

English Units

SI Units

ID	Hammer Manufacturer	Hammer Model	Hammer Type	Energy/Power (kip-ft)/(kW)	Ram Weight (kips)	Stroke (ft)	Energy/Power (kJ)/(kW)	Ram Weight (kN)	Stroke (m)
1288	APE	8a	ECH	24	12	2	32.553	53.4	0.61
774	APE	20E	VIB	59.67	0.15	38.3	59.67	0.668	38.3
776	APE	50E	VIB	194	0.233	30	194	1.037	30
1285	APE	3-Jul	ECH	42	14	3	56.967	62.3	0.914
1286	APE	3-Aug	ECH	48	16	3	65.105	71.2	0.914
778	APE	100E	VIB	194	0.144	30	194	0.642	30
1289	APE	4-Oct	ECH	80	20	4	108.509	89	1.219
781	APE	150T	VIB	260	0.17	30	260	0.759	30
784	APE	200T	VIB	466	0.341	30.83	466	1.517	30.83
787	APE	400B	VIB	738	0.78	23.33	738	3.471	23.33
596	APE	400U	ECH	400	80	5	542.544	356	1.524
1280	APE	7.5a	ECH	24	12	2	32.553	53.4	0.61
1281	APE	7.5b	ECH	20.4	10.2	2	27.67	45.39	0.61
1282	APE	7.5c	ECH	15.2	7.6	2	20.617	33.82	0.61
598	APE	750U	ECH	750	120	6.25	1017.27	534	1.905
1283	APE	9.5a	ECH	50.656	16	3.166	68.708	71.2	0.965
1284	APE	9.5b	ECH	44.324	14	3.166	60.119	62.3	0.965
779	APE	100HF	VIB	260	0.144	43	260	0.642	43
595	APE	Oct-60	ECH	100	20	5	135.636	89	1.524
782	APE	150HF	VIB	466	0.32	43	466	1.424	43
594	APE	15-60	ECH	150	30	5	203.454	133.5	1.524
791	APE	200-6	VIB	470	0.433	30	470	1.927	30
591	APE	5.4mT	ECH	26	12	2.167	35.266	53.4	0.66
592	APE	7.2mT	ECH	51.3	16.2	3.167	69.581	72.09	0.965
570	APE	D 1-42	OED	1.317	0.208	6.333	1.787	0.926	1.93
569	APE	D 8-42	OED	19.8	1.76	11.25	26.856	7.832	3.429
785	APE	200T HF	VIB	738	0.341	43	738	1.517	43
584	APE	D 12-42	OED	29.767	2.646	11.25	40.375	11.775	3.429
1262	APE	D 16-32	OED	39.69	3.528	11.25	53.834	15.7	3.429
579	APE	D 16-42	OED	39.69	3.528	11.25	53.834	15.7	3.429
580	APE	D 16-52	OED	39.69	3.528	11.25	53.834	15.7	3.429
1263	APE	D 19-32	OED	47.126	4.189	11.25	63.92	18.641	3.429
571	APE	D 19-42	OED	47.126	4.189	11.25	63.92	18.641	3.429
1261	APE	D 19-52	OED	47.126	4.189	11.25	63.92	18.641	3.429
1264	APE	D 25-32	OED	62.01	5.512	11.25	84.108	24.528	3.429
581	APE	D 25-42	OED	62.01	5.512	11.25	84.108	24.528	3.429
1273	APE	D 25-52	OED	62.01	5.512	11.25	84.108	24.528	3.429
1265	APE	D 30-32	OED	74.419	6.615	11.25	100.939	29.437	3.429
572	APE	D 30-42	OED	74.419	6.615	11.25	100.939	29.437	3.429
1274	APE	D 30-52	OED	74.419	6.615	11.25	100.939	29.437	3.429
585	APE	D 36-26	OED	89.303	7.938	11.25	121.126	35.324	3.429
1266	APE	D 36-32	OED	89.303	7.938	11.25	121.126	35.324	3.429
573	APE	D 36-42	OED	89.303	7.938	11.25	121.126	35.324	3.429
1275	APE	D 36-52	OED	89.303	7.938	11.25	121.126	35.324	3.429
1267	APE	D 46-32	OED	114.109	10.143	11.25	154.773	45.136	3.429
574	APE	D 46-42	OED	114.109	10.143	11.25	154.773	45.136	3.429
1276	APE	D 46-52	OED	114.109	10.143	11.25	154.773	45.136	3.429

583	APE	D 50-42	OED	124.031	11.025	11.25	168.231	49.061	3.429
1277	APE	D 50-52	OED	124.031	11.025	11.25	168.231	49.061	3.429
1268	APE	D 62-22	OED	153.799	13.671	11.25	208.606	60.836	3.429
575	APE	D 62-42	OED	153.799	13.671	11.25	208.606	60.836	3.429
1278	APE	D 62-52	OED	153.799	13.671	11.25	208.606	60.836	3.429
1272	APE	D 70-42	OED	173.644	15.435	11.25	235.523	68.686	3.429
1279	APE	D 70-52	OED	173.644	15.435	11.25	235.523	68.686	3.429
1269	APE	D 80-23	OED	198.45	17.64	11.25	269.17	78.498	3.429
576	APE	D 80-42	OED	198.45	17.64	11.25	269.17	78.498	3.429
789	APE	Tan 400	VIB	1476	1.368	23.33	1476	6.088	23.33
790	APE	Tan 600	VIB	1800	2.105	23.3	1800	9.367	23.3
599	APE	D 100-13	OED	300.042	23.7	12.66	406.965	105.465	3.859
1270	APE	D 100-32	OED	248.062	22.05	11.25	336.462	98.122	3.429
577	APE	D 100-42	OED	248.062	22.05	11.25	336.462	98.122	3.429
1271	APE	D 120-32	OED	349.692	27.6	12.67	474.308	122.82	3.862
582	APE	D 125-42	OED	310.084	27.563	11.25	420.585	122.655	3.429
586	APE	D 128-42	OED	317.25	28.2	11.25	430.305	125.49	3.429
587	APE	D 138-42	OED	342	30.4	11.25	463.875	135.28	3.429
588	APE	D 160-42	OED	396.9	35.28	11.25	538.339	156.996	3.429
589	APE	D 180-42	OED	446.512	39.69	11.25	605.632	176.62	3.429
593	APE	D 220-42	OED	540.814	48.46	11.16	733.538	215.647	3.402
590	APE	D 225-42	OED	558	49.6	11.25	756.849	220.72	3.429
777	APE	100	VIB	194	0.318	30	194	1.415	30
772	APE	15	VIB	59.67	0.108	30	59.67	0.481	30
780	APE	150	VIB	260	0.144	30	260	0.642	30
773	APE	20	VIB	59.67	0.15	38.3	59.67	0.668	38.3
783	APE	200	VIB	466	0.289	30	466	1.284	30
770	APE	3	VIB	10.58	0.004	38.3	10.58	0.019	38.3
786	APE	300	VIB	738	0.342	25	738	1.522	25
775	APE	50	VIB	194	0.233	30	194	1.037	30
771	APE	6	VIB	10.58	0.009	38.3	10.58	0.038	38.3
788	APE	600	VIB	800	1.052	23.3	800	4.681	23.3
1287	APE	8	ECH	16	8	2	21.702	35.6	0.61
381	BSP	HH3	ECH	26.022	6.611	3.936	35.295	29.42	1.2
382	BSP	HH5	ECH	43.375	11.02	3.936	58.832	49.039	1.2
383	BSP	HH7	ECH	60.782	15.427	3.94	82.443	68.65	1.201
384	BSP	HH8	ECH	69.502	17.64	3.94	94.269	78.498	1.201
385	BSP	HH9	ECH	78.17	19.84	3.94	106.026	88.288	1.201
374	BSP	CX40	ECH	28.207	6.613	4.265	38.259	29.43	1.3
375	BSP	CX50	ECH	37.609	8.818	4.265	51.012	39.24	1.3
376	BSP	CX60	ECH	47.012	11.022	4.265	63.765	49.05	1.3

377	BSP	CX75	ECH	52.075	13.227	3.937	70.632	58.86	1.2
378	BSP	CX85	ECH	60.754	15.431	3.937	82.404	68.67	1.2
600	BSP	DX20	ECH	14.109	3.308	4.265	19.137	14.721	1.3
601	BSP	DX25	ECH	18.089	4.411	4.101	24.535	19.628	1.25
602	BSP	DX30	ECH	21.706	5.513	3.937	29.442	24.535	1.2
391	BSP	HA30	ECH	260.373	66.135	3.937	353.16	294.3	1.2
392	BSP	HA40	ECH	347.164	88.18	3.937	470.88	392.4	1.2
369	BSP	SL20	ECH	14.108	3.308	4.265	19.136	14.72	1.3
370	BSP	SL30	ECH	21.693	5.51	3.937	29.424	24.52	1.2
396	BSP	CG180	ECH	131.922	26.454	4.987	178.934	117.72	1.52
397	BSP	CG210	ECH	153.91	30.863	4.987	208.757	137.34	1.52
398	BSP	CG240	ECH	175.897	35.272	4.987	238.579	156.96	1.52
399	BSP	CG270	ECH	197.884	39.681	4.987	268.402	176.58	1.52
400	BSP	CG300	ECH	219.871	44.09	4.987	298.224	196.2	1.52
379	BSP	CX110	ECH	78.112	19.84	3.937	105.948	88.29	1.2
606	BSP	CGL370	ECH	271.222	55.112	4.921	367.875	245.25	1.5
607	BSP	CGL440	ECH	325.467	66.135	4.921	441.45	294.3	1.5
608	BSP	CGL520	ECH	379.711	77.157	4.921	515.025	343.35	1.5
609	BSP	CGL590	ECH	433.956	88.18	4.921	588.6	392.4	1.5
604	BSP	LX4-SA	ECH	23.154	8.822	2.625	31.405	39.256	0.8
605	BSP	LX5-SA	ECH	28.942	11.027	2.625	39.256	49.07	0.8
610	BSP	LX7-SA	ECH	40.519	15.438	2.625	54.958	68.697	0.8
386	BSP	HH11-1.2	ECH	95.545	24.25	3.94	129.593	107.913	1.201
393	BSP	HH11-1.5	ECH	119.31	24.25	4.92	161.827	107.913	1.5
387	BSP	HH14-1.2	ECH	121.588	30.86	3.94	164.918	137.327	1.201
394	BSP	HH14-1.5	ECH	151.831	30.86	4.92	205.938	137.327	1.5
388	BSP	HH16-1.2	ECH	138.866	35.272	3.937	188.352	156.96	1.2
395	BSP	HH16-1.5	ECH	173.538	35.272	4.92	235.38	156.96	1.5
603	BSP	LX2.5-SA	ECH	14.471	5.513	2.625	19.628	24.535	0.8
801	DKH	PH-5	ECH	43.396	11.023	3.937	58.86	49.05	1.2
802	DKH	PH-7	ECH	60.754	15.432	3.937	82.404	68.67	1.2
804	DKH	PH-10	ECH	86.791	22.045	3.937	117.72	98.1	1.2
805	DKH	PH-13	ECH	112.828	28.658	3.937	153.036	127.53	1.2
806	DKH	PH-20	ECH	216.978	44.09	4.921	294.3	196.2	1.5
807	DKH	PH-30	ECH	325.467	66.135	4.921	441.45	294.3	1.5
808	DKH	PH-40	ECH	433.956	88.18	4.921	588.6	392.4	1.5
803	DKH	PH-7S	ECH	60.754	15.432	3.937	82.404	68.67	1.2
809	DKH	DKH-713	ECH	112.92	28.66	3.94	153.161	127.537	1.201
56	FEC	D-18	OED	39.7	3.97	10	53.847	17.667	3.048
50	FEC	FEC 1200	OED	22.495	2.75	8.18	30.511	12.238	2.493
51	FEC	FEC 1500	OED	27.093	3.3	8.21	36.748	14.685	2.502
52	FEC	FEC 2500	OED	49.995	5.5	9.09	67.811	24.475	2.771

