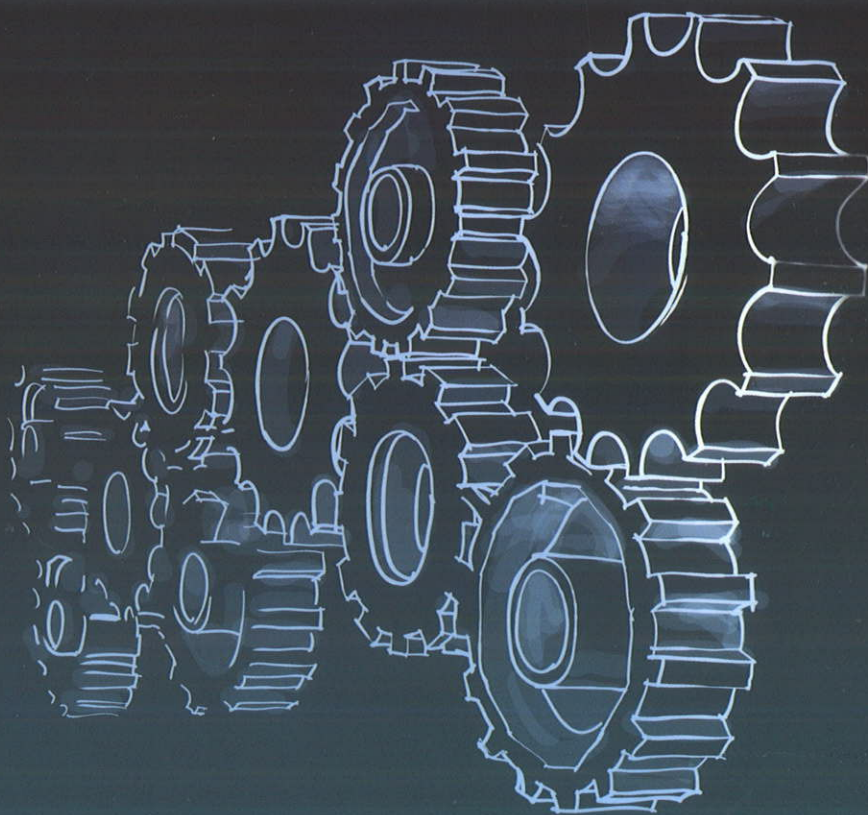
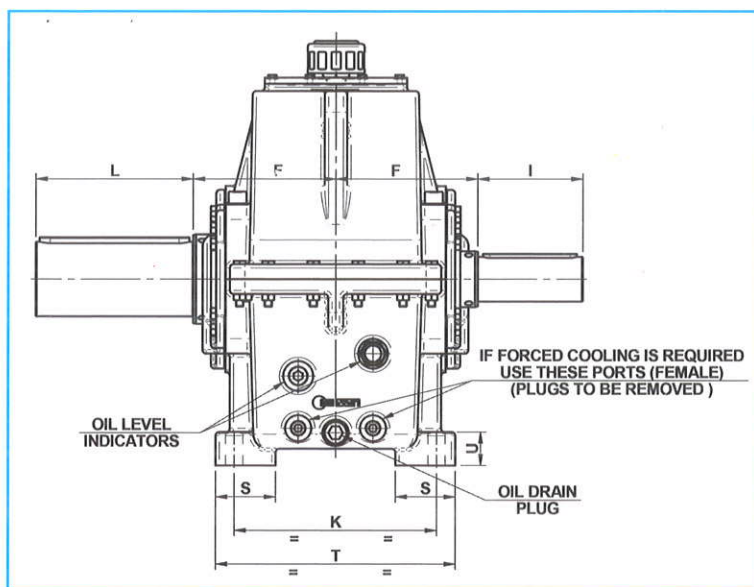
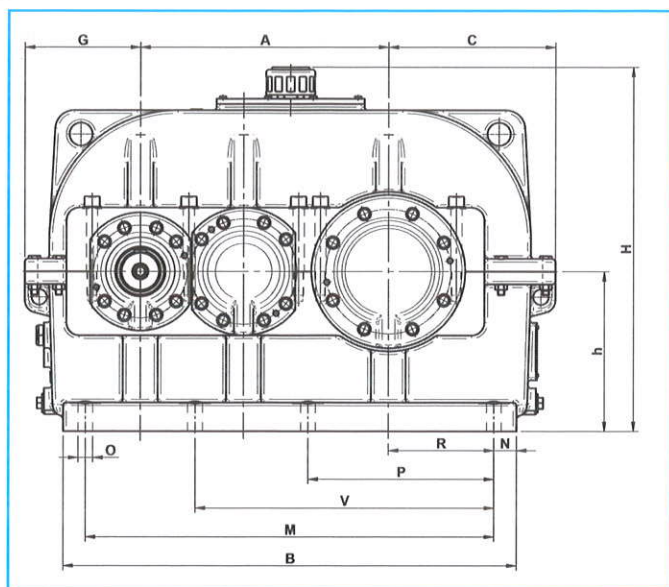
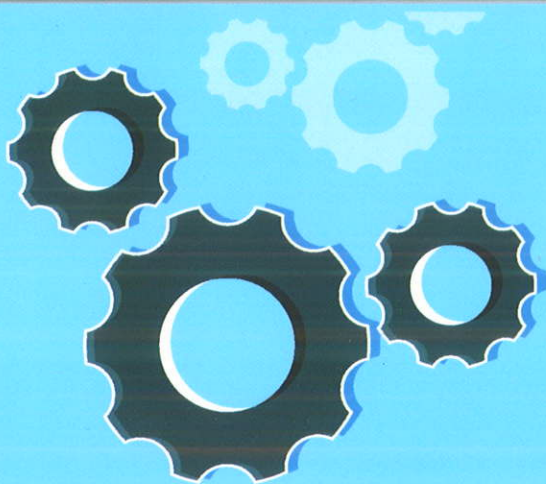


