FluidMAC

Height of Hose Power

way to conduct

vital energy

vision

Highly evolved hose systems enabling advanced use of fluid power and aiding rapid acceleration of economic development around the world

mission

To be a premier producer and supplier of complete hose & tubing solutions, and a centre of excellence in the fluid power transmission industry

To always stay ahead of customer expectations and market challenges, with increasing initiative, innovation and investment

To follow the best business practices in the interests of all the stakeholders of the company, the local community and the industry & society at large

core values

Quality & Creativity

Entrepreneurship & Leadership

Teamwork & Relationship

Honesty & Responsibility

LEAD PLAYER

in a Key Field

Fluid power is now playing an all-new critical role in economic development, thanks to its increasing convergence with contemporary automation & motion control technologies. Consequently, hoses have become virtual "arteries of power," especially hydraulic power, all across the global industry sector today.

Three enterprising engineers inside the hose industry visualized this booming scenario long back, and teamed up to float **Fluidmac** in 1999. With their professional standing as their only seed capital, they began with local services in Goa, but owing to their strong sense of quality and corporate values, Fluidmac grew rapidly over the years, and is now an acknowledged name in designing, manufacturing & supplying hose assembly systems and hydraulic fitments. The company is an authorized assembler for world-leading hose manufacturers and enjoys a fast-expanding footprint right across India.

The consistent success of this initial enterprise inspired the birth in 2007 of **Fluidmac Hose Industries**, a new-generation company with multifunctional capabilities to serve not only the retail aftermarket, but also contract manufacturing and export business segments.

HOSE POWER

in a Host of Forms

Fluidmac presents a rich portfolio of hose assemblies to meet SAE, DIN, EN, IS, NCB and other industry standards, as well as clients' own specifications. The company is also a complete producer and supplier of hydraulic hose-end components, in line with SAE, DIN (DKO/DKL), BSP, JIC, ORFS, Metric, NPTF and JIS standards, apart from varying custom standards such as Poclain and Komatsu.

- Hydraulic hoses & assemblies for a broad choice of applications & specifications
- SS corrugated hoses & assemblies
- Teflon (PTFE) & thermoplastic hoses & assemblies
- Industrial hoses & assemblies
- Hydraulic hose fitments in multifarious configurations
- Metallic tube assemblies
- Hose accessories including spring guards, PVC spiral band, protective nylon sleeving/tubing, ceramic & glass-wool tape/tubing, "O" rings and dust caps/plugs

SALIENT

in Several Ways

- Fresh-made hoses of best-known brands: **Manuli** (Italy), **Parker** (UK & India) **Aeroquip** (USA) & **Gates** (USA & India)
- Unjointed, single-piece fittings
- Interlocking end-fitting design for high-pressure hose assembly systems
- En-1A steel fittings, with corrosion-resistant zinc-plating & yellow-passivation
- SS 304 & brass fittings and chromium plating for specific applications
- Negligible failure rates
- 12 months/3000 working hours guarantee for hose assemblies (under normal conditions)

EN 853 1SN / DIN 20022 1SN / SAE 100 R1 AT
High Pressure Hoses

Dash No.	DIN No.	Hose ID		Hose OD	Working Pressure		Min Bend Radius	Weight
		inch	mm	mm	psi	bar	mm	kg/m
-4	6	1/4	6.3	13.4	3265	225	100	0.23
-5	8	5/16	8.0	15.0	3120	215	115	0.25
-6	10	3/8	10.0	17.4	2610	180	130	0.34
-8	12	1/2	12.5	20.7	2320	160	180	0.41
-10	16	5/8	16.0	23.9	1890	130	200	0.49
-12	20	3/4	19.0	27.8	1525	105	240	0.63
-16	25	1	25.0	36.8	1275	88	300	0.93
-20	32	1 1/4	31.5	44.8	915	63	420	1.39
-24	40	1 1/2	38.0	61.0	725	50	500	1.52
-32	50	2	51.0	84.5	580	40	630	2.24
■ -38	60	2 3/8	60.3	75.0	362	25	762	2.79
■ -40	64	2 1/2	63.5	79.5	362	25	762	3.11
■ -48	76	3	76.2	94.4	290	20	915	4.06
■ -56	90	3 1/2	90.0	105.5	220	15	1067	4.30
■ -64	100	4	101.6	117.0	145	10	1105	4.58

■ *Not covered under EN/SAE*

Application
High-pressure hydraulic oils, air and water.

