

# Pump Range



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# Dredging Pump

## Pumps range introduction

Range HK High Efficiency (HE) dredge pumps stand for quality and reliability. Because of our own design, HK International can offer the ideal dredge pump for every need and situation.

Our range of dredge pumps is based on four dredge pump types: low pressure, medium pressure, high pressure, and cutter special dredger.

The minimal amount of wear parts in these dredge pumps results in reduced wear, longer life, and lower maintenance which translates into less downtime and significant cost savings.

To accomplish these goals only very high quality, wear-resistant materials with a hardness above 60HRC are used for the wear parts.

All dredging pumps are purposely developed for the dredging industry and tailored to the client's specific needs and requirements.

## Instructions

The charts showed in this document show the relation between flow and manometric head for HK pumps in the working range for each pump. To choose a suitable pump, the optimum duty point with water should be located in the dark blue area of each chart. Depending on the situation a bigger or smaller pump can be selected.

# HE HK Low-Pressure Pumps

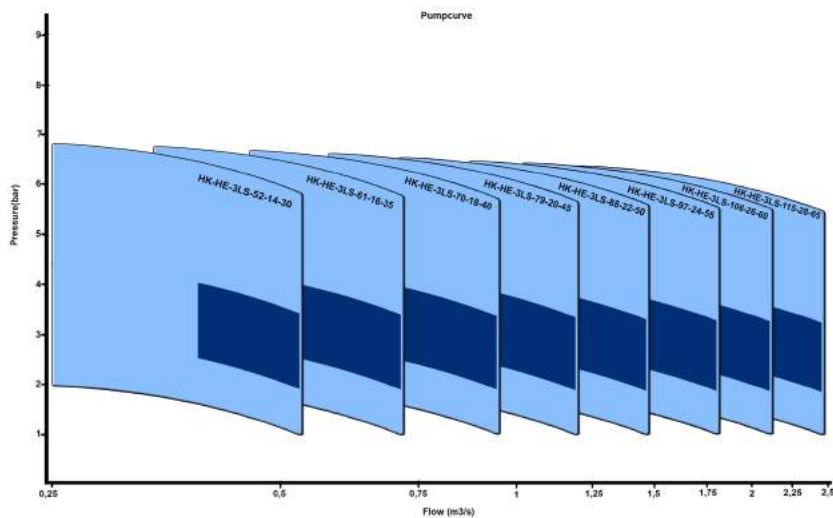
HE HK Low-pressure pumps can be used:

Inboard pump in TSHD when only loading dredging is required.

