



Mfg & Exporter Of All Types Of  
Cylinder Liner & Sleeves  
Air & Water Cooled Block

**PRODUCT  
BROCHURE**



**MANN AUTOMOTIVE PVT LTD** - is An ISO 9001:2015 Certified Company. We are fastest growing and leading manufacturer and exporter of Wet & Dry type of Cylinder Liners, Sleeves and Air Cooled Blocks. We have started operation in 2017 and after third time of expansion now our company is spread over 54,500 sq. ft. of area with production capacity of 2500pcs per day. Our company is situated in the automobile component manufacturing hub Rajkot, Gujarat (India). We have proprietary process developed in house to produce highest quality of centrifugal casting. The melting process is done by Induction Furnace. The castings produced by a combination of induction melting and centrifugal casting processes are superior, consistent and have better microstructure. Our machine shop has CNC, special purpose boring, plateau honing, grinding and customized lathe machines for the accurate job under strict tolerance. We have invested in equipment's, like various special gauge, height gauge, Ferro lab, metallurgical microscope and spectrometer to help our QA team do the best job. We also have ultra-modern laser-making machine to facilitate proper part marking & identification.

Today, the company, a dream action by a huge team of dexterous and deft professionals who successfully enable us to meet the diverse requirements of our clients within the committed time frame is one among the very focused and forte manufacturer and exporter of Wet & Dry Cylinder Liners, Sleeves and Air Cooled Blocks. The product length and breath is expected to be further increased in near future, enabling our customers a One Stop Solution. **MANN AUTOMOTIVE PVT LTD** believes in delivering not only the best but also offering a wide range to its clients.

## our vision



we are committed to exceed customer satisfaction by consistently supplying high quality products at the most competitive prices through constant evolution and innovation. we continuously focused on highest customer satisfaction and will maximize share for our products globally

## our goal



to attract and retain customers by providing best-in-class services while supplying high- quality goods.

## our strength



fast development & flexibility in planning is done by well experienced team.product supply with zero rejection. delivery on time with best quality products.Quick respond to customer on RFQ. continuously reducing Non - value added activities.



# Technical Details

## Raw Material :

A FE based 26 Channel Spectro (Germany Make) to check the chemical composition of metal Normal Composition of Casting as per A-159 (G-1800 to G-4000) grade.

Composition (Min - Max)	Carbon	Silicon	Manganese	Sulphur	Phosphorous	Chromium	Moly	Copper	Nickle
Composition (Min - Max)	3 to 3.5%	1.8 to 2.4%	0.60 to 1%	0.15 Max	0.20 to 0.40%	As Required	As Required	As Required	As Required

## Hardness :

The Hardness testing machine with capacity 3000Kg/750Kg and ball diameter 10mm/5mm to test hardness of final products in BHN.

**Min 200 BHN - Max 260 BHN or  
Min 95 HRB - Max 103 HRB**



## Micro Structure :

Matrix	Graphite	Free Ferrite	Free Carbide
Pearlite	A & B Type	Max. 5%	Max. 5%



## Roughness Tester :

We have Roughness tester to check quickly and accurately determine the surface texture or surface roughness of a material. A roughness tester shows the measured roughness depth (Rz) as well as the mean roughness value (Ra) in micrometer or microns (μm).



## Finishing :

Phosphating / Blackening  
Chrome Plating  
(Inner & Outer diameter)



# Infrastructure

## Foundry :



Melting process is carried out by 2 crucibles by dual track induction melting furnaces with continuous monitoring melting process by Pyrometers and Spectrometer. The most commonly used melting system is the induction crucible furnace. The induction crucible furnace has a crucible which is heated by an induction furnace coil surrounding the crucible.

Furnaces: - 2Nos Capacity: - 300Kg/Each  
Melting Capacity:- 250 tons/month

This process is based on the centrifugal force principle and required of the liner is achieved with a particular die. We have an in-house centrifugal casting die facility. The process is so essential for liners and sleeves because it provides a very dense structure, ultimately increasing the life of the liner and performance of the engine.