Tube
Synthetic, oil-resistant rubber.

Reinforcement
1 high-tensile steel-wire braid.

Cover
Synthetic rubber; abrasion-, ozone- and weather-resistant.

Temp. Range
-40°C to +100°C.

EN 853 2SN / DIN 20022 2SN / SAE 100 R2 AT
High Pressure Hoses

Dash No.	DIN No.	Hose ID		Hose OD	Working Pressure		Min Bend Radius	Weight
		inch	mm	mm	psi	bar	mm	kg/m
-4	6	1/4	6.3	15.0	5800	400	100	0.38
-5	8	5/16	8.0	17.0	5100	350	115	0.43
-6	10	3/8	10.0	19.0	4750	330	130	0.53
-8	12	1/2	12.5	22.3	4000	280	180	0.63
-10	16	5/8	16.0	25.5	3600	250	200	0.75
-12	20	3/4	19.0	29.4	3100	215	240	0.95
-16	25	1	25.0	38.1	2400	165	300	1.38
-20	32	1 1/4	31.5	47.1	1800	125	420	2.09
-24	40	1 1/2	38.0	54.5	1300	90	500	2.30
-32	50	2	51.0	67.2	1150	80	630	2.92
■ -38	60	2 3/8	60.3	75.8	1015	70	762	3.67
■ -40	64	2 1/2	63.5	82.5	1000	69	762	4.42
■ -48	76	3	76.2	96.0	650	45	915	5.08
■ -56	90	3 1/2	90.0	107.5	400	28	1067	5.17
■ -64	100	4	101.6	118.5	365	25	1105	5.29

■ *Not covered under EN/SAE*

Application
High-pressure hydraulic oils, air and water.

Tube
Synthetic, oil-resistant rubber.

Reinforcement
2 high-tensile steel-wire braids.

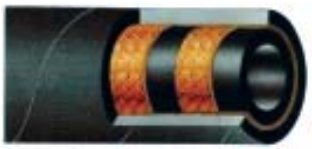
Cover
Synthetic rubber; abrasion-, ozone- and weather-resistant.

Temp. Range
-40°C to +100°C.

HOSE TYPES

PARKER MH-SUPER (Exceeds EN 853 2SN)
Extra High Pressure Hoses

Dash No.	DIN No.	Hose ID		Hose OD	Working Pressure		Min Bend Radius	Weight
		inch	mm	mm	psi	bar	mm	kg/m
-6	10	3/8	9.5	19.1	5080	350	130	0.52
-8	12	1/2	12.7	22.2	5005	345	150	0.63
-10	16	5/8	15.9	25.4	4350	300	190	0.75
-12	20	3/4	19.0	29.4	3845	265	230	1.04
-16	25	1	25.4	37.3	3045	210	300	1.46
-20	32	1 1/4	31.8	48.3	2250	155	380	2.74



Application: High-pressure hydraulic oils, air and water.

Tube: Synthetic, oil-resistant rubber.

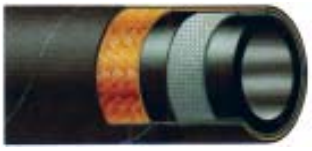
Reinforcement: 2 high-tensile steel-wire braids.

Cover: Synthetic rubber; abrasion-, ozone- and weather-resistant.

Temp. Range: -40°C to +120°C.

SAE 100 R5R
High Pressure Hoses

Dash No.	DIN No.	Hose ID		Hose OD	Working Pressure		Min Bend Radius	Weight
		inch	mm	mm	psi	bar	mm	kg/m
-5	8	1/4	6.4	14.4	3000	210	86	0.28
-6	10	5/16	7.9	17.2	2250	157	102	0.36
-8	12	13/32	10.3	19.5	2000	140	117	0.41
-10	16	1/2	12.7	23.4	1750	122	140	0.55
-12	20	5/8	15.9	27.4	1500	105	165	0.65
-16	25	7/8	22.2	31.4	800	56	187	0.73
-20	32	1 1/8	28.7	38.1	625	43	229	0.83
-24	40	1 3/8	34.9	44.5	500	35	267	1.04
-32	50	1 13/16	46.0	57.1	350	24	337	1.39
-40	60	2 3/8	60.3	73.0	350	24	610	2.12



Application: High-pressure hydraulic oils, air and water.