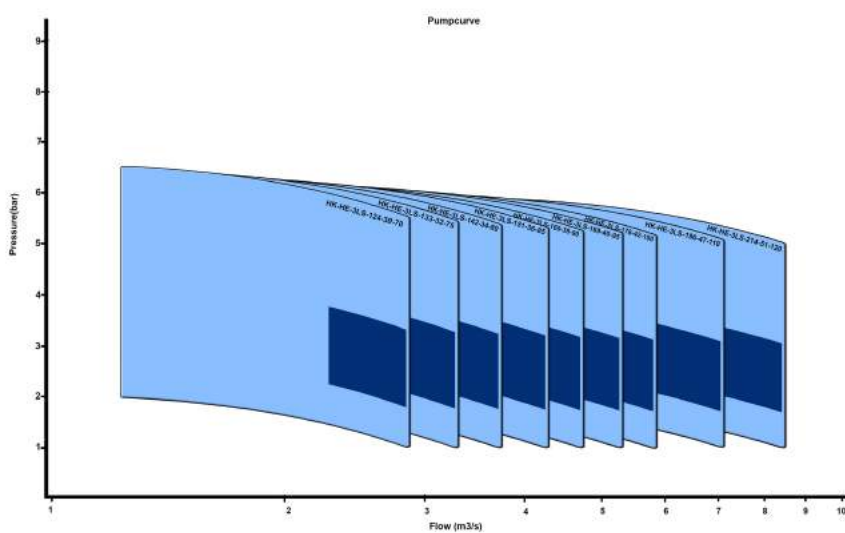
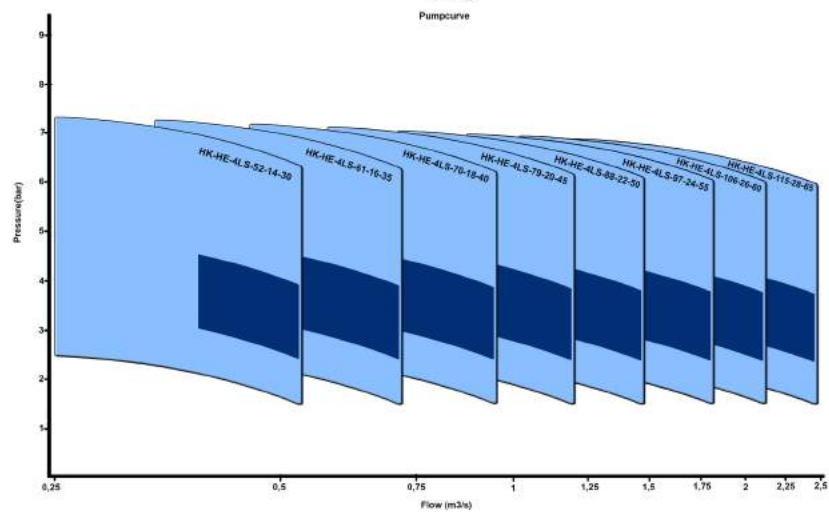
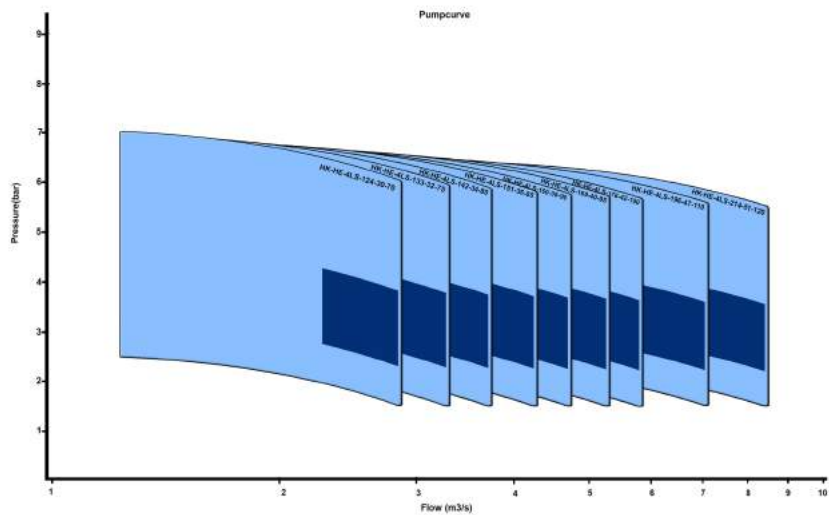
- CSD submerged pump in series with an inboard pump for big depths.
- CSD submerged pump in combination with one or two inboard pumps for long discharge distances.

This kind of pump can be delivered with 3 blades, to keep the ball passage as large as possible, or 4 blades to range more pressure.

Pump Type	Dimensions												Weight Pump kg	Bearing block Type
	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J m	K mm	L mm		
HK-HE 3LS 52 14 30	520	140	300	245	403	478	984	556	535	110	400	850	1750	BD160
HK-HE 3LS 61 16 35	610	160	350	285	456	523	1119	571	625	120	430	900	2050	BD160
HK-HE 3LS 70 18 40	700	180	400	315	546	616	1394	632	710	130	460	950	2300	BD160
HK-HE 3LS 79 20 45	790	200	450	355	607	684	1547	658	780	140	490	1050	2650	BD160
HK-HE 3LS 88 22 50	880	220	500	385	695	765	1844	689	835	150	530	1195	3240	BD200
HK-HE 3LS 97 24 55	970	240	550	425	740	847	1936	725	923	165	570	1250	3800	BD200
HK-HE 3LS 106 26 60	1060	260	600	455	806	933	2016	766	1030	175	620	1310	5500	BD200
HK-HE 3LS 115 28 65	1150	280	650	495	872	1022	2175	812	1115	185	713	1365	6250	BD240
HK-HE 3LS 124 30 70	1240	300	700	555	963	1142	2336	919	1213	195	724	1827	7450	BD240
HK-HE 3LS 133 32 75	1330	320	750	575	1030	1236	2499	978	1308	210	734	1850	8800	BD280
HK-HE 3LS 142 34 80	1420	340	800	610	1096	1250	2662	1043	1397	220	743	1875	9750	BD280
HK-HE 3LS 151 36 85	1510	360	850	645	1161	1310	2827	1113	1475	230	753	1910	11500	BD320
HK-HE 3LS 160 38 90	1600	380	900	675	1251	1390	3100	1205	1535	240	761	1958	12200	BD320
HK-HE 3LS 169 40 95	1690	400	950	705	1321	1435	3275	1265	1604	255	770	1990	15800	BD360
HK-HE 3LS 178 42 100	1780	420	1000	755	1390	1540	3450	1325	1688	265	779	2100	19100	BD360
HK-HE 3LS 196 47 110	1960	470	1100	825	1529	1685	3799	1444	1859	295	796	2200	25800	BD400
HK-HE 3LS 214 51 120	2140	510	1200	900	1667	1830	4149	1562	2035	315	813	2392	32500	BD460