53	FEC	FEC 2800	OED	55.994	6.16	9.09	75.949	27.412	2.771
54	FEC	FEC 3000	OED	63.03	6.6	9.55	85.491	29.37	2.911
55	FEC	FEC 3400	OED	73.005	7.48	9.76	99.021	33.286	2.975
1340	H&M	H-150	VIB	94	0.111	28.3	94	0.494	28.3
1341	H&M	H-1700	VIB	165	0.202	20	165	0.899	20
567	HMC	19D	ECH	14	3.5	4	18.989	15.575	1.219
560	HMC	28A	ECH	28	7	4	37.978	31.15	1.219
561	HMC	28B	ECH	21	7	3	28.484	31.15	0.914
568	HMC	38D	ECH	28	7	4	37.978	31.15	1.219
720	HMC	3+28	VIB	21	0.108	26.8	21	0.483	26.8
721	HMC	3+75	VIB	56	0.108	36.1	56	0.483	36.1
1620	HMC	TD19	OED	46.09	4.011	11.492	62.514	17.847	3.503
1621	HMC	TD30	OED	69.867	6.611	10.569	94.764	29.418	3.221
722	HMC	13+200	VIB	149	0.353	26.7	149	1.569	26.7
725	HMC	25+220	VIB	164	0.605	20.9	164	2.694	20.9
726	HMC	26+335	VIB	242	0.705	25.6	242	3.139	25.6
728	HMC	51+335	VIB	242	1.211	19.5	242	5.389	19.5
729	HMC	51+535	VIB	377	1.211	26.4	377	5.389	26.4
731	HMC	51+740	VIB	485	1.211	27.5	485	5.389	27.5
732	HMC	76+740	VIB	485	1.816	21.7	485	8.083	21.7
733	HMC	76+800	VIB	597	1.816	26.1	597	8.083	26.1
734	HMC	115+800	VIB	597	1.347	20.4	597	5.994	20.4
724	HMC	13H+200	VIB	164	0.353	29.8	164	1.569	29.8
723	HMC	13S+200	VIB	149	0.353	26.7	149	1.569	26.7
727	HMC	26S+335	VIB	242	0.705	25.6	242	3.139	25.6
730	HMC	51S+535	VIB	377	1.211	26.4	377	5.389	26.4
735	HMC	230+1600	VIB	1193	2.694	20.4	1193	11.988	20.4
564	HMC	119	ECH	88	22	4	119.36	97.9	1.219
565	HMC	149	ECH	110	27.5	4	149.2	122.375	1.219
566	HMC	187	ECH	138	34.5	4	187.178	153.525	1.219
562	HMC	62	ECH	46	11.5	4	62.393	51.175	1.219
563	HMC	86	ECH	64	16	4	86.807	71.2	1.219
899	ICE	44B	VIB	595	1.3	30	595	5.785	30
698	ICE	50B	VIB	432	10.415	26.7	432	46.347	26.7
890	ICE	7RF	VIB	154	0.507	38.3	154	2.254	38.3
716	ICE	14RF	VIB	242	1.013	38.3	242	4.508	38.3
702	ICE	216E	VIB	130	0.46	26.7	130	2.047	26.7
880	ICE	23RF	VIB	384	0.832	38.3	384	3.702	38.3
127	ICE	30-S	OED	22.5	3	7.5	30.518	13.35	2.286
895	ICE	32RF	VIB	391	1.158	33.3	391	5.152	33.3
139	ICE	32-S	OED	26.01	3	8.67	35.279	13.35	2.643
896	ICE	36RF	VIB	431	1.302	33.3	431	5.794	33.3
128	ICE	40-S	OED	40	4	10	54.254	17.8	3.048

705	ICE	416L	VIB	242	0.92	26.7	242	4.094	26.7
129	ICE	42-S	OED	42.004	4.09	10.27	56.973	18.201	3.13
897	ICE	46RF	VIB	678	1.66	38.3	678	7.387	38.3
130	ICE	60-S	OED	59.99	7	8.57	81.368	31.15	2.612
898	ICE	64RF	VIB	663	1.158	32.5	663	5.153	32.5
131	ICE	70-S	OED	70	7	10	94.945	31.15	3.048
132	ICE	80-S	OED	80	8	10	108.509	35.6	3.048
133	ICE	90-S	OED	90	9	10	122.072	40.05	3.048
1512	ICE	IP-2	ECH	17.358	4.409	3.937	23.544	19.62	1.2
1513	ICE	IP-3	ECH	26.037	6.613	3.937	35.316	29.43	1.2
1514	ICE	IP-5	ECH	43.396	11.022	3.937	58.86	49.05	1.2
1515	ICE	IP-7	ECH	60.754	15.431	3.937	82.404	68.67	1.2
715	ICE	V125	VIB	984	1.042	25.8	984	4.637	25.8
885	ICE	V360	VIB	783	0.941	25	783	4.186	25
134	ICE	100-S	OED	100	10	10	135.636	44.5	3.048
703	ICE	23-Nov	VIB	164	0.46	31.7	164	2.047	31.7
135	ICE	120-S	OED	120	12	10	162.763	53.4	3.048
713	ICE	1412B	VIB	597	2.036	21	597	9.06	21
714	ICE	1412C	VIB	470	2.022	23	470	9	23
717	ICE	14-23	VIB	164	1.165	35	164	5.184	35
136	ICE	200-S	OED	100	20	5	135.636	89	1.524
137	ICE	205-S	OED	170	20	8.5	230.581	89	2.591
719	ICE	22-30	VIB	250	0.917	26.9	250	4.079	26.9
700	ICE	23-28	VIB	21	0.096	26.7	21	0.427	26.7
882	ICE	23-40	VIB	30	0.192	31.8	30	0.853	31.8
883	ICE	28-35	VIB	261	1.158	27.3	261	5.152	27.3
708	ICE	44-30	VIB	242	1.3	20	242	5.785	20
709	ICE	44-50	VIB	377	1.3	26.7	377	5.785	26.7
710	ICE	44-65	VIB	485	1.3	27.5	485	5.785	27.5
888	ICE	44-70	VIB	585	0.917	28.1	585	4.08	28.1
711	ICE	66-65	VIB	485	1.95	21.7	485	8.678	21.7
889	ICE	66-70	VIB	585	0.917	23	585	4.08	23
712	ICE	66-80	VIB	597	1.95	26.7	597	8.678	26.7
1502	ICE	I-8v2	OED	18.689	1.764	10.597	25.349	7.848	3.23
1516	ICE	IP-10	ECH	86.782	22.043	3.937	117.708	98.09	1.2
1517	ICE	IP-13	ECH	112.828	28.658	3.937	153.036	127.53	1.2
552	ICE	110-SH	ECH	37.72	11.5	3.28	51.162	51.175	1
553	ICE	115-SH	ECH	37.95	11.5	3.3	51.474	51.175	1.006
881	ICE	1412BT	VIB	1193	1.667	21.7	1193	7.418	21.7
555	ICE	160-SH	ECH	64	16	4	86.807	71.2	1.219
718	ICE	22-23V	VIB	164	0.917	26.9	164	4.079	26.9
887	ICE	44-30V	VIB	250	0.917	26	250	4.08	26
559	ICE	DKH-3U	ECH	26.004	6.6	3.94	35.271	29.37	1.201
1501	ICE	I-12v2	OED	29.625	2.822	10.499	40.182	12.557	3.2
1503	ICE	I-19v2	OED	46.137	4.012	11.499	62.578	17.854	3.505
1504	ICE	I-30v2	OED	76.051	6.613	11.499	103.152	29.43	3.505
1505	ICE	I-36v2	OED	93.734	7.936	11.811	127.138	35.316	3.6
1506	ICE	I-46v2	OED	119.772	10.141	11.811	162.453	45.126	3.6
1507	ICE	I-62v2	OED	172.367	14.594	11.811	233.791	64.942	3.6
1508	ICE	I-80v2	OED	208.299	17.636	11.811	282.528	78.48	3.6
886	ICE	V360 T	VIB	1566	1.881	25	1566	8.37	25

140	ICE	120S-15	OED	132.45	15	8.83	179.65	66.75	2.691
884	ICE	28RF-35	VIB	261	1.158	27.3	261	5.152	27.3
891	ICE	66-70HS	VIB	585	0.916	26.7	585	4.078	26.7
892	ICE	66-80HS	VIB	597	0.916	29.2	597	4.078	29.2
1509	ICE	I-100v2	OED	260.373	22.045	11.811	353.16	98.1	3.6
1510	ICE	I-125v2	OED	310.097	27.556	11.253	420.604	122.625	3.43
360	ICE	I-12obs	OED	30.213	2.821	10.71	40.98	12.553	3.264
1520	ICE	I-138v2	OED	328.624	30.4	10.81	445.732	135.28	3.295
1511	ICE	I-160v2	OED	393.453	35.272	11.155	533.664	156.96	3.4
361	ICE	I-19obs	OED	43.242	4.015	10.77	58.651	17.867	3.283
1251	ICE	I-30 V2	OED	71.707	6.615	10.84	97.26	29.437	3.304
362	ICE	I-30obs	OED	71.453	6.616	10.8	96.916	29.441	3.292
363	ICE	I-36obs	OED	90.675	7.94	11.42	122.988	35.333	3.481
364	ICE	I-46obs	OED	107.74	10.145	10.62	146.134	45.145	3.237
365	ICE	I-62obs	OED	164.98	14.6	11.3	223.772	64.97	3.444
366	ICE	I-80obs	OED	212.4	17.7	12	288.091	78.765	3.658
893	ICE	100c-Tdm	VIB	1774	1.833	26.67	1774	8.157	26.67
368	ICE	I-100obs	OED	264.454	23.612	11.2	358.695	105.073	3.414
367	ICE	I-8v2obs	OED	17.6	1.76	10	23.872	7.832	3.048
126	ICE	1070	CED	72.6	10	7.26	98.472	44.5	2.213
554	ICE	115	ECH	46	11.5	4	62.393	51.175	1.219
556	ICE	160	ECH	64	16	4	86.807	71.2	1.219
120	ICE	180	CED	8.131	1.73	4.7	11.029	7.699	1.433
701	ICE	216	VIB	130	0.46	26.7	130	2.047	26.7
557	ICE	220	ECH	88	22	4	119.36	97.9	1.219
704	ICE	223	VIB	242	0.46	38.3	242	2.047	38.3
558	ICE	275	ECH	110	27.5	4	149.2	122.375	1.219
699	ICE	3117	VIB	235	1.122	28.3	235	4.991	28.3
121	ICE	422	CED	23.12	4	5.78	31.359	17.8	1.762
894	ICE	423	VIB	377	0.915	38.3	377	4.073	38.3
122	ICE	440	CED	18.56	4	4.64	25.174	17.8	1.414
123	ICE	520	CED	30.369	5.07	5.99	41.192	22.562	1.826
124	ICE	640	CED	40.62	6	6.77	55.095	26.7	2.063
125	ICE	660	CED	51.627	7.57	6.82	70.025	33.687	2.079
550	ICE	70	ECH	21	7	3	28.484	31.15	0.914
551	ICE	75	ECH	30	7.5	4	40.691	33.375	1.219
706	ICE	812	VIB	375	1.82	26.7	375	8.099	26.7
707	ICE	815	VIB	375	1.84	26.7	375	8.188	26.7
318	IHC	S-30	ECH	21.698	3.527	6.152	29.43	15.696	1.875
320	IHC	S-35	ECH	25.525	6.63	3.85	34.622	29.504	1.173
319	IHC	S-40	ECH	28.927	4.85	5.965	39.236	21.582	1.818
321	IHC	S-70	ECH	51.25	7.73	6.63	69.513	34.399	2.021
322	IHC	S-90	ECH	65.902	9.94	6.63	89.387	44.233	2.021
323	IHC	S-120	ECH	89.372	13.48	6.63	121.221	59.986	2.021
324	IHC	S-150	ECH	110.058	16.6	6.63	149.278	73.87	2.021
325	IHC	S-200	ECH	145.64	22	6.62	197.54	97.9	2.018
326	IHC	S-280	ECH	205.31	30.06	6.83	278.474	133.767	2.082
327	IHC	S-400	ECH	292.604	44.2	6.62	396.876	196.69	2.018
328	IHC	S-500	ECH	366.086	55.3	6.62	496.544	246.085	2.018
329	IHC	S-600	ECH	443.54	67	6.62	601.6	298.15	2.018

