



## Waterous Split Shaft Pump/Engine/Ratio Combinations

This guide should be used to determine pump/engine/ratio combinations. Deductions have been made to compensate for engine variations, estimated parasitic losses, truck transmission and operation at an altitude of 2,000 feet. Five percent has been added to the required horsepower listed on Waterous performance sheets for each pump test, to allow for pump variations. HP draw for air conditioning, generator, transmission retarder, etc. is not included. Because of the many variables that affect these combinations, OEM review and approval is required.

Detroit Diesel					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD8 375 Curve #: D936.917_375-1000 Curve Date: 6-30-17 1050 lb-ft @ 1400 RPM	375/2600	CSC20-1250	1.79	2194	127
		CSUC20-1500	1.88	2181	87
		CXSC20-1500	1.88 2.03	2314 2143	90 89

Detroit Diesel					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 410 Curve #: D471.940_410-1450 Curve Date: 12-30-15 1450 lb-ft @ 975 RPM	410/1900	CSC20 - 750	2.46	1587	185
		CSC20 - 1000	2.46	1592	166
		CSC20 - 1250	2.46	1596	142
		CSUC20 - 1250	2.46	1659	145
			2.68	1522	138
		CSUC20 - 1500	2.46	1667	123
			2.68	1530	116
		CSUC20 - 1750	2.46	1667	87
			2.68	1530	80
		CSUC20 - 2000	2.46	1667	57
			2.68	1530	50
		CMC20 - 750	2.46	1622	199
		CMC20 - 1000	2.46	1632	182
		CMC20 - 1250	2.46	1650	151
		CMUC20-1250	2.27	1643	144
2.46	1516		137		
CMUC20 - 1500	2.27	1665	119		
	2.46	1537	112		
CMUC20 - 1750	2.27	1687	84		
	2.46	1557	81		
CMUC20 - 2000	2.46	1585	42		

<b>Detroit Diesel</b>					
<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
DD13 410 Curve #: D471.940_410-1450 Curve Date: 12-30-15 1450 lb-ft @ 1250 RPM	410/1900	CGC20 - 500	2.68	1716	234
		CGC20 - 750	2.68	1733	224
		CXC20 - 750	2.68	1597	175
		CXC20 - 1000	2.68	1601	167
		CXC20 - 1250	2.68	1610	151
		CXC20 - 1500	2.68	1623	120
		S100C20 - 1250	2.68	1493	107
		S100C20 - 1500	2.68	1493	79
		S100C20 - 1750	2.68	1503	59
		S100C20 - 2000	2.68	1516	48

Detroit Diesel					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 450  Curve#: D471.940_450-1550  Curve Date: 12-30-15 1550 lb-ft @ 975 RPM	450/1900	CSC20 - 750	2.46	1587	249
		CSC20 - 1000	2.46	1592	225
		CSC20 - 1250	2.46	1596	192
		CSUC20 - 1250	2.46	1659	190
			2.68	1522	173
		CSUC20 - 1500	2.46	1667	172
			2.68	1530	155
		CSUC20 - 1750	2.46	1667	127
			2.68	1530	106
		CSUC20 - 2000	2.46	1667	99
			2.68	1530	93
		CSUC20 - 2250	2.46	1602	37
			2.68	1506	27
		CMC20 - 750	2.46	1622	231
			2.68	1489	248
		CMC20 - 1000	2.46	1628	214
2.68	1498		231		
CMC20 - 1250	2.46	1650	185		
CMUC20 - 1250	2.46	1516	160		
CMUC20 - 1500	2.46	1537	140		
CMUC20 - 1750	2.46	1557	113		
CMUC20 - 2000	2.46	1585	74		

Detroit Diesel					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 450 Curve #: D471.940_450-1550 Curve Date: 12-30-15 1550 lb-ft @ 1250 RPM	450/1900	CGC20 - 500	2.68	1716	238
		CGC20 - 750	2.68	1733	222
		CXC20 - 750	2.68	1597	209
		CXC20 - 1000	2.68	1601	201
		CXC20 - 1250	2.68	1610	184
		CXC20 - 1500	2.68	1623	150
		S100C20 - 1250	2.68	1493	127
		S100C20 - 1500	2.68	1493	122
		S100C20 - 1750	2.68	1504	98
		S100C20 - 2000	2.68	1516	84

<b>Detroit Diesel</b>					
<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
DD13 470 Curve #: D471.940_470-1650 Curve Date: 12-30-15 1650 lb-ft @ 1075 RPM	470/1900	CSC20-1250	2.46	1596	184
		CSUC20-1250	2.46	1659	170
		CSUC20-1500	2.46	1667	164
			2.68	1530	138
		CSUC20-1750	2.46	1667	134
			2.68	1530	112
		CSUC20-2000	2.46	1667	111
		CMUC20-1500	2.46	1537	163
CMUC20-2000	2.46	1585	110		
CX(S)C20-1500	2.46	1768	129		

Detroit Diesel					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 500 Curve #: E4-471X-35-16 Curve Date: 2-24-10 1650 lb-ft @ 1800 RPM	500/2000	CSC20 - 750	2.27	1720	256
			2.46	1587	228
		CSC20 - 1000	2.27	1725	236
			2.46	1592	209
		CSC20 - 1250	2.27	1730	212
			2.46	1596	188
		CSUC20 - 1250	2.27	1797	217
			2.46	1659	195
		CSUC20 - 1500	2.27	1806 *	197
			2.46	1667	174
		CSUC20 - 1750	2.27	1718	160
			2.46	1585	137
		CSUC20 - 2000	2.27	1727	128
			2.46	1593	107
		CSUC20 - 2250	2.27	1778	72
			2.46	1640	55
		CMC20 - 750	2.27	1758	278
			2.46	1622	258
		CMC20 - 1000	2.27	1769	261
			2.46	1632	243
CMC20 - 1250	2.27	1789	229		
	2.46	1650	219		
CMUC20 - 1250	2.27	1643	206		
	2.46	1516	181		
CMUC20 - 1500	2.27	1665	186		
	2.46	1537	162		
CMUC20 - 1750	2.27	1687	156		
	2.46	1557	135		
CMUC20 - 2000	2.27	1718	121		
	2.46	1585	104		
CMUC20 - 2250	2.27	1819 *	41		
	2.46	1679	47		

<b>Detroit Diesel</b>					
<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
DD13 500 Curve #: E4-471X-35-16 Curve Date: 2-24-10 1650 lb-ft @ 1800 RPM	500/2000	CGC20 - 500	2.46	1870 *	281
		CGC20 - 750	2.46	1888 *	269
		CXC20 - 750	2.27	1885 *	212
			2.46	1740	250
		CXC20 - 1000	2.27	1890 *	208
			2.46	1744	239
		CXC20 - 1250	2.46	1754	223
		CXC20 - 1500	2.46	1768	196
		S100C20 - 1250	2.27	1762	167
			2.46	1626	143
S100C20 - 1500	2.27	1762	174		
S100C20 - 1750	2.27	1773	159		
S100C20 - 2000	2.27	1790	131		
	2.46	1652	112		



Detroit Diesel					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 505 Curve #: D471.940_505-1750 Curve Date: 12-30-2015 1750 lb-ft @ 1075 RPM	505/1900	CSC20-1000	2.46	1592	226
		CSC20-1250	2.46	1596	207
		CSUC20-1250	2.46	1659	200
		CSUC20-1500	2.46 2.68	1667 1530	196 162
		CSUC20-1750	2.46	1667	159
		CSUC20-2000	2.46	1667	135
		CMUC20-1500	2.46 2.68	1537 1410	184 151
		CMUC20-1750	2.46 2.68	1557 1463	189 117
		CMUC20-2000	2.46	1585	124
		S100C20-1750	2.27	1775	178
		S100C20-2000	2.27	1790	153
		CX(S)C20-750	2.46	1740	209
		CX(S)C20-1500	2.46	1768	163

Detroit Diesel					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 525 Curve #: D471.940_525-1850 Curve Date: 12-30-15 1850 lb-ft @ 1075 RPM	525/1900	CSC20-1250	2.46	1652	153
		CSUC20-1500	2.46	1667	209
			2.68	1530	184
		CSUC20-1750	2.46	1585	179
		CSUC20-2000	2.46	1667	158
			2.68	1530	143
		CMUC20-1500	2.46	1537	202
			2.68	1530	179
		CMUC20-1750	2.46	1557	182
		CMUC20-2000	2.46	1585	143
		S100C20-1250	2.46	1626	207
		S100C20C-1500	2.46	1626	197
S100C20-1750	2.46	1638	177		
S100C20-2000	2.46	1652	144		
	2.68	1516	132		

Cummins ISB Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISB 340 Curve #: FR93353EV Curve Date: 6-4-13 700 lb-ft @ 1600 RPM	340/2600	CSC20 - 750	1.69	2310	108
			1.79	2181	94
		CSC20 - 1000	1.69	2317	84
			1.79	2188	74
		CSC20 - 1250	1.69	2324	62
			1.79	2194	47
		CSUC20 - 1250	1.79	2279	55
			1.88	2170	44
		CSUC20 - 1500	1.79	2291	29
			1.88	2181	19
		CMC20 - 750	1.69	2361	117
			1.79	2229	109
		CMC20 - 1000	1.69	2376	112
			1.79	2243	97
CMC20 - 1250	1.79	2268	69		
	1.88	2160	57		
CMUC20 - 1250	1.58	2361	69		
	1.69	2207	55		
CMUC20 - 1500	1.58	2392	47		
	1.69	2237	31		

Cummins ISB Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISB 340 Curve #: FR93353EV Curve Date: 6-4-13 700 lb-ft @ 1600 RPM	340/2600	CGC20 - 500	1.97	2335	146
			2.03	2266	141
		CGC20 - 750	1.97	2358	136
			2.03	2288	128
		CGC20 - 1000	2.27	2181	83
			2.46	2012	65
		CXC20 - 750	1.79	2391	112
			1.88	2277	100
			1.97	2173	87
		CXC20 - 1000	1.79	2397	94
			1.88	2282	90
			1.97	2178	74
		CXC20 - 1250	1.88	2295	64
1.97	2190		53		
CXC20 - 1500	1.88	2314	75		
	1.97	2208	63		
	2.03	2143	55		
S100C20 - 1250	1.69	2367	43		
	1.79	2235	28		
S100C20 - 1500	1.69	2367	29		
	1.79	2235	16		
S100C20 - 1750	1.69	2385	16		

