



SUBURBAN INDUSTRIAL WORKS PVT. LTD.

MAIN & AUXILIARY

MINE FANS



Sarala

ABOUT US

SUBURBAN INDUSTRIAL WORKS PVT. LTD. was established in the year 1981 as manufacturers of Centrifugal Fans, Axial Flow Fans, and other Ventilation and Pollution Control Equipment, with complete infrastructure setup, design, manpower, plant, and machinery. Personnel with decades of experience in each field, along with technically qualified support staff, forms the backbone of the organization. Mingled with strong product quality, and a well-spread marketing network, SIWPL is a pioneer in the HVAC industry.

COMPANY PHILOSOPHY

To provide our clients with a well-engineered product using the latest technology and an optimized manufacturing process in our ISO 9001:2015 certified manufacturing facility. Thus, ensuring high quality workmanship which translates to longer lasting products, and a product range with a track record of lower downstream repair and maintenance cost. With our established product credibility throughout the country, our mission is to continuously innovate, and keep pace with technology up-gradation as per industry demands, and simultaneously excel with the product quality.

QUALITY MANAGEMENT

The Company has adopted strict measures to ensure the products and their application meet uniform quality at all times. Right from the input stage, the raw materials are tested by reputed, and government approved test houses before processing of the finished products. To ensure meeting guaranteed performance of products, we have testing laboratory/ test beds for testing of fans as per IS 4894, BS, and AMCA standards, supported with varied range of measuring instruments with updated calibration. During manufacture, all products are subject to DP, radiographic, ultrasonic, x-ray tests, as required, and all rotor portions are subject to Dynamic Balancing before assembly as per ISO: 1940. Any further tuning required is carried out by Portable Dynamic Balancing Machine.

Suburban Industrial Works has been providing complete and bespoke ventilation systems for the mining industry under the brand name SARALA for over three decades through a well-established network of operations. From complete, custom mine ventilation systems, to flexible auxiliary units, we offer innovative solutions for all mining requirements, thus helping to drive productivity, and guarantee worker, and asset safety.

SARALA's broad range of high output mine fans are engineered with the industry in mind, to achieve a higher grade of manufacturing precision – the precondition for robust performance and prolonged life, even in the toughest conditions and the harshest of environments.

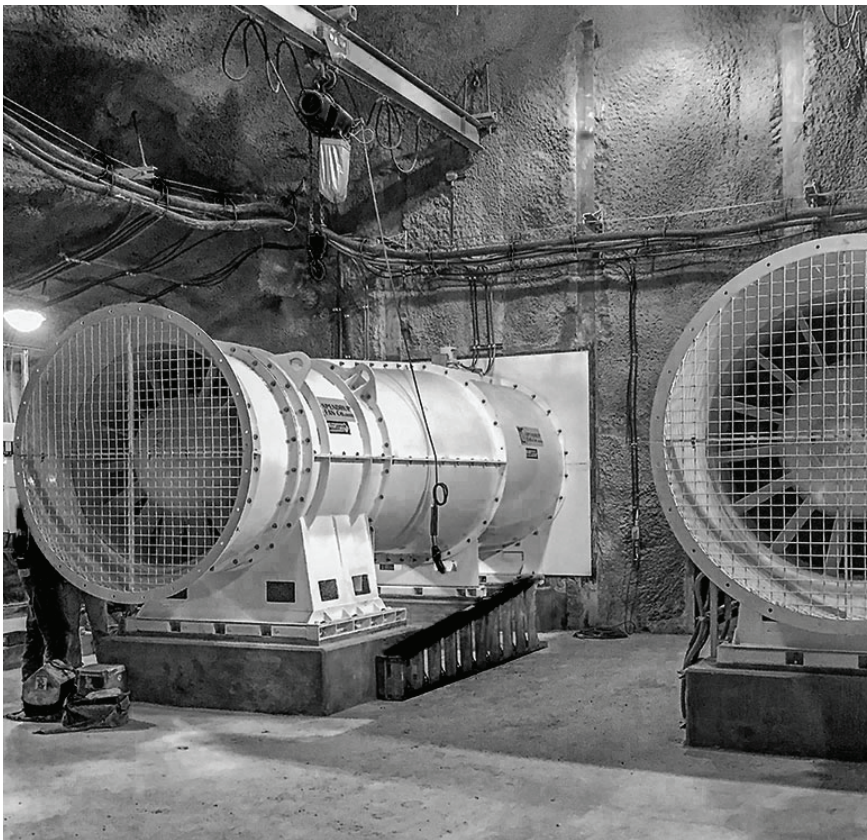
What makes SARALA Mine Fans unique?