344	IHC	S-750	ECH	550.791	83.109	6.627	747.071	369.837	2.02
345	IHC	S-800	ECH	589.969	88.148	6.693	800.21	392.26	2.04
330	IHC	S-900	ECH	658.359	99.45	6.62	892.972	442.552	2.018
335	IHC	SC-30	ECH	21.808	3.76	5.8	29.579	16.732	1.768
336	IHC	SC-40	ECH	29.864	5.51	5.42	40.507	24.52	1.652
337	IHC	SC-50	ECH	36.815	7.29	5.05	49.934	32.44	1.539
338	IHC	SC-60	ECH	44.954	13.3	3.38	60.974	59.185	1.03
339	IHC	SC-75	ECH	54.797	12.15	4.51	74.324	54.067	1.375
331	IHC	S-1200	ECH	891.052	134.6	6.62	1208.587	598.97	2.018
346	IHC	S-1400	ECH	1033.839	147.941	6.988	1402.258	658.337	2.13
347	IHC	S-1800	ECH	1340.214	195.641	6.85	1817.813	870.6	2.088
334	IHC	S-2000	ECH	1473.969	222.654	6.62	1999.232	990.81	2.018
333	IHC	S-2300	ECH	1681.48	254	6.62	2280.692	1130.3	2.018
348	IHC	S-2500	ECH	1843.16	275.802	6.683	2499.989	1227.32	2.037
1371	IHC	S-3000	ECH	2211.928	332.444	6.654	3000.17	1479.374	2.028
1372	IHC	S-4000	ECH	2948.905	444.304	6.637	3999.776	1977.151	2.023
340	IHC	SC-110	ECH	81.887	17.46	4.69	111.069	77.697	1.43
341	IHC	SC-150	ECH	109.35	24.3	4.5	148.318	108.135	1.372
342	IHC	SC-200	ECH	152.51	30.2	5.05	206.858	134.39	1.539
343	IHC	SC-250	ECH	179.802	37.256	4.826	243.876	165.789	1.471
332	IHC	S-1800-L	ECH	1170.387	166	7.051	1587.466	738.7	2.149
1053	J&M	416B	VIB	261	0.917	26.7	261	4.079	26.7
1054	J&M	416S	VIB	250	0.917	26.7	250	4.079	26.7
1039	J&M	23-Nov	VIB	164	0.917	31.7	164	4.079	31.7
1041	J&M	1412T	VIB	1119	1.667	21.7	1119	7.417	21.7
1044	J&M	22-23	VIB	164	0.917	20.8	164	4.079	20.8
1045	J&M	22-30	VIB	261	0.917	27.5	261	4.079	27.5
1050	J&M	28-35	VIB	261	1.167	27.5	261	5.192	27.5
1056	J&M	44-30	VIB	250	0.917	20	250	4.079	20
1057	J&M	44-50	VIB	399	0.917	26.7	399	4.079	26.7
1058	J&M	44-65	VIB	552	0.917	27.5	552	4.079	27.5
1060	J&M	66-65	VIB	552	0.917	21.7	552	4.079	21.7
1061	J&M	66-80	VIB	559	0.917	26.7	559	4.079	26.7
1021	J&M	82 HIH	ECH	32.8	8.2	4	44.489	36.49	1.219
1022	J&M	115 HIH	ECH	46	11.5	4	62.393	51.175	1.219
1023	J&M	160 HIH	ECH	64	16	4	86.807	71.2	1.219
1024	J&M	220 HIH	ECH	88	22	4	119.36	97.9	1.219
1025	J&M	275 HIH	ECH	110	27.5	4	149.2	122.375	1.219
1026	J&M	345 HIH	ECH	138	34.5	4	187.178	153.525	1.219
1020	J&M	70B HIH	ECH	21	7	3	28.484	31.15	0.914
1040	J&M	1412	VIB	559	1.667	21.7	559	7.417	21.7
1042	J&M	216	VIB	149	0.917	26.7	149	4.079	26.7
1051	J&M	360	VIB	783	0.942	21.7	783	4.19	21.7
1052	J&M	416	VIB	250	0.917	26.7	250	4.079	26.7
1055	J&M	815	VIB	429	0.917	26.7	429	4.079	26.7
811	MGF	RBH 80	VIB	50	0.597	30	50	2.659	30
812	MGF	RBH 140	VIB	85	1.04	26.667	85	4.628	26.667
813	MGF	RBH 200	VIB	125	0.738	26.667	125	3.282	26.667
814	MGF	RBH 320	VIB	200	0.787	26.667	200	3.501	26.667
815	MGF	RBH 460	VIB	255	1.133	26.667	255	5.044	26.667

816	MGF	RBH 1050	VIB	460	1.549	22.5	460	6.893	22.5
817	MGF	RBH 1575	VIB	700	1.162	22.5	700	5.169	22.5
818	MGF	RBH 2400	VIB	975	1.769	23.5	975	7.874	23.5
304	MKT	9B3	ECH	8.752	1.6	5.47	11.871	7.12	1.667
308	MKT	S-5	ECH	16.25	5	3.25	22.041	22.25	0.991
312	MKT	S-8	ECH	26	8	3.25	35.265	35.6	0.991
305	MKT	10B3	ECH	13.11	3	4.37	17.782	13.35	1.332
309	MKT	11B3	ECH	19.15	5	3.83	25.974	22.25	1.167
314	MKT	S 10	ECH	32.5	10	3.25	44.082	44.5	0.991
315	MKT	S 14	ECH	37.52	14	2.68	50.891	62.3	0.817
317	MKT	S 20	ECH	60	20	3	81.382	89	0.914
750	MKT	V-2B	VIB	52	0.146	30	52	0.65	30
753	MKT	V-30	VIB	448	1.467	28.33	448	6.528	28.33
754	MKT	V-35	VIB	485	1.6	28.33	485	7.12	28.33
751	MKT	V-5C	VIB	138	0.433	28.33	138	1.927	28.33
152	MKT	DA 45	CED	30.72	4	7.68	41.667	17.8	2.341
146	MKT	DE 10	OED	8.8	1.1	8	11.936	4.895	2.438
147	MKT	DE 20	OED	16	2	8	21.702	8.9	2.438
148	MKT	DE 30	OED	22.4	2.8	8	30.382	12.46	2.438
154	MKT	DE 35	OED	35	3.5	10	47.473	15.575	3.048
153	MKT	DE 40	OED	32	4	8	43.404	17.8	2.438
155	MKT	DE 42	OED	42	4.2	10	56.967	18.69	3.048
301	MKT	No. 5	ECH	1	0.2	5	1.356	0.89	1.524
302	MKT	No. 6	ECH	2.5	0.4	6.25	3.391	1.78	1.905
303	MKT	No. 7	ECH	4.152	0.8	5.19	5.632	3.56	1.582
755	MKT	V-140	VIB	1341	1.167	23.33	1341	5.193	23.33
752	MKT	V-20B	VIB	242	0.2	28.33	242	0.89	28.33
306	MKT	C5-Air	ECH	14.2	5	2.84	19.26	22.25	0.866
151	MKT	DA 35B	CED	21	2.8	7.5	28.484	12.46	2.286
167	MKT	DA 35C	CED	21	2.8	7.5	28.484	12.46	2.286
161	MKT	DA 55B	CED	38.2	5	7.64	51.813	22.25	2.329
168	MKT	DA 55C	CED	38.2	5	7.64	51.813	22.25	2.329
150	MKT	DE 30B	OED	23.8	2.8	8.5	32.281	12.46	2.591
159	MKT	DE 50B	OED	42.5	5	8.5	57.645	22.25	2.591
157	MKT	DE 50C	OED	50	5	10	67.818	22.25	3.048
162	MKT	DE 70B	OED	59.5	7	8.5	80.703	31.15	2.591
158	MKT	DE 70C	OED	70	7	10	94.945	31.15	3.048
142	MKT	DE-20C	OED	20	2	10	27.127	8.9	3.048
143	MKT	DE-30C	OED	28	2.8	10	37.978	12.46	3.048
144	MKT	DE-33C	OED	33	3.3	10	44.76	14.685	3.048
163	MKT	DE-50B	OED	50	5	10	67.818	22.25	3.048
164	MKT	DE-70B	OED	70	7	10	94.945	31.15	3.048
316	MKT	MS 500	ECH	44	11	4	59.68	48.95	1.219
313	MKT	MS-350	ECH	30.803	7.72	3.99	41.78	34.354	1.216
165	MKT	DE-110C	OED	110	11	10	149.2	48.95	3.048
166	MKT	DE-150C	OED	150	15	10	203.454	66.75	3.048
307	MKT	C5- Steam	ECH	16.2	5	3.24	21.973	22.25	0.988
311	MKT	C826 Air	ECH	21.2	8	2.65	28.755	35.6	0.808

