



CV. JAYA RAYA SAKTI

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CV. JAYA RAYA SAKTI

About us

CV Jaya Raya Sakti merupakan mitra kerja yang sepenuhnya milik nasional yang bergerak dibidang jasa konsultasi maupun pelaksanaan di bidang peralatan hydraulic dan lubrikasi industri alat berat, pertambangan, perkapalan, pertanian dan perkebunan lebih dari 15 tahun. Dengan pengetahuan dan pengalaman yang luas dibidangnya dan didukung oleh kemampuan teknologi dan mitra tenaga kerja ahli nasional dan internasional dalam hal Supply dan pemasangan instalasi sytem meliputi :

- hydraulic dan lubrikasi pada unit heavy equipment.
- Supply dan pemasangan instalasi system hydraulic dan lubrikasi pada unit heavy industri. Konsultasi engineering dan memecahkan segala permasalahan yang timbul dari hydraulic dan lubrikasi dari segala macam equipment.
- Jasa Oil Flushing dan Chemical Cleaning untuk instalasi hydraulic dan lubrication system.
- Jasa Oil Contamination test, untuk menentukan standard kebersihan oil pada derajat yang diperbolehkan untuk hydraulic dan lubrication system.

CV Jaya Raya Sakti is a nationally owned work partner which deals both in consulting services and Hydraulic/Lubrication on heavy equipment industries, mining, ships, forming and plantation. Based on board knowledge & Experiences in it fields, and supported by International technology, ability and expert the company work on following :

- Lubrication and hydraulic system supply and installation heavy equipment unit.
- Lubrication and hydraulic system supply and installation on heavy industry unit.
- Engineering Consultation and problem solving of any problem raised from hydraulic and lubrication of various equipments.
- Chemical cleaning and oil flushing service on hydraulic and lubrication system.

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The Law Status

Company Name	: CV. Jaya Raya sakti
Bil of establishmen	: No 144 Date 22 Juli 2017 Herman Soesilo
NPWP (Tax) No	: 31.493.59.6-616.000
SIUP	: 5.3/7841.A/436.7.17/2017
TDP	: 13.01.3.46.31674
NIB	: 9120205351027
Registrasi	: 2.3578-1-02-1-13-080739
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Fax	: +6231 - 3731214
Email	: sales_sby@jayarayasakti.co.id
Website	: www.jayarayasakti.co.id
Head Office	: Tambak Adi 112 ,Surabaya 60142 eats java - Indonesia

Hydraulic Hose

HCGE THE THERMOPLASTIC

Series Code	←			→			↑		↓		↺		↻	
	Start	End	Value	Start	End	Value	Start	End	Value	Start	End	Value	Start	End
1000001	-4	0	1/4	1/2	0.48	31	3000	84	1000	30	1.4	3.96	7	
1000002	-4	0	1/16	1/3	1.96	19	2700	70	10000	45	1.8	1.10	8	
1000003	-4	10	98	10.0	2.00	16	2300	84	9000	19	3.2	0.98	10	
1000004	-4	10	10	20	3.00	14	2000	90	8000	70	0.7	0.22	10	

Time (min)	100%				50%				25%				10%			
	Speed	Time	Acc	Dec	Speed	Time	Acc	Dec	Speed	Time	Acc	Dec	Speed	Time	Acc	Dec
002040	-4	8	19	14.2	0.56	40	1880	140	22000	19	6.2	0.31	22			
002048	-5	8	0.16	15.8	0.82	30	5000	140	20000	119	6.8	0.31	23			
002049	-6	10	0.19	14.2	0.71	30	4800	140	18000	121	6.8	0.46	21			
002047	-6	10	10	21.2	0.84	27.5	4000	140	12000	171	7.2	0.47	20			
002047	-10	10	0.08	24.0	0.36	20	3000	130	14000	200	8.0	0.67	16			
002042	-12	10	0.04	20.6	0.12	21.5	3400	80	12000	240	8.6	0.85	17			
002045	-16	20	1	36.3	1.44	16.5	1400	80	8000	500	12.0	1.28	14			
002048	-20	30	1.04	46.0	1.81	12.3	1600	30	7200	440	14.0	1.54	10.5			
002044	-24	30	1.02	52.8	2.58	8	1200	30	5200	500	16.0	2.08	10.8			
002045	-30	30	2	60.8	3.39	8	1100	30	4600	600	20.0	2.58	10.6			

Item Code	← 1			← 2			← 3			← 4			← 5		
	QTY	UNIT	PRICE	QTY	UNIT	PRICE	QTY	UNIT	PRICE	QTY	UNIT	PRICE	QTY	UNIT	PRICE
000004	4	E	918	15.2	0.32	26.7	3000	82.8	10000	76	3.2	0.20	18		
000005	6	E	918	14.8	0.38	26.7	3000	82.8	10000	86	3.4	0.27	18		
000006	6	E	918	17.5	0.38	16.3	2000	82	8000	102	4.1	0.35	20		
000008	4	11	918	18.8	0.77	15.8	2000	82.8	8000	117	4.7	0.45	18		
000009	10	15	918	22.2	0.82	12.1	1700	84.4	7000	148	5.8	0.56	18		
000011	12	18	918	27.8	1.08	15.2	1500	81.6	6000	188	6.8	0.67	18		
000012	18	22	918	31.4	1.24	5.8	800	82	2000	187	7.8	0.80	18		
000013	20	38	118	38.1	1.3	4.3	425	17.2	2000	228	8.2	0.80	17		
000019	24	38	118	44.8	1.78	3.8	380	15.8	2000	287	16.7	1.06	17		
000022	32	48	118	56.4	2.22	2.4	380	8.8	180	327	12.8	1.08			

Item Code														
	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large
100010	-	2	504	0	0.2	62	8420	185	2700	20	0.75	0.02	-	-

Test Case													
	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	
100108	-4	9	10	13.1	0.02	7.3	1102	30.0	4002	40	1.8	6.11	7
100109	-4	9	910	11.8	0.08	9.8	900	27.0	3900	30	2.0	0.12	10
100102	-4	10	30	16.0	0.80	8.3	900	25.2	3900	30	2.4	0.18	11
100403	-6	10	102	16.7	0.78	5.8	640	20.2	3400	70	2.8	0.21	14
100402	-10	16	88	23.8	0.94	0.0	700	20.0	3400	90	3.8	0.08	18
100400	-12	19	304	27.8	1.00	4.3	850	18.0	3200	110	4.8	0.28	20
100401	-16	26	4	36.2	1.30	6.0	900	18.0	3200	900	8.0	0.30	30

Year/Date	←		→		↑		↓		↺		↻		
	Year	Month	Day	Hour	Minute	Second	Year	Month	Day	Hour	Minute	Second	
2002-01	4	8	14	32.7	0.92	22.5	2075	8	10	1000	100	4.5	0.22
2002-02	6	8	514	14.2	5.58	21.5	2123	8	10	1000	119	4.8	0.24
2002-03	4	10	38	14.3	5.88	18.5	2015	7	10	1000	138	5.2	0.30
2002-04	8	12	12	16.9	5.78	16.5	2020	8	10	1000	146	7.2	0.37
2002-05	-10	16	38	20.3	5.81	19.5	1980	5	7	7000	160	8.0	0.40
2002-06	-12	16	34	27.9	1.08	16.5	1950	4	7	7100	248	8.8	0.58
2002-07	-16	20	1	30.2	1.58	8.8	1980	16.2	7	7100	300	12.5	0.58
2002-08	20	22	114	4.2	1.88	6.9	202	16.2	1000	420	16.8	1.08	71
2002-09	-24	26	119	48.2	1.84	5.9	720	26	1000	500	20.0	1.20	84
2002-10	-32	31	3	80.8	2.84	4.8	180	32	1000	600	28.2	1.80	92