Tube: Synthetic, oil-resistant rubber.

Reinforcement: 1 fibre braid and 1 high-tensile steel-wire braid.

Cover: Synthetic rubber; abrasion-, ozone- and weather-resistant.

Temp. Range: -40°C to +120°C.

EN 854 R3 / SAE 100 R3
Medium Pressure Hoses

Dash No.	DIN No.	Hose ID		Hose OD	Working Pressure		Min Bend Radius	Weight
		inch	mm	mm	psi	bar	mm	kg/m
-4	6	1/4	6.4	14.3	1250	87	76	0.17
-5	8	5/16	7.9	17.5	1200	84	102	0.23
-6	10	3/8	9.5	19.0	1125	78	102	0.27
-8	12	1/2	12.7	23.8	1000	70	127	0.46
-10	16	5/8	15.9	27.0	875	61	140	0.54
-12	20	3/4	19.0	31.8	750	52	152	0.64
-16	25	1	25.4	38.1	565	39	203	0.80
-20	32	1 1/4	31.8	44.5	375	26	254	0.98
-24	40	1 1/2	38.1	50.8	250	17	306	1.06
-32	50	2	50.8	64.0	215	15	410	1.41

Application: Medium-pressure hydraulic oils, air and water.

Tube: Synthetic, oil-resistant rubber.

Reinforcement: 2 rayon braids.

Cover: Synthetic rubber; abrasion-, ozone- and weather-resistant.

Temp. Range: -40°C to +120°C.

SAE 100 R4
Hose for Suction, Return and Delivery Lines

Dash No.	DIN No.	Hose ID		Hose OD	Working Pressure		Min Bend Radius	Weight
		inch	mm	mm	psi	bar	mm	kg/m
-12	20	3/4	19.0	34.9	300	21	127	0.84
-16	25	1	25.4	41.3	250	17	152	1.10
-20	32	1 1/4	31.8	50.8	200	14	203	1.53
-24	40	1 1/2	38.1	57.2	150	10	254	1.80
-32	50	2	50.8	69.9	100	7	305	2.39
-40	64	2 1/2	63.5	82.0	62	4	356	2.80
-48	76	3	76.2	95.0	55	4	457	3.29

Application: Low-pressure hydraulic oils, fuel oils, gasoline and water.

Tube: Synthetic, oil-resistant rubber.

Reinforcement: 2 rayon braids, with a helical/spiral wire.

Cover: Synthetic rubber; abrasion-, ozone- and weather-resistant.

Temp. Range: -40°C to +100°C.

EN 854 / SAE 100 R6
Low Pressure Hoses

Dash No.	DIN No.	Hose ID		Hose OD	Working Pressure		Min Bend Radius	Weight
		inch	mm	mm	psi	bar	mm	kg/m
-4	6	1/4	6.4	12.7	400	28	64	0.13
-5	8	5/16	7.9	14.3	400	28	76	0.15
-6	10	3/8	9.5	15.9	400	28	76	0.16
-8	12	1/2	12.7	19.8	400	28	102	0.24
-10	16	5/8	15.9	23.0	350	24	127	0.30
-12	20	3/4	19.0	26.0	300	21	152	0.35
-16	25	1	25.4	32.5	190	13	230	0.44

Application: Low-pressure hydraulic oils, air and water.

Tube: Synthetic, oil-resistant rubber.

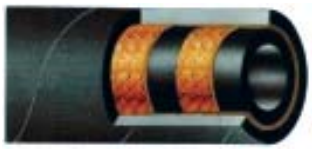
Reinforcement: 1 rayon braid.

Cover: Synthetic rubber; abrasion-, ozone- and weather-resistant.

Temp. Range: -40°C to +100°C.