New efficient series
of gearboxes from the
pioneers of gear industry





MODEL.No.	INPUT SHAFT						OUTPUT SHAFT		DIMENSIONS (mm)																	AVERAGE WEIGHT (kg)	OIL QUANTITY (LITRES)	THREAD SIZE FOR FORCED COOLING
	i<=12.5		i>12.5 UP TO 20		i>20		D	L	A	B	C	F	G	h	H	K	M	O	P	R	S	T	U	V				
	d	l	d	l	d	l																						
2HFS385	60	140	50	110	40	110	100	210	385	705	260	190	180	250	570	570	635	23	290	165	80	320	45	-	360	14	1/2" BSP	
2HFS430	70	140	55	110	45	110	110	210	430	785	290	210	205	280	625	310	705	27	315	180	90	370	45	-	490	21	1/2" BSP	
2HFS480	75	140	60	140	50	110	120	210	480	875	325	230	230	315	690	340	785	27	355	200	100	400	55	-	675	29	1/2" BSP	
2HFS540	85	170	70	140	55	110	140	250	540	975	355	260	250	355	785	380	875	33	405	220	110	450	60	-	910	42	1/2" BSP	
2HFS605	95	170	80	170	60	140	160	300	605	1085	390	285	270	400	865	410	975	33	450	245	120	48	65	-	1230	60	1/2" BSP	
2HFS680	105	210	90	170	70	140	170	300	680	1215	440	305	305	450	960	460	1105	33	510	280	130	53	70	-	1675	85	3/4" BSP	
2HFS765	115	210	95	170	80	170	190	350	765	1365	490	345	340	500	1065	510	1245	39	575	315	140	600	80	940	2260	115	3/4" BSP	
2HFS855	125	250	110	210	90	170	220	350	855	1525	550	475	280	560	1185	560	1385	39	645	350	150	650	90	1050	3500	165	3/4" BSP	

Helical Gears :- The Gears are manufactured out of Case Carburized High alloy steel with hardness of 58-62 HRC. The Case layer is removed in the Core to provide greater fatigue strengths

Housing:- Two piece Cast Housing for easy serviceability less weight and reduction in Noise

Bearing :- Bearing of SKF/FAG/TIMKEN/NTN make

Shafts & Pinions: - The integrated input shaft with Pinion is made of Case Carburized high alloy steel while the output shaft will be made of through hardened steel. The Gear boxes are manufactured by AGMA standards.