# HE HK Low-Pressure Pumps



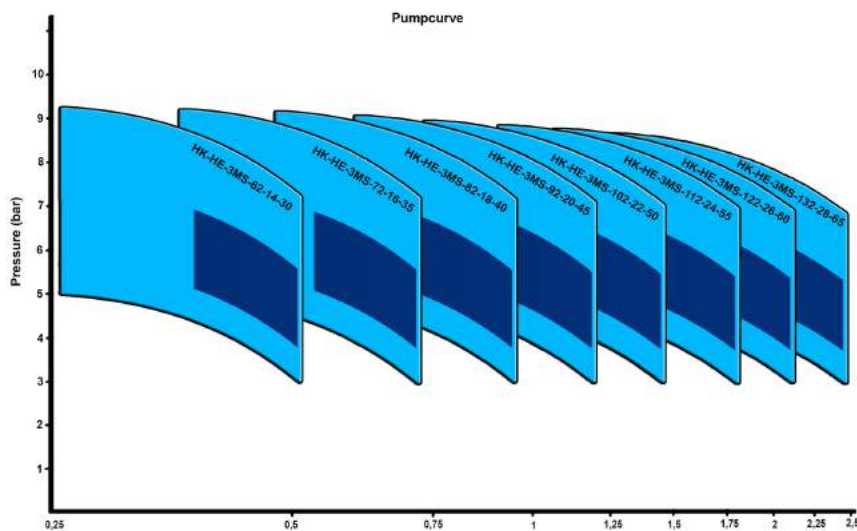
# HE HK Medium-Pressure Pumps

HE HK Medium-pressure pumps can be used:

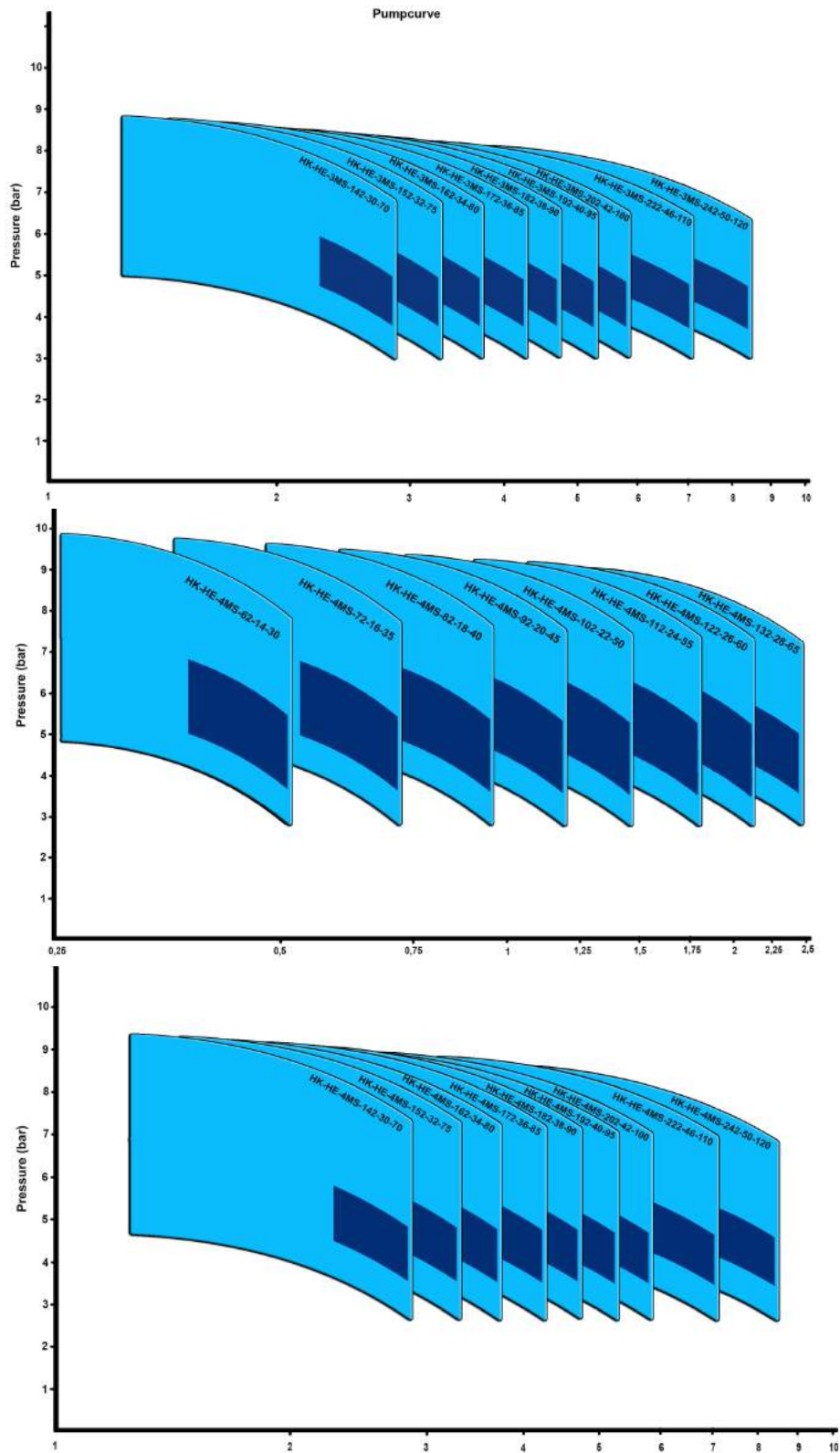
- TSHD inboard pump for trailing, pumping ashore, or rainbowing due to lightness.
- Submerged pump or inboard pump for a small Cutter Suction Dredger.
- As submerged or inboard in combination with high pressure pumps in CSD when long discharge distances required. A combination of these pumps is the most suitable solution for pumping sand.