Cummins ISB Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISB 360 Curve #: FR93355EV Curve Date: 5-14-13 800 lb-ft @ 1800 RPM	360/2600	CSC20 - 750	1.69	2310	80
			1.79	2181	124
		CSC20 - 1000	1.69	2317	116
			1.79	2188	106
		CSC20 - 1250	1.69	2324	92
			1.79	2194	82
			2.03	1934	41
		CSUC20 - 1250	1.79	2279	87
			1.88	2170	73
		CSUC20 - 1500	1.79	2291	62
			1.88	2181	50
			2.03	2020	31
		CSUC20 - 1750	1.69	2308	38
			1.79	2179	23
		CMC20 - 750	1.69	2361	159
			1.79	2229	144
CMC20 - 1000	1.69	2376	148		
	1.79	2243	132		
CMC20 - 1250	1.79	2268	106		
	1.88	2160	92		
CMUC20 - 1250	1.58	2361	106		
	1.69	2207	89		
CMUC20 - 1500	1.58	2392	85		
	1.69	2237	67		
CMUC20 - 1750	1.69	2266	41		
	1.79	2140	25		

Cummins ISB Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISB 360 Curve #: FR93355EV Curve Date: 5-14-13 800 lb-ft @ 1800 RPM	360/2600	CGC20 - 500	1.97	2335	177
			2.03	2266	172
		CGC20 - 750	1.97	2358	171
			2.03	2288	163
		CGC20 - 1000	2.27	2181	120
			2.46	2012	95
		CXC20 - 750	1.79	2391	146
			1.88	2277	132
			1.97	2173	120
		CXC20 - 1000	1.79	2397	129
			1.88	2282	117
			1.97	2178	107
		CXC20 - 1250	1.79	2411*	110
			1.88	2295	97
1.97	2190		85		
CXC20 - 1500	1.88	2314	112		
	1.97	2208	99		
	2.03	2143	91		
S100C20 - 1250	1.69	2367	79		
	1.79	2235	66		
S100C20 - 1500	1.69	2367	65		
	1.79	2235	56		
S100C20 - 1750	1.69	2385	41		
	1.79	2251	25		

Cummins ISL Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL 300 Curve #: FR93445EV Curve Date: 6-26-13 860 lb-ft @ 1300 RPM	300/2200	CSC20 - 750	2.27	1720	90
			2.46	1587	74
		CSC20 - 1000	2.03	1929	92
			2.27	1725	70
		CSC20 - 1250	2.46	1592	54
			2.03	1934	66
		CSUC20 - 1250	2.27	1730	44
			2.46	1596	27
		CSUC20 - 1500	2.27	1797	49
			2.46	1659	32
		CMC20 - 750	2.03	2020 *	44
			2.27	1806	23
		CMC20 - 1000	2.27	1758	104
			2.46	1622	87
CMC20 - 1250	2.27	1768	92		
	2.46	1632	134		
CMUC20 - 1250	2.27	1789	60		
	2.46	1650	45		
CMUC20 - 1500	2.27	1643	35		
	2.46	1516	19		
	1.97	1919	37		
	2.03	1862	32		

Cummins ISL Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 300 Curve #: FR93445EV Curve Date: 6-26-13 860 lb-ft @ 1300 RPM	300/2200	CGC20 - 500	2.27	2026 *	160
			2.46	1870	144
		CGC20 - 750	2.27	2046 *	142
			2.46	1888	130
		CGC20 - 1000	2.46	2012 *	92
		CXC20 - 750	2.27	1885	92
			2.46	1740	81
		CXC20 - 1000	2.27	1890	84
			2.46	1744	73
		CXC20 - 1250	2.27	1901	66
2.46	1754		50		
CXC20 - 1500	2.27	1916	65		
	2.46	1768	54		
S100C20 - 1250	2.03	1970	30		
	2.27	1762	17		
S100C20 - 1500	2.03	1970	19		



Cummins ISL Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 330 Curve #: FR93444EV Curve Date: 6-26-13 1000 lb-ft @ 1400 RPM	330/2200	CSC20 - 750	2.27	1720	120
			2.46	1587	89
		CSC20 - 1000	2.27	1725	101
			2.46	1592	73
		CSC20 - 1250	2.03	1934	91
			2.27	1730	75
		CSUC20 - 1250	2.46	1596	55
			2.27	1797	73
		CSUC20 - 1500	2.46	1659	62
			2.03	2020 *	66
		CSUC20 - 1750	2.27	1806	47
			2.46	1667	38
		CMC20 - 750	1.97	1980	31
			2.03	1921	26
		CMC20 - 1000	2.27	1758	129
			2.46	1622	117
CMC20 - 1250	2.27	1769	116		
	2.46	1632	103		
CMUC20 - 1250	2.27	1789	82		
	2.46	1650	70		
CMUC20 - 1500	2.27	1643	63		
	2.46	1516	52		
CMUC20 - 1750	2.03	1862	54		
	2.27	1665	37		
CMUC20 - 1750	1.97	1944	28		
	2.03	1887	23		

<b>Cummins ISL Series</b>					
<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
ISL/L9 330 Curve #: FR93444EV Curve Date: 6-26-13 1000 lb-ft @ 1400 RPM	330/2200	CGC20 - 500	2..27 2.46	2026 * 1870	184 170
		CGC20 - 750	2.27 2.46	2046 * 1888	165 154
		CGC20 - 1000	2.46	2012 *	119
		CXC20 - 750	2.27 2.46	1885 1740	116 104
		CXC20 - 1000	2..27 2.46	1890 1744	108 96
		CXC20 - 1250	2.27 2.46	1901 1754	90 78
		CXC20 - 1500	2..27 2.46	1916 1768	89 76
		S100C20 - 1250	2.27 2.46	1762 1626	39 28
		S100C20 - 1500	2.27 2.46	1762 1626	29 18

Cummins ISL Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 350 Curve #: FR93443EV Curve Date: 6-26-13 1000 lb-ft @ 1400 RPM	350/2200	CSC20 - 750	2.27	1720	124
			2.46	1587	89
		CSC20 - 1000	2.27	1725	115
			2.46	1592	73
		CSC20 - 1250	2.03	1934	98
			2.27	1730	94
			2.46	1596	55
		CSUC20 - 1250	2.03	2020*	71
			2.27	1797	80
			2.46	1659	66
		CSUC20 - 1500	2.03	2020*	72
			2.27	1806	53
			2.46	1667	40
		CSUC20 - 1750	1.97	1980	43
			2.03	1921	36
		CSUC20 - 2000	2.03	2020 *	17
		CMC20 - 750	2.27	1758	135
			2.46	1622	119
		CMC20 - 1000	2.27	1769	121
			2.46	1632	107
CMC20 - 1250	2.27	1989	91		
	2.46	1650	74		
CMUC20-1250	2.03	1837	90		
	2.27	1643	66		
	2.46	1516	52		
CMUC20 - 1500	2.03	1862	64		
	2.27	1665	42		
	2.46	1537	27		
CMUC20 - 1750	1.97	1944	43		
	2.03	1887	36		
	2.27	1687	13		
CMUC20 - 2000	1.97	1980	9 *		

Cummins ISL Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
IS/L9 350 Curve #: FR93443EV Curve Date: 6-26-13 1000 lb-ft @ 1400 RPM	350/2200	CGC20 - 500	2.27	2026 *	191
			2.46	1870	174
		CGC20 - 750	2.27	2046 *	169
			2.46	1888	162
		CGC20 - 1000	2.46	2012 *	136
		CXC20 - 750	2.27	1885	130
			2.46	1740	113
		CXC20 - 1000	2.27	1890	120
			2.46	1744	105
		CXC20 - 1250	2.27	1901	98
			2.46	1754	81
		CXC20 - 1500	2.27	1916	104
			2.46	1768	87
		CSC20-750	2.03	1923	143
CSC20-1000	2.03	1929	123		
S100C20 - 1250	2.27	1762	49		
	2.46	1626	41		
S100C20 - 1500	2.27	1762	40		
	2.46	1626	22		
S100C20 - 1750	2.27	1775	14		

Cummins ISL Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 370 Curve #: FR93437EV Curve Date: 6-26-13 1250 lb-ft @ 1400 RPM	370/2100	CSC20 - 750	2.27	1720	178
			2.46	1587	148
		CSC20 - 1000	2.27	1725	168
			2.46	1592	132
		CSC20 - 1250	2.27	1730	141
			2.46	1596	104
		CSUC20 - 1250	2.27	1797	126
			2.46	1659	125
		CSUC20 - 1500	2.27	1806	112
			2.46	1667	98
		CSUC20 - 1750	2.03	1921 *	82
			2.27	1718	76
			2.46	1585	62
		CSUC20 - 2000	2.27	1806	46
			2.46	1667	40
		CMC20 - 750	2.27	1758	187
			2.46	1622	185
		CMC20 - 1000	2.27	1769	170
			2.46	1632	167
		CMC20 - 1250	2.27	1789	140
2.46	1650		136		
CMUC20 - 1250	2.27	1643	130		
	2.46	1516	112		
CMUC20 - 1500	2.27	1665	104		
	2.46	1537	84		
CMUC20 - 1750	2.03	1887	72		
	2.27	1687	70		
CMUC20 - 2000	2.03	1921 *	31		
	2.27	1718	32		

<b>Cummins ISL Series</b>					
<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
ISL/L9 370 Curve #: FR93437EV Curve Date: 6-26-13 1250 lb-ft @ 1400 RPM	370/2100	CGC20 - 500	2.46	1870	225
		CGC20 - 750	2.46	1888	213
		CXC20 - 750	2.27	1888	160
			2.46	1740	161
		CXC20 - 1000	2.27	1890	152
			2.46	1744	153
		CXC20 - 1250	2.27	1901 *	141
			2.46	1754	141
		CXC20 - 1500	2.27	1916 *	131
			2.46	1768	131
		S100C20 - 1250	2.27	1762	94
			2.46	1626	92
S100C20 - 1500	2.27	1762	84		
	2.46	1626	82		
S100C20 - 1750	2.27	1775	68		
	2.46	1638	66		
S100C20 - 2000	2.27	1790	42		
	2.46	1652	36		

