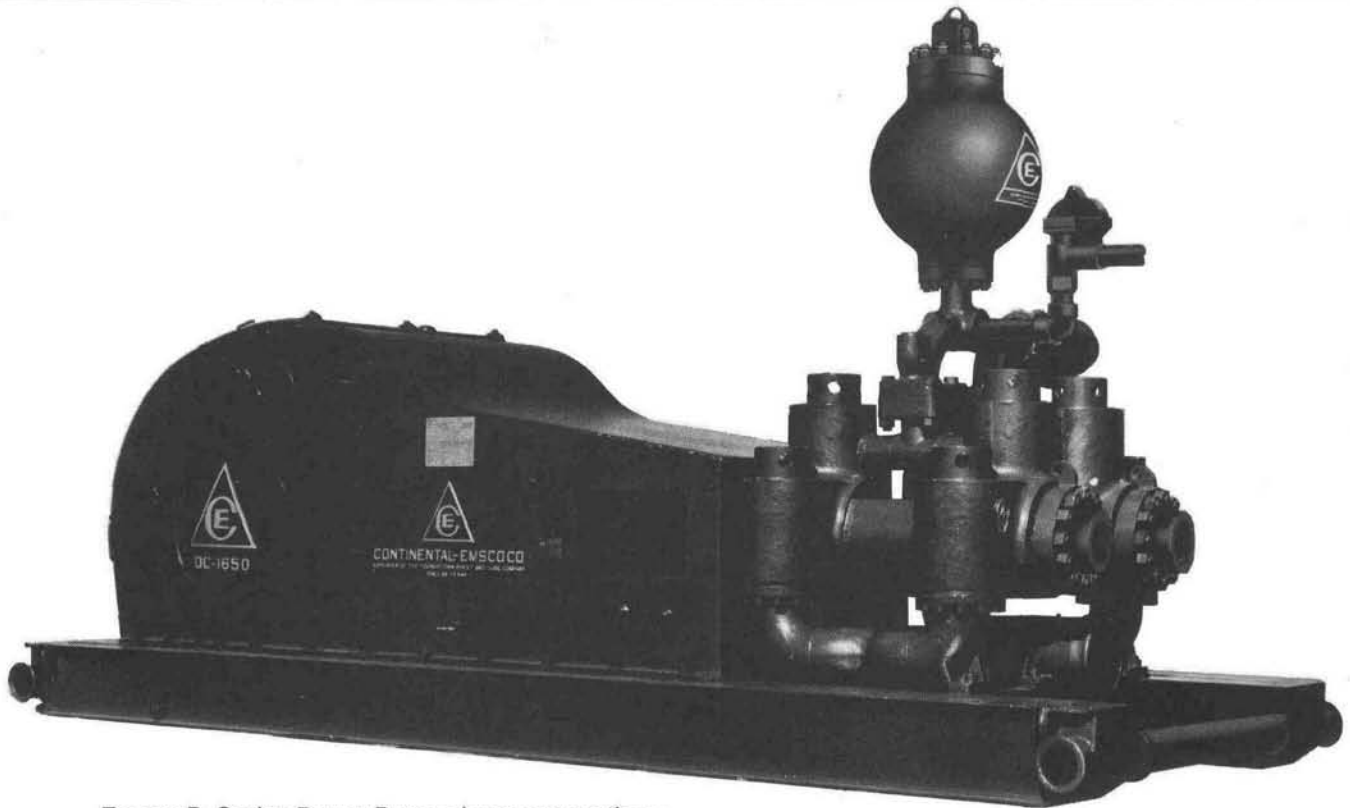


D-Series Duplex Power Pumps



Emsco D-Series Power Pumps have proven themselves on drilling locations the world over... from small mobile rigs to the big rigs for deepest drilling.

Fabriform construction

Fabriform construction of the power end, utilizing steel plates and shapes, provides a strong, rigid and lightweight frame.

Herringbone gears

Wide faced, forged steel, heat-treated herringbone gears provide quiet and efficient speed reduction.

Lubrication

All running parts are flood lubricated by a positive splash-lubrication system. In the larger pumps, the splash system is augmented by a plunger pump.

"Exposed" liners

With Emsco's exclusive "exposed" liner design,

leaking liner packing is immediately detectable so washouts can be reduced.

Metal lock liner system and threaded cylinder heads

Standard on DC-1000, DC-1350 and DC-1650.

Crossheads and guides

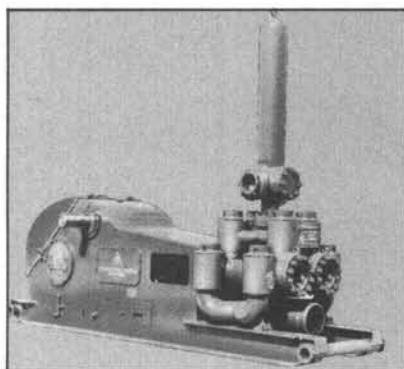
Crossheads run on renewable guides. Alloy steel crosshead pins are mounted in heavy-duty double-row needle roller bearings.