Row Name	Column	Row 1	Row 2	Row 3	Row 4	Row 5	Row 6	Row 7	Row 8	Row 9	Row 10	Row 11	Row 12	Row 13	Row 14	Row 15	Row 16	Row 17	Row 18	Row 19	Row 20	Row 21	Row 22	Row 23	Row 24	Row 25	Row 26	Row 27	Row 28	Row 29	Row 30	Row 31	Row 32	Row 33	Row 34	Row 35	Row 36	Row 37	Row 38	Row 39	Row 40	Row 41	Row 42	Row 43	Row 44	Row 45	Row 46	Row 47	Row 48	Row 49	Row 50	Row 51	Row 52	Row 53	Row 54	Row 55	Row 56	Row 57	Row 58	Row 59	Row 60	Row 61	Row 62	Row 63	Row 64	Row 65	Row 66	Row 67	Row 68	Row 69	Row 70	Row 71	Row 72	Row 73	Row 74	Row 75	Row 76	Row 77	Row 78	Row 79	Row 80	Row 81	Row 82	Row 83	Row 84	Row 85	Row 86	Row 87	Row 88	Row 89	Row 90	Row 91	Row 92	Row 93	Row 94	Row 95	Row 96	Row 97	Row 98	Row 99	Row 100	Row 101	Row 102	Row 103	Row 104	Row 105	Row 106	Row 107	Row 108	Row 109	Row 110	Row 111	Row 112	Row 113	Row 114	Row 115	Row 116	Row 117	Row 118	Row 119	Row 120	Row 121	Row 122	Row 123	Row 124	Row 125	Row 126	Row 127	Row 128	Row 129	Row 130	Row 131	Row 132	Row 133	Row 134	Row 135	Row 136	Row 137	Row 138	Row 139	Row 140	Row 141	Row 142	Row 143	Row 144	Row 145	Row 146	Row 147	Row 148	Row 149	Row 150	Row 151	Row 152	Row 153	Row 154	Row 155	Row 156	Row 157	Row 158	Row 159	Row 160	Row 161	Row 162	Row 163	Row 164	Row 165	Row 166	Row 167	Row 168	Row 169	Row 170	Row 171	Row 172	Row 173	Row 174	Row 175	Row 176	Row 177	Row 178	Row 179	Row 180	Row 181	Row 182	Row 183	Row 184	Row 185	Row 186	Row 187	Row 188	Row 189	Row 190	Row 191	Row 192	Row 193	Row 194	Row 195	Row 196	Row 197	Row 198	Row 199	Row 200	Row 201	Row 202	Row 203	Row 204	Row 205	Row 206	Row 207	Row 208	Row 209	Row 210	Row 211	Row 212	Row 213	Row 214	Row 215	Row 216	Row 217	Row 218	Row 219	Row 220	Row 221	Row 222	Row 223	Row 224	Row 225	Row 226	Row 227	Row 228	Row 229	Row 230	Row 231	Row 232	Row 233	Row 234	Row 235	Row 236	Row 237	Row 238	Row 239	Row 240	Row 241	Row 242	Row 243	Row 244	Row 245	Row 246	Row 247	Row 248	Row 249	Row 250	Row 251	Row 252	Row 253	Row 254	Row 255	Row 256	Row 257	Row 258	Row 259	Row 260	Row 261	Row 262	Row 263	Row 264	Row 265	Row 266	Row 267	Row 268	Row 269	Row 270	Row 271	Row 272	Row 273	Row 274	Row 275	Row 276	Row 277	Row 278	Row 279	Row 280	Row 281	Row 282	Row 283	Row 284	Row 285	Row 286	Row 287	Row 288	Row 289	Row 290	Row 291	Row 292	Row 293	Row 294	Row 295	Row 296	Row 297	Row 298	Row 299	Row 300	Row 301	Row 302	Row 303	Row 304	Row 305	Row 306	Row 307	Row 308	Row 309	Row 310	Row 311	Row 312	Row 313	Row 314	Row 315	Row 316	Row 317	Row 318	Row 319	Row 320	Row 321	Row 322	Row 323	Row 324	Row 325	Row 326	Row 327	Row 328	Row 329	Row 330	Row 331	Row 332	Row 333	Row 334	Row 335	Row 336	Row 337	Row 338	Row 339	Row 340	Row 341	Row 342	Row 343	Row 344	Row 345	Row 346	Row 347	Row 348	Row 349	Row 350	Row 351	Row 352	Row 353	Row 354	Row 355	Row 356	Row 357	Row 358	Row 359	Row 360	Row 361	Row 362	Row 363	Row 364	Row 365	Row 366	Row 367	Row 368	Row 369	Row 370	Row 371	Row 372	Row 373	Row 374	Row 375	Row 376	Row 377	Row 378	Row 379	Row 380	Row 381	Row 382	Row 383	Row 384	Row 385	Row 386	Row 387	Row 388	Row 389	Row 390	Row 391	Row 392	Row 393	Row 394	Row 395	Row 396	Row 397	Row 398	Row 399	Row 400	Row 401	Row 402	Row 403	Row 404	Row 405	Row 406	Row 407	Row 408	Row 409	Row 410	Row 411	Row 412	Row 413	Row 414	Row 415	Row 416	Row 417	Row 418	Row 419	Row 420	Row 421	Row 422	Row 423	Row 424	Row 425	Row 426	Row 427	Row 428	Row 429	Row 430	Row 431	Row 432	Row 433	Row 434	Row 435	Row 436	Row 437	Row 438	Row 439	Row 440	Row 441	Row 442	Row 443	Row 444	Row 445	Row 446	Row 447	Row 448	Row 449	Row 450	Row 451	Row 452	Row 453	Row 454	Row 455	Row 456	Row 457	Row 458	Row 459	Row 460	Row 461	Row 462	Row 463	Row 464	Row 465	Row 466	Row 467	Row 468	Row 469	Row 470	Row 471	Row 472	Row 473	Row 474	Row 475	Row 476	Row 477	Row 478	Row 479	Row 480	Row 481	Row 482	Row 483	Row 484	Row 485	Row 486	Row 487	Row 488	Row 489	Row 490	Row 491	Row 492	Row 493	Row 494	Row 495	Row 496	Row 497	Row 498	Row 499	Row 500	Row 501	Row 502	Row 503	Row 504	Row 505	Row 506	Row 507	Row 508	Row 509	Row 510	Row 511	Row 512	Row 513	Row 514	Row 515	Row 516	Row 517	Row 518	Row 519	Row 520	Row 521	Row 522	Row 523	Row 524	Row 525	Row 526	Row 527	Row 528	Row 529	Row 530	Row 531	Row 532	Row 533	Row 534	Row 535	Row 536	Row 537	Row 538	Row 539	Row 540	Row 541	Row 542	Row 543	Row 544	Row 545	Row 546	Row 547	Row 548	Row 549	Row 550	Row 551	Row 552	Row 553	Row 554	Row 555	Row 556	Row 557	Row 558	Row 559	Row 560	Row 561	Row 562	Row 563	Row 564	Row 565	