Cummins ISL Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 380 Curve #: FR934427EV Curve Date: 6-26-13 1150 lb-ft @ 1400 RPM	380/2200	CSC20 - 750	2.27	1720	159
			2.46	1587	126
		CSC20 - 1000	2.27	1725	137
			2.46	1592	110
		CSC20 - 1250	2.03	1934	131
			2.27	1730	111
			2.46	1596	79
		CSUC20 - 1250	2.27	1797	113
			2.46	1659	100
		CSUC20 - 1500	2.27	1806	86
			2.46	1667	76
		CSUC20 - 1750	2.03	1921	68
			2.27	1718	47
		CSUC20 - 2000	1.97	2081*	53
			2.27	1806	28
			2.46	1667	13
		CMC20 - 750	2.27	1758	168
			2.46	1622	153
		CMC20 - 1000	2.27	1769	154
			2.46	1632	141
CMC20 - 1250	2.27	1789	124		
	2.46	1650	109		
CMUC20 - 1250	2.03	1837	112		
	2.27	1643	100		
	2.46	1516	87		
CMUC20 - 1500	2.27	1665	76		
	2.46	1537	62		
CMUC20 - 1750	2.03	1887	65		
	2.27	1687	46		
CMUC20 - 2000	2.03	1921	31		
	2.27	1718	12 *		

Cummins ISL Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 380 Curve #: FR934427EV Curve Date: 6-26-13 1150 lb-ft @ 1400 RPM	380/2200	CGC20 - 500	2.27	2026 *	224
			2.46	1870	209
		CGC20 - 750	2.27	2046 *	208
			2.46	1888	194
		CGC20 - 1000	2.46	2012 *	162
		CXC20 - 750	2.27	1888	159
			2.46	1740	145
		CXC20 - 1000	2.27	1890	152
			2.46	1744	138
		CXC20 - 1250	2.27	1901	130
			2.46	1754	116
		CXC20 - 1500	2.27	1916	132
2.46	1768		118		
S100C20 - 1250	2.27	1762	80		
	2.46	1626	62		
S100C20 - 1500	2.27	1762	71		
	2.46	1626	61		
S100C20 - 1750	2.27	1775	48		
	2.46	1638	34		
S100C20 - 2000	2.27	1790	21		



Cummins ISL Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 400 Curve #: FR93435EV Curve Date: 6-26-13 1250 lb-ft @ 1400 RPM	400/2200	CSC20 - 750	2.27	1720	183
			2.46	1587	148
		CSC20 - 1000	2.27	1725	164
			2.46	1592	125
		CSC20 - 1250	2.03	1934	158
			2.27	1730	141
			2.46	1596	113
		CSUC20 - 1250	2.03	2010 *	147
			2.27	1797	138
			2.46	1659	125
		CSUC20 - 1500	2.03	2020 *	111
			2.27	1806	116
			2.46	1667	101
		CSUC20 - 1750	2.03	1921	92
			2.27	1718	77
			2.46	1585	59
		CSUC20 - 2000	2.03	2020*	65
			2.27	1806	54
			2.46	1667	41
		CMC20 - 750	2.27	1758	197
2.46	1622		185		
CMC20 - 1000	2.27	1769	181		
	2.46	1632	170		
CMC20 - 1250	2.27	1789	149		
	2.46	1650	138		
CMUC20 - 1250	1.97	1893	150		
	2.03	1837	147		
	2.27	1643	131		
	2.46	1516	112		
CMUC20 - 1500	2.03	1862	120		
	2.27	1665	104		
	2.46	1537	81		
CMUC20 - 1750	1.97	1944	90		
	2.03	1887	87		
	2.27	1687	74		
CMUC20 - 2000	1.97	1980	52		
	2.03	1921	50		
	2.27	1718	39		

Cummins ISL Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 400 Curve #: FR93435EV Curve Date: 6-26-13 1250 lb-ft @ 1400 RPM	400/2200	CGC20 - 500	2.27	2026 *	248
			2.46	1870	238
		CGC20 - 750	2.27	2046 *	229
			2.46	1888	221
		CGC20 - 1000	2.46	2012 *	178
		CXC20 - 750	2.27	1888	178
			2.46	1740	170
		CXC20 - 1000	2.27	1890	170
			2.46	1744	162
		CXC20 - 1250	2.27	1901	158
			2.46	1754	145
		CXC20 - 1500	2.27	1916	150
			2.46	1768	142
		S100C20 - 1250	2.27	1762	105
2.46	1626		95		
S100C20 - 1500	2.27	1762	95		
	2.46	1626	85		
S100C20 - 1750	2.27	1775	77		
	2.46	1638	66		
S100C20 - 2000	2.27	1790	48		
	2.46	1652	36		

Cummins ISL Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 450 Curve #: FR93434EV  Curve Date: 6-26-13  1250 lb-ft @ 1400 RPM	450/2200	CSC20 - 750	2.27	1720	183
			2.46	1587	148
		CSC20 - 1000	2.27	1725	164
			2.46	1592	125
		CSC20 - 1250	1.97	1993	175
			2.03	1934	167
			2.27	1730	141
			2.46	1596	113
		CSUC20 - 1250	2.03	2010*	168
			2.27	1797	146
			2.46	1659	125
		CSUC20 - 1500	1.97	2081 *	111
			2.03	2020 *	149
			2.27	1806	121
			2.46	1667	101
		CSUC20 - 1750	2.03	1921	107
			2.27	1718	82
			2.46	1585	62
		CSUC20 - 2000	1.97	2081*	88
			2.03	2020 *	92
2.27	1806		67		
2.46	1667		46		
CSUC20 - 2250	2.03	1988	27		
CMC20 - 750	2.27	1758	204		
	2.46	1622	185		
CMC20 - 1000	2.27	1769	190		
	2.46	1632	171		
CMC20 - 1250	2.27	1789	162		
	2.46	1650	143		
CMUC20 - 1250	2.27	1643	133		
	2.46	1516	112		
CMUC20 - 1500	1.97	1919	143		
	2.03	1862	137		
	2.27	1665	109		
	2.46	1537	84		
CMUC20 - 1750	2.03	1887	109		
	2.27	1687	82		
CMUC20 - 2000	1.97	1980	83		
	2.03	1921	76		
	2.27	1718	50		
	2.46	1569	30		

Cummins ISL Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 450 Curve #: FR93434EV Curve Date: 6-26-13 1250 lb-ft @ 1400 RPM	450/2200	CGC20 - 500	2.27	2026 *	262
			2.46	1870	242
		CGC20 - 750	2.27	2046 *	251
			2.46	1888	232
		CGC20 - 1000	2.46	2012 *	214
		CXC20 - 750	2.27	1888	204
			2.46	1740	180
		CXC20 - 1000	2.27	1890	188
			2.46	1744	170
		CXC20 - 1250	2.27	1901	168
			2.46	1754	149
		CXC20 - 1500	2.27	1916	178
			2.46	1768	159
		S100C20 - 1250	2.27	1762	120
2.46	1626		101		
S100C20 - 1500	2.27	1762	109		
	2.46	1626	86		
S100C20 - 1750	2.27	1775	84		
	2.46	1638	66		
S100C20 - 2000	2.03	2001*	84		
	2.27	1790	55		
	2.46	1652	39		

Cummins ISX(12) Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX(12) 370 Curve #: FR20411EV Curve Date: 6-25-13 1450 lb-ft @ 1100 RPM	370/2100	CSC20 - 750	2.27	1720	182
			2.46	1587	184
		CSC20 - 1000	2.27	1725	172
			2.46	1592	174
		CSC20 - 1250	2.27	1730	159
			2.46	1596	152
		CSUC20 - 1250	2.27	1797	131
			2.46	1659	132
		CSUC20 - 1500	2.27	1806	116
			2.46	1667	118
		CSUC20 - 1750	2.27	1718	89
			2.46	1585	87
		CSUC20 - 2000	2.27	1806	50
			2.46	1667	52
		CMC20 - 750	2.27	1758	192
			2.46	1622	193
		CMC20 - 1000	2.27	1769	175
			2.46	1632	176
		CMC20 - 1250	2.27	1789	144
			2.46	1650	146
CMUC20 - 1250	2.27	1643	140		
	2.46	1516	141		
CMUC20 - 1500	2.27	1665	115		
	2.46	1537	116		
CMUC20 - 1750	2.27	1687	78		
	2.46	1557	79		
CMUC20 - 2000	2.27	1718	37		
	2.46	1585	38		

<b>Cummins ISX(12) Series</b>					
<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
ISX (12) 370 Curve #: FR20411EV Curve Date: 6-25-13 1450 lb-ft @ 1100 RPM	370/2100	CGC20 - 500	2.46	1870	227
		CGC20 - 750	2.46	1888	215
		CXC20 - 750	2.27	1885	162
			2.46	1740	165
		CXC20 - 1000	2.27	1890	153
			2.46	1744	157
		CXC20 - 1250	2.27	1901 *	141
			2.46	1754	146
		CXC20 - 1500	2.27	1916 *	129
			2.46	1768	136
		S100C20 - 1250	2.27	1762	99
			2.46	1626	100
S100C20 - 1500	2.27	1762	89		
	2.46	1626	90		
S100C20 - 1750	2.27	1775	73		
	2.46	1638	74		
S100C20 - 2000	2.27	1790	48		
	2.46	1652	49		