## Machining :

Machine shop is well equipped with CNC & SPM machine, along with heavy duty Lath Machines. Rough & Semi Finish machining done by heavy duty Lath Machine and Fully Finish is done by CNC machine to give high accuracy in dimensional parameters, Surface roughness & Geometric parameters. We are also having SPM for Outside & Bore machining combine operation.

## Boring Operation :

Boring Operations done by Vertical Boring Machines Centre (SuperWolga) to maintain dimensional accuracy, taper, Ovality and Surface finish.

## Grinding :

Grinding is the process where super surface finish can be maintained on products. We have two type of grinding process center less grinding and cylindrical grinding. Grinding controls dimensional parameters, surface parameters and geometrical parameters.

## Infrastructure

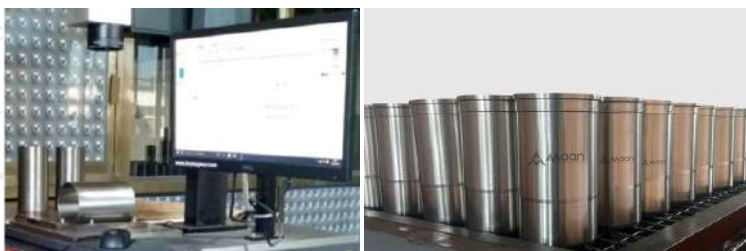
## Honing Operation :

Honing Process done by honing machine, our cylinder Liners bores are cross honed and diameters are properly ground finish to achieve the highest level of accuracy and Surface roughness as per customer specifications.

## Final Inspection :

Our Final inspection departments is well experience and well equipped by all instruments. It consists of inspection the surface of the casting with naked eye or sometimes with a magnifying glass or microscope. It can only indicate surface defects such as blow holes, fusion, swells and external cracks. Almost all castings are subjected to certain degree of visual inspection.

## Laser Marking :



We have laser marking machine for traceability and mark logo. Neat, clean & indelible marking of Logos & Part no. are marked which doesn't produce stress or change in physical properties of materials. Marking are proof from chemical, water, Oil Grease and fuels.





## Packing & Dispatch

Cleaning machine to clean the Cylinder Liners and Sleeves before the packing. Finish Cylinder Liners are duly Oiled & placed in VCI paper and packed in corrugated box as per customer requirements. Safe, quick and undamaged - that's how our products reach any destination all round the world. To assure comprehensive quality methods that prevent damage in transit, because what matters is to deliver the components safely to the end user in the quality in which Silver Metal Cast produced for them.



## Our Products

### Cylinder Liners - Dry & Wet :

The cylinder liner also known as cylinder sleeve, is fitted into the engine block as the inner wall of a cylinder, forms a sliding surface for the piston rings while retaining the lubricant within. Cast iron is the material used for cylinder liners. There are three types of liners, dry, wet and finned cylinder liners.

Dry cylinder liners are thin. They do not interact with the engine coolant. Instead they provide a very close fit with the jacket in the cylinder block to protect the piston from heat and impurities.

Wet cylinder liners come in direct contact with the engine coolant. Sometimes the wet cylinder liners are fitted with tiny openings to help disperse the heat and impurities. These types of liners are called water-jacket liners which are simply a type of wet cylinder liner.

Finned cylinder liners are designed for air-cooled engines. They operate much like the dry cylinder liner in that the cooling medium for the motor is air. However, these liners are fitted with tiny fins which allow the inflowing air to draw with great force around the cylinder to provide cooling.

### Cylinder Sleeves :

Cylinder Liners - Sleeves, made of grey cast-iron, ought to have desired casting and machining qualities, viz. strength, toughness, hardness and wear resistance. These are mainly of two type - Dry liners and Wet liners. The liners-sleeves are 'Cast-In', force (press) fit or slip fit. The interference between its outer diameter and bore-hole walls depends on fit-type from 0.050 to 0.075mm. These are available in wide range suitable for light, medium and heavy duty application.