Jack Hoses

Dash No.	DIN No.	Hose ID		Hose OD	Working Pressure		Min Bend Radius	Weight
		inch	mm	mm	psi	bar	mm	kg/m
-4	6	1/4	6.4	14.8	10000	690	102	0.38
-6	10	3/8	9.5	18.8	10000	690	127	0.51



Application: High-pressure static jacks.

Tube: Synthetic, oil-resistant rubber.

Reinforcement: 2 high-tensile steel-wire braids.

Cover: Synthetic rubber; abrasion-, ozone- and weather-resistant.

Temp. Range: -40°C to +100°C.

HOSE TYPES

Hoses for Pilot Lines

Dash No.	DIN No.	Hose ID		Hose OD	Working Pressure		Min Bend Radius	Weight
		inch	mm	mm	psi	bar	mm	kg/m
-4	6	1/4	6.3	11.5	2170	150	25	0.155
-6	10	3/8	10.0	15.0	1450	100	40	0.210

Application: Medium-pressure hydraulic oils, air and water.

Tube: Synthetic, oil-resistant rubber.

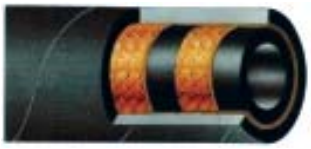
Reinforcement: 1 high-tensile steel-wire braid.

Cover: Synthetic rubber; abrasion-, ozone- and weather-resistant.

Temp. Range: -40°C to +120°C.

BCS 174-1992 (Exceeds ISO 6805 Type 2)
Underground Mining Hoses

Dash No.	DIN No.	Hose ID		Hose OD	Working Pressure		Min Bend Radius	Weight
		inch	mm	mm	psi	bar	mm	kg/m
-4	6	1/4	6.4	17.0	6525	450	100	0.44
-6	10	3/8	9.5	21.1	5510	380	130	0.63
-8	12	1/2	12.7	26.4	5250	362	150	0.75
-10	16	5/8	15.9	29.8	4060	280	190	0.97
-12	20	3/4	19.0	33.7	4000	276	230	1.04
-16	25	1	25.4	40.7	3120	215	300	1.88
-20	32	1 1/4	31.8	47.5	2495	172	380	2.36
-24	40	1 1/2	38.1	54.1	2120	146	450	2.74
-32	50	2	50.8	66.8	1625	112	600	3.51



Application: High-pressure hydraulic oils, air and water.

Tube: Synthetic, oil-resistant rubber.

Reinforcement: 2 high-tensile steel-wire braids.

Cover: Synthetic rubber; abrasion-, ozone- and weather-resistant.

Temp. Range: -40°C to +120°C.

EN 856 4SP / DIN 20023 4SP
Very High Pressure Hydraulic Hoses

Dash No.	DIN No.	Hose ID		Hose OD	Working Pressure		Min Bend Radius	Weight
		inch	mm	mm	psi	bar	mm	kg/m
-6	10	3/8	10.0	21.0	6500	450	180	0.72
-8	12	1/2	12.5	25.0	6000	415	230	0.94
-10	16	5/8	16.0	28.0	5000	350	250	1.08
-12	20	3/4	19.0	32.0	5000	350	300	1.48
-16	25	1	25.4	39.5	4060	280	340	1.91

Application: High-impulse, high-pressure hydraulic oils and water.

Tube: Synthetic, oil-resistant rubber.

Reinforcement: 4 layers of alternating, spiralled, high-tensile steel wire.

Cover: Synthetic rubber; abrasion-, ozone- and weather-resistant.

Temp. Range: -40°C to +100°C.

STANDARD HOSE TYPES

EN 856 4SH / DIN 20023 4SH
Very High Pressure Hydraulic Hoses

Dash No.	DIN No.	Hose ID		Hose OD	Working Pressure		Min Bend Radius	Weight
		inch	mm	mm	psi	bar	mm	kg/m
-12	20	3/4	19.0	32.0	6000	420	280	1.54
-16	25	1	25.0	39.0	5500	380	340	2.03
-20	32	1 1/4	31.5	45.0	4700	325	460	2.45
-24	40	1 1/2	38.0	53.0	4200	290	560	3.13
-32	50	2	51.0	68.0	3600	250	700	4.63

Application: High-impulse, high-pressure hydraulic oils and water.