Cummins ISX(12) Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX(12) 400 Curve #: FR20407EV Curve Date: 6-25-13 1450 lb-ft @ 1100 RPM	400/2100	CSC20 - 750	2.27	1720	195
			2.46	1587	192
		CSC20 - 1000	2.27	1725	185
			2.46	1592	176
		CSC20 - 1250	2.27	1730	164
			2.46	1596	151
		CSUC20 - 1250	2.27	1797	144
			2.46	1659	143
		CSUC20 - 1500	2.27	1806	128
			2.46	1667	128
		CSUC20 - 1750	2.27	1718	97
			2.46	1585	88
		CSUC20 - 2000	2.27	1806	63
			2.46	1667	60
		CMC20 - 750	2.27	1758	205
			2.46	1622	203
		CMC20 - 1000	2.27	1769	188
			2.46	1632	186
CMC20 - 1250	2.27	1789	157		
	2.46	1650	155		
CMUC20 - 1250	2.27	1643	150		
	2.46	1516	143		
CMUC20 - 1500	2.27	1665	123		
	2.46	1537	115		
CMUC20 - 1750	2.27	1687	89		
	2.46	1557	82		
CMUC20 - 2000	2.27	1718	50		
	2.46	1585	45		

**Cummins ISX(12) Series**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
ISX(12) 400 Curve #: FR20407EV Curve Date: 6-25-13 1450 lb-ft @ 1100 RPM	400/2100	CGC20 - 500	2.46	1870	238
		CGC20 - 750	2.46	1888	225
		CXC20 - 750	2.27	1885	173
			2.46	1740	178
		CXC20 - 1000	2.27	1890	165
			2.46	1744	170
		CXC20 - 1250	2.27	1901 *	151
			2.46	1754	159
		CXC20 - 1500	2.27	1916 *	139
			2.46	1768	149
		S100C20 - 1250	2.27	1762	112
			2.46	1626	110
S100C20 - 1500	2.27	1762	102		
	2.46	1626	100		
S100C20 - 1750	2.27	1775	86		
	2.46	1638	84		
S100C20 - 2000	2.27	1790	60		
	2.46	1652	55		



Cummins ISX(12) Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX(12)400 Curve #: FR20406EV Curve Date: 6-25-13 1550 lb-ft @ 1100 RPM	400/2100	CSC20 - 750	2.27	1720	199
			2.46	1587	205
		CSC20 - 1000	2.27	1725	189
			2.46	1592	196
		CSC20 - 1250	2.27	1730	176
			2.46	1596	174
		CSUC20 - 1250	2.27	1797	144
			2.46	1659	152
		CSUC20 - 1500	2.27	1806	127
			2.46	1667	137
		CSUC20 - 1750	2.27	1718	112
			2.46	1585	111
		CSUC20 - 2000	2.27	1806	67
			2.46	1667	75
		CMC20 - 750	2.27	1758	208
			2.46	1622	214
		CMC20 - 1000	2.27	1769	190
			2.46	1632	196
CMC20 - 1250	2.27	1789	161		
	2.46	1650	168		
CMUC20 - 1250	2.27	1643	160		
	2.46	1516	165		
CMUC20 - 1500	2.27	1665	138		
	2.46	1537	138		
CMUC20 - 1750	2.27	1687	98		
	2.46	1557	103		
CMUC20 - 2000	2.27	1718	55		
	2.46	1585	62		

Cummins ISX(12) Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX(12) 400 Curve #: FR20406EV Curve Date: 6-25-13 1550 lb-ft @ 1100 RPM	400/2100	CGC20 - 500	2.46	1870	238
		CGC20 - 750	2.46	1888	225
		CXC20 - 750	2.27	1885	173
			2.46	1740	182
		CXC20 - 1000	2.27	1890	163
			2.46	1744	173
		CXC20 - 1250	2.27	1901 *	151
			2.46	1754	162
		CXC20 - 1500	2.27	1916 *	139
			2.46	1768	151
		S100C20 - 1250	2.27	1762	114
			2.46	1626	121
S100C20 - 1500	2.27	1762	104		
	2.46	1626	111		
S100C20 - 1750	2.27	1775	87		
	2.46	1638	95		
S100C20 - 2000	2.27	1790	67		
	2.46	1652	72		

Cummins ISX(12) Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX(12) 425 Curve #: FR20396EV Curve Date: 6-25-13 1550 lb-ft @ 1100 RPM	425/2100	CSC20 - 750	2.27	1720	221
			2.46	1587	218
		CSC20 - 1000	2.27	1725	211
			2.46	1592	200
		CSC20 - 1250	2.27	1730	197
			2.46	1596	179
		CSUC20 - 1250	2.27	1797	168
			2.46	1659	171
		CSUC20 - 1500	2.27	1806	150
			2.46	1667	157
		CSUC20 - 1750	2.27	1718	128
			2.46	1585	120
		CSUC20 - 2000	2.27	1806	89
			2.46	1667	90
		CSUC20 - 2250	2.27	1778	28
			2.46	1640	26
		CMC20 - 750	2.27	1758	230
			2.46	1622	232
		CMC20 - 1000	2.27	1769	212
			2.46	1632	215
CMC20 - 1250	2.27	1789	183		
	2.46	1650	185		
CMUC20 - 1250	2.27	1643	179		
	2.46	1516	173		
CMUC20 - 1500	2.27	1665	154		
	2.46	1537	147		
CMUC20 - 1750	2.27	1687	117		
	2.46	1557	115		
CMUC20 - 2000	2.27	1718	77		
	2.46	1585	76		

**Cummins ISX(12) Series**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
ISX(12)425 Curve #: FR20396EV Curve Date: 6-25-13 1550 lb-ft @ 1100 RPM	425/2100	CGC20 - 500	2.46	1870	260
		CGC20 - 750	2.46	1888	248
		CXC20 - 750	2.27	1885	195
			2.46	1740	204
		CXC20 - 1000	2.27	1890	187
			2.46	1744	195
		CXC20 - 1250	2.27	1901 *	175
			2.46	1754	184
		CXC20 - 1500	2.27	1916 *	164
			2.46	1768	173
		S100C20 - 1250	2.27	1762	132
			2.46	1626	139
S100C20 - 1500	2.27	1762	126		
	2.46	1626	130		
S100C20 - 1750	2.27	1775	112		
	2.46	1638	113		
S100C20 - 2000	2.27	1790	88		
	2.46	1652	87		

**Cummins ISX(12) Series**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
ISX(12)450 Curve #: FR20395EV Curve Date: 6-25-13 1550 lb-ft @ 1100 RPM	450/2100	CSC20 - 750	2.27	1720	236
			2.46	1587	218
		CSC20 - 1000	2.27	1725	225
			2.46	1592	200
		CSC20 - 1250	2.27	1730	202
			2.46	1596	179
		CSUC20 - 1250	2.27	1797	188
			2.46	1659	185
		CSUC20 - 1500	2.27	1806	172
			2.46	1667	163
		CSUC20 - 1750	2.27	1718	136
			2.46	1585	123
		CSUC20 - 2000	2.27	1806	104
			2.46	1667	99
		CSUC20 - 2250	2.27	1778	41
			2.46	1640	35
		CMC20 - 750	2.27	1758	247
			2.46	1622	243
		CMC20 - 1000	2.27	1769	230
			2.46	1632	226
CMC20 - 1250	2.27	1789	199		
	2.46	1650	195		
CMUC20 - 1250	2.27	1643	191		
	2.46	1516	175		
CMUC20 - 1500	2.27	1665	162		
	2.46	1537	151		
CMUC20 - 1750	2.27	1687	130		
	2.46	1557	122		
CMUC20 - 2000	2.27	1718	91		
	2.46	1585	84		
CMUC20 - 2250	2.27	1819	19		
	2.46	1679	18		

**Cummins ISX(12) Series**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
ISX(12)450 Curve #: FR20395EV Curve Date: 6-25-13 1550 lb-ft @ 1100 RPM	450/2100	CGC20 - 500	2.46	1870	282
		CGC20 - 750	2.46	1888	269
		CXC20 - 750	2.27	1885	217
			2.46	1740	220
		CXC20 - 1000	2.27	1890	207
			2.46	1744	212
		CXC20 - 1250	2.27	1901 *	195
			2.46	1754	201
		CXC20 - 1500	2.27	1916 *	182
			2.46	1768	191
		S100C20 - 1250	2.27	1762	155
			2.46	1626	151
S100C20 - 1500	2.27	1762	145		
	2.46	1626	141		
S100C20 - 1750	2.27	1775	129		
	2.46	1638	125		
S100C20 - 2000	2.27	1790	101		
	2.46	1652	95		

**Cummins ISX(12) Series**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
ISX(12) 500 Curve #: FR20389EV Curve Date: 6-25-13 1645 lb-ft @ 1100 RPM	500/2100	CSC20 - 750	2.27	1720	261
			2.46	1587	238
		CSC20 - 1000	2.27	1725	241
			2.46	1592	219
		CSC20 - 1250	2.27	1730	217
			2.46	1596	196
		CSUC20 - 1250	2.27	1797	222
			2.46	1659	206
		CSUC20 - 1500	2.27	1806	198
			2.46	1667	179
		CSUC20 - 1750	2.27	1718	157
			2.46	1585	139
		CSUC20 - 2000	2.27	1806	143
			2.46	1667	123
		CSUC20 - 2250	2.27	1778	78
			2.46	1640	57
		CMC20 - 750	2.27	1758	280
			2.46	1622	261
		CMC20 - 1000	2.27	1769	266
			2.46	1632	248
CMC20 - 1250	2.27	1789	238		
	2.46	1650	220		
CMUC20 - 1250	2.27	1643	209		
	2.46	1516	191		
CMUC20 - 1500	2.27	1665	186		
	2.46	1537	167		
CMUC20 - 1750	2.27	1687	159		
	2.46	1557	139		
CMUC20 - 2000	2.27	1718	128		
	2.46	1585	106		
CMUC20 - 2250	2.27	1819	62		
	2.46	1679	52		

**Cummins ISX(12) Series**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
ISX(12) 500 Curve #: FR20389EV Curve Date: 6-25-13 1645 lb-ft @ 1100 RPM	500/2100	CGC20 - 500	2.46	1870	319
		CGC20 - 750	2.46	1888	308
		CXC20 - 750	2.27	1885	256
			2.46	1740	260
		CXC20 - 1000	2.27	1890	247
			2.46	1744	245
		CXC20 - 1250	2.27	1901 *	234
			2.46	1754	224
		CXC20 - 1500	2.27	1916 *	223
			2.46	1768	233
		S100C20 - 1250	2.27	1762	196
			2.46	1626	182
S100C20 - 1500	2.27	1762	185		
	2.46	1626	165		
S100C20 - 1750	2.27	1775	160		
	2.46	1638	142		
S100C20 - 2000	2.27	1790	136		
	2.46	1652	115		



