



Company Introduction

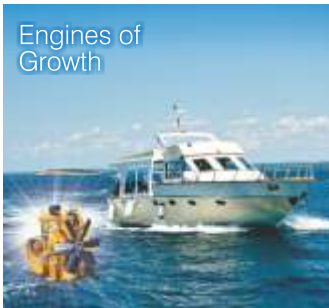
- Among India's leading and one of the oldest engineering companies.
- Core Competencies: Generator Sets, Pump Sets, Diesel / Petrol Engines, and Farm Equipments.
- Manufacturing 5 lakh engines annually.
- More than 85% of diesel 3-wheelers in India, run on Greaves engines.
- 7 state-of-the-art manufacturing facilities spread across the country, and excellent infrastructure for R & D.
- Significant Strengths: Technology, Value. Reach.
- Strong team of more than 300 R&D professionals.
- Extensive Marketing and Service Network: Over 1200 sales & service centres across India.
- Global footprint, with local presence in SAARC, South-East Asia, Africa and Middle-East.

Auxiliary Power Business

- Over 5 decades of experience in generator sets. 1 Lakh+ Gensets population in Operations
- New Genset Manufacturing facility at Chakan with annual capacities more than 10000 Gensets
- CPCB-II Compliant Gensets: Fuel-efficient, rugged and reliable.
- Total solutions by single point of contact for sales, service & spare parts: anytime, anywhere.
- State-of-the-art technology centre at Pune for multi-cylinder / higher HP engines and gensets.
- Testing facility equipped with sophisticated equipment is among the best in the industry and can test engines up to 2 MW.
- Segments we serve: Real Estate, Malls, Hospitals, Hotels, Industries, Manufacturing, Infrastructure, Engineering, Dairy, Petroleum, Telecom, Food Processing, Textile, Banking, Financial Services & Insurance (BFSI), Education, Government, Railways, and many more.

GreavesPower - Performance in Demanding Conditions

- Greaves Gensets powered India's Antarctica Mission in 1982,continuously operating below sub-zero temperature.
- Greaves Gensets installed along the India-Bangladesh border help armed forces every day from sunset to sunrise to keep a vigil.
- Power cars of the premium air-conditioned trains in the Indian Railways are powered by Greaves Gensets.
- Supporting power requirement of India's largest project in the Oil & Gas industry.