Row 566	Row 567	Row 568	Row 569	Row 570	Row 571	Row 572	Row 573	Row 574	Row 575	Row 576	Row 577	Row 578	Row 579	Row 580	Row 581	Row 582	Row 583	Row 584	Row 585	Row 586	Row 587	Row 588	Row 589	Row 590	Row 591	Row 592	Row 593	Row 594	Row 595	Row 596	Row 597	Row 598	Row 599	Row 600	Row 601	Row 602	Row 603	Row 604	Row 605	Row 606	Row 607	Row 608	Row 609	Row 610	Row 611	Row 612	Row 613	Row 614	Row 615	Row 616	Row 617	Row 618	Row 619	Row 620	Row 621	Row 622	Row 623	Row 624	Row 625	Row 626	Row 627	Row 628	Row 629	Row 630	Row 631	Row 632	Row 633	Row 634	Row 635	Row 636	Row 637	Row 638	Row 639	Row 640	Row 641	Row 642	Row 643	Row 644	Row 645	Row 646	Row 647	Row 648	Row 649	Row 650	Row 651	Row 652	Row 653	Row 654	Row 655	Row 656	Row 657	Row 658	Row 659	Row 660	Row 661	Row 662	Row 663	Row 664	Row 665	Row 666	Row 667	Row 668	Row 669	Row 670	Row 671	Row 672	Row 673	Row 674	Row 675	Row 676	Row 677	Row 678	Row 679	Row 680	Row 681	Row 682	Row 683	Row 684	Row 685	Row 686	Row 687	Row 688	Row 689	Row 690	Row 691	Row 692	Row 693	Row 694	Row 695	Row 696	Row 697	Row 698	Row 699	Row 700	Row 701	Row 702	Row 703	Row 704	Row 705	Row 706	Row 707	Row 708	Row 709	Row 710	Row 711	Row 712	Row 713	Row 714	Row 715	Row 716	Row 717	Row 718	Row 719	Row 720	Row 721	Row 722	Row 723	Row 724	Row 725	Row 726	Row 727	Row 728	Row 729	Row 730	Row 731	Row 732	Row 733	Row 734	Row 735	Row 736	Row 737	Row 738	Row 739	Row 740	Row 741	Row 742	Row 743	Row 744	Row 745	Row 746	Row 747	Row 748	Row 749	Row 750	Row 751	Row 752	Row 753	Row 754	Row 755	Row 756	Row 757	Row 758	Row 759	Row 760	Row 761	Row 762	Row 763	Row 764	Row 765	Row 766	Row 767	Row 768	Row 769	Row 770	Row 771	Row 772	Row 773	Row 774	Row 775	Row 776	Row 777	Row 778	Row 779	Row 780	Row 781	Row 782	Row 783	Row 784	Row 785	Row 786	Row 787	Row 788	Row 789	Row 790	Row 791	Row 792	Row 793	Row 794	Row 795	Row 796	Row 797	Row 798	Row 799	Row 800	Row 801	Row 802	Row 803	Row 804	Row 805	Row 806	Row 807	Row 808	Row 809	Row 810	Row 811	Row 812	Row 813	Row 814	Row 815	Row 816	Row 817	Row 818	Row 819	Row 820	Row 821	Row 822	Row 823	Row 824	Row 825	Row 826	Row 827	Row 828	Row 829	Row 830	Row 831	Row 832	Row 833	Row 834	Row 835	Row 836	Row 837	Row 838	Row 839	Row 840	Row 841	Row 842	Row 843	Row 844	Row 845	Row 846	Row 847	Row 848	Row 849	Row 850	Row 851	Row 852	Row 853	Row 854	Row 855	Row 856	Row 857	Row 858	Row 859	Row 860	Row 861	Row 862	Row 863	Row 864	Row 865	Row 866	Row 867	Row 868	Row 869	Row 870	Row 871	Row 872	Row 873	Row 874	Row 875	Row 876	Row 877	Row 878	Row 879	Row 880	Row 881	Row 882	Row 883	Row 884	Row 885	Row 886	Row 887	Row 888	Row 889	Row 890	Row 891	Row 892	Row 893	Row 894	Row 895	Row 896	Row 897	Row 898	Row 899	Row 900	Row 901	Row 902	Row 903	Row 904	Row 905	Row 906	Row 907	Row 908	Row 909	Row 910	Row 911	Row 912	Row 913	Row 914	Row 915	Row 916	Row 917	Row 918	Row 919	Row 920	Row 921	Row 922	Row 923	Row 924	Row 925	Row 926	Row 927	Row 928	Row 929	Row 930	Row 931	Row 932	Row 933	Row 934	Row 935	Row 936	Row 937	Row 938	Row 939	Row 940	Row 941	Row 942	Row 943	Row 944	Row 945	Row 946	Row 947	Row 948	Row 949	Row 950	Row 951	Row 952	Row 953	Row 954	Row 955	Row 956	Row 957	Row 958	Row 959	Row 960	Row 961	Row 962	Row 963	Row 964	Row 965	Row 966	Row 967	Row 968	Row 969	Row 970	Row 971	Row 972	Row 973	Row 974	Row 975	Row 976	Row 977	Row 978	Row 979	Row 980	Row 981	Row 982	Row 983	Row 984	Row 985	Row 986	Row 987	Row 988	Row 989	Row 990	Row 991	Row 992	Row 993	Row 994	Row 995	Row 996	Row 997	Row 998	Row 999	Row 1000
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Series Code	Series 1			Series 2			Series 3			Series 4			Series 5		
	Value	Unit	Year	Value	Unit	Year	Value	Unit	Year	Value	Unit	Year	Value	Unit	Year
020000P	102	10	2000	100	10	2000	100	10	2000	100	10	2000	100	10	2000
020001P	102	10	2001	100	10	2001	100	10	2001	100	10	2001	100	10	2001
020002P	102	10	2002	100	10	2002	100	10	2002	100	10	2002	100	10	2002
020003P	102	10	2003	100	10	2003	100	10	2003	100	10	2003	100	10	2003
020004P	102	10	2004	100	10	2004	100	10	2004	100	10	2004	100	10	2004
020005P	102	10	2005	100	10	2005	100	10	2005	100	10	2005	100	10	2005
020006P	102	10	2006	100	10	2006	100	10	2006	100	10	2006	100	10	2006
020007P	102	10	2007	100	10	2007	100	10	2007	100	10	2007	100	10	2007
020008P	102	10	2008	100	10	2008	100	10	2008	100	10	2008	100	10	2008
020009P	102	10	2009	100	10	2009	100	10	2009	100	10	2009	100	10	2009
020010P	102	10	2010	100	10	2010	100	10	2010	100	10	2010	100	10	2010