Cummins ISX(15) Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX(15) 455 Curve #: FR11086EV Curve Date: 5-22-13 1750 lb-ft @ 1200 RPM	455/2100	CSC20 - 750	2.27	1720	247
			2.46	1587	251
		CSC20 - 1000	2.27	1725	237
			2.46	1592	240
		CSC20 - 1250	2.27	1730	224
			2.46	1596	214
		CSUC20 - 1250	2.27	1797	192
			2.46	1659	199
		CSUC20 - 1500	2.27	1806	177
			2.46	1667	181
		CSUC20 - 1750	2.27	1718	156
			2.46	1585	151
		CSUC20 - 2000	2.27	1806	115
			2.46	1667	119
		CSUC20 - 2250	2.27	1778	55
			2.46	1640	56
		CMC20 - 750	2.27	1758	255
			2.46	1622	260
		CMC20 - 1000	2.27	1769	238
			2.46	1632	243
CMC20 - 1250	2.27	1789	209		
	2.46	1650	213		
CMUC20 - 1250	2.27	1643	207		
	2.46	1516	205		
CMUC20 - 1500	2.27	1665	182		
	2.46	1537	177		
CMUC20 - 1750	2.27	1687	145		
	2.46	1557	145		
CMUC20 - 2000	2.27	1718	104		
	2.46	1585	104		
CMUC20 - 2250	2.27	1819	23		
	2.46	1679	32		

<b>Cummins ISX(15) Series</b>					
<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
ISX(15) 455 Curve #: FR11086EV Curve Date: 5-22-13 1750 lb-ft @ 1200 RPM	455/2100	CGC20 - 500	2.46	1870	314
		CGC20 - 750	2.46	1888	267
		CXC20 - 750	2.27	1885	215
			2.46	1740	230
		CXC20 - 1000	2.27	1890	206
			2.46	1744	221
		CXC20 - 1250	2.27	1901 *	192
			2.46	1754	210
		CXC20 - 1500	2.27	1916 *	180
			2.46	1768	199
		S100C20 - 1250	2.27	1762	162
			2.46	1626	167
S100C20 - 1500	2.27	1762	152		
	2.46	1626	157		
S100C20 - 1750	2.27	1775	136		
	2.46	1638	141		
S100C20 - 2000	2.27	1790	115		
	2.46	1652	116		

Cummins ISX(15) Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX(15) 500 Curve #: FR11094EV Curve Date: 5-22-13 1850 lb-ft @ 1200 RPM	500/2100	CSC20 - 750	2.27	1720	279
			2.46	1587	283
		CSC20 - 1000	2.27	1725	268
			2.46	1592	264
		CSC20 - 1250	2.27	1730	255
			2.46	1596	231
		CSUC20 - 1250	2.27	1797	221
			2.46	1659	231
		CSUC20 - 1500	2.27	1806	206
			2.46	1667	217
		CSUC20 - 1750	2.27	1718	189
			2.46	1585	181
		CSUC20 - 2000	2.27	1806	147
			2.46	1667	151
		CSUC20 - 2250	2.27	1778	86
			2.46	1640	88
		CMC20 - 750	2.27	1758	286
			2.46	1622	293
		CMC20 - 1000	2.27	1769	267
			2.46	1632	276
CMC20 - 1250	2.27	1789	240		
	2.46	1650	247		
CMUC20 - 1250	2.27	1643	240		
	2.46	1516	234		
CMUC20 - 1500	2.27	1665	215		
	2.46	1537	208		
CMUC20 - 1750	2.27	1687	178		
	2.46	1557	176		
CMUC20 - 2000	2.27	1718	135		
	2.46	1585	137		
CMUC20 - 2250	2.27	1819	51		
	2.46	1679	64		

**Cummins ISX(15) Series**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
ISX(15) 500 Curve #: FR11094EV Curve Date: 5-22-13 1850 lb-ft @ 1200 RPM	500/2100	CGC20 - 500	2.46	1870	312
		CGC20 - 750	2.46	1888	298
		CXC20 - 750	2.27	1885	246
			2.46	1740	260
		CXC20 - 1000	2.27	1890	237
			2.46	1744	250
		CXC20 - 1250	2.27	1901 *	223
			2.46	1754	240
		CXC20 - 1500	2.27	1916 *	210
			2.46	1768	229
		S100C20 - 1250	2.27	1762	194
			2.46	1626	200
S100C20 - 1500	2.27	1762	182		
	2.46	1626	190		
S100C20 - 1750	2.27	1775	164		
	2.46	1638	174		
S100C20 - 2000	2.27	1790	146		
	2.46	1652	148		

Cummins ISX(15) Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX(15) 550 Curve #: FR11099EV Curve Date: 5-22-13 1850 lb-ft @ 1200 RPM	550/2100	CSC20 - 750	2.27	1720	317
			2.46	1587	283
		CSC20 - 1000	2.27	1725	299
			2.46	1592	267
		CSC20 - 1250	2.27	1730	278
			2.46	1596	237
		CSUC20 - 1250	2.27	1797	276
			2.46	1659	259
		CSUC20 - 1500	2.27	1806	258
			2.46	1667	239
		CSUC20 - 1750	2.27	1718	219
			2.46	1585	197
		CSUC20 - 2000	2.27	1806	195
			2.46	1667	151
		CSUC20 - 2250	2.27	1778	132
			2.46	1640	118
		CMC20 - 750	2.27	1758	339
			2.46	1622	323
		CMC20 - 1000	2.27	1769	320
			2.46	1632	309
CMC20 - 1250	2.27	1789	289		
	2.46	1650	280		
CMUC20 - 1250	2.27	1643	272		
	2.46	1516	247		
CMUC20 - 1500	2.27	1665	247		
	2.46	1537	227		
CMUC20 - 1750	2.27	1687	217		
	2.46	1557	201		
CMUC20 - 2000	2.27	1718	182		
	2.46	1585	168		
CMUC20 - 2250	2.27	1819	106		
	2.46	1679	107		

<b>Cummins ISX(15) Series</b>					
<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
ISX(15) 550 Curve #: FR11099EV Curve Date: 5-22-13 1850 lb-ft @ 1200 RPM	550/2100	CGC20 - 500	2.46	1870	368
		CGC20 - 750	2.46	1888	354
		CXC20 - 750	2.27	1885	302
			2.46	1740	310
		CXC20 - 1000	2.27	1890	293
			2.46	1744	302
		CXC20 - 1250	2.27	1901 *	280
			2.46	1754	285
		CXC20 - 1500	2.27	1916 *	268
			2.46	1768	281
		S100C20 - 1250	2.27	1762	244
			2.46	1626	226
S100C20 - 1500	2.27	1762	234		
	2.46	1626	223		
S100C20 - 1750	2.27	1775	218		
	2.46	1638	204		
S100C20 - 2000	2.27	1790	191		
	2.46	1652	176		

Cummins ISX(15) Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX(15) 600 Curve #: FR11103EV Curve Date: 5-22-13 1850 lb-ft @ 1200 RPM	600/2100	CSC20 - 750	2.27	1720	318
			2.46	1587	283
		CSC20 - 1000	2.27	1725	301
			2.46	1592	267
		CSC20 - 1250	2.27	1730	282
			2.46	1596	246
		CSUC20 - 1250	2.27	1797	295
			2.46	1659	260
		CSUC20 - 1500	2.27	1806	279
			2.46	1667	242
		CSUC20 - 1750	2.27	1718	237
			2.46	1585	200
		CSUC20 - 2000	2.27	1806	238
			2.46	1667	204
		CSUC20 - 2250	2.27	1778	176
			2.46	1640	135
		CMC20 - 750	2.27	1758	367
			2.46	1622	329
		CMC20 - 1000	2.27	1769	349
			2.46	1632	313
CMC20 - 1250	2.27	1789	332		
	2.46	1650	303		
CMUC20 - 1250	2.27	1643	284		
	2.46	1516	248		
CMUC20 - 1500	2.27	1665	267		
	2.46	1537	230		
CMUC20 - 1750	2.27	1687	249		
	2.46	1557	209		
CMUC20 - 2000	2.27	1718	225		
	2.46	1585	185		
CMUC20 - 2250	2.27	1819	150		
	2.46	1679	146		

**Cummins ISX(15) Series**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
ISX(15) 600 Curve #: FR11103EV Curve Date: 5-22-13 1850 lb-ft @ 1200 RPM	600/2100	CGC20 - 500	2.46	1870	400
		CGC20 - 750	2.46	1888	398
		CXC20 - 750	2.27	1885	346
			2.46	1740	320
		CXC20 - 1000	2.27	1890	337
			2.46	1744	311
		CXC20 - 1250	2.27	1901 *	324
			2.46	1754	301
		CXC20 - 1500	2.27	1916 *	312
			2.46	1768	325
		S100C20 - 1250	2.27	1762	268
			2.46	1626	235
S100C20 - 1500	2.27	1762	262		
	2.46	1626	225		
S100C20 - 1750	2.27	1775	246		
	2.46	1638	210		
S100C20 - 2000	2.27	1790	232		
	2.46	1652	190		



<b>Cummins X12 Series</b>					
<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
CUMMINS X12455 Curve # FR20903 Curve Date: 5-7-18 1700 lb-ft @ 1000 RPM	455/2000	CSC20-1000	2.46	1592	231
		CSUC20-1500	2.27	1806	181
		CSUC20-2000	2.46 2.68	1667 1530	113 114
		CMUC20-1750	2.46 2.68	1557 1429	140 137

Cummins X12 Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
CUMMINS X12 500 Curve # FR20903 Curve Date: 5-7-18 1700 lb-ft @ 1000 RPM	500/2000	CSC20-1000	2.27	1725	268
		CSUC20-1250	2.27	1797	231
			2.46	1659	223
		CSUC20-1500	2.27	1806	212
			2.46	1667	204
			2.68	1530	167
		CSUC20-1750	2.27	1806	180
			2.46	1667	161
		CSUC20-2000	2.27	1806	151
			2.46	1667	141
			2.68	1530	123
		CMC20-1000	2.27	1769	276
CMUC20-1250	2.27	1643	235		
CMUC20-1500	2.27	1665	205		
	2.46	1537	191		
CMUC20-1750	2.27	1687	176		
CMUC20-2000	2.27	1718	138		
S100C20C-2000	2.46	1652	139		
	2.68	1516	116		