310	MKT	C826 Stm	ECH	24.4	8	3.05	33.095	35.6	0.93
149	MKT	DA35B SA	OED	23.8	2.8	8.5	32.281	12.46	2.591
160	MKT	DA55B SA	OED	40	5	8	54.254	22.25	2.438
145	MKT	DE33302 0	OED	40	4	10	54.254	17.8	3.048
669	MVE	M-12	OED	30.213	2.821	10.71	40.98	12.553	3.264
670	MVE	M-19	OED	49.384	4.015	12.3	66.983	17.867	3.749
671	MVE	M-30	OED	83.349	6.615	12.6	113.051	29.437	3.84
1142	PTC	30HP	VIB	196	0.868	27	196	3.864	27
1143	PTC	40HD	VIB	269	0.868	28	269	3.864	28
1147	PTC	60HD	VIB	305	0.868	28	305	3.864	28
1146	PTC	65HD	VIB	305	0.868	26	305	3.864	26
1148	PTC	75HD	VIB	410	0.868	25	410	3.864	25
1149	PTC	100HD	VIB	451	0.868	23	451	3.864	23
1154	PTC	120HD	VIB	410	0.868	23	410	3.864	23
1155	PTC	130HD	VIB	564	0.868	23	564	3.864	23
1151	PTC	175HD	VIB	611	0.868	23	611	3.864	23
1156	PTC	200HD	VIB	710	0.868	23	710	3.864	23
1152	PTC	240HD	VIB	988	0.868	23	988	3.864	23
1157	PTC	265HD	VIB	1080	0.868	24	1080	3.864	24
1144	PTC	50HD1	VIB	255	0.868	25	255	3.864	25
1145	PTC	50HD2	VIB	290	0.868	25	290	3.864	25
1150	PTC	100HDS	VIB	564	0.868	23	564	3.864	23
1153	PTC	240HDS	VIB	988	0.868	30	988	3.864	30
1100	PVE	14M	VIB	190	1.013	28.3	190	4.508	28.3
1101	PVE	23M	VIB	234	1.66	27.5	234	7.387	27.5
1102	PVE	25M	VIB	294	0.977	28.3	294	4.348	28.3
1103	PVE	27M	VIB	294	0.977	28.3	294	4.348	28.3
1104	PVE	38M	VIB	392	0.92	28.3	392	4.094	28.3
1105	PVE	50M	VIB	440	1.2	28.3	440	5.34	28.3
1106	PVE	52M	VIB	564	0.75	28.3	564	3.338	28.3
1123	PVE	55M	VIB	403	1.173	28.33	403	5.22	28.33
1124	PVE	82M	VIB	565	1.758	28.33	565	7.823	28.33
1107	PVE	105M	VIB	784	1.52	22.5	784	6.764	22.5
1108	PVE	110M	VIB	784	0.796	22.5	784	3.542	22.5
1126	PVE	16VM	VIB	335	0.347	38.33	335	1.546	38.33
1109	PVE	200M	VIB	1130	1.45	23.3	1130	6.453	23.3
1127	PVE	20VM	VIB	395	0.412	38.33	395	1.836	38.33
1128	PVE	24VM	VIB	395	0.521	38.33	395	2.32	38.33
1129	PVE	28VM	VIB	403	0.608	38.33	403	2.703	38.33
1125	PVE	300M	VIB	1796	6.206	23.33	1796	27.617	23.33
1121	PVE	40VM	VIB	564	1.45	33.3	564	6.453	33.3
1122	PVE	50VM	VIB	564	1.2	30	564	5.34	30
1130	PVE	2070VM	VIB	1130	1.519	33.33	1130	6.76	33.33
1114	PVE	2310VM	VIB	190	0.72	38.3	190	3.204	38.3
1131	PVE	2312VM	VIB	252	0.26	38.33	252	1.157	38.33
1115	PVE	2315VM	VIB	234	1.09	38.3	234	4.851	38.3
1116	PVE	2316VM	VIB	294	1.16	38.3	294	5.162	38.3
1117	PVE	2319VM	VIB	392	1.37	38.3	392	6.097	38.3

1118	PVE	2323VM	VIB	392	0.83	38.3	392	3.693	38.3
1119	PVE	2332VM	VIB	564	1.16	38.3	564	5.162	38.3
1120	PVE	2335VM	VIB	784	1.27	38.3	784	5.651	38.3
1132	PVE	2350VM	VIB	790	1.085	38.33	790	4.828	38.33
1111	PVE	1420	VIB	190	1.01	33.3	190	4.494	33.3
1110	PVE	2307	VIB	190	0.47	38.3	190	2.091	38.3
1112	PVE	2315	VIB	234	1.09	38.3	234	4.851	38.3
1113	PVE	2520	VIB	294	1.81	33.3	294	8.054	33.3
1531	SPI	D 19-42	OED	42.612	4.02	10.6	57.797	17.889	3.231
1532	SPI	D 30-32	OED	72.08	6.8	10.6	97.766	30.26	3.231
350	HERA	1250	OED	24.85	2.755	9.02	33.706	12.26	2.749
351	HERA	1500	OED	29.811	3.305	9.02	40.435	14.707	2.749
349	HERA	1900	OED	44.414	4.19	10.6	60.241	18.646	3.231
352	HERA	2500	OED	49.7	5.51	9.02	67.411	24.52	2.749
353	HERA	2800	OED	55.699	6.175	9.02	75.547	27.479	2.749
354	HERA	3500	OED	69.589	7.715	9.02	94.388	34.332	2.749
355	HERA	5000	OED	99.446	11.025	9.02	134.884	49.061	2.749
356	HERA	5700	OED	113.381	12.57	9.02	153.786	55.936	2.749
357	HERA	6200	OED	123.303	13.67	9.02	167.244	60.832	2.749
358	HERA	7500	OED	149.191	16.54	9.02	202.356	73.603	2.749
359	HERA	8800	OED	174.988	19.4	9.02	237.347	86.33	2.749
507	HPSI	1000	ECH	50	10	5	67.818	44.5	1.524
501	HPSI	110	ECH	44	11	4	59.68	48.95	1.219
502	HPSI	150	ECH	60	15	4	81.382	66.75	1.219
503	HPSI	154	ECH	61.6	15.4	4	83.552	68.53	1.219
508	HPSI	1605	ECH	83	16.6	5	112.578	73.87	1.524
504	HPSI	200	ECH	80	20	4	108.509	89	1.219
512	HPSI	2000	ECH	80	20	4	108.509	89	1.219
509	HPSI	2005	ECH	95.1	19.02	5	128.99	84.639	1.524
505	HPSI	225	ECH	90	22.5	4	122.072	100.125	1.219
510	HPSI	3005	ECH	154.325	30.865	5	209.32	137.349	1.524
511	HPSI	3505	ECH	176.325	35.265	5	239.16	156.929	1.524
506	HPSI	650	ECH	32.5	6.5	5	44.082	28.925	1.524
101	KOBE	K 13	OED	25.428	2.87	8.86	34.49	12.771	2.701
104	KOBE	K 25	OED	51.519	5.51	9.35	69.878	24.52	2.85
107	KOBE	K 35	OED	72.182	7.72	9.35	97.905	34.354	2.85
110	KOBE	K 45	OED	92.752	9.92	9.35	125.805	44.144	2.85
112	KOBE	KB 60	OED	130.183	13.23	9.84	176.575	58.873	2.999
113	KOBE	KB 80	OED	173.578	17.64	9.84	235.434	78.498	2.999
103	KOBE	K22-Est	OED	45.347	4.85	9.35	61.508	21.582	2.85
624	MAIT	120	VIB	674	1.74	30	674	7.743	30
620	MAIT	34	VIB	227	1.23	33.3	227	5.474	33.3
621	MAIT	42	VIB	309	1.52	33.3	309	6.764	33.3
622	MAIT	54	VIB	450	0.98	33.3	450	4.361	33.3
623	MAIT	68	VIB	531	1.23	33.3	531	5.474	33.3
999	Self	Drop/10t	ECH	300	20	15	406.908	89	4.572
535	BANUT	S3000	ECH	26.043	6.615	3.937	35.324	29.437	1.2
536	BANUT	S4000	ECH	34.724	8.82	3.937	47.099	39.249	1.2
537	BANUT	S5000	ECH	43.405	11.025	3.937	58.873	49.061	1.2
538	BANUT	S6000	ECH	52.087	13.23	3.937	70.648	58.873	1.2
539	BANUT	S8000	ECH	69.449	17.64	3.937	94.197	78.498	1.2

540	BANUT	S10000	ECH	86.811	22.05	3.937	117.747	98.122	1.2
541	BANUT	3 Tonnes	ECH	17.345	6.61	2.624	23.526	29.415	0.8
542	BANUT	4 Tonnes	ECH	23.144	8.82	2.624	31.391	39.249	0.8
543	BANUT	5 Tonnes	ECH	28.916	11.02	2.624	39.221	49.039	0.8
544	BANUT	6 Tonnes	ECH	34.716	13.23	2.624	47.087	58.873	0.8
545	BANUT	7 Tonnes	ECH	40.488	15.43	2.624	54.917	68.664	0.8
1431	BRUCE	SGV-80	VIB	112.2	0.133	33.33	112.2	0.592	33.33
1432	BRUCE	SGV-100	VIB	142.6	0.179	30	142.6	0.797	30
1433	BRUCE	SGV-200	VIB	184.8	0.31	28.83	184.8	1.38	28.83
1434	BRUCE	SGV-300	VIB	211.2	0.352	27.5	211.2	1.566	27.5
1435	BRUCE	SGV-400	VIB	286	0.437	26.67	286	1.945	26.67
1436	BRUCE	SGV-450	VIB	323.4	0.478	26.67	323.4	2.127	26.67
1437	BRUCE	SGV-600	VIB	451.5	0.722	26.67	451.5	3.213	26.67
921	BRUCE	SGH-0212	ECH	17.336	4.4	3.94	23.514	19.58	1.201
530	BRUCE	SGH-0312	ECH	26.004	6.6	3.94	35.271	29.37	1.201
534	BRUCE	SGH-0412	ECH	34.672	8.8	3.94	47.028	39.16	1.201
531	BRUCE	SGH-0512	ECH	43.34	11	3.94	58.785	48.95	1.201
532	BRUCE	SGH-0712	ECH	60.676	15.4	3.94	82.298	68.53	1.201
922	BRUCE	SGH-0715	ECH	75.768	15.4	4.92	102.769	68.53	1.5
533	BRUCE	SGH-1012	ECH	86.774	22.046	3.936	117.697	98.106	1.2
923	BRUCE	SGH-1015	ECH	108.467	22.046	4.92	147.121	98.106	1.5
625	BRUCE	SGH-1212	ECH	104.129	26.455	3.936	141.236	117.727	1.2
924	BRUCE	SGH-1215	ECH	130.161	26.455	4.92	176.545	117.727	1.5
626	BRUCE	SGH-1312	ECH	112.806	28.66	3.936	153.006	127.537	1.2
627	BRUCE	SGH-1315	ECH	141.008	28.66	4.92	191.257	127.537	1.5
628	BRUCE	SGH-1412	ECH	121.483	30.865	3.936	164.775	137.348	1.2
629	BRUCE	SGH-1415	ECH	151.854	30.865	4.92	205.969	137.348	1.5
630	BRUCE	SGH-1612	ECH	138.838	35.274	3.936	188.315	156.969	1.2
631	BRUCE	SGH-1615	ECH	173.548	35.274	4.92	235.393	156.969	1.5
632	BRUCE	SGH-1618	ECH	208.257	35.274	5.904	282.472	156.969	1.8

