	44,000-45,300	1,159	0.92	19' 2"	31' 5"	21.8
	190D W**	44,780-45,300	159	0.92	19' 5"	31' 1"	21.8
<i>*monoblock boom; **2-piece boom. NOTE: all models are front blade, rear outrigger.</i>							
<b>Volvo</b>	EW160D*	35,715 - 40,125	150	0.94 - 1.33	18' 5"	29'	22
	EW180D*	39,900 - 44,750	169	0.92 - 1.30	20' 1"	31' 4"	22
	EW210D*	43,430 - 50,265	169	0.92 - 1.30	21' 3"	32' 7"	18.5
	EW230C	47,620 - 56,438	168	1.54 - 1.96	22' 4"	33' 11"	
<i>*monoblock boom</i>							

## GROUND PENETRATING RADAR

Company	Model	Antenna Freq.	Display Type	Max. Target Depth	Max. Survey Length	GPS	Battery Life	Unit Weight (lbs)
<b>GSSI</b>	UtilityScanPro	270 MHz	10.4**	18'	unlimited	no**	3 hr***	86.5
	UtilityScanPro	400 MHz	10.4**	12'	unlimited	no**	3 hr***	60 - 79****
	UtilityScanPro	300/800 MHz	10.4**	16'	unlimited	no**	3 hr***	70
	UtilityScanPro	350 MHz-hyperstacking	10.4**	35'	unlimited	no**	3 hr***	60-69****
	UtilityScan	350 MHz-hyperstacking	B2 ToughPad	35'	unlimited	yes	Tablet = 10 hr; GPR = 7 hr	34
	UtilityScan	350 MHz-hyperstacking	Nvidia Shield	35'	unlimited	yes	Tablet = 3 hr; GPR = 7 hr	34
	UtilityScan DF	300/800 MHz	G1 ToughPad	16'	unlimited	no**	8 hr	51 or 66****
	UtilityScan HS	350 MHz-hyperstacking	G1 ToughPad	35'	unlimited	no**	8 hr	50 or 65****
<i>*enhanced LED display with internal high brightness; **supports external GPS; ***user replaceable battery; ****cart dependent</i>								
<b>Sensors &amp; Software</b>	Noggin 250	250	8 in. Touch Screen	3'-40'	5.7 miles	yes	6 hr	49
	LMX100	250	8 in. Touch Screen	26'	3,000'	no	6 hr	48
	LMX200	250	8 in. Touch Screen	26'	3,000'	yes	6 hr	49
	Conquest 100	1,000	8 in. Touch Screen	3'	21'	no	6 hr	7.2

Subsite Electronics	2450 GR	250 MHz/700MHz	Xplore Tablet PC	19/8'	unlimited	yes	PC = 4 hr; GPR = 10 hr	73.9
	2550 GR	250MHz/700MHz	Intel Core	19/8"	unlimited	yes	GPR = 10 hr	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
	Q5C	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	Shaker Screens	Desander, Desilter Cones	Mounting Option (skid/trailer)
American Augers	MCM-4000	4,000	560	N/A	jet	yes	yes	both
	M-500P	6,000	500	tri-plex	jet	yes	yes	rockover
	MCR-10000	10,000	900	centrifugal	jet	yes	yes	rockover
	MCD-1000	10,000	1,000	centrifugal				
	P-350	N/A	N/A	tri-plex				
	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
Ditch Witch	MR90	450	90	centrifugal	venturi	2	yes	both
Elgin Separation Solutions	KEMTRON 100HD2	500	65 - 130	centrifugal	venturi/jet	yes	yes	both
	KEMTRON 200HD2	500 or 1,000	65 to 195	centrifugal	venturi/jet	yes	yes	both
	KEMTRON 400HD2	2,350	400	centrifugal	venturi/jet	yes	yes	both
	KEMTRON 600HD2	4,000	600	centrifugal	venturi/jet	yes	yes	both
	KEMTRON 800HD2	5,000	800	centrifugal	venturi/jet	yes	yes	both
	KEMTRON 1500HD2	9,000	1,500	centrifugal	venturi/jet	yes	yes	rockover
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				
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	modular
	MX240	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
	R400T	6,375	600	centrifugal	venturi/recirculation	3	2/10", 10/5"	trailer
	R600HC	8,560	400	centrifugal	venturi/recirculation	4	2/10", 12/5"	trailer

## KEYHOLE EQUIPMENT

Company	Model	Core Diameter (in)	Core Depth (in)	Power Source (hydraulic/gas)	Mounting Option
McLaughlin	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
SIMCO	255PTC	2 - 18	36+	hydraulic	medium pickup/truck w/flat bed, trailer w/25hp 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