Task Code	Points	H				A				B				Total
		Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank			
1000007	45	4	8	139	112	5.88	45	1003	100	20100	86	5.4	5.47	41
1000008	45	8	16	248	221	5.78	44.2	1000	178	21000	78	5.3	5.35	37
1000009	45	6	10	122	22.0	5.86	45	1000	100	20000	86	5.4	5.75	38
1000010	45	10	16	338	31.4	5.84	43	1000	100	20000	100	7.1	1.25	81
1000015	45	11	16	345	31.2	5.83	43	1000	100	20000	110	8.5	5.47	98
1000016	45	14	20	1	16.3	5.80	47	1000	100	20000	200	6.0	2.20	130
1000047	45	20	32	1354	66.1	5.80	47	1000	100	20000	248	17.8	1.86	190
1000048	45	20	32	1104	66.1	5.84	43	1000	100	20000	248	17.8	3.67	210
1000049	45	24	36	1532	86.0	5.82	43	1000	100	20000	300	22.0	3.08	201
1000050	45	20	32	2	73.4	5.81	43	1000	100	20000	450	20.0	6.48	428

Year Range	Age	Mean			SD			CV			p	
		Mean	SD	CV	Mean	SD	CV	Mean	SD	CV		
1999-2002	42	19	2.8	14.2	1.8	30	140	20000	140	5.5	0.87	38
1999-2004	42	19	3.4	17.9	1.2	30	140	20000	140	5.8	1.20	35
1999-2006	42	19	3.1	17.8	1.48	30	140	20000	140	7.3	1.80	118
1999-2008	42	19	3.1	18.9	1.51	30	140	20000	140	11.0	2.27	142
2000-03	45	24	3.1	13.5	3.22	30	140	20000	140	16.7	4.49	391
2001-04	42	21	2	10.2	2.78	30	140	20000	140	17.7	4.28	105
2002-05	42	40	3.1	12.5	3.58	30	140	20000	140	22.3	7.17	308
2003-06	42	46	3.6	12.9	4.76	30	140	87.7	1087	30	35.4	135

Year/Date	2017			2018			2019			2020			2021	
	Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar	Jan	Feb	Mar	Apr	May
2017/1	17	19	24	21.2	2.27	36	5000	142	12380	180	7.7	1.07	89	
2017/2	48	25	1	38.3	1.81	36	5000	182	12000	210	8.3	1.03		

Step Code	1				2				3				
	Step	Time	Cost	Yield	Step	Time	Cost	Yield	Step	Time	Cost	Yield	
000000	17	10	30	20	1.16	3.7	100	8.8	100	27	12	1.01	91
000007	18	10	1	30	1.18	1.7	100	8.8	100	28	13	0.78	91
000008	20	12	1.94	42	1.85	1.8	100	1.8	100	30	18	1.00	92
000009	21	16	1.17	48	1.89	1.9	100	4.3	100	31	19	1.23	98
000010	22	17	2	51	2.40	3.7	100	12.8	100	32	20	1.38	99
000011	41	60	2.10	75	2.26	3.8	91	1.6	100	49	7.0	2.18	100
000012	44	78	2	80	3.46	3.8	91	5.8	100	52	10.2	2.44	100
000013	48	95	2.10	100	4.20	3.8	91	5.2	100	57	15.7	3.05	100
000014	49	100	4	100	4.33	3.8	91	6.8	100	58	16.0	3.41	100

Industrial Hose

INDUSTRIAL HOSE // BULK MATERIAL

Dimensions shown may be changed without prior notice

// 720AA



Bulk material S&D 10 bar (150 psi)

Tube: black conductive NR - abrasion resistant.
Reinforcement: high tensile textile cords with embedded steel helix wire.
Cover: black conductive SBR/NR - abrasion and ozone resistant.
Application: bulk material suction and delivery in heavy duty applications.
 Specially designed for dry cement, grain and animal feed transfer.
Constant operation: -30 °C +80 °C (-22 °F +176 °F)

mm	in	mm	in	bar	psi	bar	psi	mm	in	%	kg/m	lb/ft
51.0	2"	85.00	3.35	10	150	30	450	553.0	8.02	100	1.430	0.97
63.0	2 1/2"	91.00	3.58	10	150	30	450	589.0	8.44	90	1.900	1.28
76.0	3"	96.00	3.78	10	150	30	450	625.0	8.96	80	2.280	1.54
90.0	3 1/2"	106.00	4.17	10	150	30	450	706.0	10.03	70	3.230	2.18
102.0	4"	116.00	4.57	10	150	30	450	796.0	11.25	60	3.880	2.54
103.0	4"	116.00	4.57	10	150	30	450	800.0	11.25	60	3.900	2.54
127.0	5"	143.00	5.63	8	75	15	225	906.0	12.00	80	4.750	3.20
127.0	5"	143.00	5.63	8	75	15	225	906.0	12.00	80	5.270	3.55
152.0	6"	168.00	6.61	5	75	15	225	1006.0	13.94	80	5.880	4.00
203.0	8"	221.00	8.70	5	75	15	225	1312.0	18.97	70	8.990	6.08

INDUSTRIAL HOSE // SANDBLAST

Dimensions shown may be changed without prior notice

// 753AA



Sandblast 12 bar (180 psi) - Premium quality

Tube: black conductive NR - abrasion resistance 50 mm² (SD 40-49A).
Reinforcement: high tensile textile cords.
Cover: black SBR/NR - abrasion and ozone resistant - pin pricked.
Application: abrasive material blasting.
 Designed for long service life in heavy duty applications.
Constant operation: -40 °C +80 °C (-40 °F +176 °F)

mm	in	mm	in	bar	psi	bar	psi	mm	in	%	kg/m	lb/ft
13.0	1/2"	27.00	1.06	12	180	36	540	3.540	0.37			
16.0	5/8"	33.00	1.30	12	180	36	540	3.700	0.48			
19.0	3/4"	38.00	1.50	12	180	36	540	3.890	0.60			
19.0	3/4"	40.00	1.57	12	180	36	540	3.950	0.78			
25.0	1"	39.00	1.54	12	180	36	540	3.880	0.58			
25.0	1"	49.00	1.93	12	180	36	540	4.520	1.00			
32.0	1 1/4"	48.00	1.88	12	180	36	540	4.320	0.82			
32.0	1 1/4"	55.00	2.17	12	180	36	540	4.810	1.20			
38.0	1 1/2"	55.00	2.17	12	180	36	540	4.800	1.10			
50.0	1 1/2"	60.00	2.36	12	180	36	540	5.050	1.38			
51.0	2"	71.00	2.80	12	180	36	540	5.580	1.60			
61.0	2"	73.00	2.87	12	180	36	540	5.640	1.78			
61.0	2"	76.00	2.99	12	180	36	540	5.910	1.98			

INDUSTRIAL HOSE // CONCRETE

Dimensions shown may be changed without prior notice

// 740AA



Concrete pumping 85 bar (1275 psi) - Heavy duty - Steel reinforced

Tube: black conductive NR - abrasion resistant.
Reinforcement: high tensile steel cords.
Cover: black conductive SBR/NR - abrasion and ozone resistant.
Application: high pressure concrete pumping.
Constant operation: -30 °C +80 °C (-22 °F +176 °F)

mm	in	mm	in	bar	psi	bar	psi	mm	in	%	kg/m	lb/ft
51.0	2"	85.00	3.35	85	1275	170	2500	255.0	10.04		2.050	1.42
63.0	2 1/2"	91.00	3.58	85	1275	170	2500	315.0	12.40		3.300	2.22
76.0	3"	100.00	3.94	85	1275	170	2500	380.0	14.96		4.490	3.02
90.0	3 1/2"	116.00	4.57	85	1275	170	2500	450.0	17.72		5.430	3.65
102.0	4"	126.00	4.96	85	1275	170	2500	500.0	20.08		6.520	4.38
127.0	5"	153.00	6.02	85	1275	170	2500	635.0	25.00		8.730	6.54
152.0	6"	184.00	7.24	85	1275	170	2500	760.0	29.92		13.660	9.19

Industrial Hose

INDUSTRIAL HOSE // ACID CHEMICAL & MULTIPURPOSE

Dimensions shown may be changed without prior notice

// 984AH



Multipurpose 20 bar (300 psi)