### Air Cooled Blocks :

We manufacture air cooled block for which casting is done in graded grey cast iron in such a way so as to achieve paralytic structure free from ferrite and graphitic as per international standards. Air cooled block are cast by shell molding process & used for diesel engines, automobile engines. The casting of these air cooled blocks/barrels are machined in the machine shop equipped with precision CNC turning centre, hydraulically operated NC controlled honing machines. We maintain hardness of the cylinder barrels strictly as per international standard. The usage of hardened liners with plateau finish improves the engine life, lowers lube oil consumption and improves fuel efficiency.

SR. No.	Model	Type.	Oe Part No	Ae Part No	Bore	O/D	C/D	C/T	Length
					mm	mm	mm	mm	mm
CATERPILLAR									
1	D353 / D379 / D398	FF	N9174 / 1S9174	WS-527H	158.750	178.943	190.500	12.8+1.07	381.000
2	D6 / D334 / 3304 / 3306	FF	2P8889 / 9S6557	WS 397	120.650	134.340	142.875	10.29+1.0	254.000
3	D343 / D346 / D348 /	FF	6N8700 / 2S0920	WS-455HX	137.160	155.370	165.150	13.36+1.0	304.000
4	3406/ 3408/ 3412	FF	2W6000 / 7W3550	WS-528HX	137.160	153.746	165.125	8.89+1.04	273.812
5	D3116	SF	7C6208		105.000	109.860			196.800
6	3204	SF	7W2293	DS-576	114.300	119.126			196.774
7	D342C, 342T, 64,D386,	FF	8N5676	WS-530HX	146.050	168.046	177.419	12.675+1.05	381.000
8	D330A, 955X, D4C,	FF	8S2240 / 4A / 8166	WS 397HX	114.300	131.750	139.281	10.262+1.12	262.731
9	3508 / 3512 / 3516	FF	8N 6861-KIT	WS 578H	170.180	195.072	206.959	12.649+ 0.991	357.632
CUMMINS									
10	3BT / 4BT / 6BT	SF	3904166	DS-557	102.000	104.623			200.279
11	NH 220	FF	184400	WS-448	130.175	146.050	155.626	11.150	301.625
12	NT855 / N14	FF	3801826 / 3055099	WS-545	139.700	155.473	166.751	9.017	286.385
13	NT855 / NTC475/N14	FF	3065405	WS-555	139.700	155.473	167.259	9.540	288.163
14	NT855 / NTC475 / N14	FF	3046325		139.700	155.500	167.240	9.290	288.200
15	V8-210/ V6-155	FF	3022530 / 3277592	SJ 351161 / WS481	117.475	129.286	137.249	7.772	165.659
16	V-555, VT225	FF	3054936	WS-506	117.475	129.286	137.249	7.747	191.770
17	6CT A8.3	FF	3919937 / 3802407		114.000	132.500	130.950	14.500	238.310
18	6CT 8.3	FF	3948095		114.000	130.610	130.900	14.550	235.320
19	LTA 10 / L 10	FF	3080760 / 3803703		125.000	137.414	145.948	14.986+1.219	239.776
20	KT 1150	FF	3202240	WS 548	158.750	180.188	188.214	13.373	304.800
21	KT 1150	FF	3007710		158.750	177.300	188.010	7.750	306.500
22	KT 1150	FF	3022157		158.750	177.300	190.360	13.360	306.500
DAF									
23	DF / DT / DTD 615	FF	220 095/212 275	SJ 351028	104.000	109.000	117.064	8.077	238.989
24	D575	FF		SJ 531601	100.615	105.669	115.217	12.725	239.014
25	DH825, DHU 825, DU825,	FF	396 855/240 / 474	SJ 351103	118.000	123.485	133.650	10.061	262.204
26	DKS/DKSE /DKDL/DKL,	FF	394 080 / 396 080	SJ 351351	130.000	136.004	143.896	10.061	288.493
27	XD 3T			89412190	94.000	97.000	99.500	3.900	165.800
KOMATSU									
28	D30E16B/ D50A15C	SF	366 011 0610	SU 351281	97.000	100.495	103.428	5.000	222.500
29	6D95	FF	6207212110	SJ 351302	95.000	97.970	103.950	4.000	201.000