## LOCATORS (WALKOVER & UTILITY)

Company	Model	Type	Operating Voltage	Battery Life (hrs)	Audio Output Frequency (kHz)	Weight (lbs)	Operating Temp.	Overall Length (in)	
DCI (W)	DigiTrak Falcon F5	Receiver	Lithium Ion	8 - 12	4.5 - 45	8.5	-4°F to 140°F	15	
	DigiTrak Falcon F2	Receiver	Lithium Ion	10 - 14	4.5 - 45	7.6	-4°F to 140°F	15	
	DigiTrak Falcon F1	Receiver	Lithium Ion	5 - 7	9 - 13.5	7.6	-4°F to 140°F	15	
	DigiTrak Aurora	Remote	12 - 28 VDC	N/A	N/A	6.4	-4°F to 140°F	11.5	
	DigiTrak Aurora	Remote	12 - 28 VDC	N/A	N/A	4.3	-4°F to 140°F	9.8	
	DigiTrak FCD	Remote	NiMH	8 - 12	N/A	4.5	-4°F to 140°F	8.5	
	FT5p	Transmitter	2 Cell	20	4.5 - 45	1.7	-4°F to 220°F	15	
	FT5Lp	Transmitter	Lithium Ion	40	4.5 - 45	2	-4°F to 220°F	19	
	FT2	Transmitter	2 Cell	20	4.5 - 45	1.7	-4°F to 220°F	15	
	FT2s	Transmitter	123 Lithium	12	4.5 - 45	0.5	-4°F to 220°F	8	
	FT1	Transmitter	2 Cell	20	9 - 13.5	1.7	-4°F to 220°F	15	
	FT1s	Transmitter	123 Lithium	12	9 - 13.5	0.5	-4°F to 220°F	8	
	F5Dpx	Transmitter	2 Cell	20	12, 19	1.7	-4°F to 220°F	15	
	F5DLpx	Transmitter	Lithium Ion	20	12, 19	2	-4°F to 220°F	19	
	F5Dp	Transmitter	2 Cell	20	12, 1.3	1.7	-4°F to 220°F	15	
	F5D 19/12	Transmitter	2 Cell	20	12, 19	1.7	-4°F to 220°F	15	
	F5D 12/1.3	Transmitter	2 Cell	20	12, 1.3	1.7	-4°F to 220°F	15	
	FX 12	Transmitter	2 Cell	20	12	1.7	-4°F to 220°F	15	
	FX 19	Transmitter	2 Cell	20	19	1.7	-4°F to 220°F	15	
	FC	Transmitter	12 - 28 VDC	N/A	12	1.9	-4°F to 220°F	19	
	FXL 12	Transmitter	Lithium Ion	40	12	2	-4°F to 220°F	19	
	FXL 19	Transmitter	Lithium Ion	40	19	2	-4°F to 220°F	19	
	FS	Transmitter	1 - AA	10	12	0.5	-4°F to 220°F	8	
	ST 12	Transmitter	2 Cell	20	12	1.7	-4°F to 220°F	15	
	SES	Transmitter	1 - AA	10	12	0.5	-4°F to 180°F	8	
	EDF	Transmitter	2 Cell	10	12, 1.5	1.4	-4°F to 220°F	15	
	ET	Transmitter	2 Cell	20	12	1.4	-4°F to 220°F	15	
Radiodetection (W)	DrillTrack G2	Receiver	6 C-alkaline	12	8, 33	8.8	-4°F to 220°F	39.3	
	RD385	Receiver	12 AA-alkaline	30	8, 33	5.0	-4°F to 220°F	25	
	SDS:	Transmitter	1 AA-alkaline	10	33	0.6	-4°F to 220°F	8	
	Short range datasonde								
	MDS:	Transmitter	2 C-alkaline	20	8	1.8	-4°F to 220°F	15	
	Medium range datasonde								
	LDS:	Transmitter	2 C-alkaline	12	8	1.8	-4°F to 220°F	15	
	Long range datasonde								
	MDF:	Transmitter	2 C-alkaline	20	8, 33	1.8	-4°F to 220°F	15	
	Medium range dual frequency datasonde								
	LDF:	Transmitter	2 C-alkaline	12	8, 33	1.8	-4°F to 220°F	15	
	Long range dual frequency datasonde								
G2M:	Transmitter	2 C-alkaline	20	8, 33	1.8	-4°F to 220°F	15		
Medium range dual frequency datasonde									
G2L:	Transmitter	2 C-alkaline	12	8, 33	1.8	-4°F to 220°F	15		
Long range dual frequency datasonde									
Heath Consultants (U)	Sure-Lock All Pro	Transmitter	lead acid 6 VCD, 7 AH	10-100	8.1, 81, 480	8	-25°F to 150°F	9.25	
	Sure-Lock All Pro	Receiver	6 AA-alkaline	90-120	8.1, 81, 480	4.4	-25°F to 150°F	30.5	
	Sure-Lock Utility Pro	Transmitter	6 D-alkaline	110-190	81	4	-25°F to 150°F	8.1	
	Sure-Lock Utility Pro	Receiver	6 AA-alkaline	90-120	81	4.4	-25°F to 150°F	30.5	
	Magna-Lock	Magnetic	6 1.5V AA	100	100	3	0°F to 120°F	24	
	Split-Lock	Transmitter	4 C-alkaline	50	126	3.5	-5°F to 158°F	8.5	
McLaughlin (U)	Split-Lock	Receiver	4 C-alkaline	50	126	3.5	-5°F to 158°F	8.5	
	Vision FLX	Utility/Fault Finder	12V	24	9.5, 38, 80, FF	4.7	-4°F to 122°F	26	
	Vision GX	Utility	9V	24	9.5, 38, 80	4.7	-4°F to 122°F	26	
	Verifier G3	Utility	9V	18	9.5, 38	4.7	-4°F to 122°F	26	
	Vision LX	Utility	9V	18	9.5, 38, 80	4.7	-4°F to 122°F	26	
<i>*transmitter data listed</i>									
Schonstedt (U)	XTpc-82	Pipe/Cable	1 9V	12	82	2.8	-4°F to 140°F	27.7	
	XTpc-33	Pipe/Cable	1 9V	12	33	2.8	-4°F to 140°F	27.7	
	XTpc+	Transmitter/Receiver	1 9V	12	33, 82, 0.512	2.8	-4°F to 140°F	27.7	
	XT512	Sonde/Camera	1 9V	12	0.512	2.7	-4°F to 140°F	27.7	
	Ga-92XT	Magnetic	1 9V	24	N/A	2.4	-13°F to 140°F	26	
	Ga-72Cd	Magnetic	2 9V	60	N/A	2.5	-13°F to 140°F	34.5	
	Ga-52Cx	Magnetic	2 9V	40	N/A	2.5	-13°F to 140°F	42.3	
	MPC-800	Pipe/Cable, Magnetic	2 9V	12/24	82	16	-13°F to 140°F	27.7	
	Subsite Electronics (U)	150R	Receiver	2 C-cell alkaline	40	N/A	2	4°F to 122°F	12
		150T	Transmitter	6 C-cell alkaline	40	N/A	3	4°F to 122°F	12
250R		Receiver	6 C-cell alkaline	40	33	5	4°F to 122°F	11.5	
250T		Transmitter	6 C-cell alkaline	40	33	5	4°F to 122°F	12	
830R		Receiver	2 D-cell alkaline	75	83	5.1	4°F to 122°F	12.1	
830T		Transmitter	6 D-cell alkaline	150	83	4.6	4°F to 122°F	11.1	