Eccentric assembly

The eccentric is a one-piece steel hub. Eccentrics are equipped with large diameter roller bearings which permit an extremely narrow compact power end design. Eccentric straps are made of one-piece steel castings.

SPECIFICATIONS

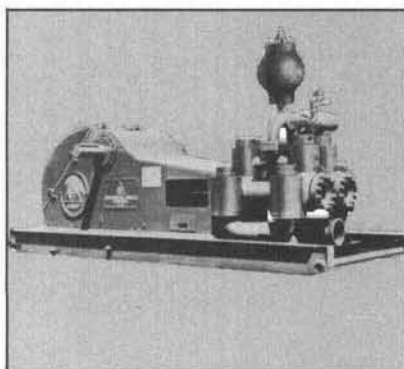
		DC-1650		DC-1350		DC-1000		DC-700		DB-550		D-375		D-225	
Nominal Horsepower Rating	US Met	1650 @60 rpm	1673 @60 rpm	1350 @60 rpm	1369 @60 rpm	1000 @60 rpm	1014 @60 rpm	700 @65 rpm	710 @65 rpm	550 @65 rpm	558 @65 rpm	375 @70 rpm	380 @70 rpm	225 @70 rpm	228 @70 rpm
Size, Maximum Liner by Stroke	in mm	7½ x 18	191 x 457	7½ x 18	191 x 457	7½ x 18	191 x 457	7½ x 16	191 x 406	7½ x 16	191 x 406	7½ x 14	191 x 356	7¼ x 12	184 x 305
Gear, Herringbone, Ratio		4.79:1	4.79:1	4.79:1	4.79:1	4.76:1	4.76:1	5.05:1	5.05:1	5.04:1	5.04:1	5.04:1	5.04:1	5.43:1	5.43:1
Pinion Shaft Dia	in mm	8½	216	8½	216	Tapered	Tapered	6¼	171	6	152	5	127	4¼	108
Extension Length	in mm	14¾	365	14¾	365	8¾	219	14¼	362	15½	394	12½	308	9¾	251
Keyway	in mm	2 x ¾	51 x 19	2 x ¾	51 x 19	1½ x ¾	38 x 19	1½ x ¾	38 x 19	1½ x ¾	38 x 19	1¼ x ¾	32 x 16	1 x ½	25 x 13
Suction Manifold Male Thd.	in mm	12	324 Approx.	12	324 Approx.	12	324 Approx.	10	273 Approx.	10	273 Approx.	10	273 Approx.	8" Fem. Thd.	219 Approx.
Discharge Manifold	in mm	5" Flgd.		5" Flgd.		5" Flgd.		4" Fem. Thd.		4" Fem. Thd.		4" Fem. Thd.		3" Fem. Thd.	
Valve Pot Size		API-8	API-8	API-8	API-8	API-8	API-8	API-8	API-8	API-8	API-8	API-7	API-7	API-6	API-6
Overall Length	in mm	204"	6198	204"	6198	202"	6147	185"	5613	168"	5080	148"	4470	126"	3810
Overall Width—Including Shaft Extension	in mm	80"	2438	80"	2438	80"	2438	72½"	2197	68¼"	2038	54¼"	1641	41¾"	1254
Overall Height—Less Pulsation Dampener	in mm	69¾"	2080	69¾"	2080	69¾"	2080	58¼"	1734	56"	1676	49½"	1461	40¼"	1226
Skid Width	in mm	80"	2438	80"	2438	80"	2438	72½"	2197	60"	1829	36¾"	1076	31½"	956
Approximate Weight	lb kg	61,500	27,896	60,928	27,636	50,500	22,907	37,265	16,903	29,833	13,532	18,872	8560	11,836	5369



D-225 PERFORMANCE DATA
 Maximum liner size 7¼" – 184 mm
 Stroke 12" – 305 mm Diameter piston rod 1⅞" – 48 mm

STROKES PER MINUTE	HORSE-POWER RATING	METRIC HORSE-POWER RATING	LINER SIZE AND PRESSURE RATING									
			7" 607 psi	178 mm 43 kg/cm ²	6½" 708 psi	165 mm 50 kg/cm ²	6" 838 psi	152 mm 59 kg/cm ²	5½" 1007 psi	140 mm 71 kg/cm ²	4½" 1551 psi	114 mm 109 kg/cm ²
			VOLUME—GALLONS/LITERS PER MINUTE									
80	257	261	616	2332	528	1998	447	1692	372	1408	241	912
70*	225*	228	539	2040	462	1749	391	1480	325	1230	211	799
60	193	196	462	1749	396	1499	335	1268	279	1056	181	685
Gallons/Liters per revolution			7.70	29.16	6.60	24.99	5.58	21.13	4.64	17.59	3.01	11.41

