

Shipbuilding Statistics

SEPTEMBER, 2019



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1. World New Orders

	Year	Japan		S. Korea		China		Europe		Others		World Total	
		No.	10,000 GT	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT
Orders	2009	300	851	150	852	487	1,495	78	53	393	110	1,408	3,360
	2010	427	1,192	473	2,791	1,043	3,612	103	167	734	478	2,780	8,240
	2011	332	769	359	2,513	731	1,911	144	89	686	399	2,252	5,680
	2012	387	885	232	1,197	704	1,376	134	123	679	219	2,152	3,840
	2013	571	1,380	551	3,545	1,417	4,393	157	142	836	860	3,532	10,320
	2014	604	1,931	340	2,459	1,164	3,137	161	204	619	428	2,888	8,160
	2015	599	2,222	273	2,332	740	2,493	148	233	580	440	2,340	7,720
	2016	183	252	89	578	277	665	102	259	393	126	1,044	1,880
	2017	216	283	170	1,850	420	1,520	179	334	447	333	1,432	4,320
	2018	344	1,031	256	2,311	426	1,308	131	203	451	188	1,608	5,040
2019 1H	109	352	80	547	186	718	60	132	101	38	536	1,787	

Note) 1. IHS Markit "World Shipbuilding Statistics".
 2. Ship Size Coverage: 100 Gross Tonnage and over.

2. World Completions

	Year	Japan		S. Korea		China		Europe		Others		World Total	
		No.	10,000 GT	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT
Completions	2009	576	1,897	524	2,885	1,086	2,197	272	304	1,096	424	3,554	7,707
	2010	580	2,022	526	3,170	1,413	3,644	254	312	975	496	3,748	9,643
	2011	593	1,937	572	3,585	1,425	3,961	185	144	895	558	3,670	10,185
	2012	586	1,743	474	3,158	1,448	3,900	188	134	1,000	622	3,696	9,558
	2013	540	1,459	386	2,450	1,073	2,590	159	111	931	437	3,089	7,048
	2014	522	1,342	343	2,259	914	2,271	166	132	1,018	458	2,963	6,462
	2015	520	1,301	358	2,327	949	2,516	152	99	891	514	2,870	6,757
	2016	514	1,331	359	2,503	824	2,235	165	154	681	419	2,543	6,642
	2017	493	1,307	290	2,243	798	2,383	187	161	656	482	2,424	6,577
	2018	458	1,453	211	1,432	811	2,315	190	187	730	396	2,400	5,783
2019 1H	254	833	134	1,157	393	1,226	87	97	325	155	1,193	3,469	

Note) 1. IHS Markit "World Fleet Statistics", "World Shipbuilding Statistics".

2. Ship Size Coverage: 100 Gross Tonnage and over.

3. World Orderbook at Year-end

	Year	Japan		S. Korea		China		Europe		Others		World Total	
		No.	10,000 GT	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT
Orderbook	2009	1,286	5,197	1,675	10,425	3,523	11,115	529	685	2,213	2,630	9,226	30,051
	2010	1,105	4,247	1,357	8,959	2,967	10,303	385	441	2,008	2,151	7,822	26,102
	2011	933	3,427	1,078	7,587	2,482	8,400	360	382	2,006	1,901	6,859	21,697
	2012	740	2,583	764	5,211	1,927	6,347	333	358	1,786	1,538	5,550	16,037
	2013	825	2,609	890	6,062	2,161	7,304	343	367	1,775	1,944	5,994	18,286
	2014	941	3,288	865	6,108	2,454	8,045	313	491	1,575	1,807	6,148	19,739
	2015	991	4,058	769	5,941	2,334	7,759	340	680	1,573	1,701	6,007	20,140
	2016	868	3,633	483	3,892	1,794	5,770	328	735	1,378	1,173	4,851	15,203
	2017	737	3,041	403	3,545	1,694	5,653	384	1,029	1,380	1,102	4,598	14,369
	2018	783	3,127	469	4,493	1,664	5,414	417	1,128	1,332	935	4,665	15,097
	2019 End of June	731	2,896	443	4,112	1,670	5,450	417	1,103	1,320	793	4,581	14,354

Note) 1. IHS Markit "World Shipbuilding Statistics".
2. Ship Size Coverage: 100 Gross Tonnage and over.