Subsite Electronics (U) (cont'd)	UtiliGuard	Receiver	D-cell selectaqble alkaline	30	0.05-200	4.8	4°F to 122°F	27.2
	UtiliGuard	Transmitter	D-cell selectable alkaline	100	0.256-200	7.7	4°F to 122°F	12
	TK	Receiver	4 C-cell alkaline	12	29	9	-4°F to 176°F	30
	TKD	Receiver	4 C-cell alkaline	12	12, 29	9	-4°F to 176°F	30
	TK Recon 1	Receiver	4 C-cell/alkaline, NiMH*	10-16	29	9	-4°F to 140°F	30
	TK Recon 2	Receiver	4 C-cell/alkaline, NiMH*	10-16	12, 29	9	-4°F to 140°F	30
	TK Recon 4	Receiver	4 C-cell/alkaline, NiMH*	10-16	1.5, 12, 20, 29	9	-4°F to 140°F	30
	TKQ	Receiver	4 C-cell alkaline	12	1.5, 12, 20, 29	9	-4°F to 176°F	30
	TD	Remote	12V DC	N/A	N/A	2	-4°F to 176°F	7
	TDR	Remote	12V DC	N/A	N/A	2	-4°F to 176°F	7
			2 C-cell	16				
	TX	Beacon Transmitter	3.6V Lithium	60	29	2	-4°F to 176°F	17.8
			2 C-cell	16				
	TXH	Beacon Transmitter	3.6V Lithium	60	29	2	-4°F to 176°F	17.8
			2 C-cell	16				
	TXU	Beacon Transmitter	3.6V Lithium	60	12, 29	2	-4°F to 176°F	15
			2 C-cell	16				
	TXQ	Beacon Transmitter	3.6V Lithium	60	1.5, 12, 20, 29	2	-4°F to 176°F	17.8
			2 C-cell	16				
	TXQG	Beacon Transmitter	3.6V Lithium	60	1.5, 12, 20, 29	2	-4°F to 176°F	17.8

\*rechargeable or Inspired Energy NB2038 Li ion rechargeable

## PIERCING TOOLS

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size (ft)	Cycles/ Minute
Footage Tools	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
HammerHead Trenchless Equipment	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

HammerHead Trenchless Equipment (cont'd)	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	



## PIERCING TOOLS (continued)

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size (ft)	Cycles/Minute
<b>Hammerhead</b>	5.5" SR BU	pneumatic	170	5.50	150	6 X 7.6	370
<b>Trenchless</b>	5.5" SR BU MT	pneumatic	170	5.50	150	6 X 7.6	370
<b>Equipment</b>	5.625" PP BU DF	pneumatic	247.9	5.63	150	8 X 7.6	334
(cont'd)	5.75" SR	pneumatic	305	5.88	150	8 X 7.6	300
<i>RH-replaceable head; SR-screw reverse; PP-Power Port; AH-Active Head; BL-boltless; CAT-Catamount; SW-Sidewalker; AR-air reverse; BU-bulbed; DF-debris free; MT-MoleTrac</i>							
<b>Hudco</b>	HP200	pneumatic	28	2	75	1 x 4	500
	HP200Q	pneumatic	28	2	75	1 x 4	500
	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	437	6-1/4	300+	2 x 7	320
	P180 Grundomat 8	pneumatic	573	7	300+	2 x 8	280
<b>McLaughlin</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

<b>McLaughlin</b>	Hole Hammer VHH250	pneumatic	48	2.5	100	1x48	460
(cont'd)	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 VPT 300 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 opt
	14M	120 VAC/240 VAC	3 KW	3/4 CTS - 4 DIPS	wheel
	28CQ	120 VAC/240 VAC	4 KW	2 IPS - 8 DIPS	cart opt
	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
	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	40 KW,	14 IPS - 42 IPS	wheel
		208V 3 phase Y			

Integrity Fusion Products	I Fuse 105	240 VAC	7 KW	1/2 IPS - 48 IPS	no
McElroy	Mini-Mc	100 - 120V, 50/60Hz, 1Ph 200 - 240V, 50/60Hz, 1Ph	300 Watts	1/2 CTS - 1 IPS	no
	1LC (locking cam)	100 - 120V, 50/60Hz, 1Ph 200 - 240V, 50/60Hz, 1Ph	100 Watts	1/2 CTS - 1 IPS	no
	2LC (locking cam)	100 - 120V, 50/60Hz, 1Ph 200 - 240V, 50/60Hz, 1Ph	800 Watts	1/2 CTS - 2' IPS	opt wheel cart
	2CU (combination unit)	100 - 120V, 50/60Hz, 1Ph 200 - 240V, 50/60Hz, 1Ph	800 Watts	1/2 CTS - 2 IPS	no
	Pit Bull 14	100 - 120V, 50/60Hz, 1Ph 200 - 240V, 50/60Hz, 1Ph	3 KVA, 2.5 KW	1 IPS - 4 DIPS	opt wheel cart
	Pit Bull 26	100 - 120V, 50/60Hz, 1Ph 220 - 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 220 - 240V, 50/60Hz, 1Ph	3 KVA, 2.9 KW	2 IPS - 8 DIPS	no
	DynaMc 28 EP (electric pump)	100 - 120V, 50/60Hz, 1Ph 220 - 240V, 50/60Hz, 1Ph	3 KVA, 2.9 KW	2 IPS - 8 DIPS	no
	Rolling 28	100V, 50/60Hz, 1Ph 110V, 50Hz, 1Ph 120V, 60Hz, 1Ph 208 - 240V, 60Hz, 1Ph	4.1 KVA, 3.7 KW 3.4 KVA, 3.2 KW 3.5 KVA, 3.2 KW	2 IPS - 8 DIPS	wheel track
	Rolling 28 HP	120V, 50/60Hz, 1Ph	3.28 KVA, 3 KW	2 IPS - 8 DIPS	no
	TracStar 28	on-board generator	self-contained diesel	2 IPS - 8 DIPS	no
	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 220 - 240V, 50/60Hz, 1Ph	4.2 KVA, 4.2 KW	63mm - 250mm	no
	DynaMc 250 Auto	100 - 120V, 50/60Hz, 1Ph 220 - 240V, 50/60Hz, 1Ph	3 KVA, 3 KW	63mm - 250mm	no
	Rolling 250	220 - 240V, 50Hz, 1Ph	5.2 KVA, 4.8 KW	63mm - 250mm	wheel track
	TracStar 250	on-board generator	self-contained diesel	63mm - 250mm	no
	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