- Designed to maximize efficiency and minimize power consumption.
- High Reliability and durability with low downstream repair and maintenance cost.
- Maximize performance throughout their lifespan.
- Tailored to meet specific requirements of each mine.
- Performance parameters can be validated in our in-house test beds before installation.
- Reduced capital costs with fans that maximise safety, reduce energy costs and deliver optimal performance.

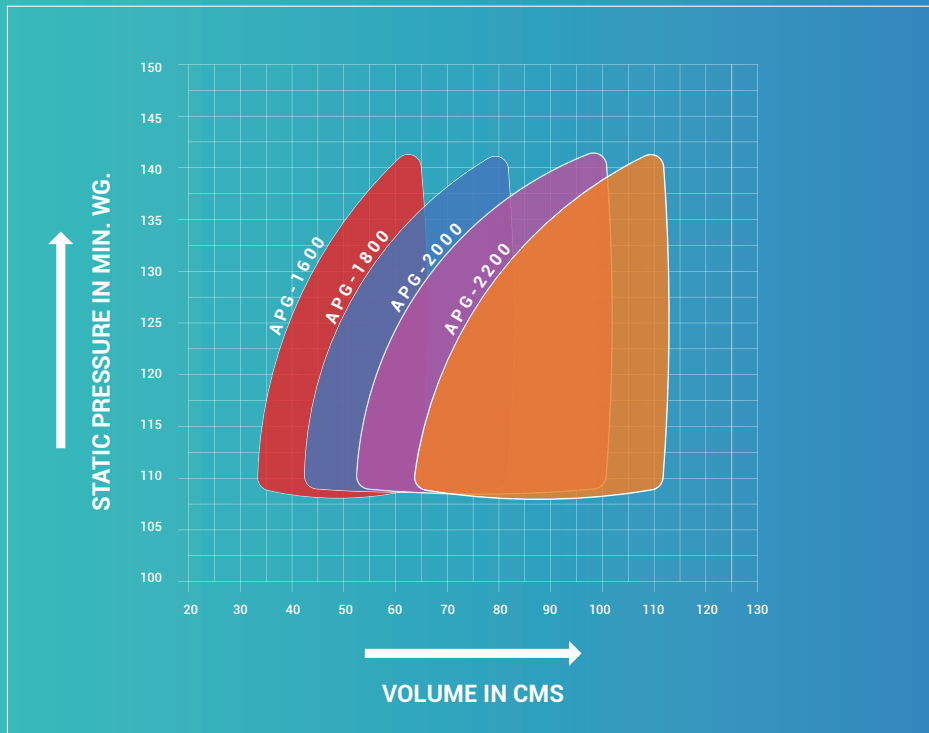


MAIN MINE VENTILATION FANS (APG SERIES)