4. World Merchant Fleets by Ship Type

Year end	World Total		Oil Tanker		Bulk Carrier		Others		GT Share (%)		
	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT	Oil Tanker	Bulk Carrier	Others
2008	99,741	83,070	7,221	19,544	7,744	23,196	84,776	40,330	23.5	27.9	48.5
2009	102,194	88,263	7,453	20,784	8,081	25,252	86,660	42,228	23.5	28.6	47.8
2010	103,392	95,798	7,587	21,390	8,938	29,401	86,867	45,007	22.3	30.7	47.0
2011	104,305	104,308	7,476	22,765	9,801	34,320	87,028	47,224	21.8	32.9	45.3
2012	105,004	108,120	7,477	23,465	10,133	36,608	87,394	48,048	21.7	33.9	44.4
2013	106,833	112,265	7,779	23,848	10,498	38,842	88,556	49,575	21.2	34.6	44.2
2014	109,627	116,685	7,885	24,032	10,958	40,684	90,784	51,968	20.6	34.9	44.5
2015	111,806	121,122	7,910	24,363	11,161	41,630	92,735	55,130	20.1	34.4	45.5
2016	113,888	124,858	8,104	25,565	11,368	42,721	94,416	56,572	20.5	34.2	45.3
2017	115,761	129,105	8,373	26,619	11,578	44,001	95,810	58,485	20.6	34.1	45.3
2018	118,525	133,364	8,619	27,036	11,832	45,314	98,074	61,015	20.3	34.0	45.8

Note) 1. IHS Markit "World Fleet Statistics"

2. Ship Size Coverage: 100 Gross Tonnage and over.

3. Oil tanker does not include chemical tankers and gas tankers but other liquids. Bulk carrier includes combined carriers

5. World Disposals by Country of Breaking

Year	Bangladesh		China		India		Pakistan		Others		World Total	
	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT	No.	10,000 GT
2008	170	418	38	93	198	246	25	27	396	53	827	837
2009	196	661	301	774	425	756	101	210	558	152	1,581	2,553
2010	107	393	187	472	422	653	103	244	654	189	1,473	1,951
2011	144	584	263	597	461	850	106	301	747	237	1,721	2,570
2012	224	884	335	817	497	1,221	121	550	626	283	1,828	3,767
2013	197	730	343	708	363	809	103	538	586	226	1,619	3,018
2014	214	552	215	498	317	679	106	409	467	162	1,355	2,324
2015	223	752	159	404	202	456	105	459	350	136	1,103	2,229
2016	230	989	131	346	325	847	134	570	211	107	1,178	2,894
2017	197	636	167	357	232	576	119	430	305	144	1,066	2,164
2018	187	793	32	35	239	471	77	419	327	120	862	1,837

Note) 1. IHS Markit "World Casualty Statistics"