This kind of pump can be delivered with 3 blades, to keep the ball passage as large as possible, or 4 blades to range more pressure.

Pump Type	Dimensions												Weight Pump kg	Bearing block Type
	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	L mm		
HK-HE 3MS 62 14 30	620	140	300	280	445	500	1060	573	599	110	400	850	2000	BD160
HK-HE 3MS 72 16 35	720	160	350	320	504	535	1202	596	649	120	430	900	2300	BD160
HK-HE 3MS 82 18 40	820	180	400	370	566	620	1346	624	719	130	460	950	2730	BD160
HK-HE 3MS 92 20 45	920	200	450	410	636	700	1506	665	810	140	490	1050	3300	BD200
HK-HE 3MS 102 22 50	1020	220	500	450	705	785	1662	709	908	155	530	1195	4250	BD200
HK-HE 3MS 112 24 55	1120	240	550	510	771	935	1813	755	1009	165	570	1250	5050	BD240
HK-HE 3MS 122 26 60	1220	260	600	540	837	940	1965	808	1111	175	620	1310	6450	BD240
HK-HE 3MS 132 28 65	1320	280	650	565	904	990	2119	866	1210	185	713	1365	7650	BD280
HK-HE 3MS 142 30 70	1420	300	700	610	1002	1060	2352	962	1346	200	724	1827	9150	BD280
HK-HE 3MS 152 32 75	1520	320	750	670	1067	1240	2514	1034	1429	210	734	1850	10850	BD320
HK-HE 3MS 162 34 80	1620	340	800	710	1157	1210	2662	1143	1420	225	743	1875	12950	BD320
HK-HE 3MS 172 36 85	1720	360	850	720	1228	1310	2827	1205	1504	235	753	1910	16000	BD360
HK-HE 3MS 182 38 90	1820	380	900	740	1299	1350	2991	1268	1590	245	761	1958	17250	BD360
HK-HE 3MS 192 40 95	1920	400	950	780	1369	1340	3156	1330	1678	255	770	1990	20525	BD400
HK-HE 3MS 202 42 100	2020	420	1000	850	1440	1480	3321	1391	1767	270	779	2100	22750	BD400
HK-HE 3MS 222 46 110	2220	460	1100	950	1580	1630	3650	1515	1950	290	796	2200	30100	BD460
HK-HE 3MS 242 50 120	2420	500	1200	1005	1740	1760	3982	1640	2136	310	813	2392	37850	BD460