Tube: black synthetic elastomer.
Reinforcement: high tensile textile cords.
Cover: red synthetic elastomer with longitudinal blue stripes - abrasion, ozone and hydrocarbon resistant.
Application: compressed air, water, fuel and oil delivery in general industrial applications.
Constant operation: -10 °C +60 °C (+14 °F +140 °F)

mm	in	mm	in	bar	psi	bar	psi	mm	in	%	kg/m	lb/ft
8.0	1/4"	13.00	0.51	20	300	60	900	48.0	1.89		0.140	0.10
8.0	5/16"	15.00	0.59	20	300	60	900	64.0	2.52		0.170	0.12
10.0	3/8"	17.00	0.67	20	300	60	900	80.0	3.15		0.200	0.14
15.0	1/2"	21.00	0.83	20	300	60	900	104.0	4.09		0.275	0.19
16.0	5/8"	25.00	0.98	20	300	60	900	128.0	5.04		0.370	0.26
19.0	3/4"	29.00	1.14	20	300	60	900	152.0	5.98		0.500	0.34
25.0	1"	35.00	1.38	20	300	60	900	200.0	7.87		0.825	0.43

// 954AH **NEW**



EVOLUTION

Multipurpose 20 bar (300 psi) - Non conductive

Tube: black non conductive NBR.
Reinforcement: high tensile textile cords.
Cover: red NBR/PVC - abrasion, ozone and hydrocarbon resistant.
Application: premium quality compressed air, water, fuel and oil delivery in general industrial applications.
Constant operation: -30 °C +80 °C (-22 °F +176 °F)

mm	in	mm	in	bar	psi	bar	psi	mm	in	%	kg/m	lb/ft
10.0	3/8"	16.00	0.63	20	300	60	900				0.185	0.13
13.0	1/2"	20.00	0.79	20	300	60	900				0.230	0.16
19.0	3/4"	27.00	1.06	20	300	60	900				0.420	0.29
25.0	1"	34.00	1.34	20	300	60	900				0.560	0.38
32.0	1 1/4"	44.00	1.73	20	300	60	900				0.880	0.60
38.0	1 1/2"	50.00	1.97	20	300	60	900				1.020	0.69
51.0	2"	65.00	2.56	20	300	60	900				1.450	0.98

INDUSTRIAL HOSE // HYDROCARBONS

Dimensions shown may be changed without prior notice

// 650AA



Fuel-oil delivery 10 bar (150 psi)

Tube: black conductive NBR.
Reinforcement: high tensile textile cords.
Cover: black conductive CR - abrasion, ozone, hydrocarbon and fire resistant.
Application: general purpose fuel and oil delivery.
Constant operation: -30 °C +80 °C (-22 °F +176 °F)

mm	in	mm	in	bar	psi	bar	psi	mm	in	%	kg/m	lb/ft
19.0	3/4"	29.00	1.14	10	150	30	450				0.450	0.31
25.0	1"	38.00	1.38	10	150	30	450				0.370	0.26
32.0	1 1/4"	42.00	1.65	10	150	30	450				0.750	0.48
32.0	1 1/4"	44.00	1.73	10	150	30	450				0.660	0.46
35.0	1 3/8"	47.00	1.85	10	150	30	450				0.840	0.64
38.0	1 1/2"	48.00	1.88	10	150	30	450				0.820	0.58
38.0	1 1/2"	50.00	1.97	10	150	30	450				1.000	0.68
40.0	1 9/16"	52.00	2.05	10	150	30	450				1.050	0.71
45.0	1 3/4"	57.00	2.24	10	150	30	450				1.170	0.79
51.0	2"	61.00	2.40	10	150	30	450				1.080	0.74
51.0	2"	63.00	2.48	10	150	30	450				1.320	0.89
63.0	2 1/2"	75.00	2.95	10	150	30	450				1.600	1.08
76.0	3"	88.00	3.46	10	150	30	450				1.930	1.30
102.0	4"	114.00	4.49	10	150	30	450				2.810	1.78

Industrial Hose

// 605AA



MSHA

Fuel-oil S&D 10 bar (150 psi)
exceed SAE 100R4 - SAE J2006/R2 - ISO
13363/2/A+B

Tube: black conductive NBR.

Reinforcement: high tensile textile cords with embedded steel
helix wire.

Cover: black CR - abrasion, ozone, hydrocarbon and flame
resistant.

Application: fuel and oil suction and delivery.
Specially designed for tank truck and general industrial
applications.

Also suitable for marine wet exhaust and bilge pump connection.
Constant operation: -30 °C +80 °C (-22 °F +176 °F)

mm	in	mm	in	bar	psi	bar	psi	mm	in	%	kg/m	lb/ft
19.0	3/4"	30.00	1.18	10	150	30	450	76.0	2.99	100	0.590	0.40
25.0	1"	36.00	1.42	10	150	30	450	100.0	3.94	100	0.750	0.51
30.0	1 1/16"	41.00	1.61	10	150	30	450	120.0	4.72	100	0.890	0.60
32.0	1 1/4"	43.00	1.69	10	150	30	450	128.0	5.04	100	0.940	0.64
35.0	1 3/8"	46.00	1.81	10	150	30	450	140.0	5.51	100	1.020	0.69
38.0	1 1/2"	49.00	1.93	10	150	30	450	152.0	5.98	100	1.020	0.69
40.0	1 5/16"	51.00	2.01	10	150	30	450	160.0	6.30	100	1.140	0.77
42.0	1 5/8"	53.00	2.09	10	150	30	450	168.0	6.61	100	1.190	0.80
45.0	1 3/4"	56.00	2.20	10	150	30	450	180.0	7.09	100	1.260	0.85
48.0	1 7/8"	59.00	2.32	10	150	30	450	192.0	7.56	100	1.330	0.90
51.0	2"	62.00	2.44	10	150	30	450	204.0	8.03	100	1.410	0.95
57.0	2 1/4"	68.00	2.68	10	150	30	450	228.0	8.98	100	1.570	1.06
60.0	2 3/8"	73.00	2.87	10	150	30	450	240.0	9.45	100	1.980	1.34
63.0	2 1/2"	76.00	2.99	10	150	30	450	252.0	9.92	90	2.060	1.39
70.0	2 3/4"	83.00	3.27	10	150	30	450	280.0	11.02	90	2.300	1.55
76.0	3"	89.00	3.50	10	150	30	450	304.0	11.97	90	2.470	1.66
80.0	3 1/8"	94.00	3.70	10	150	30	450	320.0	12.60	90	2.650	1.79
90.0	3 1/2"	104.00	4.09	10	150	30	450	360.0	14.17	90	3.090	2.08
100.0	4"	116.00	4.57	10	150	30	450	408.0	16.06	90	3.440	2.32
110.0	4 1/4"	124.00	4.88	10	150	30	450	440.0	17.32	90	4.150	2.79
115.0	4 1/2"	129.00	5.08	10	150	30	450	460.0	18.11	90	4.320	2.91
120.0	4 3/4"	136.00	5.43	10	150	30	450	480.0	18.90	80	5.530	3.72
127.0	5"	146.00	5.71	10	150	30	450	508.0	20.00	80	5.810	3.91
133.0	5 1/4"	151.00	5.94	10	150	30	450	532.0	20.94	80	6.050	4.07
152.0	6"	170.00	6.69	10	150	25	375	608.0	23.94	80	7.230	4.86
203.0	8"	225.00	8.86	10	150	25	375	812.0	31.97	70	11.470	7.71



Hose Fitting

A HOUSE OF COMPLETE HYDRAULIC FITTINGS



HOSE FITTING

- Hydraulic Hose Pipe Fitting
- Hydraulic Bends
- Hydraulic Nipples
- Hydraulic Nuts
- Hydraulic Adaptor
- Hydraulic Caps
- Hydraulic SAE Flange

- SAE lurus Thread
- ISO 6149
- ORFS Adapters
- NPT Adapters
- SLEEVE/FERULE,
- DOUBLE NEPPLE
- PUST ON FITTING
- SAE FLANGE
- SPIRAL GUARD
- WIRE SPRING GUARD HOSE
- ...Etc.....