2. Ship Size Coverage: 100 Gross Tonnage and over.

6. World Seaborne Trade

Year	1) Tonnes														2) Ton-Miles (Estimated)													
	Iron Ore	Coal	Grain	Container	Other Dry	Total Dry	Crude Oil	Oil Products	Total Oil	LPG	LNG	Chemicals	Grand Total	Iron Ore	Coal	Grain	Container	Other Dry	Total Dry	Crude Oil	Oil Products	Total Oil	LPG	LNG	Chemicals	Grand Total		
1990	356	331	195	238	1,424	2,544	1,133	415	1,548	33	58	103	4,286															
1991	363	351	195	260	1,438	2,607	1,210	375	1,585	35	58	104	4,389															
1992	343	357	202	284	1,471	2,657	1,332	381	1,713	37	60	104	4,571															
1993	358	358	182	313	1,502	2,713	1,318	414	1,732	39	62	114	4,660															
1994	383	371	178	347	1,495	2,774	1,394	411	1,805	38	66	124	4,807															
1995	404	403	193	378	1,571	2,949	1,455	444	1,899	39	68	130	5,085															
1996	392	422	198	408	1,662	3,082	1,488	487	1,975	41	74	134	5,306															
1997	426	448	211	446	1,748	3,279	1,583	481	2,064	43	83	137	5,606															
1998	423	451	209	478	1,721	3,282	1,537	473	2,010	40	85	141	5,558															
1999	399	458	223	534	1,879	3,493	1,590	501	2,091	43	93	152	5,872															
2000	447	509	230	599	1,980	3,765	1,676	561	2,237	45	103	157	6,307	2,433	2,525	1,372	2,911	10,658	19,899	8,052	1,561	9,613	210	321	610	30,653		
2001	449	546	234	631	1,978	3,838	1,666	540	2,206	42	107	159	6,352	2,521	2,604	1,493	3,072	10,606	20,296	7,773	1,527	9,300	194	348	621	30,759		
2002	477	556	232	682	2,076	4,023	1,632	552	2,184	44	113	168	6,532	2,672	2,625	1,438	3,284	10,756	20,775	7,392	1,550	8,942	201	365	656	30,939		
2003	512	599	235	790	2,079	4,215	1,767	583	2,350	47	125	172	6,909	2,862	2,808	1,564	3,865	10,916	22,015	8,049	1,668	9,717	212	403	671	33,018		
2004	589	641	225	897	2,155	4,507	1,858	641	2,499	51	132	178	7,367	3,285	2,962	1,532	4,382	11,604	23,765	8,539	1,831	10,370	227	439	692	35,493		
2005	660	671	248	986	2,216	4,781	1,880	704	2,584	52	142	185	7,744	3,704	3,079	1,686	4,814	11,834	25,117	8,558	2,081	10,639	218	457	722	37,153		
2006	709	712	255	1,074	2,259	5,009	1,894	751	2,645	52	160	196	8,062	4,061	3,255	1,717	5,222	12,347	26,602	8,801	2,137	10,938	217	549	764	39,070		
2007	773	761	277	1,195	2,277	5,283	1,919	782	2,701	55	171	207	8,417	4,501	3,382	1,889	5,753	12,220	27,745	8,745	2,225	10,970	217	631	803	40,366		
2008	837	790	284	1,249	2,302	5,462	1,913	812	2,725	55	173	212	8,627	4,811	3,513	1,937	5,983	12,147	28,391	8,903	2,316	11,219	217	684	821	41,332		
2009	897	804	297	1,112	2,082	5,192	1,807	819	2,626	54	183	217	8,272	5,365	3,424	2,060	5,399	10,874	27,122	8,130	2,450	10,580	225	689	850	39,466		
2010	990	926	317	1,266	2,322	5,821	1,876	865	2,741	55	222	233	9,072	5,859	4,022	2,271	6,109	12,278	30,539	8,683	2,555	11,238	226	877	914	43,794		
2011	1,050	998	315	1,382	2,428	6,173	1,844	899	2,743	59	247	246	9,468	6,319	4,306	2,209	6,661	12,853	32,348	8,749	2,600	11,349	229	1,059	958	45,943		
2012	1,107	1,111	345	1,427	2,507	6,497	1,896	898	2,794	61	240	254	9,846	6,696	4,798	2,407	6,777	13,262	33,940	9,133	2,615	11,748	237	1,049	985	47,959		
2013	1,188	1,183	363	1,501	2,626	6,861	1,824	939	2,763	64	241	264	10,193	6,961	5,051	2,619	7,102	13,971	35,704	8,889	2,673	11,562	258	1,043	1,021	49,588		
2014	1,340	1,216	407	1,588	2,676	7,227	1,787	930	2,717	72	246	267	10,529	7,604	5,228	2,854	7,507	14,550	37,743	8,846	2,674	11,520	304	1,064	1,025	51,656		
2015	1,364	1,136	429	1,624	2,729	7,282	1,862	998	2,860	80	250	279	10,751	7,647	4,950	3,125	7,614	14,807	38,143	9,026	2,850	11,876	367	1,031	1,075	52,492		
2016	1,418	1,140	450	1,698	2,747	7,453	1,938	1,036	2,974	88	268	283	11,066	7,934	4,977	3,205	7,932	15,115	39,163	9,585	2,961	12,546	443	1,033	1,115	54,300		
2017	1,473	1,200	477	1,797	2,837	7,784	2,004	1,055	3,059	90	292	304	11,529	8,180	5,241	3,426	8,374	15,807	41,028	#####	3,000	13,138	453	1,142	1,189	56,950		
2018 e	1,473	1,239	477	1,874	2,939	8,002	2,027	1,067	3,094	96	319	320	11,831	8,169	5,474	3,420	8,657	16,505	42,225	#####	3,082	13,547	481	1,286	1,272	58,811		
2019 f	1,480	1,264	496	1,954	3,030	8,224	2,059	1,099	3,158	102	347	336	12,167	8,088	5,587	3,586	8,973	17,135	43,369	#####	3,168	14,029	523	1,425	1,340	60,686		
2020 f	1,501	1,283	511	2,033	3,118	8,446	2,121	1,143	3,264	108	372	352	12,542	8,292	5,680	3,713	9,297	17,771	44,753	#####	3,325	14,778	555	1,579	1,407	63,072		