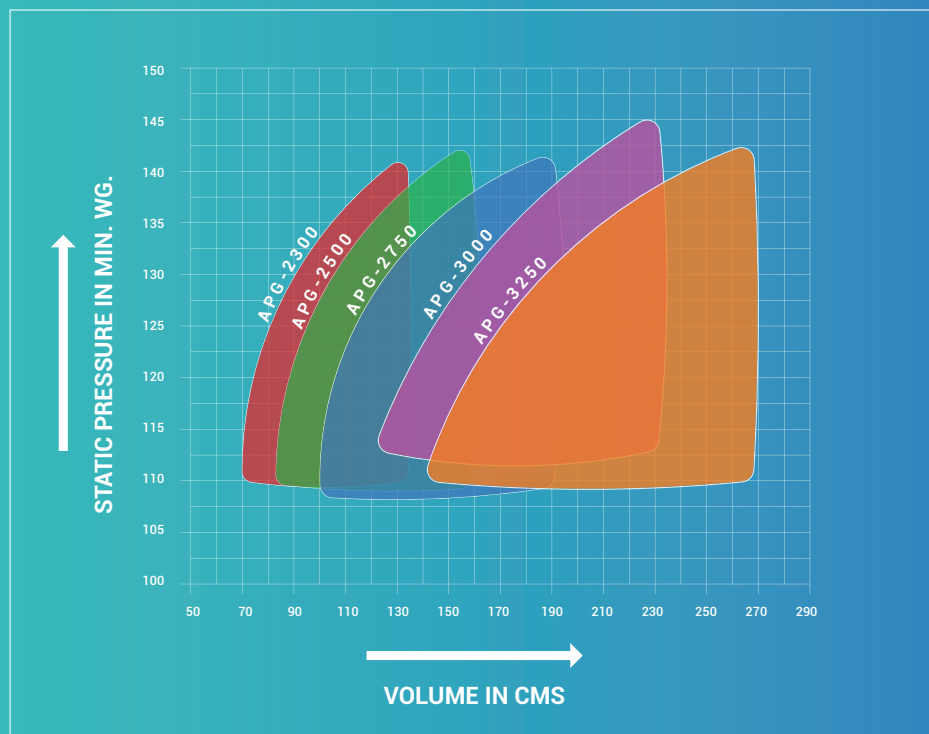
The main mine fan is installed at the surface and is used to generate flow for total air requirement in the underground mine circuit. The operation of this fan is so critical that in case of its shutdown, immediate cease work, and evacuation is declared. The typical application of these fans is for pressurization of mine shafts, safety ventilation systems, and dust control.



- ▶ **Wheel Diameter** : Ranging from 254 mm to 3250 mm.
- ▶ **Performance** : Ranging from 1,500 CMH to 8,50,000 CMH each, and up to 150 MM WG SP in single & 300 MM WG in double stage
- ▶ **Mounting** : Floor Mounted
- ▶ **Electrical Compatibility** : Compatible for usage with VFD and PLC
- ▶ **Accessories** : A complete range of guillotines, valves and dampers, protective grids, diffusers, silencers, transition pieces, connection pieces for horizontal fans and vertical shafts.
- ▶ **Motor** : Single Stage Fan HT Motors are used



MINE VENTILATION PERFORMANCE REGION (APG-1600 - APG-2200)



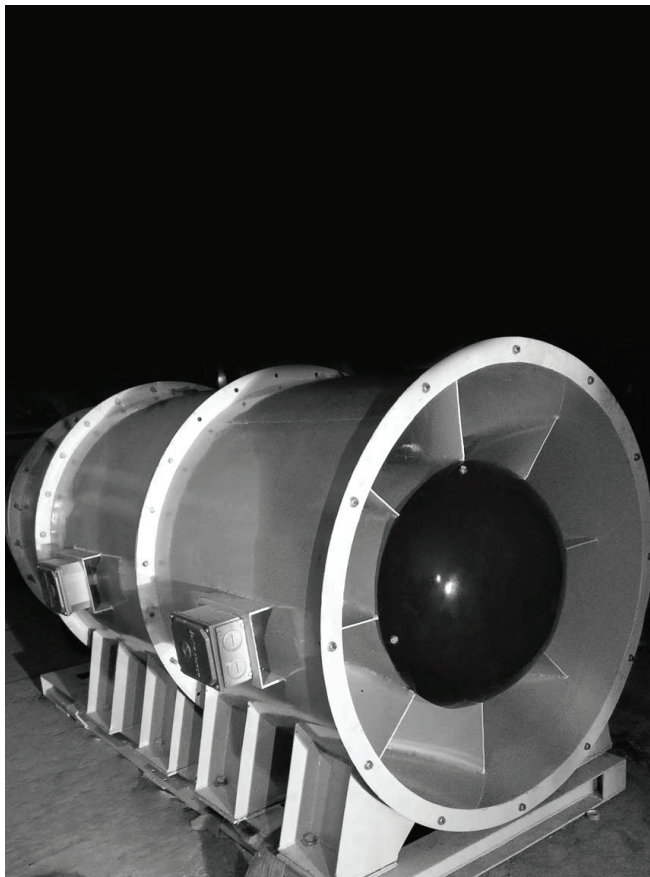
MINE VENTILATION PERFORMANCE REGION (APG-2300 - APG-3250)