**Cummins X15 Series**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
CUMMINS X15 505 Curve # FR11361 Curve Date: 2-20-17 1850 lb-ft @ 1150 RPM	505/2100	CSUC20-1500	2.27	1806	221
			2.46	1667	224
		CSUC20-2000	2.46	1667	157
		CMC20-1250	2.46	1650	250
		CMUC20-1500	2.46	1537	216

Cummins X15 Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
CUMMINS X15565 Curve # FR11362 Curve Date: 2-20-17 1850 lb-ft @ 1150 RPM	565/2100	CXVC20-1250	2.46	1754	291
		S100C20-1500	2.27	1762	247
		S100C20-2000	2.27 2.46	1790 1652	193 183
		CSC20-1250	2.46	1596	246
		CSUC20-1500	2.46	1667	235
		CSUC20-1750	2.46	1667	200
		CMUC20-1500	2.27	1665	254
		CMUC20-1750	2.46	1557	208
		CSUC20-2000	2.27 2.46	1806 1667	208 191
		S100C20C-2000	2.68	1516	151

Cummins X15 Series					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
CUMMINS X15 600 Curve # FR11641 Curve Date: 2-20-17 1850 lb-ft @ 1150 RPM	600/2100	CSC20-1250	2.27	1730	282
		CSUC20-1500	2.46	1667	233
			2.68	1530	202
		CSUC20-2000	2.46	1667	201
			2.68	1530	163
		CMUC20-1750	2.46	1557	212
		S100C20-1500	2.46	1626	223
S100C20-2000	2.46	1652	190		
	2.68	1516	151		
CRUC21-2	1.77	1751	131		

**Navistar/International MaxxForce DT**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
Maxx Force DT 300 Curve #: 12NUT Curve Date: 4-30-2013 860 lb-ft @ 1300 RPM	300/2400	CSC20 - 750	1.88	2077	105
			1.97	1982	106
			2.03	1923	106
		CSC20 - 1000	1.88	2083	95
			1.97	1988	91
			2.03	1929	85
		CSC20 - 1250	1.88	2089	78
			1.97	1993	66
			2.03	1934	60
		CSUC20 - 1250	1.88	2170	54
			1.97	2071	54
			2.03	2010	54
		CSUC20 - 1500	1.88	2181	40
			1.97	2081	40
			2.03	2020	40
CSUC20 - 1750	1.79	2179	11 *		
CMC20 - 750	1.88	2122	115		
	1.97	2025	115		
	2.03	1966	116		
CMC20 - 1000	1.88	2136	98		
	1.97	2038	98		
	2.03	1978	99		
CMC20 - 1250	1.88	2160	67		
	1.97	2061	68		
	2.03	2000	68		
CMUC20 - 1250	1.79	2084	62		
	1.88	1984	63		
	1.97	1893	58		
CMUC20 - 1500	1.88	2011	37		
	1.97	1919	34		

Navistar/International MaxxForce DT					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
Maxx Force DT 300 Curve #: 12NUT Curve Date: 4-30-2013 860 lb-ft @ 1300 RPM	300/2400	CGC20 - 500	2.27	2026	153
			2.46	1870	136
		CGC20 - 750	2.27	2046	139
			2.46	1888	124
		CGC20 - 1000	2.27	2181	84
			2.46	2012	84
		CXC20 - 750	2.03	2108	88
			2.27	1885	87
			2.46	1740	76
		CXC20 - 1000	2.03	2113	80
			2.27	1890	76
		CXC20 - 1250	2.46	1744	66
			2.03	2126	69
2.27	1901		61		
CXC20 - 1500	2.46	1754	43		
	2.03	2143	59		
	2.27	1916	60		
S100C20 - 1250	2.46	1768	51		
	1.88	2128	22		
	1.97	2030	22		
S100C20 - 1500	2.03	1970	23		
	2.03	1970	13		

Navistar/International MaxxForce 7					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
Maxx Force 7 300 Curve #: 12NVE Curve Date: 4-30-2013 660 lb-ft @ 1600 RPM	300/2800	CSC20 - 750	1.69	2310	83
			1.79	2181	74
			1.88	2077	66
		CSC20 - 1000	1.58	2478	74
			1.69	2317	65
			1.79	2188	53
		CSC20 - 1250	1.58	2485	48
			1.69	2324	36
			1.79	2194	26
		CSUC20 - 1250	1.79	2279	30
			1.88	2170	22
		CMC20 - 750	1.69	2361	94
			1.79	2229	84
			1.88	2122	76
		CMC20 - 1000	1.69	2376	81
			1.79	2243	72
			1.88	2136	63
		CMC20 - 1250	1.69	2402	46
			1.79	2268	38
			1.88	2160	30
		CMUC20 - 1250	1.58	2361	38
			1.69	2207	27
			1.79	2084	17



Navistar/International MaxxForce 7					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
Maxx Force 7 300 Curve #: 12NVE Curve Date: 4-30-2013 660 lb-ft @ 1600 RPM	300/2800	CGC20 - 500	1.88	2447	130
			1.97	2335	122
			2.03	2266	117
		CGC20 - 750	1.88	2471	114
			1.97	2358	106
			2.03	2288	101
		CGC20 - 1000	1.97	2513	75
			2.03	2438	71
		CXC20 - 750	1.69	2533	81
			1.79	2391	72
		CXC20 - 1000	1.69	2538	74
			1.79	2397	65
CXC20 - 1250	1.79	2411	45		
	1.88	2295	37		
CXC20 - 1500	1.79	2430	45		
	1.88	2314	38		
S100C20 - 1250	1.58	2532	15		

Navistar/International MaxxForce 9					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
Maxx Force 9 300 Curve #: 12NUU Curve Date: 4-30-2013 860 lb-ft @ 1200 RPM	300/2200	CSC20 - 750	2.03	1923	106
			2.27	1720	83
		CSC20 - 1000	2.03	1929	106
			2.27	1725	87
		CSC20 - 1250	2.03	1934	60
			2.27	1730	29
		CSUC20 - 1250	2.03	2010 *	51
			2.27	1797	40
		CSUC20 - 1500	2.03	2020 *	36
		CMC20 - 750	2.27	1758	97
			2.46	1622	81
CMC20 - 1000	2.27	1769	84		
	2.46	1632	68		
CMC20 - 1250	2.27	1789	55		
	2.46	1650	37		
CMUC20 - 1250	2.03	1837	53		
	2.27	1643	27		
CMUC20 - 1500	2.03	1862	29		

<b>Navistar/International MaxxForce 9</b>					
<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
Maxx Force 9 300 Curve #: 12NUU Curve Date: 4-30-2013 860 lb-ft @ 1200 RPM	300/2200	CGC20 - 500	2.46	1870	136
		CGC20 - 750	2.46	1888	115
		CGC20 - 1000	2.46	2012 *	82
		CXC20 - 750	2.27	1885	87
			2.46	1740	78
		CXC20 - 1000	2.27	1890	80
			2.46	1744	66
		CXC20 - 1250	2.27	1901	61
			2.46	1754	43
		CXC20 - 1500	2.27	1916	60
2.46	1768		53		
S100C20 - 1250	2.03	1970	23		
	2.27	1762	13		
S100C20 - 1500	2.03	1970	13		

Navistar/International MaxxForce 9					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
Maxx Force 9 315 Curve #: 12NUV Curve Date: 4-30-2013 915 lb-ft @ 1200 RPM	315/2200	CSC20 - 750	2.03	1923	119
			2.27	1720	104
		CSC20 - 1000	2.03	1929	119
			2.27	1725	108
		CSC20 - 1250	2.03	1934	84
			2.27	1730	58
		CSUC20 - 1250	2.03	2010 *	63
			2.27	1797	62
		CSUC20 - 1500	2.03	2020 *	53
			2.27	1806	31
		CSUC20 - 1750	1.97	1980	24
		CMC20 - 750	2.27	1758	121
			2.46	1622	102
CMC20 - 1000	2.27	1769	107		
	2.46	1632	89		
CMC20 - 1250	2.27	1789	78		
	2.46	1650	55		
CMUC20 - 1250	2.03	1837	76		
	2.27	1643	49		
CMUC20 - 1500	2.03	1862	47		
	2.27	1665	26		

Navistar/International MaxxForce 9					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
Maxx Force 9 315 Curve #: 12NUV Curve Date: 4-30-2013 915 lb-ft @ 1200 RPM	315/2200	CGC20 - 500	2.46	1870	159
		CGC20 - 750	2.46	1888	141
		CGC20 - 1000	2.46	2012 *	95
		CXC20 - 750	2.27	1885	102
			2.46	1740	99
		CXC20 - 1000	2.27	1890	94
			2.46	1744	87
		CXC20 - 1250	2.27	1901	83
			2.46	1754	65
		CXC20 - 1500	2.27	1916	73
			2.46	1768	71
		S100C20 - 1250	2.03	1970	36
2.27	1762		33		
S100C20 - 1500	2.03	1970	26		
	2.27	1762	13		
S100C20 - 1750	2.03	1985	10 *		

Navistar/International MaxxForce 9					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
Maxx Force 9 330 Curve #: 12NUW Curve Date: 4-30-2013 950 lb-ft @ 1200 RPM	330/2200	CSC20 - 750	2.03	1923	128
			2.27	1720	105
		CSC20 - 1000	2.03	1929	132
			2.27	1725	108
		CSC20 - 1250	2.03	1934	84
			2.27	1730	58
		CSUC20 - 1250	2.03	2010 *	77
			2.27	1797	62
		CSUC20 - 1500	2.03	2020 *	62
			2.27	1806	31
		CSUC20 - 1750	1.97	1980	33
			2.03	1921	25
		CMC20 - 750	2.27	1758	121
			2.46	1622	102
CMC20 - 1000	2.27	1769	107		
	2.46	1632	89		
CMC20 - 1250	2.27	1789	81		
	2.46	1650	55		
CMUC20 - 1250	2.03	1837	78		
	2.27	1643	49		
CMUC20 - 1500	2.03	1862	55		
	2.27	1665	26		