Note) Data Source: Clarkson "Shipping Review & Outlook, Spring 2019".

7. Newbuilding / Repair Sales (SAJ Members Only)

(100 Million Yen)

Fiscal Year	Newbuilding	Share (%)	Repair	Share (%)	Total	No. of Companies
1977	17,989	89.5	2,103	10.5	20,092	23
1978	9,906	84.2	1,856	15.8	11,762	23
1979	8,877	81.2	2,052	18.8	10,929	23
1980	10,750	76.0	3,395	24.0	14,145	23
1981	14,514	79.5	3,740	20.5	18,254	23
1982	13,412	82.0	2,941	18.0	16,353	23
1983	14,820	86.1	2,385	13.9	17,205	23
1984	15,249	86.7	2,347	13.3	17,596	23
1985	12,067	84.5	2,206	15.5	14,273	23
1986	9,800	84.9	1,737	15.1	11,537	18
1987	5,448	76.7	1,658	23.3	7,106	18
1988	5,086	76.7	1,542	23.3	6,628	18
1989	7,279	80.2	1,796	19.8	9,075	18
1990	8,665	82.7	1,817	17.3	10,482	18
1991	8,990	82.1	1,961	17.9	10,951	18
1992	11,780	88.3	1,567	11.7	13,347	18
1993	12,288	88.9	1,529	11.1	13,817	18
1994	11,789	88.6	1,518	11.4	13,307	18
1995	10,378	87.3	1,515	12.7	11,893	18
1996	11,453	88.6	1,480	11.4	12,933	18
1997	12,247	88.6	1,577	11.4	13,824	18