SHAFT END CENTER HOLES			
DIAMETER		THREAD SIZE	DEPTH FROM SHAFT END
ABOVE	UPTO		
30	50	M12	28
50	120	M16	32
120	180	M20	40
180	220	M24	51

Nominal Ratio	Nominal Speed(rpm)		Size of Gear box						
			385	430	480	540	605	680	765
I	Input(n1)	Output(n2)	Nominal Power Ratings PN(Kw)						
6.3	1500	240	285	370	530	790	1060*	1450*	2020*
	1000	160	215	280	400	560	800	1100	1520
	750	120	170	230	310	425	600	900	1200
7.1	1500	210	280	380	490	730	990	1350*	1900*
	1000	140	200	255	365	490	720	1000	1400
	750	105	150	210	275	370	550	790	1050
8	1500	188	255	350	450	660	920	1300	1750*
	1000	125	180	245	335	450	680	950	1270
	750	94	135	190	250	340	520	710	950
9	1500	167	225	320	450	580	820	1100	1500
	1000	111	160	215	300	430	620	800	1120
	750	83	125	170	235	340	500	650	900
10	1500	150	210	280	390	540	760	1050	1420
	1000	100	145	195	265	360	540	750	1000
	750	75	110	155	210	280	420	600	800
11.2	1500	134	180	250	330	480	680	900	1250
	1000	89	130	175	245	360	500	680	940
	750	67	95	130	185	270	400	500	720
12.5	1500	120	170	225	320	430	640	850	1200
	1000	80	115	165	220	300	450	600	850
	750	60	88	125	165	225	330	450	640
14	1500	107	150	205	280	380	550	710	950
	1000	71	105	145	195	265	400	520	710
	750	53	78	110	145	200	290	420	560
16	1500	94	135	185	250	340	490	650	860
	1000	62	92	130	175	235	350	490	650
	750	47	69	97	130	175	270	370	500
18	1500	83	120	140	220	310	430	550	740
	1000	56	80	98	145	230	320	410	540
	750	41	62	77	110	180	250	340	440
20	1500	75	110	140	210	280	410	520	700
	1000	50	74	98	140	190	280	380	500
	750	38	58	77	110	145	230	310	400
22.4	1500	67	99	135	185	250	390	490	660
	1000	45	66	92	125	170	260	350	460
	750	33	52	70	98	130	200	280	370

Established in 1969, SAN has been providing world class products that have made it a multi crore company in the private sector.

SAN's success in the field of engineering products & Locomotives is the result of continues manpower development, both at its 30 acre plant in Bangalore and 8 acre plant at Mysore. Today SAN has 1000 locomotives on track and enormous range of innovative products like rail cranes, cardan shafts and transmissions to custom designed gear boxes and locomotive subsystems. Products that have brought it to the fore front in the field of import substitution and helped it gain recognition from many prestigious industrial houses. These Plants are equipped with world class CNC machines and own Heat treatment plant.

SAN Gear Boxes are made the most advanced technology in the world and are known for the quality we offer. You can choose from a wide range of compact gear boxes with hardened and precision ground gears or get SAN to custom design one for you.

Some of SAN's achievement in the area of custom-built gear boxes are breakthrough designs in defence applications, planetary gear boxes locomotive gear boxes, turbine gear boxes and coal mill gear boxes to name a few. Over 200 designs have been engineered to replace expensive imports.

The standard range includes parallel shaft reducer, and multiple stages. SAN in addition to the above, is in a position to provide solutions for any application requiring use of bevel/helical/planetary gear boxes for the existing installations/equipment of the customer including one to one replacement, improves/alternate solutions, reverse engineering and spares. Cardan Shafts are vital link between driving and driven equipment. And SAN is proud to be first company in the country to develop and successfully implement indigenous technology in the heavy duty segment of this field. SAN has well equipped plant to manufacture cardan shafts. X-ray quality weld quality is maintained on the welds and the assemblies are finally dynamically balanced to an accuracy class of G-16 as per ISO 1940 specifications.

There is hardly any application known for which SAN has not developed gears and pinions, They are found in coal mill drives, fertilizers plants, Material Handling Equipments, conveyors, Mill Drives, highly sophisticated defence applications, Traction Gears for Railways, SPM machines,

Kolkatta

7/1, MONICA

9B, Lord Sinha Road

Kolkatta-700071, Ph: 033-22821023/22829009

Mumbai

Sadhana Rayon House

5th Floor, Dr. D N Road

Fort, Mumbai-400 001, Ph: 022-22822209/1023

New Delhi

Flat No;19, OSIAN

5th Floor, 12, Nehru Place

New Delhi-110019, Ph: 011-26471253/2642766

Nagpur

Plat No: A1, Falt No: 8C, Parivahan Nagar

Siddesh Apartments, Somalwada

Nagpur-400025, Ph: 0712-3912025



SAN ENGINEERING & LOCOMOTIVE CO LTD

POST BOX No: 4802 | White field Road, Bangalore

Ph: 080-42449200 | Fax: 080-28452260 | E-mail : epd@san-engineering.com