633	BRUCE	SGH-1619	ECH	219.827	35.274	6.232	298.165	156.969	1.9
634	BRUCE	SGH-1812	ECH	156.193	39.683	3.936	211.854	176.59	1.2
635	BRUCE	SGH-1815	ECH	195.241	39.683	4.92	264.817	176.59	1.5
636	BRUCE	SGH-2012	ECH	173.548	44.092	3.936	235.393	196.211	1.2
637	BRUCE	SGH-2015	ECH	216.935	44.092	4.92	294.241	196.211	1.5
638	BRUCE	SGH-2312	ECH	199.58	50.706	3.936	270.702	225.643	1.2
639	BRUCE	SGH-2315	ECH	249.475	50.706	4.92	338.378	225.643	1.5
925	BRUCE	SGH-2512	ECH	216.935	55.116	3.936	294.241	245.264	1.2
926	BRUCE	SGH-2515	ECH	271.168	55.116	4.92	367.802	245.264	1.5
640	BRUCE	SGH-3012	ECH	260.322	66.139	3.936	353.09	294.317	1.2
641	BRUCE	SGH-3013	ECH	282.015	66.139	4.264	382.514	294.317	1.3
642	BRUCE	SGH-3015	ECH	325.402	66.139	4.92	441.362	294.317	1.5
927	BRUCE	SGH-3512	ECH	303.708	77.162	3.936	411.938	343.37	1.2
928	BRUCE	SGH-3515	ECH	379.636	77.162	4.92	514.922	343.37	1.5
643	BRUCE	SGH-4012	ECH	347.095	88.185	3.936	470.786	392.422	1.2
929	BRUCE	SGH-4015	ECH	433.869	88.185	4.92	588.483	392.422	1.5
644	BRUCE	SGH-4212	ECH	364.45	92.594	3.936	494.326	412.043	1.2
930	BRUCE	SGH-4215	ECH	455.563	92.594	4.92	617.907	412.043	1.5
931	BRUCE	SGH-4512	ECH	390.482	99.208	3.936	529.635	441.475	1.2
932	BRUCE	SGH-4515	ECH	488.103	99.208	4.92	662.043	441.475	1.5
933	BRUCE	SGH-4712	ECH	407.837	103.617	3.936	553.174	461.096	1.2
934	BRUCE	SGH-4715	ECH	509.796	103.617	4.92	691.467	461.096	1.5
935	BRUCE	SGH-4719	ECH	645.742	103.617	6.232	875.858	461.096	1.9
645	BRUCE	SGH-5012	ECH	433.869	110.231	3.936	588.483	490.528	1.2
936	BRUCE	SGH-5015	ECH	542.337	110.231	4.92	735.604	490.528	1.5
937	BRUCE	SGH-5715	ECH	618.263	125.663	4.92	838.588	559.202	1.5

938	BRUCE	SGH-6015	ECH	650.804	132.277	4.92	882.724	588.634	1.5
939	BRUCE	SGH-7015	ECH	759.271	154.323	4.92	1029.845	686.739	1.5
940	BRUCE	SGH-8015	ECH	867.738	176.37	4.92	1176.966	784.845	1.5
1438	BRUCE	SGV-1000	VIB	569.1	1.032	25	569.1	4.592	25
1401	FAMBO	HR250	ECH	1.806	0.551	3.281	2.45	2.45	1
1403	FAMBO	HR500	ECH	4.344	1.103	3.937	5.892	4.91	1.2
1404	FAMBO	HR1000	ECH	8.679	2.204	3.937	11.772	9.81	1.2
1405	FAMBO	HR1500	ECH	13.023	3.308	3.937	17.664	14.72	1.2
1406	FAMBO	HR2000	ECH	17.358	4.409	3.937	23.544	19.62	1.2
1407	FAMBO	HR2750	ECH	23.87	6.063	3.937	32.376	26.98	1.2
1408	FAMBO	HR3000	ECH	26.037	6.613	3.937	35.316	29.43	1.2
1409	FAMBO	HR4000	ECH	34.716	8.818	3.937	47.088	39.24	1.2
1410	FAMBO	HR5000	ECH	43.396	11.022	3.937	58.86	49.05	1.2
1411	FAMBO	HR7000	ECH	60.754	15.431	3.937	82.404	68.67	1.2
1412	FAMBO	HR8000	ECH	69.451	17.64	3.937	94.2	78.5	1.2
1413	FAMBO	HR10000	ECH	86.791	22.045	3.937	117.72	98.1	1.2
1402	FAMBO	HR500ak k	ECH	3.62	1.103	3.281	4.91	4.91	1
271	MENCK	MH 68	ECH	49.176	7.72	6.37	66.701	34.354	1.942
272	MENCK	MH 96	ECH	69.426	11.02	6.3	94.167	49.039	1.92
273	MENCK	MH 145	ECH	104.8	16.53	6.34	142.147	73.559	1.932
449	MENCK	MHF3-3	ECH	24.764	7.054	3.51	33.589	31.392	1.07
450	MENCK	MHF3-4	ECH	30.956	8.818	3.51	41.987	39.24	1.07
451	MENCK	MHF3-5	ECH	38.694	11.022	3.51	52.483	49.05	1.07
452	MENCK	MHF3-6	ECH	46.433	13.227	3.51	62.98	58.86	1.07
453	MENCK	MHF3-7	ECH	54.172	15.431	3.51	73.477	68.67	1.07
441	MENCK	MHF5-5	ECH	38.694	11.022	3.51	52.483	49.05	1.07
442	MENCK	MHF5-6	ECH	46.433	13.227	3.51	62.98	58.86	1.07
443	MENCK	MHF5-7	ECH	54.172	15.431	3.51	73.477	68.67	1.07
444	MENCK	MHF5-8	ECH	61.911	17.636	3.51	83.974	78.48	1.07
445	MENCK	MHF5-9	ECH	69.65	19.84	3.51	94.47	88.29	1.07
446	MENCK	MHF5-10	ECH	77.389	22.045	3.51	104.967	98.1	1.07
447	MENCK	MHF5-11	ECH	85.128	24.249	3.51	115.464	107.91	1.07
448	MENCK	MHF5-12	ECH	92.866	26.454	3.51	125.96	117.72	1.07
274	MENCK	MHU 195	ECH	143.738	21.361	6.729	194.96	95.056	2.051
275	MENCK	MHU 220	ECH	162.167	24.838	6.529	219.957	110.531	1.99
276	MENCK	MHU 400	ECH	294.824	51.087	5.771	399.887	227.338	1.759
277	MENCK	MHU 600	ECH	442.281	75.522	5.856	599.892	336.074	1.785
300	MENCK	MBS1250 0	ECH	1581.829	275.58	5.74	2145.53	1226.331	1.75
456	MENCK	MHF 5- 14	ECH	108.344	30.863	3.51	146.954	137.34	1.07

454	MENCK	MHF10-15	ECH	124.734	33.06	3.773	169.185	147.117	1.15
455	MENCK	MHF10-20	ECH	166.275	44.07	3.773	225.528	196.111	1.15
278	MENCK	MHU 1000	ECH	737.381	126.98	5.807	1000.155	565.059	1.77
270	MENCK	MHU 100C	ECH	73.71	11.1	6.64	99.978	49.396	2.024
475	MENCK	MHU 135T	ECH	110.589	17.987	6.148	149.999	80.042	1.874
473	MENCK	MHU 150S	ECH	110.589	17.987	6.148	149.999	80.042	1.874
279	MENCK	MHU 1700	ECH	1253.241	207.152	6.05	1699.846	921.825	1.844
461	MENCK	MHU 200T	ECH	162.241	26.745	6.066	220.057	119.014	1.849
280	MENCK	MHU 2100	ECH	1548.291	257.177	6.02	2100.04	1144.436	1.835
1321	MENCK	MHU 240U	ECH	221.198	35.729	6.191	300.024	158.995	1.887
460	MENCK	MHU 270T	ECH	221.198	35.729	6.191	300.024	158.995	1.887
281	MENCK	MHU 3000	ECH	2211.896	370.228	5.974	3000.128	1647.517	1.821
459	MENCK	MHU 300S	ECH	221.198	35.729	6.191	300.024	158.995	1.887
1323	MENCK	MHU 360U	ECH	324.365	52.449	6.184	439.955	233.398	1.885
462	MENCK	MHU 400T	ECH	324.365	52.449	6.184	439.955	233.398	1.885
1322	MENCK	MHU 440S	ECH	324.365	52.449	6.184	439.955	233.398	1.885
1325	MENCK	MHU 450U	ECH	404.059	65.958	6.126	548.049	293.513	1.867
463	MENCK	MHU 500T	ECH	405.529	65.958	6.148	550.043	293.513	1.874
1327	MENCK	MHU 540U	ECH	485.169	80.393	6.035	658.064	357.747	1.839
1324	MENCK	MHU 550S	ECH	404.059	65.958	6.126	548.049	293.513	1.867
466	MENCK	MHU 600B	ECH	457.032	65.958	6.929	619.899	293.513	2.112
467	MENCK	MHU 600T	ECH	486.628	80.393	6.053	660.043	357.747	1.845
1329	MENCK	MHU 650U	ECH	588.193	99.931	5.886	797.801	444.692	1.794
1326	MENCK	MHU 660S	ECH	485.169	80.393	6.035	658.064	357.747	1.839
464	MENCK	MHU 700T	ECH	567.722	92.883	6.112	770.036	413.331	1.863
1328	MENCK	MHU 720T	ECH	588.193	99.931	5.886	797.801	444.692	1.794

476	MENCK	MHU 750T	ECH	604.568	99.931	6.05	820.012	444.692	1.844
468	MENCK	MHU 800S	ECH	604.568	99.931	6.05	820.012	444.692	1.844
1332	MENCK	MHU 810U	ECH	736.482	126.98	5.8	998.934	565.059	1.768
465	MENCK	MHU 840S	ECH	619.223	92.883	6.667	839.889	413.331	2.032
1331	MENCK	MHU 900T	ECH	736.482	126.98	5.8	998.934	565.059	1.768
1330	MENCK	MHU100 0S	ECH	736.482	126.98	5.8	998.934	565.059	1.768
477	MENCK	MHU110 0T	ECH	899.66	145.705	6.175	1220.262	648.386	1.882
469	MENCK	MHU120 0S	ECH	884.84	145.705	6.073	1200.162	648.386	1.851
457	MENCK	MHU135 T*	ECH	110.589	17.987	6.148	149.999	80.042	1.874
1336	MENCK	MHU140 0B	ECH	1032.075	145.705	7.083	1399.865	648.386	2.159
470	MENCK	MHU150 0S	ECH	1106.07	178.944	6.181	1500.229	796.3	1.884
478	MENCK	MHU150 S*	ECH	110.589	17.987	6.148	149.999	80.042	1.874
1333	MENCK	MHU170 0S	ECH	1272.947	207.152	6.145	1726.575	921.825	1.873
471	MENCK	MHU170 0T	ECH	1400.86	227.36	6.161	1900.07	1011.752	1.878
472	MENCK	MHU190 0S	ECH	1400.86	227.36	6.161	1900.07	1011.752	1.878
1334	MENCK	MHU210 0S	ECH	1573.921	257.177	6.12	2134.803	1144.436	1.865
474	MENCK	MHU270 0S	ECH	1990.188	318.765	6.243	2699.411	1418.503	1.903
1335	MENCK	MHU300 0S	ECH	2216.558	370.228	5.987	3006.45	1647.517	1.825
1337	MENCK	MHU350 0S	ECH	2582.428	385.845	6.693	3502.702	1717.011	2.04
479	MENCK	MHU600 B*	ECH	457.032	65.958	6.929	619.899	293.513	2.112
282	MENCK	MRBS 500	ECH	45.072	11.02	4.09	61.134	49.039	1.247
283	MENCK	MRBS 750	ECH	67.773	16.53	4.1	91.925	73.559	1.25
285	MENCK	MRBS 850	ECH	93.283	18.96	4.92	126.526	84.372	1.5
286	MENCK	MRBS11 00	ECH	123.433	24.25	5.09	167.419	107.913	1.551
287	MENCK	MRBS15 02	ECH	135.587	33.07	4.1	183.905	147.161	1.25
288	MENCK	MRBS18 00	ECH	189.814	38.58	4.92	257.456	171.681	1.5