SR. No.	Model	Type.	Oe Part No	Ae Part No	Bore	O/D	C/D	C/T	Length
					mm	mm	mm	mm	mm
30	BEPC-2203/ S6D105 / 6D 105	FF	6136-22-2210		105.000	118.669	127.000	10.00+1.00	223.000
31	6D 125 / BD65	FF	6150-21-2212		125.000	141.400	153.060	10.200+1.75	256.540
32	SA6D 140 / S6D 140 / S(A)6D 140	FF	6211-21-2220		140.000	158.000	170.200	11.12+1.85	283.000
33	SA6D 170	FF	6162-23-2210		170.000	190.400	206.000	14.12+1.70	342.000
34	828 AC.3	SF		21207702	76.000	81.080			134.300
MAN									
35	D 1146	FF			111.000	115.000			234.000
36	D 2156	FF		SJ 351145	121.000	125.960	131.880	8.03	287.000
37	D 2356	FF			123.000	126.970	132.880	8.02	270.000
38	D2555/SL200 D2556/D 2565	FF	51.01201.0296	SJ 351188 V1	125.000	140.000	152.000	10.05+1.0	270.000
39	D 2848	FF		SJ 351336	128.000	144.500	153.750	10.0+1.0	253.000
40	O226 M			89091110	102.000	105.990	111.000	8.00	217.000
41	D 0824	FF		89339110	108.000	111.490	116.000	4.04	217.000
42	D 1246			88324110	112.000	118.000			288.000
43	D 2865 D 2866 D 2876	FF	51.01201.0309	Mahle # 227 WN 37/ KS	128.000	144.500	153.800	10.07+1.00	270.000
44	D2555/SL200 D 2556/D 2565	FF	51.01201.0323	MAHLE# 227WN33	125.000	140.000	152.000	10.55+1.00	270.000
45	D 2530 / D2876	AIR COO LED		MAHLE# 004WR06	90.000	95.000		94.000	104.000
MERCEDES BENZ									
46	OM 314/OM 352/OM 353	SF		SU 607501	97.000	103.099	105.926	4.521	223.012
47	OM 321	SF		SU 463801	95.000	101.074	103.924	4.623	223.012
48	OM 314/352 /366 / 364	SF	366 011 0610	SU 351281	97.000	100.495	103.428	5.000	222.500
49	OM 352	SF	352 011 1510		97.000	101.000	104.000	5.200	222.000
50	OM 360	SF	360 011 0010		115.000	120.000	125.000	5.500	253.500
51	OM 360	SF			115.000	120.000	125.000	5.750	253.500
52	OM 401/402 403	FF		Goetze # 14- 451660-00	125.000	140.000	152.000	10.07+1.00	253.000
53	OM 421 / 422	FF	422 011 0310	SJ 351230	128.000	144.451	153.757	10.07+1.10	253.000
54	OM 602	SF	601 011 0210	SU 351337	87.000	91.560	96.520	4.740	156.500
55	OM 615.913	SF	615 011 1010 615 011 1110	SU 351122 / SU 351123	87.000	90.065	91.923	4.800	158.400
56	OM 616 / OM 617	SF	616 011 0710 616 011 0610	SU 351119	91.000	94.065	95.920	4.800	158.000
57	OM 636	SF	181 011 0110	SU 453801	75.000	79.075	80.825	4.125	190.246