McElroy (cont'd)	DynaMc 412 EP (electric pump)	100 - 120V, 50/60Hz, 1Ph 220 - 240V, 50/60Hz, 1Ph	4.2 KVA, 4.2 KW	4 IPS - 12 DIPS	no
	DynaMc 412 Auto	110 - 200V, 50/60Hz, 1Ph 220 - 240V, 50/60Hz, 1Ph	3 KVA, 3 KW	4 IPS - 12 DIPS	no
	Rolling 412	220 - 240V, 50/60Hz, 3Ph on-board generator	6.2 KVA, 5.8 KW	4 IPS - 12 DIPS	wheel
	TracStar 412	on-board generator	self-contained gas	4 IPS - 12 DIPS	no
	Pit Bull 618	220 - 240V, 50/60Hz, 1Ph	3 KW	6 IPS - 18 OD	no
	Rolling 618	220 - 240V, 50/60Hz, 3Ph on-board generator	8.0 KVA, 7.4 KW	6 IPS - 18 OD	wheel
	TracStar 618	on-board generator	self-contained diesel	6 IPS - 18 OD	track
	Pit Bull 500	240V, 50/60Hz, 1Ph	4 KW	180mm - 500mm	no
	TracStar 500	on-board generator	self-contained diesel	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 diesel	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 diesel	12 IPS - 36 OD	track
	TracStar 1200	on-board generator	self-contained diesel	16 OD - 48 OD	no
	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	on-board generator	self-contained diesel	54 OD - 2,000 mm OD	

## PIPE JACKING/MICROTUNNELING

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size	Total Thrust (t)
Akkerman	TBM 48SC	hydraulic	12,500	48-52	varies	12x20	400
	TBM 420	hydraulic	14,000	58-62	varies	12x20	400
	TBM 48 SC	hydraulic	14,500	48-52	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	30,000	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

## PIPE JACKING/MICROTUNNELING (continued)

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size	Total Thrust (t)	
<b>Akerman</b> (cont'd)	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

Note: Pit size assumes pipe length is 8 ft.

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size	Total Thrust (t)
<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
	AVN800-A	hydraulic	varies	38.38 - 43.70	varies	3.2M	260
	AVN800-B	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	610-700
	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; thrust force refers to jacking frame in shaft.

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'	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

Note: Max Bore Range varies depending on project geo-tech and soil data; Pit Size Lengths are approximate and assume a 2 meter pipe length.

Company	Model	Type Drive	Weight (lbs)	Boring Diameter Range (in)	Max. Bore Length (ft)	Pit Size	Total Thrust (t)
<b>The Robbins Company</b>	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

NOTE: Electric drive is infinitely variable via variable frequency drive; MTBM can typically be up sized by 20% depending on geology and other factors; shaft dimensions are dictated by pipe length and jacking frame design; non standard machine diameters are available

## PIPELAYERS

Company	Model	HP	Operating Weight (lbs)	Lifting Capacity (lbs)
<b>Caterpillar</b>	PL61	125	37,480	40,000
	PL83	310	106,807	160,000
	PL87	366	120,119	214,000
<b>Midwestern Mfg.</b>	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
	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)
<b>Volvo</b>	4809E	377	up to 143,000	242,508
	4809D	343	up to 140,000	225,280
	3005D	227	up to 82,000	112,000
	3005E	240	up to 82,000	120,000

## PIPE LIFTING/HANDLING

Company	Model	Capacity (lbs)	Pipe Diameter (in)	Dimensions (beam)	Weight (lbs)	Carrier Type
<b>LaValley Industries</b>	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

Company	Model	Capacity (lbs)	Pipe Diameter (in)	Dimensions (beam)	Weight (lbs)	Carrier Type
<b>Vacuworx</b>	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	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)
<b>HammerHead</b>	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	511	8 - 20	300	3 X 30
	8" AR	air	900	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
	24" AR	air	9,831	24 - 72+	300	3 X 40
	34" AR	air	27,500	36 - 180	300	3 X 40

Note: RH=replaceable head; SR=screw reverse; AR=air reverse; maximum ramming varies based on pipe diameter installed, ground conditions and ramming tool used.

<b>Poweram</b>	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"

<b>TT Technologies</b>	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
	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	
	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 (cu. ft.)	
<b>Bobcat</b>	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	
	<b>Case</b>	SR130	46	5,180	1,300	112	11.3 - 23.3
		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	
<b>Caterpillar</b>		226D	60	5,705	1,550	111	12.7
		232D	60	6,213	1,850	118	12.7
		236D	73.2	6,559	1,800	122.9	14
		242D	73.2	6,980	2,150	121.1	14
	246D	72.9	7,424	2,150	124.2	15.4	
	262D	72.9	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	
<b>Ditch Witch</b>	SK600	24.8	2,418	600	76	varies	
	SK800	24.8	2,920	860	83	varies	
	SK850	37	3,100	860	83	9 (varies)	
	SK850 Footings	36.9	3,840	N/A	57	N/A	
	SK1050	36.9	3,435	1,062	83	varies	
	SK1550	43.5	3,990	1,558	94.5	varies	
<b>Hyundai</b>	HSL650-7A	46.6	5,787	1,433	114.8	10.9	
	HSL850-7A	72.7	7,381	1,892	121.3	13.1	
<b>John Deere</b>	312GR	45	5,995	1,550	115.1		
	314G	8	6,315	1,760	120		
	316GR	61	6,375	1,750	115.1		
	318G	61	6,475	1,945	120		
	320E	66	7,150	2,190	121.5		
	324E	70	7,500	2,690	125.5		
	330G	88.5	9,900	3,000	132		
	332G	96.6	10,000	3,600	132		
<b>Kubota</b>	SSV65	61.3	6,790	1,950	121.5	14.5*	
	SSV75	71.6	8,157	2,690	128.3	15.8*	
*short lip with cutting edge							
<b>New Holland</b>	L213	43	5,000	1,300	112	N/A	
	L215	49	5,300	1,500	112	N/A	
	L218	57	5,930	1,800	120	N/A	
	L220	57	6,470	2,000	121	N/A	
	L223	68	7,380	2,250	129.5	N/A	
	L225	76	7,900	2,500	129.5	N/A	
	L230	84	8,300	3,000	131.1	N/A	