Industrial Clamp

All Type of Clamps , All Material of Clamps
Just Fit Your Needs



- Superior Clamp
- also called pipe clamp
- American Worm Clamp
- Multipurpose Clamp
- Spanlock Clamp
- Safety Clamp
- Double Wire Clamp
- Light duty on hose pressure

Industrial Clamp



Stauff Clamp

RSB Clamp



Pipe, Tube And Hose Clamps

- Standard Series according to DIN 3015
- Heavy Series according to DIN 3015
- Twin Series according to DIN 3015,
- Pressure Test Kit



Industrial Gauges

Industrial Gauges



Selecting a Pressure Gauge

When selecting a pressure gauge, it is important to consider the following factors to ensure safety and accuracy:

1. Pressure fluid composition
2. Pressure fluid temperature
3. Ambient conditions
4. Pressure range
5. Conditions affecting wear of the system
6. Method of mounting
7. Required accuracy

1. Pressure fluid composition

Since the sensing element of a pressure gauge may be exposed directly to the measured medium, consider the characteristics of this medium. It may be corrosive, it may solidify at various temperatures or it may contain solids that will leave deposits inside the sensing element. For pressure fluids that will not solidify under normal conditions or leave deposits, a Bourdon tube gauge is acceptable. Otherwise a Sealgauge or diaphragm seal should be used. A chemical compatibility chart follows this section to aid in the selection of the proper sensing element material.

2. Pressure fluid temperature

Steam and other hot media may raise the temperature of the gauge components above safe working limits of the sealed joints. In these cases it is recommended that a siphon, cooling tower or diaphragm seal be used in conjunction with the pressure gauge.

3. Ambient conditions

The normal ambient temperature range for Wika pressure gauges is -40°F to +140°F (-40°C to +60°C) for dry or silicone-filled gauges and -4°F to +140°F (-20°C to +60°C) for glycerine-filled gauges. The error caused by temperature changes is +0.3% or -0.3% per 18°F rise or fall, respectively. The reference temperature is 70°F (20°C). The correction is for the temperature of the gauge, not the temperature of the measured medium. Remote gauge mounting using a diaphragm seal and capillary line is one alternative for applications involving extreme ambient temperature. Moisture and weather effects must also be considered. Liquid-filled gauges prevent condensation build up. For outdoor use, stainless steel, brass or plastic cased gauges are recommended.

4. Pressure range

A gauge range of twice the working pressure is generally selected. The working pressure in all cases should be limited to 75% of the gauge range. Where alternating pressure and pulsation are encountered, working pressure should be limited to 2/3 of the gauge range.

5. Conditions affecting wear of the system

In applications involving severe pressure fluctuation or pulsation, the use of restrictors and/or snubbers is recommended. In addition, liquid-filled gauges increase the service life of gauges in these conditions. Wika liquid-filled gauges are generally filled with glycerine. Silicone for larger temperature extremes and Halocarbon® for use with oxidizing agents such as chlorine, oxygen and hydrogen peroxide are also available.

6. Method of mounting

Radial (LM) and back (CBM or LBM) connections are available for most Wika gauges. Wika stocks gauges with standard NPT threaded connections. Other types such as metric threads, straight threads, hose barbs and special fittings are available as a special order. Pressure gauges should be mounted in the upright position. For applications where the gauge is mounted side ways, horizontally or upside down, contact Wika Customer Service for gauge type compatibility.

7. Required accuracy

Wika stocks gauges with accuracies from $\pm 3/2\%$ to $\pm 0.1\%$ of span (ASME Grade B to Grade 4A).

To ensure safe and accurate gauge selection, you must take all of the above factors into consideration. When in doubt, please do not hesitate to contact your local stocking distributor or Wika Customer Care for assistance!

Industrial Bearing



- BALL & ROLLER BEARINGS
- PLUMMER BLOCK HOUSING
- ADAPTER SLEEVE
- LINEAR BEARINGS
- PLAIN BEARINGS
- SLEWING BEARING
- RAILWAY BEARINGS
- SPLIT BEARINGS
- GREASES
- MECHANICAL TOOLS
- CONDITION MONITORING

Industrial Chains - Sprockets



- Drive Chains
- Conveyor Chains
- Leaf Chains
- Chains Part
- Industrial Sprockets



- Special Chains
- Transmission Chains
- Oil Field Chains
- Drag Chains
- Cement Industry Chains
- Agricultural Chains
- Sugar Mill Chains
- Palm Oil Chains

Filters



Pembuatan dan reparasi berbagai macam

- Filter udara,
- Filter oli,
- Filter bahan bakar,
- dll

untuk mesin industri, kapal, alat berat, otomotif.

Brake - Clutch - Acessories



kampas alat berat, crane, kapal, mesin industri, bus/ truck,

- Kampas wooven roll (anyaman),
- Kampas semi wet roll,
- Kampas lembaran,
- Kampas rem resin,
- Kampas basah (automatic transmission),
- Dry & Wet (kampas kering dan kampas basah),
- Automatic Clutch,
- Bronze Reducer Clutch,
- Brake Lining (resin types & wooven types),
- Disc Brake,
- dll.

Aplikasi brake :

- Crane,
- Alat-berat,
- Kapal,
- Mesin Industri,
- Forklift, Dll

PNEUMATIC - FITTING

One Touch Tube Fittings

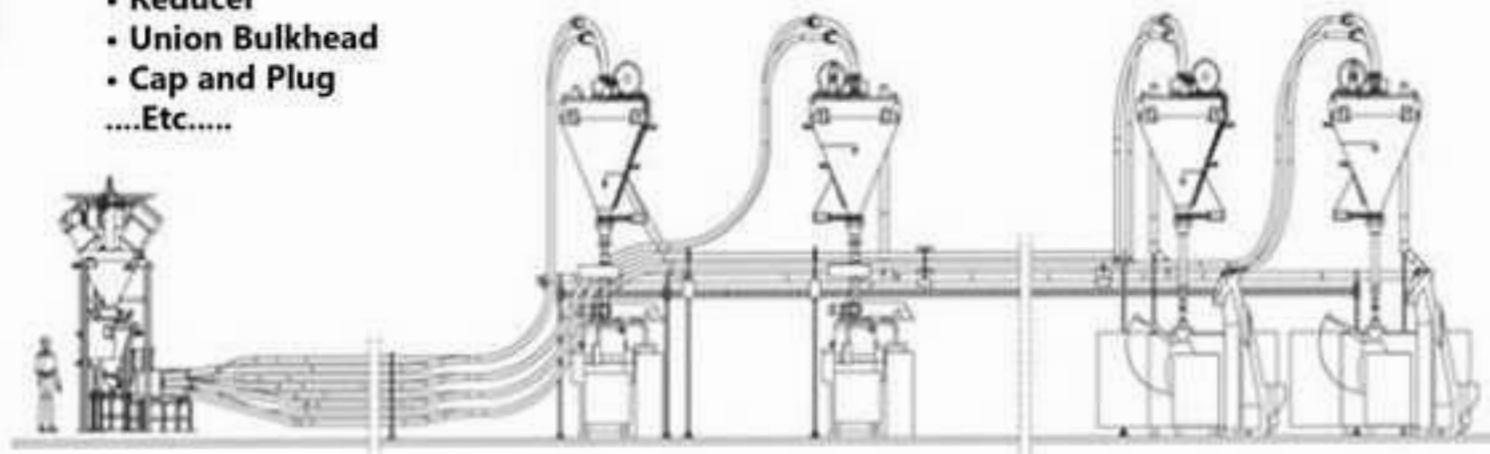


Fitting with G Thread (O-Ring)



- Male Conector
- Female Conector
- Union
- Union Tee
- Fitting Cross
- 90 derajat Elbow/Siku
- 45 derajat Elbow/Siku
- Reducer
- Union Bulkhead
- Cap and Plug
-Etc....