SR. No.	Model	Type.	Oe Part No	Ae Part No	Bore	O/D	C/D	C/T	Length
					mm	mm	mm	mm	mm
58	OM 636	SF		SU 453802	75.000	79.075			190.246
59	OM 401-404 OM 421-424 /	FF		004WN05	90.000	95.000		94.000	104.000
60	OM 424/424A 424LA /	FF	444 011 0210 444 011 0110	SJ 351340	128.000	144.500	153.800	9.920+1.00	253.000
61	OM 443 / 444	FF	442 011 0310	J 351334	130.000	144.500	153.800	9.920+1.00	253.000
62	OM 409 / A / HA / H / OM 407	FF	407 011 1110 407 011 1010	003WN16	125.000	140.000	152.000	10.07+1.00	265.000
63	OM 409 / A HA / H / OM 407	FF		003WN19	125.000	140.000	152.000	10.57+1.00	265.000
64	OM 427 / 429 / 447	FF	427 011 0310	003WN20	128.000	144.500	153.800	10.17+1.00	270.000
65	OM 904 / OM 906	SF		GOTZE # 14- 028610-00	102.000	106.000	109.500	6.200	220.000
66	OM 541 / 542 / 941	FF		KS Ref: 8947 3 110 / RSA	130.000	150.000	164.100	10.12+1.10	258.000
67	OM 541 / 542 / 941	FF		KS Ref: 89 530 110	130.000	150.000	164.100	10.12+1.10	258.000
SCANIA									
68	D 8 / DS 8	FF	243817 / 228110	061 WN 01 88 402 110	115.000	129.921	137.373	8.075+.78	270.840
69	D 11 / DS 11	FF	363305 / 230150	SJ 351072 061 WN 04	127.000	139.916	153.873	8.05+0.75	290.703
70	D 11 / DS 11	FF	235828 / 366301	061 WN 07 88 367 110	127.000	140.000	153.800	8.20+0.80	291.000
71	DS 14	FF	230151 / 170690	SJ 351137 061 WN 13	127.000	139.964	155.905	10.1+0.55	275.488
72	114 SERI- ES & 124	FF	1382183	14-112 800-00	127.000	138.500	150.000	5.000	271.120
VOLVO									
73	TD 42	FF			105.575	118.000	127.400	9.0+1.0	246.000
74	TD 60	FF	465170	037 WN 07 89 016110	98.400	109.880	119.088	12.0+1.0	234.490
75	TD100B	FF		SJ 351217	120.640	133.833	146.990	11.76+.99	293.675
76	TD120	FF	275051 / 275086 275385 / 275398	SJ 351115V1 037 WN 22	130.180	143.909	157.582	13.55+.69	310.515
77	TD121	FF	275076 / 275626	037 WN 25 89 328 110	130.180	143.909	157.582	10.50+0.70	311.000
78	TD122	FF	478149	SJ 351296 037 WN 30	130.180	143.850	157.620	10.5+3.25	313.250
79	TD70	FF	421430 P04 466860 P10	SJ 351130 037 WN 11	104.770	116.942	126.975	11.66+.76	256.794
80	D 12 A	FF		037 WN 35	131.000	143.900	159.600	11.20+4.45	276.400
81	TD 100 A	FF	422090 P06	SJ 351088 / 037 WN 18	120.640	133.916	146.957	11.679+1.00	294.107