Fiscal Year	Newbuilding	Share (%)	Repair	Share (%)	Total	No. of Companies
1998	13,141	90.4	1,397	9.6	14,538	18
1999	11,768	90.4	1,249	9.6	13,017	18
2000	11,820	90.3	1,276	9.7	13,096	18
2001	12,240	91.1	1,201	8.9	13,441	18
2002	12,128	91.3	1,157	8.7	13,285	21
2003	12,202	91.8	1,094	8.2	13,296	19
2004	13,122	92.8	1,024	7.2	14,146	19
2005	13,891	91.9	1,227	8.1	15,118	20
2006	15,485	93.1	1,140	6.9	16,625	20
2007	20,072	93.6	1,378	6.4	21,449	20
2008	21,974	94.5	1,289	5.5	23,264	20
2009	25,529	95.9	1,079	4.1	26,608	20
2010	22,604	95.4	1,090	4.6	23,695	19
2011	22,151	95.4	1,070	4.6	23,221	19
2012	18,626	94.3	1,133	5.7	19,759	18
2013	15,009	92.8	1,158	7.2	16,167	17
2014	15,110	93.3	1,090	6.7	16,200	17
2015	15,462	92.1	1,325	7.9	16,787	17
2016	15,610	93.4	1,099	6.6	16,709	17
2017	14,268	91.4	1,349	8.6	15,617	17
2018	14,384	91.7	1,294	8.3	15,678	17

8. Ordinary Steel Consumption by Shipbuilding Industry

(Ton)

FY Type	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00
Plates	1,801,536	2,017,055	2,255,608	2,094,004	1,293,794	1,039,215	1,098,946	1,271,433	1,494,663	1,552,328	1,785,552	1,700,449	1,938,704	2,045,016	2,110,196	2,139,071	2,256,065	2,122,552	2,212,440
Shapes	228,451	256,014	275,769	243,796	150,972	119,794	133,888	155,351	184,962	195,517	223,333	203,587	238,572	247,857	254,153	260,732	251,859	226,351	226,704
Pipes	79,099	94,844	101,547	88,345	51,648	40,806	42,703	54,623	62,620	62,958	61,653	52,533	59,169	63,716	67,543	73,144	73,594	66,883	62,438
Bars	33,225	32,857	34,007	36,539	30,484	25,467	30,649	42,783	50,948	48,860	55,507	57,142	63,728	64,237	72,428	84,429	106,160	102,238	108,458
Others	1,525	2,793	2,783	2,833	2,493	2,422	2,787	2,322	2,120	1,648	2,090	1,497	2,038	2,200	1,621	1,562	1,137	1,446	1,980
Total	2,143,836	2,403,563	2,669,714	2,465,517	1,529,391	1,227,704	1,308,973	1,526,512	1,795,313	1,861,311	2,128,135	2,015,208	2,302,211	2,423,026	2,505,941	2,558,938	2,688,815	2,519,470	2,612,020

FY Type	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19 (estimated)
Plates	2,405,927	2,433,287	2,631,493	2,990,107	3,506,815	3,405,778	3,541,567	3,896,154	3,832,844	3,889,481	3,671,105	3,004,009	2,794,875	2,940,493	2,913,007	2,980,660	2,760,679	2,907,996	2,810,060
Shapes	232,807	231,137	255,759	306,077	326,354	339,370	392,009	439,446	367,128	361,087	326,237	250,927	227,019	286,896	288,630	299,228	270,678	264,563	248,050
Pipes	76,786	85,842	78,853	87,857	98,606	104,144	123,032	119,301	113,188	101,462	91,933	68,774	70,797	73,330	75,394	85,782	85,301	82,626	81,053
Bars	130,070	148,581	139,794	158,220	182,227	158,556	154,897	144,729	136,022	127,160	125,343	116,422	114,802	74,176	83,011	88,228	68,740	64,451	66,869
Others	4,079	2,462	2,679	2,179	4,387	7,352	29,433	27,959	19,086	10,308	5,305	5,328	3,353	15,570	12,663	12,909	25,780	14,820	12,299
Total	2,849,669	2,901,309	3,108,578	3,544,440	4,118,389	4,015,200	4,240,938	4,627,589	4,468,268	4,489,498	4,219,923	3,445,460	3,210,846	3,390,465	3,372,705	3,466,807	3,211,178	3,334,456	3,218,331

Note) 1. SAJ Members Only. Uses are limited to shipbuilding and offshore structures.