Tube: Synthetic, oil-resistant rubber.

Reinforcement: 4 layers of alternating, spiralled, high-tensile steel wire.

Cover: Synthetic rubber; abrasion-, ozone- and weather-resistant.

Temp. Range: -40°C to +100°C.

EN 856 R13 / SAE 100 R13
Very High Pressure Hydraulic Hoses

Dash No.	DIN No.	Hose ID		Hose OD	Working Pressure		Min Bend Radius	Weight
		inch	mm	mm	psi	bar	mm	kg/m
-12	20	3/4	19.0	31.9	5000	350	240	1.51
-16	25	1	25.0	38.5	5000	350	300	2.02
-20	32	1 1/4	31.5	49.6	5000	350	420	3.81
-24	40	1 1/2	38.0	57.1	5000	350	500	4.80
-32	50	2	51.0	70.9	5000	350	630	6.64

Application: High-impulse, high-pressure hydraulic oils and water.

Tube: Synthetic, oil-resistant rubber.

Reinforcement: 4 (for -12 & -16 size) or 6 (for -20 , -24 & -32 size) layers of alternating, spiralled, high-tensile steel wire.

Cover: Synthetic rubber; abrasion-, ozone- and weather-resistant.

Temp. Range: -40°C to +120°C.

SAE 100 R15
Very High Pressure Hydraulic Hoses

Dash No.	DIN No.	Hose ID		Hose OD	Working Pressure		Min Bend Radius	Weight
		inch	mm	mm	psi	bar	mm	kg/m
-12	20	3/4	19.0	32.0	6000	414	267	1.57
-16	25	1	25.4	38.5	6000	414	330	2.13
-20	32	1 1/4	31.8	49.6	6000	414	445	3.82
-24	40	1 1/2	38.1	57.1	6000	414	533	5.04

Application: Extremely high-pressure, high-impulse hydraulic oils and water.

Tube: Synthetic, oil-resistant rubber.

Reinforcement: 4 (for -12 & -16 size) or 6 (for -20 , -24 & -32 size) layers of alternating, spiralled, high-tensile steel wire.

Cover: Synthetic rubber; abrasion-, ozone- and weather-resistant.

Temp. Range: -40°C to +120°C.

STANDARD HOSE-END FITTINGS

Hose ID (inch)	BSP (inch)	Metric	JIC/ORFS (inch - UNF)	NPTF Male (inch)	Stand Pipe (BE Nipple - Ø x L)		SAE Flange	
					Low Pressure (mm)	High Pressure (mm)	3000 psi Dash #	6000 psi Dash #
1/4	1/8 1/4	M12 X 1.5 M14 X 1.5	7/16 - 20 1/2 - 20 9/16 - 18	1/8 1/4	8 X 22 6 X 20	10 X 24	-	-
5/16	3/8	M16 X 1.5 M20 X 1.5	9/16 - 18 5/8 - 18	3/8	10 X 24	12 X 25	-	-
3/8	3/8 1/2	M18 X 1.5 M22 X 1.5	9/16 - 18 11/16 - 16 3/4 - 16	3/8 1/2	12 X 25	14 X 27	-	-
1/2	1/2 5/8	M22 X 1.5 M24 X 1.5	3/4 - 16 13/16 - 16 7/8 - 14	1/2	15 X 25	16 X 30	-8	-8
5/8	5/8 3/4	M26 X 1.5 M30 X 2.0	7/8 - 14 1 -14 1 1/16 - 12	3/4	18 X 25	20 X 32	-	-
3/4	3/4 1	M30 X 2.0 M36 X 2.0	1 1/16 - 12 1 3/16 - 12 1 5/16 - 12	3/4 1	22 X 25	25 X 34	-12	-12
1	1 1 1/4	M36 X 2.0 M42 X 2.0	1 5/16 - 12 1 7/16 - 12 1 5/8 - 12	1 1 1/4	28 X 25	30 X 36	-16	-16
1 1/4	1 1/4 1 1/2	M45 X 2.0 M52 X 2.0	1 5/8 - 12 1 11/16 - 12	1 1/4 1 1/2	35 X 30	38 X 38	-20	-20
1 1/2	1 1/2	M52 X 2.0	1 7/8 - 12	1 1/2 2	42 X 36	50 X 70	-24	-24
2	2	M65 X 2.0	2 - 12 2 1/2 - 12	2	52 X 50	52 X 50	-32	-32

EVERY INCH

A Quality Statement

Quality is a passion and a prime priority with Fluidmac. The company monitors quality parameters every step of the way and has set up ample in-house facilities to inspect and test the finished assemblies & fittings. If demanded, we also provide support for impulse test and other specialized tests at third-party labs.