# HE HK Medium-Pressure Pumps



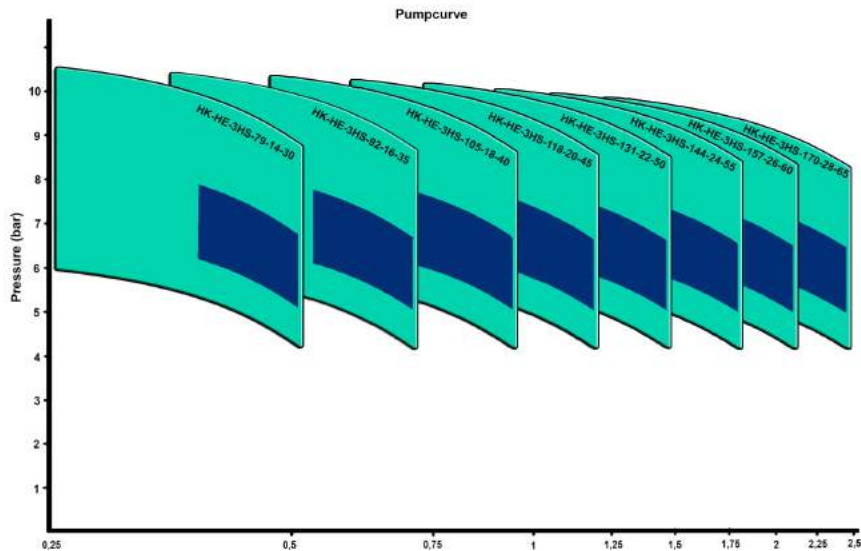
# HE HK High-Pressure Pumps

HE HK High-pressure pumps can be used:

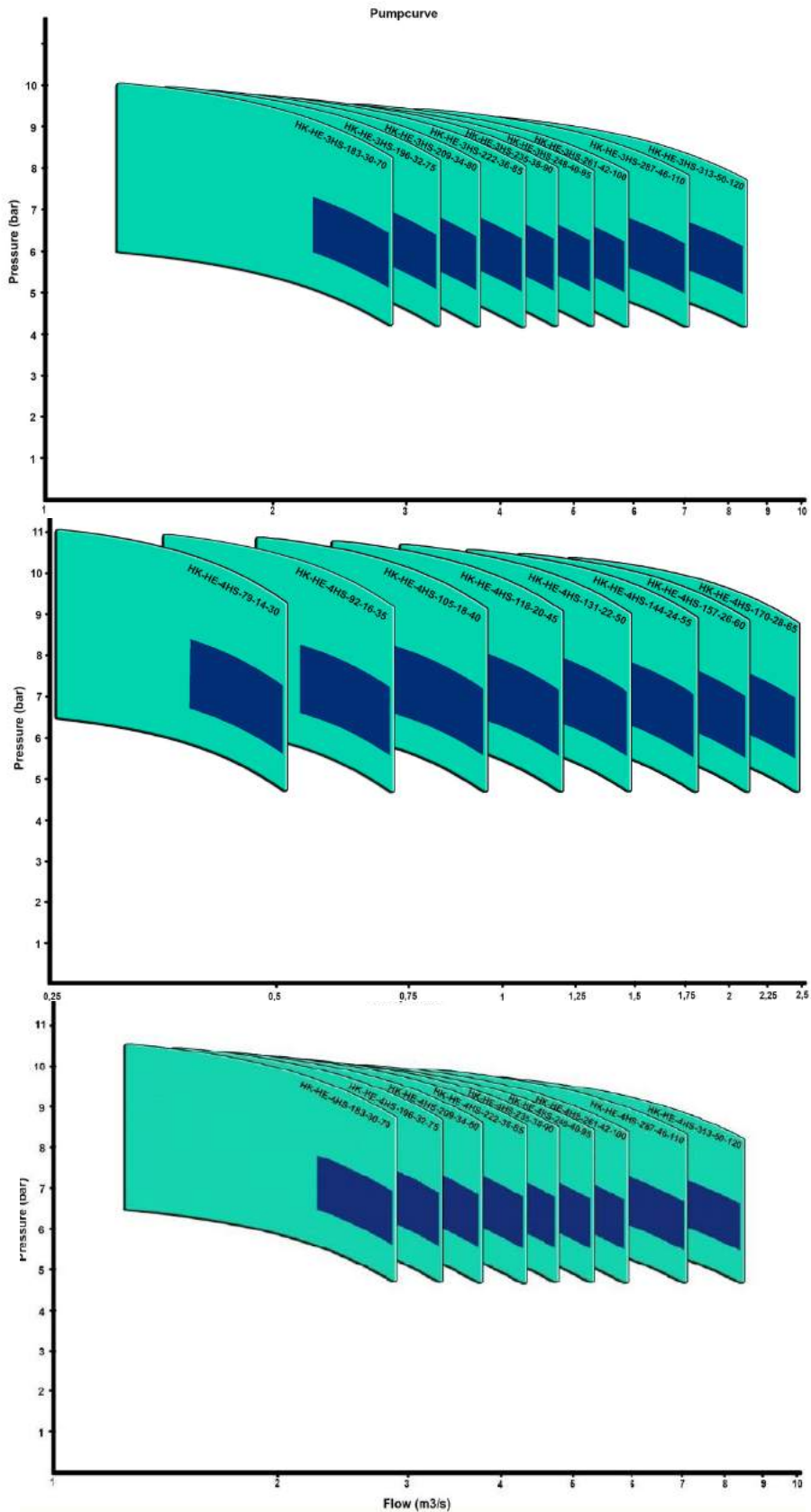
- TSHD inboard pump discharging in combination with a submerged pump for loading.
- As submerged or inboard in combination with high pressure pumps in CSD when long discharge distances required. A combination of these pumps is the most suitable solution for pumping sand.