2. Fiscal Year; From 1st April to 31st March

9. Repair / Conversion Turnover

Flag	Types of work	85		86		87		88		89		90		91		92		93		94		95		96		97		98		99		00		01	
		No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill
	Docking work	2,722	985	2,629	1,013	2,488	959	2,297	851	2,279	987	2,007	1,166	2,090	1,295	1,989	1,077	1,928	1,021	1,971	1,121	1,970	1,107	1,908	1,082	1,737	1,003	1,582	950	1,404	897	1,142	931	1,194	813
	Damaged repair	143	40	158	35	174	48	135	44	111	37	135	71	147	110	70	84	20	75	28	60	24	80	37	63	21	53	20	47	24	37	13	31	10	
	Conversion	36	157	46	183	49	100	35	68	25	113	13	18	8	16	25	48	29	47	13	10	12	17	24	21	48	23	34	14	12	17	25	11	22	
	Running/Afloat repair	836	38	963	50	1,195	54	952	61	859	58	792	51	850	73	785	74	751	77	740	57	758	60	643	56	575	43	441	59	406	68	309	45	294	31
	Japanese Flag vessels Total	3,737	1,220	3,796	1,281	3,906	1,160	3,419	1,024	3,274	1,195	2,947	1,307	3,095	1,496	2,909	1,269	2,792	1,164	2,799	1,215	2,800	1,207	2,648	1,199	2,396	1,115	2,099	1,063	1,871	1,001	1,505	1,014	1,530	876
	Docking work	621	318	454	237	397	180	424	210	420	231	339	255	401	298	316	237	263	192	262	149	166	106	161	119	192	155	115	121	131	114	85	79	78	104
	Damaged repair	61	41	36	20	43	28	44	18	28	20	42	34	47	48	42	28	38	22	23	13	28	12	25	10	17	4	5	3	7	5	5	4	12	5
	Conversion	35	392	5	54	16	79	11	106	4	17	7	73	0	2	3	5	52	3	13	2	5	6	22	3	17	3	18	3	15	0	0	1	2	
	Running/Afloat repair	385	47	281	40	219	21	228	34	128	20	123	44	130	27	128	20	137	25	138	30	81	28	67	20	55	9	53	13	30	12	36	12	39	10
	Foreign Flag vessels Total	1,102	798	776	351	675	308	707	368	580	289	511	406	578	373	488	287	443	290	426	205	277	151	259	172	267	184	176	155	171	146	126	95	130	121
	Docking work	3,343	1,303	3,083	1,250	2,885	1,139	2,721	1,061	2,699	1,218	2,346	1,422	2,491	1,594	2,305	1,314	2,191	1,212	2,233	1,270	2,136	1,213	2,069	1,201	1,929	1,158	1,697	1,071	1,535	1,011	1,227	1,010	1,272	917
	Damaged repair	204	82	194	55	217	76	179	62	139	58	177	105	194	160	152	98	122	41	98	41	88	36	105	47	80	26	58	23	54	29	42	17	43	15
	Conversion	71	549	51	238	65	179	46	174	29	130	20	91	8	16	27	50	34	99	16	23	14	22	23	47	24	65	52	17	27	17	25	12	24	
	Running/Afloat repair	1,221	85	1,244	90	1,414	75	1,180	95	987	79	915	95	980	100	913	94	888	102	878	86	839	88	710	76	630	52	494	72	436	80	345	57	333	41
	Grand Total	4,839	2,018	4,572	1,632	4,581	1,468	4,126	1,391	3,854	1,484	3,458	1,713	3,673	1,869	3,397	1,556	3,235	1,454	3,225	1,420	3,077	1,358	2,907	1,371	2,663	1,300	2,275	1,218	2,042	1,147	1,631	1,109	1,660	997