DG Set Technical Specifications***

Genset Model	GPWIL-PII-10E	GPWIL-PII-15X	GPWIL-PII-20X	GPWIL-PII-25E	GPWIL-PII-30X	GPWIL-40A	GPWIL-45A	GPWIL-PII-45	GPWIL-PII-50	GPWIL-PII-62.5	GPWIL-PII-75	GPWIL-PII-82.5	GPWIL-PII-100	GPWIL-PII-125	GPWIL-PII-160	GPWIL-PII-180	GPWIL-PII-200	GPWIL-PII-250	GPWIL-320	GPWIL-400	GPWIL-500	
Power Rating (KVA/KW)	10 / 8*	15/12	20/16	25/20	30/24	40/32	45/36	45/36*	50/40	62.5/50	75/60	82.5/66	100/80	125/100	160/128*	180/144	200/160	250/200	320/256*	400/320*	500/400	
No. of Phases	1 / 3	1 / 3	1 / 3	1 / 3	1 / 3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Current @ 0.8 PF(Amps)	43.5/13.9	65.2 /20.9	87.0/27.8	108.7/34.8	130.4/41.7	55.7	62.6	62.6	69.6	87.0	104.3	114.8	139.1	173.9	222.6	250.4	278.3	347.8	445.2	556.5	695.6	
Power Factor	0.8 / 1	0.8	0.8	0.8	0.8	0.8	0.8	0.8 / 1	0.8	0.8	0.8	0.8	0.8	0.8	0.8/1	0.8	0.8	0.8	0.8	0.8/1	0.8	
Battery Rating (AH)	88AH	88AH	88AH	88AH	88AH	88AH	88AH	88AH	88AH	88AH	88AH	88AH	88AH	88AH	120AH	120AH	120AH	2X180AH	2X180AH	2X180AH	2X180AH	
Integral Fuel Tank	50	50	75	75	75	100	100	100	150	150	150	150	350	350	360	360	360	440	850	990	990	
Capacity (Litrs)																						
Engine : 1500 RPM, with Premix coolant - 50:50 of Ethylene Glycol and DM water																						
Engine Model	G-12-II	G-15-II	G-20-II	G-25-II	G-30-II	G-40-II	G-40-II	G-40-II	3G11TAG25	3G11TAG25	3G11TAG25	3G11TAG26	3G11TAG26	4G11TAG25	4G11TAG26	6G11TAG29	6G11TAG29	6G11TAG29	D3V6TAG21	D3V8TAG21	12V14TAG23	12V14TAG23
Aspiration	Natural	Natural	Natural	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	Turbocharged & aftercooled	
No. of Cylinders	2	2	3	3	3	4	4	3	3	3	3	3	4	4	6	6	6	6	8	12	12	
Compression Ratio	17.5	17.5	17.5	17.5	17.5	17.5	17.5	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	17	17
Bore x Stroke (mm)	91X110	95X110	91X110	91X110	91X110	91X110	91X110	108X133	108X133	108X133	108X133	108X133	108 x 133	108 x 133	108X133	108X133	108X133	128X130	128X130	115X135	115X135	
Cubic Capacity (Litrs)	1.43	1.56	2.14	2.14	2.14	2.86	2.86	3.66	3.66	3.66	3.66	3.66	4.87	4.87	7.31	7.31	7.31	10.03	13.38	16.8	16.8	
Power (HP)	18.0	21.6	25.2	33.6	42.0	58.0	58.0	80.1	80.1	101.2	101.2	101.2	126.5	155.0	243.1	243.1	243.1	309.0	386.0	604.0	604.0	
Power (kW)	13.3	15.9	18.5	24.7	31.2	42.8	42.8	59.0	59.0	74.5	74.5	74.5	93.0	114.0	178.8	178.8	178.8	227.0	284.0	444.0	444.0	
Governing* (ISO 8528)	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Mech. / G2	Electronic /G3	Electronic /G3	Electronic /G3	Electronic /G3
Starting System	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	12V ESE	24V ESE	24V ESE	24V ESE	24V ESE	
Lube Oil Sump Capacity (Litrs) with filter	5.5	5.5	6.5	6.5	6.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	10	10	17	17	17	30	50	50	50	
Lube oil Specification	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	15W40 Greaves Maxtherm API CH	
Alternator: AVR Controlled, Brushless Alternator with 3ph, 50Hz ,voltage range-415-440 volts. IP23 Protection, Voltage Regulation +/- 1%. Single Phase Voltage 230 Volts. Insulation class H with temperature rise restricted to class H limits.																						
Fuel Consumption																						
100% Load (LPH)	3	3.5	5.0	6.3	7.4	9.1	11.1	11.1	12.4	14.1	17.5	19.3	23.6	28.6	36.5	41.1	45.1	56.4	76.5	86.8	107.9	
75% Load (LPH)	2.3	2.7	3.8	5.0	5.9	7.1	8.6	8.6	9.9	10.5	12.6	14.0	17.4	21.2	27.2	30.7	33.6	42.3	57.7	64.9	82.5	
Genset Installation																						
3 & 1/2 Core cable, Al,Armoured	10 X 1	16 X 1	25 X 1	25 X 1	25 X 1	35 X 1	35 X 1	35 X 1	50 X 1	70 X 1	95 X 1	95 X 1	150 X 1	95 X 2	120 X 2	150 X 2	185 X 2	70 X 4	120 X 4	185 X 4	240 X 4	
3 & 1/2 Core cable, Cu,Armoured	2.5 X 1	4 X 1	4 X 1	6 X 1	10 X 1	16 X 1	25 X 1	25 X 1	25 X 1	35 X 1	50 X 1	70 X 1	95 X 1	120 X 1	70 X 2	95 X 2	120 X 2	70 X 3	150 X 3	150 X 4	185 X 4	
Exh. Pipe Size (NB)	2" NB	2" NB	2" NB	2"NB	2" NB	2" NB	2" NB	2" NB	3" NB	3" NB	3" NB	3" NB	4" NB	4" NB	4" NB	5" NB	5" NB	5" NB	5" NB	5" NB	5" NB	
Dimensions																						
L x W x H (mm)	1420 x 930 X 1242	1420 x 930 X 1242	1650 x 930 x 1242	1650 x 930 x 1242	1650 x 930 x 1242**	2350 x 950 x 1380	2350 x 950 x 1380	2500 x 1150 x 1535	2500 x 1150 x 1535	2500 x 1150 x 1535	2800 X 1150 X 1540	2800 X 1150 X 1540	3000 x 1350 x 1884	3000 x 1350 x 1884	3800 x 1350 x 1900	4000 x 1600 x 1900	4000 x 1600 x 1900	4500 x 1800 x 2200	5000 x 2000 x 2220	5600 x 2000 x 2300	5600 x 2000 x 2300	
Weight (Kg) (Approx.)	595	660	810	860	945	1260	1490	1210	1210	1230	1270	1270	1600	1610	2150	2295	2300	4050	4300	5490	5610	