This kind of pump can be delivered with 3 blades, to keep the ball passage as large as possible, or 4 blades to range more pressure.

Pump Type	Dimensions												Weight Pump kg	Bearing block Type
	A	B	C	D	E	F	G	H	I	J	K	L		
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		
HK-HE 3HS 79 14 30	790	140	300	220	515	580	1225	515	610	110	400	850	2550	BD160
HK-HE 3HS 92 16 35	920	160	350	250	592	670	1402	595	700	120	430	900	3200	BD200
HK-HE 3HS 105 18 40	1050	180	400	290	671	750	1582	665	790	130	460	950	4150	BD200
HK-HE 3HS 118 20 45	1180	200	450	320	752	825	1765	745	880	140	490	1050	5200	BD240
HK-HE 3HS 131 22 50	1310	220	500	365	831	930	1949	805	980	155	530	1195	7000	BD280
HK-HE 3HS 144 24 55	1440	240	550	395	910	1020	2137	895	1070	165	570	1250	9300	BD320
HK-HE 3HS 157 26 60	1570	260	600	430	985	1110	2326	965	1170	175	620	1310	11650	BD320
HK-HE 3HS 170 28 65	1700	280	650	465	1088	1125	2504	1105	1255	185	713	1365	13950	BD360
HK-HE 3HS 183 30 70	1830	300	700	510	1170	1196	2696	1142	1350	200	724	1827	16700	BD360
HK-HE 3HS 196 32 75	1960	320	750	535	1252	1272	2887	1255	1440	210	734	1850	19400	BD400
HK-HE 3HS 209 34 80	2090	340	800	575	1334	1351	3079	1325	1540	225	743	1875	22500	BD400
HK-HE 3HS 222 36 85	2220	360	850	610	1446	1463	3340	1390	1630	235	753	1910	25850	BD460
HK-HE 3HS 235 38 90	2350	380	900	670	1529	1549	3537	1460	1730	245	761	1958	28800	BD460
HK-HE 3HS 248 40 95	2480	400	950	710	1612	1638	3735	1535	1790	260	770	1990	33500	BD500
HK-HE 3HS 261 42 100	2610	420	1000	750	1694	1730	3935	1610	1940	270	779	2100	38000	BD500
HK-HE 3HS 287 46 110	2870	460	1100	810	1859	1922	4338	1765	2100	290	796	2200	44500	BD560
HK-HE 3HS 313 50 120	3130	500	1200	865	2022	2124	4749	1925	2280	310	813	2392	53500	BD560