- Metric One-Touch Instant Fittings
- Stainless Steel Fittings
- One-Touch Instant Fittings
- Air Silencers, General Purpose
- Vacuum Generators
- Fitting Check Valves
- AS Series Flow Control
- ASP Series Flow Control
- ASN Series Silencer with Flow Control



PNEUMATIC - SOLENOID

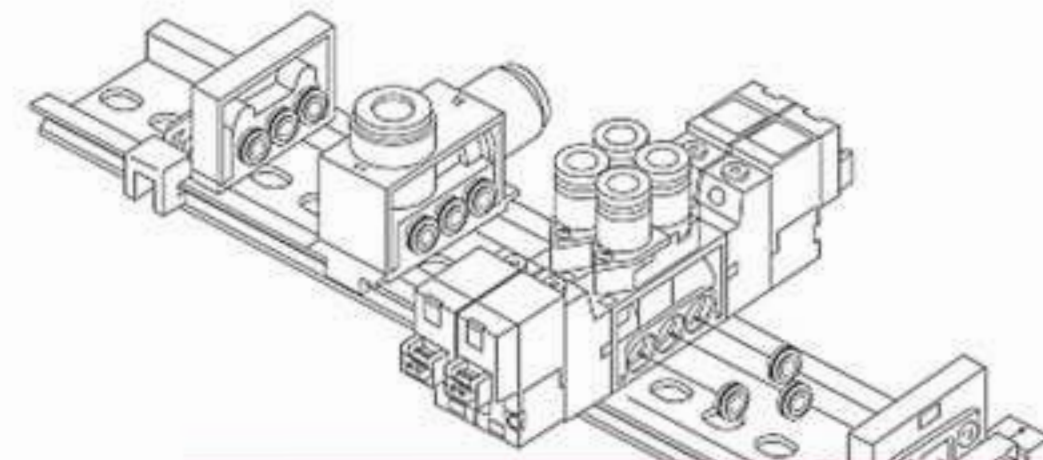


HYDRAULIC COMPONENT

Fullfills The Hydraulic Requirement of all market
As a complete stocking distributor of Hydraulic hose
and Coupling System, Hydraulic Assembly

- HYDRAULIC MOTORS
- HYDRAULIC PUMPS
- HYDRAULIC POWERPACKS
- HYDRAULIC VALVES

Etc....





FITTING TUBING CATEGORY

Specific Fitting (Customized)

#Orat : BSP,NPT

#Size : 1/4", 3/8", 1/2", 5/8", 3/4",
1 1/4", 1 1/2", dst

Steel Fitting

Brass Fitting

Westpex Fitting

Copper Fitting

Stainless Steel Fitting



Expansion Joint Rubber



Flesible Expansion Joint



Expansion Joint



Industrial Flange

Welding Neck



Slip On



Lap Joint



Socket Welding



Threaded



Blind



Long Welding Neck



Orifice



Spectacle



Tube Fitting

Overview of 24° Tube Fittings



Tube Fitting

24°/37° Flared Cone Adapter with O-Rings
Type FI-BA • Series L / S



37° Flared Tube Fitting Set
Type FI-AB • Series L / S



Straight Male Stud Fitting
Type FI-GE-...-R • Series L



Male Stud Fittings

Straight Male Stud Fitting
Type FI-GE-...-R • Series S



Straight Male Stud Fitting
Type FI-GE-...-M • Series L



Straight Male Stud Fitting
Type FI-GE-...-R-DF • Series L



Tee Reducer
Type FI-T • Series L

Straight Male Stud Fitting
Type FI-GE-...-Rk • Series LL / L



Male Stud Elbow
Type FI-WE-...-R • Series L / S



Male Stud Elbow
Type FI-WE-...-Rk • Series LL / L / S



Male Stud Branch Tee
Type FI-TE-...-R • Series L / S



Male Stud Branch Tee
Type FI-TE-...-Rk • Series LL / L / S



Equal Cross
Type FI-K • Series LL / L / S



Bulkhead Fittings

Straight Bulkhead Fitting
Type FI-GS • Series L / S



Elbow Bulkhead Fittings
Type FI-WS • Series L / S



Straight Bulkhead Weld Fitting
Type FI-ES • Series L / S



Tube Fitting

Weld Fittings

Tee Reducer
Type FI-T • Series L



Equal Cross
Type FI-K • Series LL / L / S



Bulkhead Fittings

Straight Bulkhead Fitting
Type FI-GS • Series L / S



Elbow Bulkhead Fittings
Type FI-WS • Series L / S



Straight Bulkhead Weld Fitting
Type FI-ES • Series L / S



Straight Weld Fitting for Tubes
Type FI-ASV • Series S



Straight Reducer for Tube Ends with 24° Taper / O-Ring
Type FI-RESD • Series L



Female Stud/Gauge Fittings

Straight Female Stud Fitting
Type FI-GA-...-R • Series L / S



Gauge Fitting
Type FI-MA-...-R • Series L / S



Gauge Fitting with 24° Taper / O-Ring
Type FI-EMAD-...-R • Series L / S



Fitting with 24° Taper / O-Ring (DKO)

Straight Reducer with 24° Taper / O-Ring
Type FI-SNV • Series L



Adjustable Elbow (90°) with 24° Taper / O-Ring
Type FI-EWD • Series L / S



Adjustable Elbow (45°) with 24° Taper / O-Ring
Type FI-EVD • Series L / S



Adjustable Branch Tee with 24° Taper / O-Ring (DKO)
Type FI-ETD • Series L / S



Tube Fitting

Adjustable Barrel Tee with 24° Taper / O-Ring (DKO)
Type FI-ELD • Series L / S



Standpipe Fittings

Adjustable Standpipe Elbow
Type FI-EW • Series L / S



Adjustable Standpipe Barrel Tee
Type FI-EL • Series L / S



Fittings with Lock Nut

Adjustable Male Stud Elbow (90°) with Lock Nut
Type FI-WEE-...-R-OK • Series L / S



Adjustable Male Stud Elbow (45°) with Lock Nut
Type FI-VEE-...-R-OK • Series L / S



Adjustable Male Stud Branch Tee with Lock Nut
Type FI-TEE-...-R-OK • Series L / S



Adjustable Male Stud Barrel Tee with Lock Nut
Type FI-LEE-...-R-OK • Series L / S



Banjo Fittings

Banjo Elbow (Medium-Pressure Version)
Type FI-RSWND-...-R-OK • Series LL / L / S





SKF Automatic Lubricator System



Automatic lubrication system (ALS) sering disebut sebagai sistem pelumasan terpusat, adalah sistem yang memberikan kendali jumlah pelumas ke beberapa lokasi spesifik pada waktu tertentu saat mesin beroperasi.

Sistem pelumasan otomatis menggunakan media pelumas grease yang terdiri dari gabungan beberapa komponen, di antaranya controller, timer, pompa, tangki, katup, selang dan pipa.

Pada produk alat berat Komatsu, auto-lubrication artinya spesifik kepada proses melumasi komponen-komponen yang bergesekan seperti bearing, bushing dan pin yang terdapat di unit alat berat seperti PC200-8.