289	MENCK	MRBS2500	ECH	262.113	63.93	4.1	355.52	284.489	1.25
290	MENCK	MRBS2502	ECH	225.951	55.11	4.1	306.471	245.24	1.25
291	MENCK	MRBS2504	ECH	225.951	55.11	4.1	306.471	245.24	1.25
292	MENCK	MRBS3000	ECH	325.36	66.13	4.92	441.305	294.278	1.5
293	MENCK	MRBS3900	ECH	513.343	86.86	5.91	696.277	386.527	1.801
294	MENCK	MRBS4600	ECH	498.937	101.41	4.92	676.738	451.275	1.5
295	MENCK	MRBS5000	ECH	542.332	110.23	4.92	735.597	490.524	1.5
296	MENCK	MRBS6000	ECH	759.23	132.27	5.74	1029.789	588.602	1.75
297	MENCK	MRBS7000	ECH	631.4	154	4.1	856.406	685.3	1.25
298	MENCK	MRBS8000	ECH	867.74	176.37	4.92	1176.968	784.846	1.5
299	MENCK	MRBS8800	ECH	954.529	194.01	4.92	1294.685	863.344	1.5
521	DAWSON	HPH1200	ECH	8.717	2.3	3.79	11.823	10.235	1.155
522	DAWSON	HPH1800	ECH	13.721	3.3	4.158	18.611	14.685	1.267
523	DAWSON	HPH2400	ECH	17.316	4.189	4.134	23.486	18.64	1.26
525	DAWSON	HPH4500	ECH	32.56	7.716	4.22	44.163	34.336	1.286
524	DAWSON	HPH6500	ECH	46.979	10.25	4.583	63.721	45.613	1.397
526	DAWSON	HPH9000	ECH	66.303	10.471	6.332	89.93	46.596	1.93
1601	DELMAG	D 2	OED	1.784	0.494	3.609	2.42	2.2	1.1
1602	DELMAG	D 4	OED	3.603	0.838	4.298	4.886	3.73	1.31
1	DELMAG	D 5	OED	10.505	1.1	9.55	14.249	4.895	2.911
3	DELMAG	D 12	OED	22.605	2.75	8.22	30.661	12.238	2.505
4	DELMAG	D 15	OED	27.093	3.3	8.21	36.748	14.685	2.502
6	DELMAG	D 22	OED	40.606	4.91	8.27	55.076	21.849	2.521
11	DELMAG	D 30	OED	59.73	6.6	9.05	81.015	29.37	2.758
16	DELMAG	D 36	OED	83.82	7.93	10.57	113.69	35.288	3.222
21	DELMAG	D 44	OED	90.155	9.5	9.49	122.283	42.275	2.893
22	DELMAG	D 46	OED	107.078	10.14	10.56	145.237	45.123	3.219
27	DELMAG	D 55	OED	125.004	11.86	10.54	169.551	52.777	3.213
47	DELMAG	D 5-42	OED	10.56	1.1	9.6	14.323	4.895	2.926
36	DELMAG	D 6-32	OED	13.524	1.322	10.23	18.343	5.883	3.118
1603	DELMAG	D 8-12	OED	20.099	1.76	11.42	27.262	7.832	3.481
2	DELMAG	D 8-22	OED	20.099	1.76	11.42	27.262	7.832	3.481
37	DELMAG	D 12-32	OED	31.33	2.82	11.11	42.495	12.549	3.386
38	DELMAG	D 12-42	OED	33.304	2.82	11.81	45.172	12.549	3.6
1604	DELMAG	D 12-52	OED	33.981	2.82	12.05	46.09	12.549	3.673

39	DELMAG	D 14-42	OED	34.501	3.086	11.18	46.796	13.733	3.408
5	DELMAG	D 16-32	OED	40.198	3.52	11.42	54.523	15.664	3.481
1605	DELMAG	D 16-52	OED	40.198	3.52	11.42	54.523	15.664	3.481
40	DELMAG	D 19-32	OED	42.44	4	10.61	57.564	17.8	3.234
41	DELMAG	D 19-42	OED	43.24	4	10.81	58.649	17.8	3.295
35	DELMAG	D 19-52	OED	43.2	4	10.8	58.595	17.8	3.292
46	DELMAG	D 21-42	OED	55.745	4.63	12.04	75.611	20.604	3.67
7	DELMAG	D 22-02	OED	48.5	4.85	10	65.783	21.582	3.048
8	DELMAG	D 22-13	OED	48.5	4.85	10	65.783	21.582	3.048
9	DELMAG	D 22-23	OED	51.216	4.85	10.56	69.467	21.582	3.219
10	DELMAG	D 25-32	OED	66.34	5.51	12.04	89.981	24.52	3.67
1606	DELMAG	D 25-52	OED	66.34	5.51	12.04	89.981	24.52	3.67
12	DELMAG	D 30-02	OED	66.198	6.6	10.03	89.788	29.37	3.057
13	DELMAG	D 30-13	OED	66.198	6.6	10.03	89.788	29.37	3.057
14	DELMAG	D 30-23	OED	73.788	6.6	11.18	100.083	29.37	3.408
15	DELMAG	D 30-32	OED	75.438	6.6	11.43	102.321	29.37	3.484
1607	DELMAG	D 30-52	OED	75.438	6.6	11.43	102.321	29.37	3.484
17	DELMAG	D 36-02	OED	83.82	7.93	10.57	113.69	35.288	3.222
18	DELMAG	D 36-13	OED	83.82	7.93	10.57	113.69	35.288	3.222
19	DELMAG	D 36-23	OED	88.499	7.93	11.16	120.036	35.288	3.402
20	DELMAG	D 36-32	OED	90.561	7.93	11.42	122.833	35.288	3.481
23	DELMAG	D 46-02	OED	107.078	10.14	10.56	145.237	45.123	3.219
24	DELMAG	D 46-13	OED	96.533	10.14	9.52	130.933	45.123	2.902
25	DELMAG	D 46-23	OED	107.078	10.14	10.56	145.237	45.123	3.219
26	DELMAG	D 46-32	OED	122.187	10.14	12.05	165.73	45.123	3.673
28	DELMAG	D 62-02	OED	152.446	13.66	11.16	206.771	60.787	3.402
29	DELMAG	D 62-12	OED	152.446	13.66	11.16	206.771	60.787	3.402
30	DELMAG	D 62-22	OED	164.603	13.66	12.05	223.261	60.787	3.673
31	DELMAG	D 80-12	OED	186.243	17.62	10.57	252.613	78.409	3.222
32	DELMAG	D 80-23	OED	212.497	17.62	12.06	288.223	78.409	3.676
33	DELMAG	D100-13	OED	265.675	22.066	12.04	360.35	98.194	3.67
43	DELMAG	D120-42	OED	301.794	26.45	11.41	409.342	117.703	3.478
45	DELMAG	D125-42	OED	313.633	27.56	11.38	425.399	122.642	3.469
1611	DELMAG	D138-32	OED	339.511	30.436	11.155	460.499	135.441	3.4
44	DELMAG	D150-42	OED	377.329	33.07	11.41	511.794	147.161	3.478
48	DELMAG	D160-32	OED	393.453	35.272	11.155	533.664	156.96	3.4
1612	DELMAG	D180-32	OED	442.638	39.681	11.155	600.376	176.58	3.4
42	DELMAG	D200-42	OED	492.044	44.09	11.16	667.389	196.201	3.402
49	DELMAG	D260-32	OED	639.362	57.317	11.155	867.204	255.06	3.4
1613	DELMAG	D300-32	OED	737.727	66.135	11.155	1000.624	294.3	3.4
1614	DELMAG	D400-32	OED	983.637	88.18	11.155	1334.166	392.4	3.4
850	PILECO	D8-22	OED	18.656	1.76	10.6	25.304	7.832	3.231
851	PILECO	D12-42	OED	29.892	2.82	10.6	40.544	12.549	3.231
852	PILECO	D19-42	OED	42.506	4.01	10.6	57.653	17.845	3.231
853	PILECO	D25-32	OED	58.406	5.51	10.6	79.22	24.52	3.231
854	PILECO	D30-32	OED	70.066	6.61	10.6	95.035	29.415	3.231
855	PILECO	D36-32	OED	84.164	7.94	10.6	114.157	35.333	3.231
856	PILECO	D46-32	OED	107.484	10.14	10.6	145.787	45.123	3.231
857	PILECO	D62-22	OED	161.306	13.67	11.8	218.789	60.832	3.597
858	PILECO	D80-23	OED	197.568	17.64	11.2	267.973	78.498	3.414
859	PILECO	D100-13	OED	246.848	22.04	11.2	334.815	98.078	3.414