*Gensets for PF = 1 can be used.
**For 30 kVA Single Phase (Genset Model is - GPWIL-30) Dimensions(mm) are -2300 X 950 X1360.
/G3 Governing is also available From 10kVA to 200kVA engine fitted with Electronic Governor, as an Option.
Prime Power Rating : Applicable for supplying power to varying electrical load for unlimited hours and is in accordance with ISO8528.
10% Overload is available for 1 hour in every 12 hours of operation.

*** Due to the policy of continual improvements, the specifications may change without prior notice.



Engine Features and Benefits

- Very low, basic engine noise level. Contributes to bettering the statutory MoEF stipulated noise level of 75 dB(A) for the DG Set.
- Lowest exhaust emissions. Meets the next generation CPCBII norms.
- Individual cylinder head design. Savings on maintenance, cost and time (45kVA onwards).
- Modular design. High degree of commonality of hardware and components over entire range.
- Easy accessibility of all maintenance parts.
- Deep skirt crank case design. High degree of rigidity and ruggedness.
- Higher reserve margins in the lube and cooling circuits gives following benefits –
 - Increased wear life & extended Overhauling periods
 - Hassle-free operation in Low and high ambient temperatures from 0°C. to 50°C.
- Wet liner construction eliminates time consuming and expensive block re-boring during overhauls.
- Gear-driven water pump (45 kVA onwards) improves the reliability of the cooling system.
- Engines with Electronic Governor from 250-500 kVA as Std, and other range optional.

DG Sets - State-of-the-art Acoustic Enclosures

- Smallest Footprint through Most compact acoustic enclosures.
- Lowest vibrations - most suitable for roof-top installations.
- Enclosures Louvers & Radiators are designed to ensure safe operations upto 50°C.
- Silencers inside upto 200 kVA Gensets lowering the height of the gensets.
- Enclosures & doors are designed for ease of Service, Access & Maintenance of DG set & Radiator
- CRCA steel Material processed with CNC punching/laser cutting machines to ensure precision.
- Surface treatment with 9 tank process to give high retention of surface finish
- Fully automatic, Pure Polyester and UV resistance powder coating process for outdoor installations and corrosive environments.
- Acoustic insulation with Fire retardant Foam/Rockwool material conforming to IS 7888/IS 8183.
- Water and lube oil drain outlets located on the outer surface - Leading to ease of maintenance and cleanliness.
- Toughened glass inspection window for clear view of control panel.
- Green passivated/stainless steel fasteners and hardware for trouble-free operation.

Integrated DG Set Controller

The unique integrated DG Set Controller incorporates both engine and alternator parameters in one console. This micro-processor based controller provides the most exhaustive display of critical engines and alternator performance parameters with alarm and safety features.

Display Parameters	Audio-Visual Warning	Shut-down with Audio-Visual Annunciation
Engine: RPM, Oil Pressure, Coolant Temp, Fuel level %, Battery Voltage. DG set: Hours run, Gen. volts (L-N, L-L) Gen. Current (Amps), kW, PF & kWhr.	Low oil pressure, High coolant temperature, Low battery voltage, Low fuel level	Low oil pressure, High coolant temperature, Engine over speed, Engine under speed, Under voltage, Over voltage, Over frequency, Under frequency, Low water level*, High canopy temp*

*Applicable for 160kVA and above

The controller has data logging facility for the latest 50 faults recorded and option for RS232 / RS485 connectivity for remote monitoring / BMS integration.