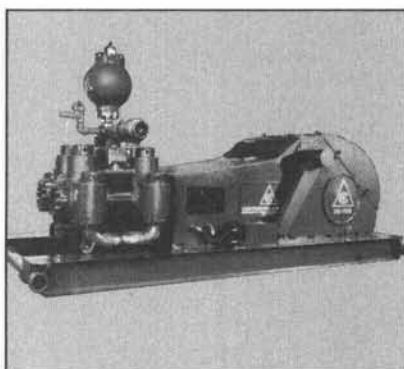
Based on 100% volumetric efficiency and 85% mechanical efficiency.
 Typical liners shown—other data available upon request.
 *Recommended speed and input horsepower for continuous service.



D-375 PERFORMANCE DATA
 Maximum liner size 7½" – 191 mm
 Stroke 14" – 356 mm Diameter piston rod 2" – 51 mm

STROKES PER MINUTE	HORSE-POWER RATING	METRIC HORSE-POWER RATING	LINER SIZE AND PRESSURE RATING							
			7½" 755 psi	191 mm 53 kg/cm ²	7" 871 psi	178 mm 81 kg/cm ²	6" 1204 psi	152 mm 85 kg/cm ²	5" 1777 psi	127 mm 125 kg/cm ²
			VOLUME—GALLONS/LITERS PER MINUTE							
80	429	435	826	3126	716	2710	518	1961	350	1325
70*	375*	380	723	2737	626	2369	458	1734	307	1162
60	321	325	620	2347	537	2033	388	1469	263	995
Gallons/Liters per revolution			10.33	39.09	8.95	33.88	6.47	24.50	4.38	16.57

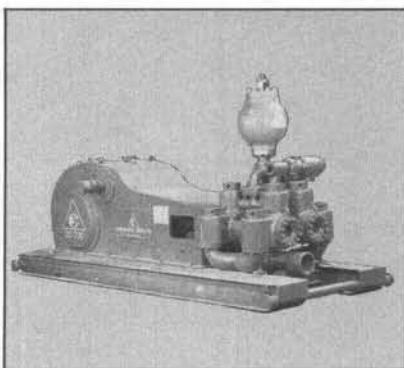
Based on 100% volumetric efficiency and 85% mechanical efficiency.
 Typical liners shown—other data available upon request.
 *Recommended speed and input horsepower for continuous service.



DB-550 PERFORMANCE DATA
 Maximum liner size 7½" – 191 mm
 Stroke 16" – 406 mm Diameter piston rod 2½" – 64 mm

STROKES PER MINUTE	HORSE-POWER RATING	METRIC HORSE-POWER RATING	LINER SIZE AND PRESSURE RATING							
			7½" 1067 psi	191 mm 75 kg/cm ²	7" 1235 psi	178 mm 87 kg/cm ²	6" 1727 psi	152 mm 121 kg/cm ²	5" 2590 psi	127 mm 182 kg/cm ²
			VOLUME—GALLONS/LITERS PER MINUTE							
70	592	600	809	3062	699	2646	500	1893	333	1260
65*	550*	558	751	2843	649	2456	464	1756	309	1170
60	508	515	694	2627	599	2267	428	1620	286	1083
Gallons/Liters per revolution			11.56	43.75	9.98	37.77	7.14	27.02	4.76	18.02

Based on 100% volumetric efficiency and 85% mechanical efficiency.
 Typical liners shown—other data available upon request.
 *Recommended speed and input horsepower for continuous service.



DC-700 PERFORMANCE DATA
 Maximum liner size 7½" – 191 mm
 Stroke 16" – 406 mm Diameter piston rod 2¾" – 70 mm

STROKES PER MINUTE	HORSE-POWER RATING	METRIC HORSE-POWER RATING	LINER SIZE AND PRESSURE RATING							
			7½" 1374 psi	191 mm 97 kg/cm ²	6½" 1875 psi	165 mm 132 kg/cm ²	6" 2236 psi	152 mm 157 kg/cm ²	5½" 2727 psi	140 mm 192 kg/cm ²
			VOLUME—GALLONS/LITERS PER MINUTE							
70	754	765	799	3024	586	2218	491	1858	403	1525
65*	700*	710	742	2808	544	2059	456	1726	374	1416
60	646	655	685	2593	502	1900	421	1593	346	1310
Gallons/Liters per revolution			11.42	43.22	8.37	31.68	7.02	26.57	5.76	21.80

Based on 100% volumetric efficiency and 85% mechanical efficiency.
 Typical liners shown—other data available upon request.
 *Recommended speed and input horsepower for continuous service.