# HE HK High-Pressure Pumps

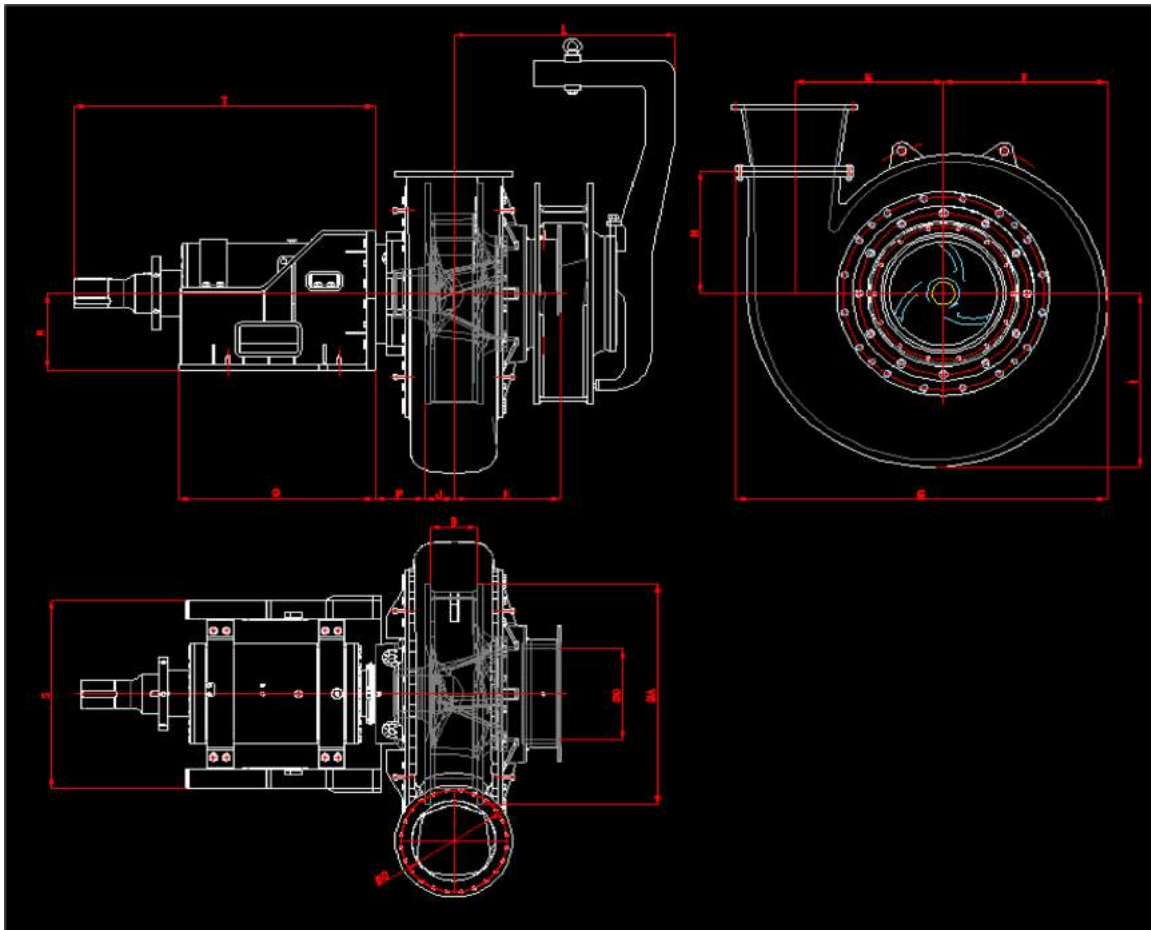




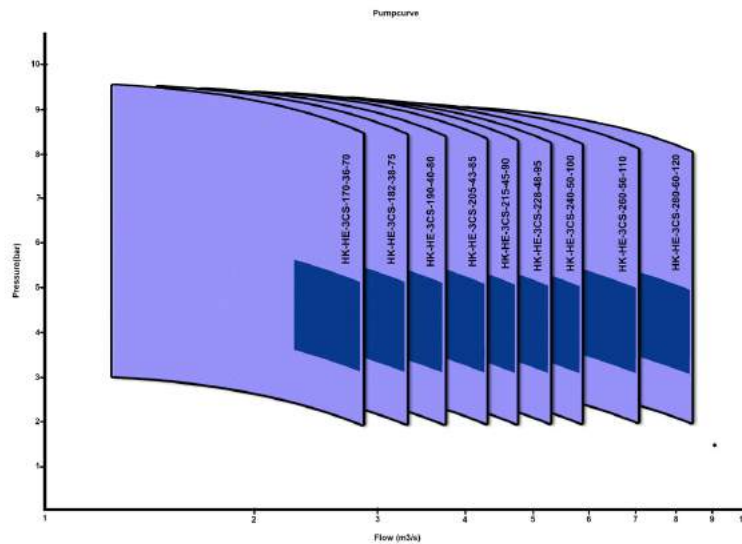
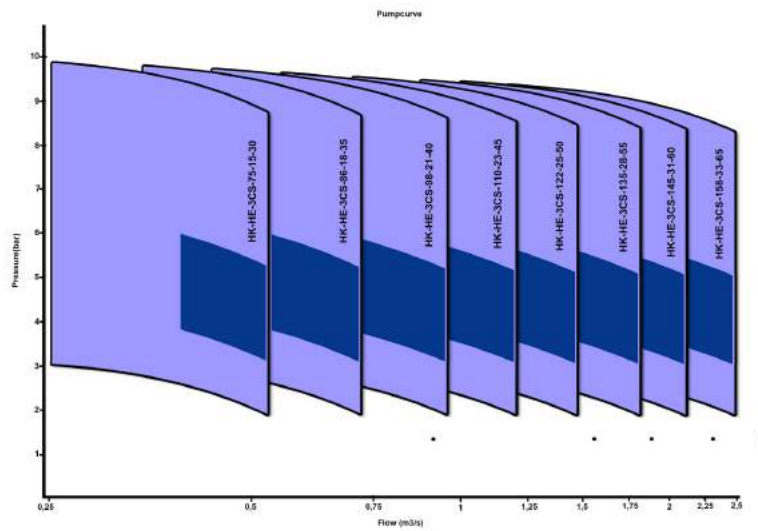
# HE HK Cutter Special Pumps