SR. No.	Model	Type.	Oe Part No	Ae Part No	Bore	O/D	C/D	C/T	Length
					mm	mm	mm	mm	mm
PERKINS									
82		SF	31358323-ATS		91.490	93.710	96.620	3.810	216.000
83		SF	31358393-ATS		98.480	103.280	106.350	3.860	227.280
84		SF	31358346-ATS		101.05	104.250	107.440	3.860	227.280
85		SF	3135X031-ATS		98.430	104.250	107.370	3.810	226.440
86		SF	3135XG33ATS		101.050	104.200	107.370	3.810	225.540
87		SF	3135X041-ATS		100.000	104.280	107.440	3.860	226.440
88		SF	31358533-ATS		114.310	117.580	121.050	2.710	230.780
89		SF	3135X063-ATS		100.000	104.270	107.440	3.860	227.500
90		SF	31358343-ATS		101.050	103.300			223.900
91		SF	14-020870-ATS		105.000	108.080	109.500	5.100	227.000
92		FF	31358345-ATS		91.490	93.660	96.470	3.780	216.030
93		FF	31358394-ATS		98.480	103.190	106.450	3.860	227.280
94		FF	31358352-ATS		101.050	104.200	107.400	3.860	227.280
95		FF	3135X032-ATS		98.480	104.200	107.370	3.810	226.440
96		FF	3135X034-ATS		101.050	104.200	107.370	3.810	225.430
97		FF	3135X042-ATS		100.000	104.230	107.440	3.860	226.440
98		FF	31358534-ATS		114.310	117.900	121.130	2.710	230.780
99		FF	3135X062-ATS		100.000	104.200	107.360	3.860	227.710



# Tractor Segment Cylinder Liner

Sr. No	Product Description	Finish / Type	Bore Dia In mm	Cyl.Per Eng.
Tractor Vehicle Segment				
1	P3	S.F	88.24	3
2	P3 PF	P.F	88.98	3
3	S3\MF245	S.F	90.80	3
4	S3\MF245 PF	P.F	88.98	3
5	MF1035	S.F	88.35	3
6	MF1035 PF	P.F	91.56	3
7	MF 9000	S.F	94.88	3
8	FORD 3000 STD	S.F	106.01	3
9	FORD 3000 PF	P.F	106.75	3
10	FORD 3610 STD	S.F	110.50	3
11	FORD 3610 PF	P.F	111.30	3
12	FORD 3610 MT STD	S.F	111.12	3
13	FORD 3610 MT STD PF	P.F	111.30	3
14	FARM TRAC 45HP	S.F	105.32	3
15	FARM TRAC 60/70HP	S.F	111.00	3
16	FARM TRAC - NEW HOLLAND 3630	S.F	110.35	3
17	AVL 475 PF	P.F	88.91	4
18	AVL 475 SILVER	P.F	88.91	4
19	AVL 575 PF	P.F	88.91	4
20	AVL 575 PUF	P.F/PUF	88.91	4
21	AVL 575 PF M.G.	P.F	88.91	4
22	MAHINDRA ARJUN P/F	P.F	94.02	4
23	EICHER 115 SF	S.F	114.30	1
24	EICHER 115 PF	P.F/PUF	115.00	1
25	EICHER 5.145 SF	S.F	114.30	1
26	EICHER 5.145 PF	P.F/PUF	115.00	1
27	EICHER 312 (SMALL ) BARREL	P.F	99.60	1
28	EICHER 364/485 (LONG) BARREL	P.F	100.00	1
29	EICHER 241 XTRAC PF STD	P.F	114.2	1
30	EICHER 241 XTRAC STD	S.F	115.00	1
31	ESCORTS 325	P.F/PUF	97.61	1
32	ESCORTS 335 SF	SF/PUF	101.7	1
33	ESCORTS 335	P.F/PUF	102.03	1
34	ESCORTS 340 SF	S.F/PUF	104.23	1
35	ESCORTS 340	P.F/PUF	105.01	1
36	ESCORTS 345 SF	S.F/PUF	109.23	1