Sistem ini sangat cocok untuk mendukung kinerja alat berat dibidang Industri Pertambangan yang minim perawatan



- A. Time setting slot**
Allows easy installation and accurate adjustment of lubrication flow
- B. Gas cell**
Generates pressure to enable lubricant dispensing
- C. Easy-grip top-cover**
Facilitates easy and quick fitting
- D. Piston**
Special piston shape helps ensure optimum emptying of lubricator
- E. Lubricant container**
Transparent lubricant container allows visual inspection of dispense rate
- F. SKF Lubricant**
Filled with a wide range of high quality SKF lubricants



- Engine Part,
- Electric System,
- Hydraulic Component; Main pump, Swing Motor, Turning Joint, Main Control Valve, Travel Motor, Cylinder Boom, arm Bucket,
- Reduction ; Swinng Reduction, Travel Reduction, Transmission & PTO, gear Component,
- Tire Wheel Rim, Seal Kits, Filter dan lain-lain.

Workshop Machine - Repair - Production



List Of Project Experiences & Material Suppliers

No	Detail of Project	Owner / Company	Supervision	Year
1	Design Hydraulic & Oil Lubrication System	PT Krakatau Steel Bar Mill Stand	PT Krakatau Steel	1990
2	Pipe Installation Hydraulic, Pneumatic Cooling water, Compressed air piping, including chemical cleaning process, Oil Flushing process (Down Coiler 2)	PT Krakatau Steel HSM (Sub PT.Barata Indonesia Cabang Surabaya)	PT Krakatau Engineering Co. & SMS - Germany	1991
3	Pipe Installation hydraulic, Water Pneumatic Steam Oil Lubrication Piping Including Hydro Test, Pickling Process, Oil Flushing for Modernization Finishing Stand F6 HSM	PT Krakatau Steel Hot Strip Mill	Hitachi - Japan	1992
4	Reconstruction Piping Hydraulic & Cooling water piping Hydro & WRB	PT Krakatau Steel Hot Strip Mill	Hitachi - Japan	1992
5	Chemical Cleaning work & Oil Flushing for Hydraulic Pipe Line	PT Krakatau Steel Wire Rod Mill	PT Krakatau Steel	1992
6	Oil Flushing Work For Hydraulic pipe Line Coil Handling System	PT. ELKA for PT Krakatau Steel, Hot Strip Mill	Siemag Transplant Germany	1992
7	Installation of piping Centralized Grease Lubrication System Cross & Cut Shear.	PT Krakatau Steel Shearing Line HSM	PT Krakatau Steel	1993
8	Design & Installation of piping centralized grease Lubrication System for Drag Chain Clinker & Kiln	PT Cement Padang, Indarung III	PT Cement Padang	1994
9	Modification & Installation of piping centralized Grease lubrication System for HCD tank CRM	PT Krakatau Steel Coil Rolling Mill	PT Krakatau Steel	1995
10	Installation Piping of Centralized Grease lubrication System for CAL Furnace	PT Krakatau Steel Coil Rolling Mill	PT Krakatau Steel	1996
11	Installation of piping Lubrication Oil Line For ZOS C & D HSM	PT. Krakatau Steel Hot Strip Mill	PT Krakatau Steel	1997
12	Installation Piping Cooling Water, Hydraulic, Grease Including Pressure test, Pickling, Flushing for CCM 2 Modernization SSP 1	PT. Krakatau Steel Cilegon.	Seloeman Siemag SMS - Germany	1998

No	Detail of Project	Owner / Company	Supervision	Year
13	Oil Flushing Of Hyd. Piping for Furnace HSM	PT Wasa Mitra	PT. Krakatau Engineering. KROSAKI Japan	1998
14	Installation of Piping Hyd. Oil & water for Pre rough WRM Modernization Project	PT. Lenggeng	POMINI - Italia	1999
15	Installation of Piping, Pickling Process & Flushing Work For Section Mill	PT Krakatau Wajatama Cilegon	BASCO TECNIA Spain & PT. KE	1999
16	Installation of Hyd. Piping Riot Control "Mobil anti Huru Hara"	PT.Bukaka T.U	PT Bukaka TU	2000
17	Oil Flushing in Revamping of TCM CRM	CRM PT. Krakatau Steel	PT. Krakatau Engineering	2001
18	Hot Oil Flushing	PT. Karya Sumiden (Jatake Tangerang)	Morgan - America	2001
19	Entry Guide Job Tension Reel 1 & 2	PT. Krakatau Steel (Cilegon)	PT. Krakatau Engineering	2001
20	Adjustable Hydraulic Sys. CRM Pickling line Exit Existing Electrical, Mach & Pump	PT. Krakatau Steel (Cilegon)	PT. Krakatau Engineering	2001
21	Pipe Hyd. Replacement Roughing Mill Level Nol to Cylinder	HSM PT. Krakatau Steel	PT. Krakatau Steel	2002
22	Material Procurement & Hydraulic Installation Pneumatic System Area EO 214,150,514,525,600 & 610	CRM PT. Krakatau Steel	PT. Krakatau Steel	2002
23	Job Cleaning, Piping Recondition Hyd. Piping Stand 3 & 4, CTCM	CRM PT Krakatau Steel (PT. KS)	PT. Krakatau Steel	2002
24	Service & Installation Grease System WRC No : 1 ~ 5, CTCM	CRM PT. Krakatau Steel	PT. Krakatau Steel	2004
25	Install. Piping of Central Lubrication Sys. For CCM1	SSP PT. Krakatau Steel.	PT. Krakatau Steel	2004 to 2005
26	Install. Piping of Central Lubrication Sys. For GFS 2, 6, 6B, 9 & 11 HSM	HSM PT. Krakatau Steel	PT. Krakatau Steel	2004 to 2005

27	Recondition Hydraulic System. D/E, S1, S2 & G HSM	HSM PT. Krakatau Steel	PT. Krakatau Steel	2005
28	Fabrication & Installation System. Machine ERW - Hydraulic Piping & Pnumatic	PT. KHI	PT. KHI	2005
29	Service System Consignation Hydraulic Hose	PT. Krakatau Steel	PT. Krakatau Steel	2002 to 2010
30	Supply of spare part for charcoal	PT. PAMA	PT. PAMA	Up to present
31	Supply of Spare Part Manufacture Heavy Equipment	PT. UTE, Cikarang	PT. UTE	Up to present
32	Supply of spare part Ceramic Industry	PT. Mulia Keramik	PT. Mulia Keramik	Up to present
33	Supply & Installation Pipe Hydraulic	PJB Unit Cirata	PJB Unit Cirata	2005 & 2008
34	Supply & Installation Pipe Hydraulic for Molding Machine	PT. Aqua Citerep, Gunung Putri	PT. Aqua	2008
35	Supply Hydraulic Hose, Fitting & Hydraulic Accessories	PT. Dynaplast	PT. Dynaplast	2005 up to present
36	Supply / Installation Pipe Hydraulic, Spare part Hydraulic & Recondition Hydraulic tooling	PT. Komatsu Indonesia	PT. Komatsu Indonesia	2005 up to present
37	Supply Hydraulic Hose, Fitting & Hydraulic Accessories	PT. Cypres Plastic Industry	PT. Cypres Plastic Industry	2005 up to present
38	Replacement Equipment Hydraulic / Pneumatic EAF 6 & 7 SSP1	PT. Krakatau Steel	PT Krakatau Engineering	2010
39	Pickling & Flushing For Hydraulic Piping PT. Bhirawa Steel	PT. Bhirawa Steel	PT. Bhirawa Steel	2011
40	EPC Hydraulic System Work Project 315,000 TYP Direct Red ction Rotar Kiln Plant	PT. Meratus Jaya Iron & Steel	PT Krakatau Engineering	2011 to 2012

Connection System	Hydraulic System	Lubrication System
		
		
		
		
		