With a view to delivering ever-exciting quality and increasing value to the clients, Fluidmac ceaselessly pursues R&D in products (components), processes and tools.

Notable Features

- Every single assembly proof-tested to SAE J 343 standard
- One assembly per every batch of hose and end-fittings, compulsorily burst-tested
- All end-fittings checked with go/no-go plug & ring gauges
- Hose pipes jet-cleaned before & after assembly
- Products dust-capped and packed in sealed polythene tubes
- Test certificates issued regularly for all products, and on-demand for raw materials
- Prompt failure/rejection analysis and action, in case of complaints

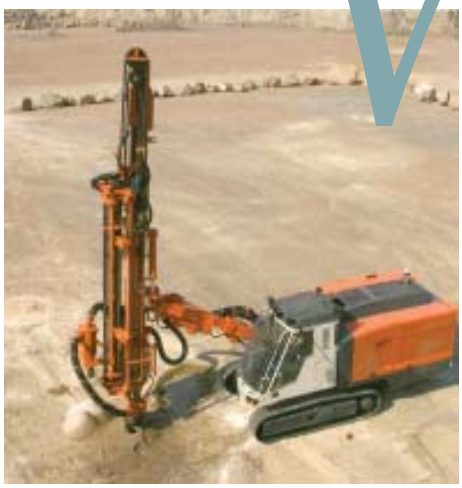
ALL SET *for Ace Output*

Fluidmac is located in an industrial estate with full-scale amenities and has developed a feature-filled infrastructure over an area of 820 square meters. Here is an overview of our resource base:

- Uniflex (German) automated crimper to handle ¼" to 2" ID spiral hoses and up to 6" ID industrial hoses
- Finn-Power (Finnish) analog crimper to handle up to 2½" ID hoses
- Manuli Techmaflex (French) automatic static test rig to take up to 1500 bar (21750 psi) pressure and 5 hose assemblies at a time
- Manuli Techmaflex (French) hose cut-off machine, with up to 3" ID capacity
- Pneumatic roll-marking machine
- Sophisticated workshop with CNC lathe support
- Modern computing tools for technical & administrative operations
- Professionally qualified executives, skilled & motivated workers and high-calibre vendors

EVER-WIDER

Market Horizons



We enjoy a strong brand presence in the spares market and are spreading our wings in the OEM/ODM marketplace as well, with several noted names in construction, earthmoving, automotive, injection moulding, mining and engineering sectors on our client roster. Driven by our success, and leveraging our strengths in handling global standards and world-class brands & equipment, besides our proximity to a major seaport, we are now setting our sights on offshore markets, too.

PROPOSAL FOR CONTRACT MANUFACTURING

We invite equipment manufacturers and machine builders to outsource your part-manufacturing to us, and discover a wonderful new way to enhance your productivity. We offer annual supply contracts with attractive economics, in addition to consultation, including retrofit & modernization issues. We further provide **Total Fitting Kits**, as well as spare-parts support for routine maintenance.

Visit our facility today and you will sure be delighted to see in Fluidmac the right and final answer to your search for an OEM/ODM partner in hose solutions.

Gates®

Parker

markwel

EATON

manuli

Fluidmac for solid reasons

- Complete range of international standard hose assemblies
- Superior-grade components in extensive varieties
- High-tech designing and assembling infrastructure
- Exceptional product and service availability
- Superb price/performance ratio
- Special performance-guarantee
- Wide base of loyal clients
- Strong credibility and goodwill in the industry
- Proven competence for OEM/ODM services

FluidMAC

Height of Hose Power

Fluidmac Hose Industries

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