Sr. No	Product Description	Finish / Type	Bore Dia In mm	Cyl.Per Eng.
Tractor Vehicle Segment				
37	ESCORTS 345	P.F/PUF	110.03	1
38	ESCORTS 430 SF	S.F/PUF	90.21	1
39	ESCORTS 430	P.F/PUF	91.01	1
40	ESCORTS 435 SF	S.F/PUF	90.2	1
41	ESCORTS 435	P.F/PUF	91.01	1
42	ESCORTS JCB	P.F/PUF	95.00	1
43	JOHNDEER	P.F	106.50	4
44	KIRLOSKAR R-1040 & 4R(B)	P.F/PUF	105.00	1
45	KIRLOSKAR DEUTZE 912 BARREL	PF	100.00	1
46	PERKINS PHASER PF	PF	100.00	6
47	PERKINS PHASER SF(4)	S.F	99.32	4
48	SWARAJ RV100	P.F/PUF	99.94	1
49	SWARAJ RV100 SEMI FINISH	S.F/PUF	99.00	1
50	SWARAJ 735FE	P.F/PUF	100.05	1
51	SWARAJ 735FE SEMI FINISH	S.F/PUF	99.20	1
52	SWARAJ 855/RBV1	P.F/PUF	110.01	1
53	SWARAJ 855/RBV1 SEMI FINISH	S.F/PUF	109.32	1
54	SWARAJ 855 FE/RBV2	P.F/PUF	110.01	1
55	SWARAJ 855 FE/RBV2 SEMI FINISH	S.F/PUF	109.32	1
56	KUBOTA TRACTOR	P.F	95.01	1
57	SHB 110MM	P.F	110.00	1
58	MITSUBISHI	P.F	95.00	1
59	KAMCO DI	P.F	95.00	1
60	ZETOR 2511	P.F/PUF	95.02	1
61	ZETOR 2522	P.F/PUF	95.02	1
62	ZETOR 3522	P.F/PUF	95.02	1
63	ZETOR 2911	P.F/PUF	100.00	1
64	ZETOR 4511	P.F/PUF	95.02	1
65	ZETOR 5911	P.F/PUF	100.01	1
66	ZETOR 6911	P.F/PUF	100.01	1
67	SONALIKA 92MM	P.F	92.02	1
68	SONALIKA 95MM	P.F	95.02	1
69	SONALIKA 97MM	P.F	97.02	1
70	SONALIKA 100MM	P.F	100.02	1
71	SONALIKA 102MM	P.F	102.02	1
72	SONALIKA 105MM	P.F	105.02	1
73	SONALIKA 107MM	P.F	107.02	1

Sr. No	Product Description	Finish / Type	Bore Dia In mm	Cyl.Per Eng.
LIGHT COMMERCIAL VEHICLE SEGMENT				
1	EICHER CANTER C.T	S.F	99.05	4
2	EICHER CANTER C.T P.F	P.F	100.05	4
3	M.NISSAN	S.F	88.39	4

Sr. No	Product Description	Finish / Type	Bore Dia In mm	Cyl.Per Eng.
LIGHT COMMERCIAL VEHICLE SEGMENT				
4	M.NISSAN P.F	P.F	89.06	4
5	SWARAJ MAZDA AY ( GREEN)	P.F/PUF	100.02	4
6	SWARAJ MAZDA BY (RED)	P.F/PUF	100.02	4



Sr. No	H.C.V &L.C.V SEGMENT CYLINDER LINER Product Description	Finish / Type	Bore Dia In mm	Cyl.Per Eng.
HEAVY COMMERCIAL VEHICLE SEGMENT				
1	680 SOFT	PF	127.08	6
2	400 EURO PLAIN S.F	S.F	102.90	6
3	400 EURO P.F	P.F	107.32	6
4	400 EURO P.F PLAIN	PF	107.32	6
5	HINO 'W'	P.F	104.03	6
6	HINO 'X'	P.F	104.03	6
7	HINO 'Y'	P.F	104.03	6
8	HINO 'Z'	P.F	104.03	6

Sr. No	H.C.V &L.C.V SEGMENT CYLINDER LINER Product Description	Finish / Type	Bore Dia In mm	Cyl.Per Eng.
HEAVY COMMERCIAL VEHICLE SEGMENT				
9	TATA CUMMINS C.T	S.F	101.30	6
10	TATA CUMMINS P.L	S.F	101.30	6
11	TATA CUMMINS C.T P.F	P.F	102.10	6
12	TATA CUMMINS P.L P.F	P.F	102.10	6
13	PRIMA (107 MM)	S.F	106.00	6
14	EICHER JUMBO BS.3 (PLAIN)	S.F	99.05	6
15	EICHER JUMBO BS.3 (PLAIN)	P.F	100.05	6
16	BHARAT BENZ (DE 210)	S.F	101.00	6