Flag	Types of work	02		03		04		05		06		07		08		09		10		11		12		13		14		15		16		17		18	
		No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill	No.	Turnover ¥100 Mill
	Docking work	1,093	748	1,041	753	1,111	692	1,084	837	946	751	1,006	911	997	912	868	859	933	795	800	892	777	851	836	801	808	830	751	904	751	666	770	1,004	770	1,024
	Damaged repair	31	12	7	1	26	12	23	13	23	20	13	2	9	3	20	4	19	4	16	12	13	6	11	3	13	8	17	15	10	4	6	1	13	9
	Conversion	17	28	8	19	11	8	10	31	9	20	7	21	12	26	5	58	5	16	16	15	7	13	1	0	6	19	5	8	5	13	10	7	16	33
	Running/Afloat repair	231	31	217	39	237	29	392	52	366	63	341	46	240	49	203	33	225	39	228	50	274	43	270	48	326	49	315	50	262	53	288	38	225	53
	Japanese Flag vessels Total	1,372	820	1,273	811	1,385	741	1,509	933	1,344	854	1,367	981	1,258	990	1,096	954	1,182	854	1,060	969	1,071	913	1,118	851	1,153	906	1,088	977	1,028	736	1,074	1,049	1,024	1,120
	Docking work	95	142	107	121	142	118	128	104	81	135	109	93	101	77	61	75	53	76	35	78	45	98	45	62	21	68	32	78	38	20	18	35	16	
	Damaged repair	6	1	4	2	6	2	4	0	6	17	1	0	7	8	2	0	1	1	6	12	3	2	2	0	0	2	6	4	3	2	7	0	0	
	Conversion	3	5	1	3	2	4	1	4	2	2	2	5	0	0	0	0	0	3	8	1	1	1	1	1	0	8	6	11	1	2	2	1	2	
	Running/Afloat repair	49	16	18	12	67	12	43	19	31	8	23	11	17	7	19	8	24	8	39	6	31	30	17	7	18	14	17	8	17	7	11	3	8	2
	Foreign Flag vessels Total	153	164	130	139	217	136	176	151	143	108	161	124	117	116	98	69	100	62	124	60	113	78	118	55	81	35	95	52	110	49	35	30	44	19
	Docking work	1,188	890	1,148	874	1,253	809	1,212	965	1,050	832	1,141	1,020	1,090	1,013	945	921	1,008	848	876	927	855	896	934	846	870	851	819	935	829	703	790	1,022	805	1,040
	Damaged repair	37	13	11	3	32	14	27	14	29	37	14	2	16	11	22	5	20	5	22	23	16	8	13	5	13	8	19	21	14	7	8	8	13	9
	Conversion	20	33	9	22	13	13	11	34	11	22	9	26	12	26	5	58	5	16	19	23	8	14	2	1	7	19	13	14	16	14	12	9	17	35
	Running/Afloat repair	280	47	235	51	304	41	435	71	397	71	364	57	257	56	222	40	249	47	267	56	305	74	287	54	344	64	332	58	279	59	299	41	233	55
	Grand Total	1,525	983	1,403	950	1,602	876	1,685	1,084	1,487	962	1,528	1,105	1,375	1,105	1,194	1,023	1,282	916	1,184	1,030	1,184	991	1,236	906	1,234	941	1,183	1,029	1,138	784	1,138	784	1,068	1,139

- (Note) 1. Data Source : SAJ members and associate member only. Fiscal Year Basis.
2. Docking work is mainly composed of special survey and intermediate survey.
3. "Japanese Flag vessels" includes foreign flag vessels which are practically controlled by Japanese shipowners.