860	PILECO	D125-32	OED	308.672	27.56	11.2	418.67	122.642	3.414
863	PILECO	D138-32	OED	340.608	30.411	11.2	461.988	135.331	3.414
866	PILECO	D160-32	OED	395.08	35.275	11.2	535.871	156.974	3.414
864	PILECO	D180-32	OED	444.273	39.667	11.2	602.593	176.519	3.414
861	PILECO	D225-22	OED	555.344	49.584	11.2	753.247	220.65	3.414
862	PILECO	D250-22	OED	617.057	55.094	11.2	836.952	245.17	3.414
865	PILECO	D280-22	OED	688.545	61.726	11.155	933.915	274.68	3.4
867	PILECO	D400-12	OED	810.098	88.15	9.19	1098.785	392.268	2.801
868	PILECO	D600-12	OED	1215.102	132.22	9.19	1648.115	588.379	2.801
869	PILECO	D800-22	OED	1620.197	176.3	9.19	2197.57	784.535	2.801
204	VULCAN	VUL 01	ECH	15	5	3	20.345	22.25	0.914
205	VULCAN	VUL 02	ECH	7.26	3	2.42	9.847	13.35	0.738
206	VULCAN	VUL 06	ECH	19.5	6.5	3	26.449	28.925	0.914
207	VULCAN	VUL 08	ECH	26	8	3.25	35.265	35.6	0.991
208	VULCAN	VUL 010	ECH	32.5	10	3.25	44.082	44.5	0.991
209	VULCAN	VUL 012	ECH	39	12	3.25	52.898	53.4	0.991
210	VULCAN	VUL 014	ECH	42	14	3	56.967	62.3	0.914
211	VULCAN	VUL 016	ECH	48.75	16.25	3	66.123	72.313	0.914
212	VULCAN	VUL 020	ECH	60	20	3	81.382	89	0.914
213	VULCAN	VUL 030	ECH	90	30	3	122.072	133.5	0.914
214	VULCAN	VUL 040	ECH	120	40	3	162.763	178	0.914
215	VULCAN	VUL 060	ECH	180	60	3	244.145	267	0.914
220	VULCAN	VUL 30C	ECH	7.26	3	2.42	9.847	13.35	0.738
231	VULCAN	VUL 320	ECH	60	20	3	81.382	89	0.914
232	VULCAN	VUL 330	ECH	90	30	3	122.072	133.5	0.914
233	VULCAN	VUL 340	ECH	120	40	3	162.763	178	0.914
234	VULCAN	VUL 360	ECH	180	60	3	244.145	267	0.914
235	VULCAN	VUL 505	ECH	25	5	5	33.909	22.25	1.524
236	VULCAN	VUL 506	ECH	32.5	6.5	5	44.082	28.925	1.524
237	VULCAN	VUL 508	ECH	40	8	5	54.254	35.6	1.524
221	VULCAN	VUL 50C	ECH	15.1	5	3.02	20.481	22.25	0.92
238	VULCAN	VUL 510	ECH	50	10	5	67.818	44.5	1.524
239	VULCAN	VUL 512	ECH	60	12	5	81.382	53.4	1.524
240	VULCAN	VUL 520	ECH	100	20	5	135.636	89	1.524
241	VULCAN	VUL 530	ECH	150	30	5	203.454	133.5	1.524
242	VULCAN	VUL 540	ECH	200.001	40.9	4.89	271.273	182.005	1.49
243	VULCAN	VUL 560	ECH	300	62.5	4.8	406.908	278.125	1.463
222	VULCAN	VUL 65C	ECH	19.175	6.5	2.95	26.008	28.925	0.899
224	VULCAN	VUL 80C	ECH	24.48	8	3.06	33.204	35.6	0.933
225	VULCAN	VUL 85C	ECH	25.986	8.52	3.05	35.246	37.914	0.93
226	VULCAN	VUL 100C	ECH	32.9	10	3.29	44.624	44.5	1.003
227	VULCAN	VUL 140C	ECH	35.98	14	2.57	48.802	62.3	0.783
228	VULCAN	VUL 200C	ECH	50.2	20	2.51	68.089	89	0.765
245	VULCAN	VUL 3100	ECH	300	100	3	406.908	445	0.914
229	VULCAN	VUL 400C	ECH	113.6	40	2.84	154.082	178	0.866
246	VULCAN	VUL 5100	ECH	500	100	5	678.18	445	1.524

247	VULCAN	VUL 5150	ECH	750	150	5	1017.27	667.5	1.524
230	VULCAN	VUL 600C	ECH	179.16	60	2.986	243.005	267	0.91
248	VULCAN	VUL 6300	ECH	1800	300	6	2441.448	1335	1.829
223	VULCAN	VUL 65CA	ECH	19.565	6.5	3.01	26.537	28.925	0.917
171	CONMACO	C 50	ECH	15	5	3	20.345	22.25	0.914
172	CONMACO	C 65	ECH	19.5	6.5	3	26.449	28.925	0.914
175	CONMACO	C 80	ECH	26	8	3.25	35.265	35.6	0.991
176	CONMACO	C 100	ECH	32.5	10	3.25	44.082	44.5	0.991
177	CONMACO	C 115	ECH	37.375	11.5	3.25	50.694	51.175	0.991
182	CONMACO	C 140	ECH	42	14	3	56.967	62.3	0.914
183	CONMACO	C 160	ECH	48.75	16.25	3	66.123	72.313	0.914
184	CONMACO	C 200	ECH	60	20	3	81.382	89	0.914
185	CONMACO	C 300	ECH	90	30	3	122.072	133.5	0.914
173	CONMACO	C 550	ECH	25	5	5	33.909	22.25	1.524
174	CONMACO	C 565	ECH	32.5	6.5	5	44.082	28.925	1.524
196	CONMACO	C 1750	ECH	1050	175	6	1424.178	778.75	1.829
192	CONMACO	C 50E5	ECH	25	5	5	33.909	22.25	1.524
186	CONMACO	C 5200	ECH	100	20	5	135.636	89	1.524
187	CONMACO	C 5300	ECH	150	30	5	203.454	133.5	1.524
188	CONMACO	C 5450	ECH	225	45	5	305.181	200.25	1.524
189	CONMACO	C 5700	ECH	350	70	5	474.726	311.5	1.524
193	CONMACO	C 65E5	ECH	32.5	6.5	5	44.082	28.925	1.524
190	CONMACO	C 6850	ECH	510	85	6	691.744	378.25	1.829
178	CONMACO	C 80E5	ECH	40	8	5	54.254	35.6	1.524
179	CONMACO	C 100E5	ECH	50	10	5	67.818	44.5	1.524
180	CONMACO	C 115E5	ECH	57.5	11.5	5	77.991	51.175	1.524
181	CONMACO	C 125E5	ECH	62.5	12.5	5	84.773	55.625	1.524
194	CONMACO	C 200E5	ECH	100	20	5	135.636	89	1.524
195	CONMACO	C 300E5	ECH	150	30	5	203.454	133.5	1.524
191	CONMACO	C 160 **	ECH	51.78	17.26	3	70.232	76.807	0.914
90	HITACHI	HNC65	ECH	56.419	14.33	3.937	76.524	63.77	1.2
91	HITACHI	HNC80	ECH	69.433	17.636	3.937	94.176	78.48	1.2
92	HITACHI	HNC100	ECH	86.791	22.045	3.937	117.72	98.1	1.2
93	HITACHI	HNC125	ECH	108.493	27.557	3.937	147.156	122.63	1.2
481	JUNTTAN	HHK3A	ECH	26.048	6.616	3.937	35.33	29.442	1.2
482	JUNTTAN	HHK4A	ECH	34.73	8.822	3.937	47.107	39.256	1.2
483	JUNTTAN	HHK5A	ECH	43.413	11.027	3.937	58.884	49.07	1.2
951	JUNTTAN	HHK5S	ECH	54.266	11.027	4.921	73.604	49.07	1.5
484	JUNTTAN	HHK6A	ECH	52.095	13.232	3.937	70.66	58.884	1.2
485	JUNTTAN	HHK7A	ECH	60.754	15.431	3.937	82.404	68.67	1.2
952	JUNTTAN	HHK7S	ECH	75.973	15.438	4.921	103.046	68.697	1.5
491	JUNTTAN	HHK9A	ECH	78.143	19.848	3.937	105.99	88.325	1.2
953	JUNTTAN	HHK9S	ECH	97.679	19.848	4.921	132.488	88.325	1.5
961	JUNTTAN	HHU5A	ECH	54.266	11.027	4.921	73.604	49.07	1.5
962	JUNTTAN	HHU7A	ECH	75.942	15.431	4.921	103.005	68.67	1.5
963	JUNTTAN	HHU9A	ECH	97.64	19.84	4.921	132.435	88.29	1.5
486	JUNTTAN	HHK10A	ECH	86.826	22.054	3.937	117.767	98.139	1.2
949	JUNTTAN	HHK10S	ECH	108.494	22.046	4.921	147.157	98.105	1.5

487	JUNTTAN	HHK12A	ECH	104.191	26.465	3.937	141.32	117.767	1.2
954	JUNTTAN	HHK12S	ECH	130.239	26.465	4.921	176.651	117.767	1.5
488	JUNTTAN	HHK14A	ECH	121.556	30.875	3.937	164.874	137.395	1.2
955	JUNTTAN	HHK14S	ECH	151.945	30.875	4.921	206.092	137.395	1.5
494	JUNTTAN	HHK16A	ECH	138.921	35.286	3.937	188.427	157.023	1.2
956	JUNTTAN	HHK16S	ECH	173.652	35.286	4.921	235.534	157.023	1.5
495	JUNTTAN	HHK18A	ECH	156.286	39.697	3.937	211.981	176.651	1.2
957	JUNTTAN	HHK18S	ECH	195.358	39.697	4.921	264.976	176.651	1.5
496	JUNTTAN	HHK20A	ECH	173.652	44.108	3.937	235.534	196.278	1.2
958	JUNTTAN	HHK20S	ECH	217.065	44.108	4.921	294.418	196.278	1.5
959	JUNTTAN	HHK25S	ECH	271.222	55.112	4.921	367.875	245.25	1.5
950	JUNTTAN	HHK28S	ECH	303.784	61.729	4.921	412.041	274.694	1.5
960	JUNTTAN	HHK36S	ECH	390.56	79.362	4.921	529.74	353.16	1.5
498	JUNTTAN	HHK3AL	ECH	17.365	6.616	2.625	23.553	29.442	0.8
499	JUNTTAN	HHK4AL	ECH	23.154	8.822	2.625	31.405	39.256	0.8
497	JUNTTAN	HHK4SL	ECH	43.396	8.818	4.921	58.86	39.24	1.5
500	JUNTTAN	HHK5AL	ECH	28.942	11.027	2.625	39.256	49.07	0.8
964	JUNTTAN	HHU12A	ECH	130.187	26.454	4.921	176.58	117.72	1.5
965	JUNTTAN	HHU14A	ECH	151.884	30.863	4.921	206.01	137.34	1.5
966	JUNTTAN	HHU16A	ECH	173.582	35.272	4.921	235.44	156.96	1.5
968	JUNTTAN	SHK100-3	ECH	26.905	6.613	4.068	36.493	29.43	1.24
969	JUNTTAN	SHK100-3	ECH	35.888	8.822	4.068	48.677	39.256	1.24
970	JUNTTAN	SHK100-3	ECH	44.842	11.022	4.068	60.822	49.05	1.24
971	JUNTTAN	SHK100-3	ECH	53.815	13.228	4.068	72.992	58.865	1.24
977	JUNTTAN	SHK100-5	ECH	44.844	11.023	4.068	60.825	49.052	1.24
978	JUNTTAN	SHK100-5	ECH	53.815	13.228	4.068	72.992	58.865	1.24
972	JUNTTAN	SHK110-5	ECH	44.976	11.022	4.08	61.004	49.05	1.244
973	JUNTTAN	SHK110-5	ECH	53.824	13.228	4.069	73.005	58.865	1.24
974	JUNTTAN	SHK110-5	ECH	65.622	15.431	4.253	89.007	68.67	1.296
975	JUNTTAN	SHK110-5	ECH	77.421	17.637	4.39	105.011	78.485	1.338
976	JUNTTAN	SHK110-5	ECH	87.741	19.842	4.422	119.009	88.297	1.348
979	JUNTTAN	SHK110-7	ECH	65.632	15.432	4.253	89.021	68.672	1.296
980	JUNTTAN	SHK110-7	ECH	77.43	17.637	4.39	105.023	78.485	1.338
981	JUNTTAN	SHK110-7	ECH	87.741	19.842	4.422	119.009	88.297	1.348
900	Mueller	MS16HF	VIB	219	1.16	39.2	219	5.162	39.2
901	Mueller	MS25H2	VIB	218	0.904	28	218	4.023	28
902	Mueller	MS25H3	VIB	218	0.904	28	218	4.023	28
903	Mueller	MS50H2	VIB	419	1.2	27	419	5.34	27