Sr. No	MINI TRUCK CYLINDER LINER Product Description	Finish / Type	Bore Dia In mm	Cyl.Per Eng.
MINI TRUCK SEGMENT				
1	DOST	S.F	79.30	3
2	MAHINDRA MAXXIMO	S.F	82.30	2
3	MAHINDRA MAXXIMO(3.390)	S.F	82.30	2
4	TATA ACE	S.F	74.30	2

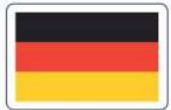
Sr. No	MINI TRUCK CYLINDER LINER Product Description	Finish / Type	Bore Dia In mm	Cyl.Per Eng.
MINI TRUCK SEGMENT				
5	TATA ACE GOLD	S.F	74.30	2
6	TATA ACE DICOR	S.F	77.20	2
7	TATA ACE P.F	P.F	75.02	2
8	IRIS	S.F	91.33	1

Sr. No	Product Description	Finish / Type	Bore Dia In mm	Cyl.Per Eng.
CAR&JEEP SEGMENT				
1	MAHINDRA LOGAN	S.F	74.30	4
2	MARUTI SWIFT DIESEL	S.F	68.96	4
3	MARUTI SWIFT DIESEL (2.850)	S.F	68.96	4
4	MARUTI SWIFT DIESEL MOLY GOLD	S.F	68.96	4
5	MARUTI ZEN DIESEL	S.F	76.3	4
6	PEUGEOT	P.F	90.02	4
7	PEUGEOT L.B	P.F	89.97	4
8	INDICA	S.F	74.30	4
9	INDICA P.F	P.F	75.01	4

Sr. No	Product Description	Finish / Type	Bore Dia In mm	Cyl.Per Eng.
THREE WHEELER SEGMENT				
1	BAJAJ DIESEL	S.F	82.32	1
2	BAJAJ MINIDOR	S.F	84.01	1

Sr. No	Product Description	Finish / Type	Bore Dia In mm	Cyl.Per Eng.
MULTI UTILITY VEHICLE SEGMENT				
1	BAJAJ OM 616	S.F	90.22	4
2	FORD ENDAVOUR	S.F	92.30	4
3	BOLERO - XD3P	S.F	93.30	4
4	MAHINDRA HAWK	P.F	84.30	4
5	SCORPIO	P.F	94.02	4
6	MAHINDRA XYLO	S.F	88.30	4
7	RENAULT DUSTER	S.F	74.2	4
8	207 THIN	S.F	82.32	4
9	207 PF THIN	P.F	83.01	4
10	207 THIN M.G	S.F	82.32	4
11	207 THICK	S.F	82.32	4
12	SAFARI DICOR	S.F	84.30	4
13	TAVERA S.F	S.F	92.20	4
14	TAVERA S.F (Spl.Steel)	S.F	92.14	4
15	TOYOTA INNOVA	S.F	91.35	4
16	TOYOTA FORTUNER	S.F	95.20	4
17	TOYOTA QUALIS	S.F	91.35	4
18	TOYOTA 1 N	S.F	73.20	4
19	MARUTI ECCO	S.F	70.30	4
20	MARUTI ERTIGA PETROL	S.F	72.20	4

## GLOBAL PRESENT



GERMANY



POLAND



PERU



KENYA



SOUTH  
AFRICA



DUBAI



EGYPT



NIGERIA



SAUDI  
ARABIA



SUDAN



PANAMA



MEXICO



UK



SPAIN



RUSSIA



TURKEY



+91 75750 67272 | +91 99745 57999 | +91 92656 24575

sales@maanautomotive.com

Plot No. 1 and 2, Revenue Survey No. 121 and 122 Paiki,  
Piplana, Pardi, Rajkot, Gujarat (360024), India.



We Support