Navistar/International MaxxForce 9					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
Maxx Force 9 330 Curve #: 12NUW Curve Date: 4-30-2013 950 lb-ft @ 1200 RPM	330/2200	CGC20 - 500	2.46	1870	159
		CGC20 - 750	2.46	1888	141
		CGC20 - 1000	2.46	2012 *	108
		CXC20 - 750	2.27	1885	114
			2.46	1740	103
		CXC20 - 1000	2.27	1890	105
			2.46	1744	87
		CXC20 - 1250	2.27	1901	85
			2.46	1754	65
		CXC20 - 1500	2.27	1916	86
			2.46	1768	77
		S100C20 - 1250	2.03	1970	49
2.27	1762		39		
S100C20 - 1500	2.03	1970	39		
	2.27	1762	25		
S100C20 - 1750	2.03	1985	23		

Navistar/International MaxxForce 10					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
Maxx Force 10 310 Curve #: 12NUX Curve Date: 4-30-2013 1050 lb-ft @ 1200 RPM	310/2200	CSC20 - 750	2.03	1923	115
			2.27	1720	116
		CSC20 - 1000	2.03	1929	115
			2.27	1725	116
		CSC20 - 1250	2.03	1934	92
			2.27	1730	83
		CSUC20 - 1250	2.03	2010 *	59
			2.27	1797	63
		CSUC20 - 1500	2.27	1806	52
			2.46	1667	39
		CSUC20 - 1750	1.97	1980	20
			2.03	1921	20
		CMC20 - 750	2.27	1758	125
			2.46	1622	126
CMC20 - 1000	2.27	1769	108		
	2.46	1632	109		
CMC20 - 1250	2.27	1789	78		
	2.46	1650	78		
CMUC20 - 1250	2.03	1837	72		
	2.27	1643	71		
CMUC20 - 1500	2.03	1862	46		
	2.27	1665	45		



**Navistar/International MaxxForce 10**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
Maxx Force 10 310 Curve #: 12NUX Curve Date: 4-30-2013 1050 lb-ft @ 1200 RPM	310/2200	CGC20 - 500	2.46	1870	163
		CGC20 - 750	2.46	1888	142
		CGC20 - 1000	2.46	2012 *	91
		CXC20 - 750	2.27	1885	98
			2.46	1740	99
		CXC20 - 1000	2.27	1890	90
			2.46	1744	91
		CXC20 - 1250	2.27	1901	79
			2.46	1754	79
		CXC20 - 1500	2.27	1916	69
			2.46	1768	69
		S100C20 - 1250	2.03	1970	32
2.27	1762		32		
S100C20 - 1500	2.03	1970	22		
	2.27	1762	22		

Navistar/International MaxxForce 10					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
Maxx Force 10 330 Curve #: 12NUY Curve Date: 4-30-2013 1150 lb-ft @ 1200 RPM	330/2200	CSC20 - 750	2.03	1923	132
			2.27	1720	133
		CSC20 - 1000	2.03	1929	132
			2.27	1725	133
		CSC20 - 1250	2.03	1934	109
			2.27	1730	106
		CSUC20 - 1250	2.03	2010 *	76
			2.27	1797	80
		CSUC20 - 1500	2.27	1806	69
			2.46	1667	64
		CSUC20 - 1750	1.97	1980	37
			2.03	1921	37
			2.27	1718	37
		CMC20 - 750	2.27	1758	142
2.46	1622		143		
CMC20 - 1000	2.27	1769	125		
	2.46	1632	126		
CMC20 - 1250	2.27	1789	95		
	2.46	1650	95		
CMUC20 - 1250	2.03	1837	89		
	2.27	1643	90		
CMUC20 - 1500	2.03	1862	63		
	2.27	1665	63		

**Navistar/International MaxxForce 10**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
Maxx Force 10 330 Curve #: 12NUY Curve Date: 4-30-2013 1150 lb-ft @ 1200 RPM	330/2200	CGC20 - 500	2.46	1870	180
		CGC20 - 750	2.46	1888	159
		CGC20 - 1000	2.46	2012 *	108
		CXC20 - 750	2.27	1885	115
			2.46	1740	116
		CXC20 - 1000	2.27	1890	107
			2.46	1744	108
		CXC20 - 1250	2.27	1901	96
			2.46	1754	96
		CXC20 - 1500	2.27	1916	86
			2.46	1768	86
		S100C20 - 1250	2.03	1970	49
2.27	1762		49		
S100C20 - 1500	2.03	1970	39		
	2.27	1762	39		
S100C20 - 1750	2.03	1985	23		
	2.27	1775	23		

Navistar/International MaxxForce 10					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
Maxx Force 10 350 Curve #: 12NUZ Curve Date: 4-30-2013 1150 lb-ft @ 1200 RPM	350/2200	CSC20 - 750	2.27	1720	150
			2.46	1587	130
		CSC20 - 1000	2.03	1929	149
			2.27	1725	150
		CSC20 - 1250	2.03	1934	126
			2.27	1730	106
			2.46	1596	91
		CSUC20 - 1250	2.03	2010 *	93
			2.27	1797	97
		CSUC20 - 1500	2.27	1806	84
			2.46	1667	64
		CSUC20 - 1750	1.97	1980	54
			2.03	1921	54
		CSUC20 - 2000	2.03	2020 *	17
			2.27	1806	17
		CMC20 - 750	2.27	1758	159
2.46	1622		151		
CMC20 - 1000	2.27	1769	142		
	2.46	1632	137		
CMC20 - 1250	2.27	1789	112		
	2.46	1650	112		
CMUC20 - 1250	2.03	1837	106		
	2.27	1643	96		
CMUC20 - 1500	2.03	1862	80		
	2.27	1665	74		
CMUC20 - 1750	1.97	1944	44		
	2.03	1887	44		

**Navistar/International MaxxForce 10**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
Maxx Force 10 350 Curve #: 12NUZ Curve Date: 4-30-2013 1150 lb-ft @ 1200 RPM	350/2200	CGC20 - 500	2.46	1870	197
		CGC20 - 750	2.46	1888	176
		CGC20 - 1000	2.46	2012 *	124
		CXC20 - 750	2.27	1885	132
			2.46	1740	133
		CXC20 - 1000	2.27	1890	124
			2.46	1744	125
		CXC20 - 1250	2.27	1901	113
			2.46	1754	113
		CXC20 - 1500	2.27	1916	103
			2.46	1768	103
		S100C20 - 1250	2.03	1970	66
			2.27	1762	66
S100C20 - 1500	2.03	1970	56		
	2.27	1762	56		
S100C20 - 1750	2.03	1985	40		
	2.27	1775	40		
S100C20 - 2000	2.03	2001 *	14		

**Navistar/International N13**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
N13 365 Curve #: 12BDD Curve Date: 3-26-13 1250 lb-ft @ 1000 RPM	365/2100	CSC20 - 750	2.27 2.46	1720 1587	163 150
		CSC20 - 1000	2.27 2.46	1725 1592	162 157
		CSC20 - 1250	2.27 2.46	1730 1596	126 106
		CSUC20 - 1250	2.27 2.46	1797 1659	113 109
		CSUC20 - 1500	2.27 2.46	1806 1667	94 83
		CSUC20 - 1750	2.27 2.46	1718 1585	70 49
		CSUC20 - 2000	2.27 2.46	1806 1667	31 24
		CMC20 - 750	2.27 2.46	1758 1622	173 169
		CMC20 - 1000	2.27 2.46	1769 1632	156 153
		CMC20 - 1250	2.27 2.46	1789 1650	125 120
		CMUC20 - 1250	2.27 2.46	1643 1516	115 100
		CMUC20 - 1500	2.27 2.46	1665 1537	88 77
		CMUC20 - 1750	2.27 2.46	1687 1557	55 46
		CMUC20 - 2000	2.27	1718	16

**Navistar/International N13**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
N13 365 Curve #: 12BDD Curve Date: 3-26-13 1250 lb-ft @ 1000 RPM	365/2100	CGC20 - 500	2.46	1870	204
		CGC20 - 750	2.46	1888	190
		CXC20 - 750	2.27	1885	137
			2.46	1740	147
		CXC20 - 1000	2.27	1890	128
			2.46	1744	138
		CXC20 - 1250	2.27	1901 *	117
			2.46	1754	127
		CXC20 - 1500	2.27	1916 *	105
			2.46	1768	117
		S100C20 - 1250	2.27	1762	80
			2.46	1626	76
S100C20 - 1500	2.27	1762	70		
	2.46	1626	66		
S100C20 - 1750	2.27	1775	55		
	2.46	1638	50		
S100C20 - 2000	2.27	1790	26		
	2.46	1652	20		

**Navistar/International N13**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
<p align="center">N13 370 Curve #: 12BCN Curve Date: 3-26-13</p> <p align="center">1350 lb-ft @ 1000 RPM</p>	<p align="center">370/2100</p>	CSC20 - 750	2.27 2.46	1720 1587	159 152
		CSC20 - 1000	2.27 2.46	1725 1592	158 153
		CSC20 - 1250	2.27 2.46	1730 1596	122 110
		CSUC20 - 1250	2.27 2.46	1797 1659	110 104
		CSUC20 - 1500	2.27 2.46	1806 1667	90 80
		CSUC20 - 1750	2.27 2.46	1718 1585	56 46
		CSUC20 - 2000	2.27 2.46	1806 1667	26 20
		CMC20 - 750	2.27 2.46	1758 1622	170 164
		CMC20 - 1000	2.27 2.46	1769 1632	154 147
		CMC20 - 1250	2.27 2.46	1789 1650	121 116
		CMUC20 - 1250	2.27 2.46	1643 1516	109 102
		CMUC20 - 1500	2.27 2.46	1665 1537	83 73
		CMUC20 - 1750	2.27 2.46	1687 1557	48 41
		CMUC20 - 2000	2.27	1718	13