HE HK Cutter Special Pumps are designed to allow an extra-large ball passage for CSD. These pumps are especially suitable for pump rock and stone. Normally these pumps are delivered with 3 blades to keep the ball passage as large as possible. However, it is common to delivery 4 blades impeller for long discharge distances with sand material.

Pump Type	Dimensions													Weight Pump kg	Bearing block Type
	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	L mm			
HK-HE 3CS 75 15 30	750	150	300	300	517	568	1230	600	640	113	325	850	2650	BD160	
HK-HE 3CS 86 18 35	860	180	350	320	585	645	1386	621	736	132	345	900	2850	BD160	
HK-HE 3CS 98 21 40	980	210	400	360	663	726	1578	690	810	148	360	950	3650	BD200	
HK-HE 3CS 110 23 45	1100	230	450	393	737	826	1721	720	928	158	369	1050	4400	BD200	
HK-HE 3CS 122 25 50	1220	250	500	430	818	887	1928	790	990	168	380	1195	5500	BD240	
HK-HE 3CS 135 28 55	1350	280	550	486	897	975	2073	850	1151	184	399	1250	6500	BD240	
HK-HE 3CS 145 31 60	1450	310	600	540	967	1058	2298	940	1186	203	430	1310	7800	BD240	
HK-HE 3CS 158 33 65	1580	330	650	569	1042	1157	2448	1014	1250	217	455	1365	9900	BD280	
HK-HE 3CS 170 36 70	1700	360	700	620	1145	1175	2635	1120	1390	233	753	1827	14250	BD280	
HK-HE 3CS 182 38 75	1820	380	750	669	1224	1262	2823	1189	1482	244	764	1850	15750	BD320	
HK-HE 3CS 190 40 80	1900	400	800	710	1280	1310	2940	1250	1550	253	773	1875	17400	BD320	
HK-HE 3CS 205 43 85	2050	430	850	766	1377	1376	3179	1321	1667	266	786	1910	20250	BD360	
HK-HE 3CS 215 45 90	2150	450	900	790	1445	1485	3330	1390	1755	273	793	1958	23800	BD360	
HK-HE 3CS 228 48 95	2280	480	950	840	1527	1541	3540	1448	1855	290	810	1990	27300	BD400	
HK-HE 3CS 240 50 100	2400	500	1000	880	1610	1660	3720	1520	1960	310	813	2100	33000	BD460	
HK-HE 3CS 260 56 110	2600	560	1100	950	1740	1745	4035	1660	2130	333	853	2200	38400	BD460	
HK-HE 3CS 280 60 120	2800	600	1200	1050	1870	1945	4355	1760	2295	353	873	2392	47000	BD500	



# HE HK Cuter Special Pumps



# HK Bearing Block

HK bearing blocks are designed to support all the forces created by the dredging flow and impeller. Our bearing blocks are manufactured using first-class materials, making them able to withstand vibrations, thermal variations, and all kinds of impacts on the impeller. The best quality bearings are used to ensure the highest reliability.

Type	Bearing block Dimensions(mm)					Mass(kg)
	P	Q	R	S	T	
BD160	135	845	265	750	1200	970
BD200	210	1050	410	860	1300	1730
BD240	240	1060	470	1160	1560	2175
BD280	275	1160	530	1220	1680	3400
BD320	280	1365	590	1310	2200	4550
BD360	300	1580	640	1420	2240	6000
BD400	350	1530	710	1500	2250	7000
BD460	400	1900	750	1850	2850	11500
BD500	544	2000	935	2000	3100	17000
BD560	550	2300	1000	2200	3500	21500



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