Scope of Supply

The Ready to Use DG Set is supplied with the following standard accessories:

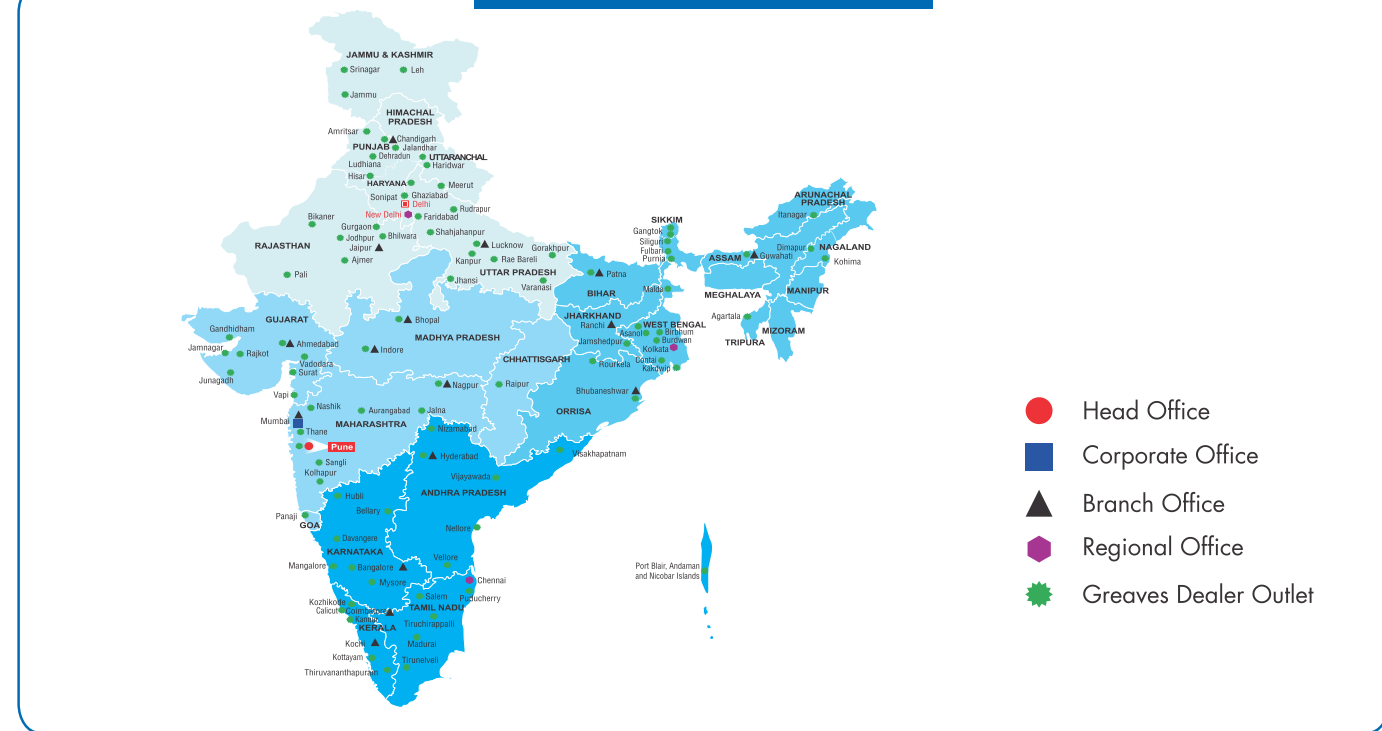
- In-built control panel with complete internal wiring/cabling
- Residential silencer - mounted with complete exhaust piping
- Right size Lead Acid Fully charged & tested battery
- In-built fuel tank to ensure Min. 8 Hrs. run @ 80% Load

Optional

- Electronic governor in lieu of mechanical governor upto 200kVA
 - AMF/ATS panel with auto change-over features
- Auto / Manual synchronising panels
- Trailer / trolley mounted mobile sets
 - Single phase alternator in lieu of 3 phase
 - Genset controller with remote monitoring feature
 - Heavy duty air filter
 - Cold starting kit for Engine
 - PMG, RTD/BDT, space Heater to Alternator



Sales and Service Network



Our Esteemed Customers



Greaves Cotton Limited

Auxiliary Power Business

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