<b>Vermeer</b>	S450TX (diesel)	24.8	2,300; 2,430	1,430	72	4 - 6
	S800TX (intl.)	35	2,950; 3,065	2,400	84.5	6
	S800TX (dom.)	40	2,950; 3,065	2,400	84.5	6
	S725TX	24.8	2,880; 3,020	2,145	84.5	4 - 6
	CTX50	25	2,100; 2,245	1,715	72	4 - 6

<b>Volvo</b>	MC60C	47.2	6,153	-----	118
	MC70C	55.7	6,355	-----	118
	MC85C	47.2	6,724	-----	118
	MC95C	60.5	7,054	-----	118
	MC110C	72.6	7,954	-----	125
	MC115C	72.6	8,232	-----	125
	MC135C	72.6	9,054	-----	125

### TRENCHING MACHINES, CHAIN

Company	Model	HP	Max. Dig Depth (in)	Max. Dig Width (in)	Operating Weight (lbs)
<b>Ditch Witch</b>	C16X	16	36	6	1,895
	C24X	22	36	6	1,915
	C30X	31	48	6	2,100
	RT45	39	63	12	4,200
	RT55	60	62	12	5,610
	RT80 Quad	83	62	12	10,710
	RT105	107	97	24	22,000
	RT120	115	97	24	19,300
	RT120 Quad	121	97	24	19,300
	RT125	121	97	24	22,000
	RT125 Quad	121	93	24	27,200
	R300 Zahn 2wd	30	36	8	1,048
	R300 Zahn 4wd	30	48	12	1,290
	SK850 Footings	35.1	36	6-16	3,840
ST37X	37	36	16	4,110	
<b>Tesmec USA</b>	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
	TRS-1475**	630	192	48	240,000
TRS-1675**	800	288	72	275,000	
M3*	350	144	40	135,000	
M5*	440	168	42	161,000	
*mechanical design; **hydraulic design					
<b>Toro</b>	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
*base unit					
<b>Trencor</b>	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
<b>Vermeer</b>	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
	RTX1250	125	72	12	13,820
	XTS1250	120			17,950
	T555 III	185	96	24	31,000
	T558 III	185	72	24	52,000
	T655 III	250	96	26	56,000
	T755 III	275	120	36	75,000
	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	

## TRENCHING MACHINES, 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
	RTX1250	120	72	12	13,820
	T555 III	185	36	6	31,000
	T855 III	350	54	14	94,000

## TRENCHING MACHINES, 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	24	6	1,191
	C16	16	30	6	1,528
	RT30	24.8	42	8	3,050
	RT45	42.2	63	12	4,200
	RT55	62	62	12	5,610
	RT80	74	62	12	11,580
	RT80 Quad	83	62	12	11,580
	RT100	100	96	24	19,300
	RT105	107	97	24	22,000
	RT120	121	96	24	19,300
	RT120 Quad	121	96	24	19,300
	RT125	121	97	24	22,000
	RT125 Quad	121	93	24	27,200
	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