SL NO.	MODEL	MAXIMUM RPM	VOLUMETRIC RANGE(CMS)	STATIC PRESSURE RANGE (MMWG)	BKW RANGE	EFFICIENCY RANGE(%)	DIFFUSER DIA	DIFFUSER LENGTH
01.	APG 3250	730	140-268	110-142	191-501	79.047	4564	4952
02.	APG3000	800	121-231	113-145	169-442	79.319	4214	5849
03.	APG2750	860	100-191	109-141	136-356	78.576	3864	4147
04.	APG2500	950	83-158	110-142	114-298	78.517	3510	3760
05.	APG2300	1030	70-134	110-141	96-250	78.636	3234	3471
06.	APG 2200	1075	64-122	109-141	87-228	78.612	3094	3335
07.	APG 2000	1180	53-101	109-141	72-187	78.663	2814	3046
08.	APG1800	1312	43-82	109-141	58-152	79.226	2534	2734
09.	APG1600	1475	34-65	109-141	46-120	78.986	2254	2438

- Note:**
1. The wheel diameter can be changed as per customer requirements. Consequently, the above data will also change.
 2. Since these fans are generally provided for handling large volume of air at comparatively higher pressures, our fans are provided with outlet guide vanes, and may or may not be provided with inlet guide vanes, depending on the client's requirements.

AUXILIARY MINE VENTILATION FANS (AMV SERIES)

Auxiliary Mine Fans are integral and symbiotic unit installed in main air stream to handle the quantity of air in one or more working districts of the mine. These fans operate in series with the main mine fan that boost the pressure of ventilation air passing through it. The deeper the mine, the greater is its importance. Such fans are extensively used in underground mining where inflammable and hazardous gas is present.



- ◆ Wheel Diameter : Standard size is 510 mm
- ◆ Performance : Ranging from 18000 CMH to 22000 CMH, at 250-260 MM WG static pressure
- ◆ Mounting : Floor/Wall Mounting
- ◆ Electrical Compatibility : Compatible for usage with VSD and PLC.
- ◆ Accessories : Inlet/Outlet Guide Vanes, Intermediate Guide Vanes, Front Canopy etc.
- ◆ Motor : Single/Double stage fan along with DGMS Flameproof LT motors are used.

MODEL	STANDARD RPM	TIP SPEED	VOLUMETRIC RANGE(CMH)	STATIC PRESSURE RANGE(MMWG)	BKW RANGE	MOTOR	EFFICIENCY RANGE
AMV 510	2900	77.47002	10800-21600	250-60	11.5-12.6	18.5KW/2P	63.9-28%

Note: 1. The wheel diameter can be changed as per customer requirements. Consequently, the above data will also change.
 2. These fans are designed specifically to operate in the highest efficiency zone.



Hi – Pressure Fans

Induced Draft (ID) Fan
Forced Draft (FD) Fan



Pollution Control Equipment

Bag Filter – Cased type, and Vent type
Cyclone Separator



Axial Flow Fans

Tube Axial Flow Fans
Bifurcated Axial flow Fan
Roof Extractor/ Roof Ventilator



Turnkey Ventilation Systems

Basement Ventilation
Car Park Ventilation
Staircase and lift well Pressurization

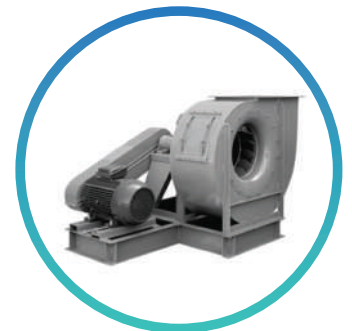


Centrifugal Fans for Industrial and Process Application

Backward Curved
Aerofoil
Radial Bladed



**AXIAL
FLOW FAN**



**CENTRIFUGAL
FAN**



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