10. Shipbuilding Workforce (SAJ Members Only)

Division Year	Shipbuilding Division Employees			Subcontractors (Shipbuilding Division)	Employees and Subcontractors Total	No. of surveyed Companies & Yards	Total Employees (Inc. other division)
	Staff	Workers	Total				
1977	27,235	75,918	103,153	30,053	133,206	23 co. & 51 yards	264,309
1978	23,163	67,246	90,409	21,661	112,070	23 co. & 49 yards	246,386
1979	18,309	50,613	68,922	15,664	84,586	23 co. & 48 yards	214,110
1980	15,155	41,483	56,638	18,050	74,688	23 co. & 46 yards	201,196
1981	16,244	41,793	58,037	24,135	82,172	23 co. & 46 yards	204,583
1982	16,637	43,845	60,482	25,908	86,390	23 co. & 46 yards	204,390
1983	16,770	43,033	59,803	18,422	78,225	23 co. & 45 yards	203,150
1984	16,418	41,086	57,504	17,992	75,496	23 co. & 44 yards	195,468
1985	15,692	38,373	54,065	18,699	72,764	23 co. & 43 yards	189,053
1986	13,865	33,515	47,380	16,034	63,414	23 co. & 44 yards	176,167
1987	10,140	20,994	31,134	11,866	43,000	21 co. & 40 yards	146,393
1988	8,533	16,311	24,844	10,846	35,690	18 co. & 40 yards	132,559
1989	8,049	15,047	23,096	12,006	35,102	18 co. & 39 yards	128,106
1990	7,639	14,712	22,351	13,056	35,407	18 co. & 38 yards	127,299
1991	8,305	15,211	23,516	14,412	37,928	18 co. & 38 yards	130,007
1992	8,873	16,073	24,946	15,664	40,610	18 co. & 38 yards	133,881
1993	9,366	16,311	25,677	16,266	41,943	18 co. & 38 yards	134,338
1994	8,397	16,317	24,714	15,514	40,228	18 co. & 38 yards	129,849
1995	7,886	15,678	23,564	14,752	38,316	18 co. & 38 yards	124,362
1996	7,066	14,557	21,623	15,480	37,103	18 co. & 37 yards	117,324
1997	6,925	13,196	20,121	18,215	38,336	18 co. & 37 yards	113,107
1998	6,872	13,055	19,927	18,298	38,225	18 co. & 36 yards	111,351
1999	6,753	12,269	19,022	18,622	37,644	18 co. & 35 yards	107,249
2000	6,570	11,518	18,088	17,479	35,567	18 co. & 33 yards	100,785
2001	6,441	11,710	18,151	18,865	37,016	18 co. & 35 yards	94,108
2002	6,245	11,411	17,656	20,755	38,411	18 co. & 34 yards	89,112
2003	6,771	11,991	18,762	23,048	41,810	17 co. & 33 yards	78,433
2004	6,975	11,692	18,667	21,771	40,438	17 co. & 32 yards	78,433
2005	7,051	11,676	18,727	24,608	43,335	17 co. & 32 yards	71,596
2006	7,269	13,377	20,646	26,188	46,834	18 co. & 35 yards	72,994
2007	7,702	13,961	21,663	28,577	50,240	18 co. & 35 yards	71,542
2008	8,295	14,453	22,748	29,391	52,139	18 co. & 35 yards	76,929
2009	8,840	14,795	23,635	30,261	53,896	18 co. & 35 yards	79,982
2010	9,408	15,451	24,859	28,461	53,320	18 co. & 35 yards	79,907
2011	9,534	15,129	24,663	28,101	52,764	18 co. & 35 yards	76,161
2012	9,431	14,287	23,718	27,462	51,180	18 co. & 35 yards	70,782
2013	9,034	13,261	22,295	24,218	46,513	17 co. & 35 yards	68,949
2014	8,972	11,867	20,839	23,501	44,340	16 co. & 34 yards	59,734
2015	9,203	11,882	21,085	25,331	46,416	16 co. & 34 yards	58,985
2016	9,797	13,477	23,274	30,979	54,253	16 co. & 34 yards	56,687
2017	9,869	13,543	23,412	27,702	51,114	16 co. & 34 yards	55,461
2018	9,751	11,020	20,771	27,760	48,531	16 co. & 34 yards	50,052
2019	9,500	10,519	20,019	26,982	47,001	16 co. & 34 yards	49,346

(Note) As of 1st April in each year.