Treconor	T1360W	440	108	66	150,000
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## 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
	<i>*water, **debris</i>						
Ditch Witch	FX20	water	27	150	N/A	543/15	trailer
	FX25	water	31	500	N/A	543/15	trailer
	FX30	water	25	500/800	N/A	500/15	trailer
	FXT30	air	25	200/400	10 Series - 200/200 12 Series - 300/250	500/15"	truck
	FX50	water	49	800/1,200	N/A	1,020/15"	trailer
	FXT50	air	49	500/800	10 Series - 200/200 12 Series - 300/250	1,020/15"	truck
	FX60	water	74	800/1,200	N/A	1,027/16"	trailer
	FXT60	water	74	500/1,200	N/A	1,027/16"	truck
	FX65	water	74	500/800/1,200	N/A	1,215/16"	trailer
	FXT65	air	74	500/800	10 Series - 200/200 12 Series - 300/250	1,027/16"	truck
MV800	water	31	100	NA	543/15"	trailer	
Hi-Vac/X-Vac	X-6	air/water	350	600/1,250	3,600	18"	truck
	X-8	air/water	350/385	600/1,650	4,000	27"	truck
	X-12	air/water	450	1,200/2,400	5,250	27"	truck
	X-13	air/water	385/410	1,200/2,600	4,000	27"	truck
	X-15	air/water	450	1,200/3,000	5,250	27"	truck
	McLaughlin	VSK25-100G	water	24	100	n/a	575/10
V25 Gas		water	24	500, 800, 1,200	n/a	575/15	skid/truck/trailer
VX30 Gas		water	31	500, 800, 1,200	n/a	575/15	trailer
VX30		water	31	250, 300, 500, 800	n/a	575/15	skid/truck/trailer
VX50		water	49 Tier 4 Final	500, 800	n/a	1,025/15	trailer
VX70*		water	67	500, 800, 1,200	n/a	1,025/15	skid/truck/trailer
VX80		water	85	500, 800, 1,200	n/a	1,025/15	skid/truck/trailer
VX100XT AIR		both	99	500, 800, 1,200	110 psi x 185 cfm	1,200/15	skid/truck/trailer
MEGA Vac		both	99	1,600, 2,000, 2,200, 2,600, 3,000	n/a	1,200/23**	skid/truck
ECO 50 Truck Vac		water	49 Tier 4 Final	500, 800	n/a	1,025/15	truck/trailer
ECO 70/80		water	67 hp/85 turbo hp	500, 800, 1200	n/a	1,025/15	truck/trailer
ECO 100XT Air		air/water	99 hp	500, 800, 1200	185 cfm x 100 psi	1,200/15	truck/trailer
		<i>*international export only; **with deep option; ***70 international/80 domestic</i>					
Ox Equipment	MTS/DINO-2	air	450	1,192	160-300/116-200	24,00/13"	truck
	MTS/DINO-3	air	450	2,112	160-300/116-200	24,000/13:	truck
Ring-O-Matic	VL150	water	31	150	3,000	600/15"	skid/truck/trailer
	VL275	water	31	250	3,000	600/15"	skid/truck/trailer
	VL550	water	31	550	3,000	600/15"	skid/truck/trailer
	VL850	water	31	800	3,000	600/15"	skid/truck/trailer
	VL1300	water	31	1,300	3,000	600/15"	skid/truck/trailer
	275 VacEx	water	42	250	4,000	600/15"	skid/truck/trailer
	550 VacEx	water	42	550	4,000	600/15"	skid/truck/trailer
	850 VacEx	water	42	800	4,000	600/15"	skid/truck/trailer
	1300 VacEx	water	42	1,300	4,000	600/15"	skid/truck/trailer
	550 HiCFM VacEx	both	49/50/81	550	70/150/4,000	1,000/15"	skid/truck/trailer
	850 HiCFM VacEx	both	49/50/81	800	70/150/4,000	1,000/15"	skid/truck/trailer
	1000 HiCFM VacEx	both	49/50/81	1,000	70/150/4,000	1,000/15"	skid/truck/trailer
	1300 HiCFM VacEx	both	49/50/81	1,300	70/150/4,000	1,000/15"	skid/truck/trailer
	1600 HiCFM VacEx	both	49/50/81	1,600	70/150/4,000	1,000/15"	skid/truck
	2000 HiCFM VacEx	both	49/50/81	2,000	70/150/4,000	1,000/15"	skid/truck
	850 Vac Extreme	both	81/100	800	70/150/4,000	1,700/14"	skid/truck/trailer
	1000 Vac Extreme	both	81/100	1,000	70/150/4,000	1,700/14"	skid/truck/trailer
	1300 Vac Extreme	both	81/100	1,300	70/150/4,000	1,700/14"	skid/truck
	1600 Vac Extreme	both	81/100	1,600	70/150/4,000	1,700/14"	skid/truck
	2000 Vac Extreme	both	81/100	2,000	70/150/4,000	1,700/14"	skid/truck
	1000 Vac Extreme II	water	100	1,000	4,000	2,500/13"	skid/truck
	1300 Vac Extreme II	water	100	1,300	4,000	2,500/13"	skid/truck
	1600 Vac Extreme II	water	100	1,600	4,000	2,500/13"	skid/truck

<b>Ring-O-Matic</b> (cont'd)	2000 Vac Extreme II	water	100	2,000	4,000	2,500/13"	skid/truck
	1000 Vac Extreme III	water	139	1,000	4,000	3,000/12"	skid/truck
	1300 Vac Extreme III	water	139	1,300	4,000	3,000/12"	skid/truck
	1600 Vac Extreme III	water	139	1,600	4,000	3,000/12"	skid/truck
	2000 Vac Extreme III	water	139	2,000	4,000	3,000/12"	skid/truck
<i>Note: HICFM= high cfm airflow</i>							
<b>Super Products</b>	Mud Dog 1200	water	410	2,400	5,500	28"	
	Mud Dog 1600	water	485	3,200	5,500	28"	
	Camel 1200 (HDX)	water	370	1,500	3,500 - 6,000	18" - 27"	
<b>Utiliscope</b>	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
<b>Vacmasters</b>	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 6000	both	250	950 gal	350/250	1,866/15"	
	SpoilVac	water	25 or 35	200/1,200	N/A	476 or 800/15"	truck, trailer
<b>Vacstar</b>	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
<b>Vactor</b>	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
<i>*water, **debris</i>							
<b>Vac-Tron</b>	EV 150 G	water	27 gas	150	-----	580	trailer/skid
	LP Mini 373	water	27 gas	300	-----	580	trailer/skid
	LP 573 XDT	water	24 diesel	500	-----	580	trailer/skid
	LP 573 SDT	water	49 diesel	500	-----	1,000	trailer/skid
	LP 573 SGT	water	37 gas	500	-----	1,000	trailer/skid
	LP 873 XDT	water	24 diesel	800	-----	580	trailer/skid
	LP 873 SDT	water	49 diesel	800	-----	1,000	trailer/skid
	LP 873 SGT	water	37 gas	800	-----	1,000	trailer/skid
	LP 1273 XDT	water	24 diesel	1,200	-----	580	trailer/skid

## VACUUM EXCAVATORS

Company	Model	Air/Water	HP	Capacity (gal)	Compressor (cfm/psi)	Vacuum (cfm/Hg)	Mounting Option
Vac-Tron (cont'd)	LP 1273 SDT	water	49 diesel	1,200	-----	1,000	trailer/skid
	LP 1273 SGT	water	37 gas	1,200	-----	1,000	trailer/skid
	CV 570 GT	water	27 gas	500	-----	580	trailer/skid
	CV 870 GT	water	27 gas	800	-----	580	trailer/skid
	CV 1270 GT	water	27 gas	1,200	-----	580	trailer/skid
	CV 570 SGT	water	37 gas	500	-----	1,000	trailer/skid
	CV 870 SGT	water	37 gas	800	-----	1,000	trailer/skid
	CV 1270 SGT	water	37 gas	1,200	-----	1,000	trailer/skid
	MC 573 SDT	water	83 diesel	500	-----	1,000	trailer/skid
	MC 873 SDT	water	83 diesel	800	-----	1,000	trailer/skid
	AIR 573 SDT	both	83 diesel	500	185@150	1,000	trailer/skid
	AIR 873 SDT	both	83 diesel	800	185@150	1,000	trailer/skid
	CS 500 GT	N/A	27 gas	500	N/A	580	trailer/skid
	CS 800 GT	N/A	27 gas	800	N/A	580	trailer/skid
	HTV 373 PTO	both	300 HP PTO	300	150@170	1,000	truck
	HTV 573 PTO	both	270 HP PTO	500	150@170	1,000	truck
	HTV 873 PTO	water	300 HP PTO	800	-----	1,000	truck