**Navistar/International N13**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
N13 370 Curve #: 12BCN Curve Date: 3-26-13 1350 lb-ft @ 1000 RPM	370/2100	CGC20 - 500	2.46	1870	200
		CGC20 - 750	2.46	1888	187
		CXC20 - 750	2.27	1885	134
			2.46	1740	142
		CXC20 - 1000	2.27	1890	125
			2.46	1744	134
		CXC20 - 1250	2.27	1901 *	113
			2.46	1754	123
		CXC20 - 1500	2.27	1916 *	101
			2.46	1768	114
		S100C20 - 1250	2.27	1762	77
			2.46	1626	70
S100C20 - 1500	2.27	1762	67		
	2.46	1626	61		
S100C20 - 1750	2.27	1775	52		
	2.46	1638	45		
S100C20 - 2000	2.27	1790	23		
	2.46	1652	14		

**Navistar/International N13**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
N13 390 Curve #: 12BCP Curve Date: 3-26-13 1450 lb-ft @ 1000 RPM	390/2100	CSC20 - 750	2.27	1720	175
			2.46	1587	171
		CSC20 - 1000	2.27	1725	175
			2.46	1592	171
		CSC20 - 1250	2.27	1730	141
			2.46	1596	129
		CSUC20 - 1250	2.27	1797	127
			2.46	1659	121
		CSUC20 - 1500	2.27	1806	108
			2.46	1667	99
		CSUC20 - 1750	2.27	1718	74
			2.46	1585	65
		CSUC20 - 2000	2.27	1806	43
			2.46	1667	38
		CMC20 - 750	2.27	1758	187
			2.46	1622	182
		CMC20 - 1000	2.27	1769	171
			2.46	1632	165
		CMC20 - 1250	2.27	1789	138
			2.46	1650	133
CMUC20 - 1250	2.27	1643	128		
	2.46	1516	118		
CMUC20 - 1500	2.27	1665	101		
	2.46	1537	92		
CMUC20 - 1750	2.27	1687	66		
	2.46	1557	60		
CMUC20 - 2000	2.27	1718	30		
	2.46	1585	23		

**Navistar/International N13**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
N13 390 Curve #: 12BCP Curve Date: 3-26-13 1450 lb-ft @ 1000 RPM	390/2100	CGC20 - 500	2.46	1870	218
		CGC20 - 750	2.46	1888	204
		CXC20 - 750	2.27	1885	152
			2.46	1740	159
		CXC20 - 1000	2.27	1890	143
			2.46	1744	151
		CXC20 - 1250	2.27	1901 *	131
			2.46	1754	140
		CXC20 - 1500	2.27	1916 *	118
			2.46	1768	131
		S100C20 - 1250	2.27	1762	94
			2.46	1626	88
S100C20 - 1500	2.27	1762	84		
	2.46	1626	79		
S100C20 - 1750	2.27	1775	69		
	2.46	1638	63		
S100C20 - 2000	2.27	1790	40		
	2.46	1652	32		

**Navistar/International N13**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
N13 410 Curve #: 12BCR Curve Date: 3-26-13 1450 lb-ft @ 1000 RPM	410/2100	CSC20 - 750	2.27	1720	192
			2.46	1587	185
		CSC20 - 1000	2.27	1725	192
			2.46	1592	188
		CSC20 - 1250	2.27	1730	158
			2.46	1596	143
		CSUC20 - 1250	2.27	1797	144
			2.46	1659	138
		CSUC20 - 1500	2.27	1806	125
			2.46	1667	116
		CSUC20 - 1750	2.27	1718	91
			2.46	1585	82
		CSUC20 - 2000	2.27	1806	60
			2.46	1667	55
		CMC20 - 750	2.27	1758	204
			2.46	1622	199
		CMC20 - 1000	2.27	1769	188
			2.46	1632	182
		CMC20 - 1250	2.27	1789	155
			2.46	1650	150
CMUC20 - 1250	2.27	1643	145		
	2.46	1516	135		
CMUC20 - 1500	2.27	1665	118		
	2.46	1537	109		
CMUC20 - 1750	2.27	1687	84		
	2.46	1557	77		
CMUC20 - 2000	2.27	1718	47		
	2.46	1585	40		

**Navistar/International N13**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
N13 410 Curve #: 12BCR Curve Date: 3-26-13 1450 lb-ft @ 1000 RPM	410/2100	CGC20 - 500	2.46	1870	233
		CGC20 - 750	2.46	1888	221
		CXC20 - 750	2.27	1885	168
			2.46	1740	176
		CXC20 - 1000	2.27	1890	159
			2.46	1744	168
		CXC20 - 1250	2.27	1901 *	147
			2.46	1754	157
		CXC20 - 1500	2.27	1916 *	135
			2.46	1768	148
		S100C20 - 1250	2.27	1762	111
			2.46	1626	105
S100C20 - 1500	2.27	1762	101		
	2.46	1626	94		
S100C20 - 1750	2.27	1775	86		
	2.46	1638	80		
S100C20 - 2000	2.27	1790	57		
	2.46	1652	49		

**Navistar/International N13**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
N13 430 Curve #: 12BCS Curve Date: 3-26-13 1550 lb-ft @ 1000 RPM	430/2100	CSC20 - 750	2.27	1720	209
			2.46	1587	203
		CSC20 - 1000	2.27	1725	209
			2.46	1592	204
		CSC20 - 1250	2.27	1730	174
			2.46	1596	159
		CSUC20 - 1250	2.27	1797	161
			2.46	1659	154
		CSUC20 - 1500	2.27	1806	141
			2.46	1667	132
		CSUC20 - 1750	2.27	1718	107
			2.46	1585	98
		CSUC20 - 2000	2.27	1806	77
			2.46	1667	71
		CSUC20 - 2250	2.27	1778	15
		CMC20 - 750	2.27	1758	221
			2.46	1622	215
		CMC20 - 1000	2.27	1769	205
			2.46	1632	198
		CMC20 - 1250	2.27	1789	172
2.46	1650		167		
CMUC20 - 1250	2.27	1643	161		
	2.46	1516	151		
CMUC20 - 1500	2.27	1665	134		
	2.46	1537	125		
CMUC20 - 1750	2.27	1687	100		
	2.46	1557	93		
CMUC20 - 2000	2.27	1718	64		
	2.46	1585	56		

**Navistar/International N13**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
N13 430 Curve #: 12BCS Curve Date: 3-26-13 1550 lb-ft @ 1000 RPM	430/2100	CGC20 - 500	2.46	1870	249
		CGC20 - 750	2.46	1888	236
		CXC20 - 750	2.27	1885	184
			2.46	1740	193
		CXC20 - 1000	2.27	1890	174
			2.46	1744	185
		CXC20 - 1250	2.27	1901 *	162
			2.46	1754	174
		CXC20 - 1500	2.27	1916 *	149
			2.46	1768	165
		S100C20 - 1250	2.27	1762	128
			2.46	1626	121
S100C20 - 1500	2.27	1762	118		
	2.46	1626	112		
S100C20 - 1750	2.27	1775	103		
	2.46	1638	96		
S100C20 - 2000	2.27	1790	74		
	2.46	1652	66		

**Navistar/International N13**

<b>Engine</b>	<b>HP/Governed RPM</b>	<b>Pump Model</b>	<b>Ratio</b>	<b>Max Engine RPM</b>	<b>Surplus HP</b>
N13 475 Curve #: 12BCT Curve Date: 3-26-13 1700 lb-ft @ 1000 RPM	475/2100	CSC20 - 750	2.27	1720	248
			2.46	1587	234
		CSC20 - 1000	2.27	1725	248
			2.46	1592	240
		CSC20 - 1250	2.27	1730	212
			2.46	1596	190
		CSUC20 - 1250	2.27	1797	199
			2.46	1659	195
		CSUC20 - 1500	2.27	1806	183
			2.46	1667	168
		CSUC20 - 1750	2.27	1718	150
			2.46	1585	134
		CSUC20 - 2000	2.27	1806	116
			2.46	1667	113
		CSUC20 - 2250	2.27	1778	53
			2.46	1640	49
		CMC20 - 750	2.27	1758	259
			2.46	1622	256
		CMC20 - 1000	2.27	1769	243
			2.46	1632	240
CMC20 - 1250	2.27	1789	210		
	2.46	1650	209		
CMUC20 - 1250	2.27	1643	203		
	2.46	1516	185		
CMUC20 - 1500	2.27	1665	176		
	2.46	1537	162		
CMUC20 - 1750	2.27	1687	141		
	2.46	1557	134		
CMUC20 - 2000	2.27	1718	102		
	2.46	1585	99		
CMUC20 - 2250	2.27	1789	29		
	2.46	1650	29		



Navistar/International N13					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
N13 475 Curve #: 12BCT Curve Date: 3-26-13 1700 lb-ft @ 1000 RPM	475/2100	CGC20 - 500	2.46	1870	286
		CGC20 - 750	2.46	1888	272
		CXC20 - 750	2.27	1885	220
			2.46	1740	231
		CXC20 - 1000	2.27	1890	311
			2.46	1744	223
		CXC20 - 1250	2.27	1901 *	199
			2.46	1754	212
		CXC20 - 1500	2.27	1916 *	186
			2.46	1768	203
		S100C20 - 1250	2.27	1762	166
			2.46	1626	163
S100C20 - 1500	2.27	1762	156		
	2.46	1626	153		
S100C20 - 1750	2.27	1775	140		
	2.46	1638	138		
S100C20 - 2000	2.27	1790	112		
	2.46	1652	108		

Engine variation and estimated parasitic losses are based on a 12% deduction for Cummins. A 15% deduction for Detroit and International. Estimated parasitic losses represent deductions for average alternator, power steering, fan, and exhaust back-pressure losses. Computations for engines up to and including 1250 lb-ft are based on using an Allison 3000EVS series truck transmission; computations for engines above 1250 lb-ft are based on using an Allison 4000EVS series truck transmission.

**\*Note: According to computations, if there is a surplus horsepower of less than 12 and/or the required engine RPM is within 200 of the engine governed RPM. These pump/engine/ratio combinations may be marginal; however, they may be suitable under favorable conditions.**