904	Mueller	MS50H3	VIB	419	1.2	27	419	5.34	27
905	Mueller	MS25HH F	VIB	274	0.583	27.3	274	2.595	27.3
906	Mueller	MS50HH F	VIB	562	1.166	27.3	562	5.191	27.3
907	Mueller	MS100H HF	VIB	750	2.333	24.9	750	10.382	24.9
910	Mueller	MS- 10HFV	VIB	203	0.387	39.3	203	1.721	39.3
908	Mueller	MS120H HF	VIB	895	2.304	25.6	895	10.252	25.6
911	Mueller	MS- 16HFV	VIB	294	0.526	39.2	294	2.343	39.2
909	Mueller	MS200H HF	VIB	837	4.253	22.9	837	18.924	22.9
912	Mueller	MS- 24HFV	VIB	720	0.847	39.2	720	3.767	39.2
913	Mueller	MS- 32HFV	VIB	551	1.053	39.6	551	4.686	39.6
914	Mueller	MS- 48HFV	VIB	823	1.693	39.2	823	7.534	39.2
915	Mueller	MS- 62HFV	VIB	735	1.823	35	735	8.112	35
1134	Pilemer	DKH-3U	ECH	26.004	6.6	3.94	35.271	29.37	1.201
1135	Pilemer	DKH 10L	ECH	86.791	22.045	3.937	117.72	98.1	1.2
255	RAYMOND	R 0	ECH	24.375	7.5	3.25	33.061	33.375	0.991
251	RAYMOND	R 1	ECH	15	5	3	20.345	22.25	0.914
252	RAYMOND	R 1S	ECH	19.5	6.5	3	26.449	28.925	0.914
258	RAYMOND	R 2/0	ECH	32.5	10	3.25	44.082	44.5	0.991
259	RAYMOND	R 3/0	ECH	40.625	12.5	3.25	55.102	55.625	0.991
263	RAYMOND	R 30X	ECH	75	30	2.5	101.727	133.5	0.762
261	RAYMOND	R 4/0	ECH	48.75	15	3.25	66.123	66.75	0.991
265	RAYMOND	R 40X	ECH	100	40	2.5	135.636	178	0.762
262	RAYMOND	R 5/0	ECH	56.875	17.5	3.25	77.143	77.875	0.991
266	RAYMOND	R 60X	ECH	150	60	2.5	203.454	267	0.762
253	RAYMOND	R 65C	ECH	19.5	6.5	3	26.449	28.925	0.914
264	RAYMOND	R 8/0	ECH	81.25	25	3.25	110.204	111.25	0.991
256	RAYMOND	R 80C	ECH	24.48	8	3.06	33.204	35.6	0.933
260	RAYMOND	R 150C	ECH	48.75	15	3.25	66.123	66.75	0.991
254	RAYMOND	R 65CH	ECH	19.5	6.5	3	26.449	28.925	0.914
257	RAYMOND	R 80CH	ECH	24.48	8	3.06	33.204	35.6	0.933
514	UDDCOMB	H2H	ECH	16.618	4.404	3.773	22.54	19.6	1.15
515	UDDCOMB	H3H	ECH	24.882	6.6	3.77	33.749	29.37	1.149
516	UDDCOMB	H4H	ECH	33.176	8.8	3.77	44.999	39.16	1.149
517	UDDCOMB	H5H	ECH	41.47	11	3.77	56.248	48.95	1.149
518	UDDCOMB	H6H	ECH	49.764	13.2	3.77	67.498	58.74	1.149
519	UDDCOMB	H8H	ECH	82.192	17.6	4.67	111.482	78.32	1.423
520	UDDCOMB	H10H	ECH	86.877	22.05	3.94	117.836	98.122	1.201
401	BERMINGH	B23	CED	22.988	2.8	8.21	31.18	12.46	2.502
434	BERMINGH	B-9	OED	21	2	10.5	28.484	8.9	3.2
402	BERMINGH	B200	OED	18	2	9	24.414	8.9	2.743
406	BERMINGH	B-21	OED	53.245	4.63	11.5	72.219	20.604	3.505

403	BERMINGH	B225	OED	29.25	3	9.75	39.674	13.35	2.972
404	BERMINGH	B300	OED	40.313	3.75	10.75	54.678	16.688	3.277
435	BERMINGH	B-32	OED	81.075	7.05	11.5	109.967	31.373	3.505
405	BERMINGH	B400	OED	53.75	5	10.75	72.904	22.25	3.277
436	BERMINGH	B-64	OED	166.498	14.11	11.8	225.831	62.789	3.597
422	BERMINGH	B2005	OED	18	2	9	24.414	8.9	2.743
414	BERMINGH	B23 5	CED	22.988	2.8	8.21	31.18	12.46	2.502
424	BERMINGH	B2505	OED	35.4	3	11.8	48.015	13.35	3.597
425	BERMINGH	B3005	OED	35.4	3	11.8	48.015	13.35	3.597
416	BERMINGH	B3505	OED	47.2	4	11.8	64.02	17.8	3.597
417	BERMINGH	B4005	OED	59	5	11.8	80.025	22.25	3.597
418	BERMINGH	B4505	OED	77.88	6.6	11.8	105.633	29.37	3.597
419	BERMINGH	B5005	OED	92.04	7.8	11.8	124.839	34.71	3.597
420	BERMINGH	B5505	OED	108.56	9.2	11.8	147.246	40.94	3.597
431	BERMINGH	B6005	OED	160.952	13.64	11.8	218.309	60.698	3.597
433	BERMINGH	B6505	OED	202.86	17.64	11.5	275.151	78.498	3.505
415	BERMINGH	B250 5	OED	26.25	2.5	10.5	35.604	11.125	3.2
410	BERMINGH	B300 M	OED	40.313	3.75	10.75	54.678	16.688	3.277
411	BERMINGH	B400 M	OED	53.75	5	10.75	72.904	22.25	3.277
421	BERMINGH	B550 C	OED	88	11	8	119.36	48.95	2.438
432	BERMINGH	B6505 C	OED	253	22	11.5	343.159	97.9	3.505
412	BERMINGH	B400 4.8	OED	43.2	4.8	9	58.595	21.36	2.743
413	BERMINGH	B400 5.0	OED	45	5	9	61.036	22.25	2.743
437	BERMINGH	B-6505HD	OED	220.5	22.05	10	299.077	98.122	3.048
1001	DFI-Corp	HHA250-4	ECH	25.181	5.51	4.57	34.154	24.52	1.393
1002	DFI-Corp	HHA300-4	ECH	28.753	6.61	4.35	39	29.415	1.326
1003	DFI-Corp	HHA325-4	ECH	30.358	7.16	4.24	41.177	31.862	1.292
1004	DFI-Corp	HHA350-4	ECH	31.801	7.7	4.13	43.134	34.265	1.259
1005	DFI-Corp	HHA400-6	ECH	51.92	8.8	5.9	70.422	39.16	1.798
1006	DFI-Corp	HHA450-6	ECH	57.04	9.92	5.75	77.367	44.144	1.753
1007	DFI-Corp	HHB500-6	ECH	66.66	11	6.06	90.415	48.95	1.847
1008	DFI-Corp	HHB600-6	ECH	77.88	13.2	5.9	105.633	58.74	1.798
372	FAIRCHLD	F-32	ECH	32.55	10.85	3	44.15	48.283	0.914
371	FAIRCHLD	F-45	ECH	45	15	3	61.036	66.75	0.914
998	HYPOTHET	EX 4	OED	23.375	2.75	8.5	31.705	12.238	2.591
1630	LB Foster	4150	VIB	335	0.534	25	335	2.376	25
1201	Liebherr	H 50/3	ECH	28.974	6.6	4.39	39.299	29.37	1.338
1202	Liebherr	H 50/4	ECH	35.024	8.8	3.98	47.505	39.16	1.213
1203	Liebherr	H 85/5	ECH	43.34	11	3.94	58.785	48.95	1.201
1204	Liebherr	H 85/7	ECH	60.158	15.425	3.9	81.595	68.641	1.189
1205	Liebherr	H 110/7	ECH	60.158	15.425	3.9	81.595	68.641	1.189
1206	Liebherr	H 110/9	ECH	78.011	19.85	3.93	105.81	88.333	1.198
81	LINKBELT	LB 180	CED	8.096	1.73	4.68	10.982	7.699	1.426

82	LINKBELT	LB 312	CED	15.015	3.86	3.89	20.366	17.177	1.186
83	LINKBELT	LB 440	CED	18.2	4	4.55	24.686	17.8	1.387
84	LINKBELT	LB 520	CED	26.313	5.07	5.19	35.69	22.562	1.582
85	LINKBELT	LB 660	CED	51.627	7.57	6.82	70.025	33.687	2.079
458	MENCK-UW	MHU500 T*	ECH	368.741	65.958	5.591	500.146	293.513	1.704
61	MITSUBIS	M 14	OED	25.245	2.97	8.5	34.241	13.217	2.591
63	MITSUBIS	M 23	OED	43.01	5.06	8.5	58.337	22.517	2.591
65	MITSUBIS	M 33	OED	61.71	7.26	8.5	83.701	32.307	2.591
67	MITSUBIS	M 43	OED	80.41	9.46	8.5	109.065	42.097	2.591
62	MITSUBIS	MH 15	OED	28.135	3.31	8.5	38.161	14.729	2.591
64	MITSUBIS	MH 25	OED	46.835	5.51	8.5	63.525	24.52	2.591
66	MITSUBIS	MH 35	OED	65.62	7.72	8.5	89.004	34.354	2.591
68	MITSUBIS	MH 45	OED	85.425	10.05	8.5	115.867	44.723	2.591
70	MITSUBIS	MH 72B	OED	135.15	15.9	8.5	183.312	70.755	2.591
71	MITSUBIS	MH 80B	OED	149.6	17.6	8.5	202.911	78.32	2.591
656	Pilemast	24-750	ECH	1.5	0.75	2	2.035	3.338	0.61
657	Pilemast	24-900	ECH	1.8	0.9	2	2.441	4.005	0.61
658	Pilemast	24-2000	ECH	4	2	2	5.425	8.9	0.61
659	Pilemast	24-2500	ECH	5	2.5	2	6.782	11.125	0.61
660	Pilemast	36-3000	ECH	9	3	3	12.207	13.35	0.914
661	Pilemast	36-5000	ECH	15	5	3	20.345	22.25	0.914
650	Twinwood	V20B	ECH	35.584	9.038	3.937	48.265	40.221	1.2
651	Twinwood	V100D	ECH	87.659	22.265	3.937	118.897	99.081	1.2
652	Twinwood	V160B	ECH	140.582	35.708	3.937	190.68	158.9	1.2
653	Twinwood	V400A	ECH	263.841	67.016	3.937	357.864	298.22	1.2