## WHEEL LOADERS

Company	Model	HP	Operating Weight (lbs)	Standard Bucket (cu. yds.)	Tip Load (lbs)	Travel Speed (mph)	Hyundai	John Deere	
Case	521G	131	24,203	2.1 - 4	17,062	22.3 / 14.1	HL760-9A	204K	
	521G XT	131	25,404	2.1 - 4	16,767	22.3 / 14.1	HL760-9A/XTD	244K-II	
	521G XR	131	24,485	2.1 - 4	17,276	22.3 / 14.1	HL770-9A	304K	
	621G	162	28,159	2.5 - 4.5	24,715	24 / 15.6	HL770-9A/XTD	342K	
	621G XT	162	29,076	2.5 - 4.5	19,587	24 / 15.6	HL780-9A	344K	
	621G XR	162	29,332	2.5 - 4.5	20,709	24 / 15.6	HL780-9A/XTD	444K Z-Bar	
	721G	179	32,492	2.6 - 5.5	27,355	25 / 19.3		444K High Lift	
	721G XT	179	33,392	2.6 - 5.5	23,624	25 / 19.3		444K Powerlrel	
	721G XR	179	32,851	2.6 - 5.5	23,078	25 / 19.3		524K-II Z-Bar	
	821G	211	40,057	3 - 6	33,583	24.9 / 17.2		524K-II High Lift	
	821G XR	211	40,648	3 - 6	26,828	24.9 / 17.2		544K-II Z-Bar	
	921G	242	45,070	3 - 6	38,941	25 / 17.2		544K-II High Lift	
	921G XR	242	45,651	3 - 6	31,222	25 / 17.2		544K-II Powerlrel	
	1021G	296	55,282	4.5 - 6.5	45,444	23.6 / 16.5		624K-II Z-Bar	
	1021G XR	296	58,711	4.5 - 6.5	38,219	23.6 / 16.5		624K-II High Lift	
	1121G	320	61,650	4.5 - 7	49,094	23.2 / 15.8		624K-II Powerlrel	
1121G XR	320	63,443	4.5 - 7	43,234	23.2 / 15.8		624K-II Tool Carrier		
<i>Note: tip load is straight frame/full turn.</i>									
Caterpillar	910K	92	15,714	1.6 - 3.3	11,767	25 / 25	HL760-9A/XTD	204K	
	914K	92	17,910	1.6 - 3.3	14,544	25 / 25	HL770-9A	244K-II	
	966M	276	51,176	3.25 - 12.0	36,711	24.9 / 24.9	HL770-9A/XTD	304K	
	966M XE	298	51,176	3.25 - 12.0	36,711	24.4 / 17.1	HL780-9A	342K	
	972M	299	54,871	3.75 - 13.0	40,779	24.9 / 24.9	HL780-9A/XTD	344K	
	972M XE	311	54,871	3.75 - 13.0	40,779	24.4 / 17.1		444K Z-Bar	
	980M	386	66,318	5.25 - 16.0	49,897	24.9 / 24.9		444K High Lift	
	986H	409	63,090	7.0 - 10.0	63,866	24.0 / 16.0		444K Powerlrel	
	982M	392	78,382	6.0 - 15.75	54,640	23.3 / 24.9		524K-II Z-Bar	
	988K	541	112,574	8.3 - 10.0	75,506	24.4 / 15.8		524K-II High Lift	
	990K	699	178,517	11.25 - 13.0	108,644	15.2 / 16.4		544K-II Z-Bar	
	992K	814	220,089	14 - 16.0	136,365	14.2 / 15.4		544K-II High Lift	
	993K	1024	292,748	16 - 31.0	183,563	14.1 / 15.6		544K-II Powerlrel	
	994K	1739	529,149	25 - 32.0	346,263	15.2 / 16.8		624K-II Z-Bar	
	926M	148	28,742	2.5 - 6.5	19,383	25 / 25		624K-II High Lift	
	930M	157	30,852	2.7 - 6.5	21,928	25 / 25		624K-II Powerlrel	
	938M	182	36,156	3.2 - 6.5	26,097	25 / 25		624K-II Tool Carrier	
	950M	230	42,357	3.3 - 12.0	28,144	24.9 / 16.0		624K-II Waste	
	962M	250	44,712	3.3 - 12.0	29,877	24.9 / 16.0		Handler	
	<i>Note: travel speed is forward/reverse.</i>								
	Doosan	DL200-5	142	25,794	2.5	21,076 / 18,618	23.6 / 15.8	HL760-9A	204K
		DL200HL-5	142	26,570	2.5	17,957 / 15,851	23.6 / 15.8	HL760-9A/XTD	244K-II
		DL200TC-5	142	26,224	2.5	18,827 / 16,623	24 / 12	HL770-9A	304K
		DL220-5	160	27,381	3.0	21,231 / 18,750	23.6 / 15.8	HL770-9A/XTD	342K
		DL220HL-5	160	28,164	3.0	19,412 / 17,141	23.6 / 15.8	HL780-9A	344K
		DL250-5	172	30,115	3.5	23,997 / 21,186	23.5 / 15		444K Z-Bar
		DL250HL-5	172	31,130	3.5	21,440 / 18,927	23.5 / 15		444K High Lift
		DL250TC-5	172	31,592	3.5	23,810 / 20,723	23.5 / 15		444K Powerlrel
		DL300-5	271	41,844	4.0	33,907 / 29,939	22.4 / 16.8		524K-II Z-Bar
		DL300HL-5	271	42,869	4.2	26,918 / 23,766	22.4 / 16.8		524K-II High Lift
		DL350-5	271	43,541	4.5	35,561 / 31,394	22.4 / 17.1		544K-II Z-Bar
		DL350HL-5	271	44,743	4.8	27,470 / 24,251	22.4 / 17.1		544K-II Powerlrel
		DL420-5	345	50,783	5.5	40,256 / 35,550	22.4 / 11.5		624K-II Z-Bar
		DL420HL-5	345	51,919	5.5	40,102 / 35,406	22.4 / 11.5		624K-II High Lift
		DL450-5	345	56,868	6.0	45,228 / 39,937	22.4 / 16.4		624K-II Tool Carrier
DL450HL-5		345	57,618	6.3	42,902 / 37,875	22.4 / 16.4		624K-II Waste	
DL550-5		380	69,897	7.5	53,991 / 47,675	22.4 / 16.1		Handler	
DL550HL-5	380	71,617	7.5	43,453 / 38,371	22.4 / 16.1		824K-II Z-Bar		
<i>*tip load is straight frame/full turn; max travel speed is foward/reverse; HL=high lift, TC=tool carrier</i>									
Hyundai	HL730-9A	128	23,149	2.5	19,268	24.4 / 15.7	HL760-9A	204K	
	HL730-9A/TM	128	24,030	2.5	19,268	24.4 / 15.7	HL760-9A/XTD	244K-II	
	HL730-9A/XTD	128	23,589	2.5	19,268	24.4 / 15.7	HL770-9A	304K	
	HL740-9A	156	28,000	3	21,760	24.5 / 15.7	HL770-9A/XTD	342K	
	HL740-9A/TM	156	29,320	3	21,760	24.5 / 15.7	HL780-9A	344K	
	HL740-9A/XTD	156	28,660	3	21,760	24.5 / 15.7		444K Z-Bar	
	HL757-9A	197	32,400	3.7	25,440	23.9 / 15.1		444K High Lift	
	HL757-9A/TM	197	35,000	3.7	25,440	23.9 / 15.1		444K Powerlrel	
	HL757-9A/XTD	197	35,000	3.7	25,440	23.9 / 15.1		524K-II Z-Bar	
								524K-II High Lift	
Hyundai	HL760-9A	222	40,450	4.3	31,530	23.9 / 15.7	HL760-9A	204K	
	HL760-9A/XTD	222	42,220	4.3	31,530	23.9 / 15.7	HL760-9A/XTD	244K-II	
	HL770-9A	297	51,810	5.5	39,090	26.1 / 17.1	HL770-9A	304K	
	HL770-9A/XTD	297	53,460	5.5	39,090	26.1 / 17.1	HL770-9A/XTD	342K	
	HL780-9A	351	66,800	7.1	52,820	22.4 / 15.4	HL780-9A	344K	
	HL780-9A/XTD	351	68,560	7.1	52,820	22.4 / 15.4		444K Z-Bar	
								444K High Lift	
								444K Powerlrel	
								524K-II Z-Bar	
								524K-II High Lift	
Hyundai	HL760-9A	222	40,450	4.3	31,530	23.9 / 15.7	HL760-9A	204K	
	HL760-9A/XTD	222	42,220	4.3	31,530	23.9 / 15.7	HL760-9A/XTD	244K-II	
	HL770-9A	297	51,810	5.5	39,090	26.1 / 17.1	HL770-9A	304K	
	HL770-9A/XTD	297	53,460	5.5	39,090	26.1 / 17.1	HL770-9A/XTD	342K	
	HL780-9A	351	66,800	7.1	52,820	22.4 / 15.4	HL780-9A	344K	
	HL780-9A/XTD	351	68,560	7.1	52,820	22.4 / 15.4		444K Z-Bar	
								444K High Lift	
								444K Powerlrel	
								524K-II Z-Bar	
								524K-II High Lift	
								544K-II Z-Bar	
								544K-II High Lift	
								544K-II Powerlrel	
								624K-II Z-Bar	
								624K-II High Lift	
								624K-II Powerlrel	
								624K-II Tool Carrier	
								624K-II Waste	
								Handler	
								824K-II Z-Bar	
								824K-II High Lift	
								844K-III	
								844K-III Aggregate	
							944K		
<i>NOTE: tip load is full turn; travel speed is forward/reverse.</i>									
Kubota	R530	47.9	9,303	0.85 - 1	6,537	12.4	R530	47.9	
	R630	61.2	10,229	1 - 1.5	8,212	12.4			
	<i>NOTE: tip load is straight &amp; full turn; travel speed is forward/reverse.</i>								
New Holland	W50B TC	51	10,173	0.92	7,377	3.1 / 12.4			
	W80BTC	72	12,727	1.44	9,741	3.7 / 12.4			
Volvo	L30C	71.3	12,125	1.3	9,590	19			
	L35C	71.3	13,779	1.6	10,913	19			
	L45H	73	19,334	2.1	13,095	12			
	L50H	85	20,900	2.2	14,642	12			
	L60H	165	26,800	2.5 - 6.5	18,460	27.3			
	L70H	170	30,280	2.7 - 8.4	20,435	27.3			
	L90H	184	33,030	3 - 9.2	23,940	27.3			
	L110H	254	40,920	3.5 - 12.4	29,430	24.9			
	L120H	272	42,830	4.3 - 12.4	32,660	24.9			
	L150H	295	55,320	4.6 - 18.3	45,200	23.6			
	L180H	329	61,890	5.5 - 20.9	52,190	23.6			
	L220H	366	70,440	5.9 - 20.9	55,710	23.6			
	L250H	395	76,544	7.2 - 13.3	60,098	23.6			
	L350F	528	110,750	8.6 - 16.6	86,120	22.2			