

# GT-150

## Specification

Green Genesis Engineering Limited has introduced modern technologies in Roots Blower in Bangladesh. We are supplying high quality energy efficient three-lobe roots-type blower. Our principles lie well-anchored in innovation and we have thrived in the lead of the Bangladesh and Asian market, placing us on par with Western engineering standards. We remain unstoppable when it comes to super-competitive costs and effectiveness of production, with easy maintenance for enduring quality, for many of your engineering needs.

We are committed to maintaining product quality and innovation, production standardization, and strict inspection system, in order to ensure that Roots Blowers, Pumps and Diffusers can meet customer's requirement. We offer the best quality products and quick after-sale service. We are capable to make products according to customer's special request.

### ❖ Feature

- ❖ Wide range for air Volume ` pressure and vacuum.
  1. Bore : 40A~400A (1.5"~16")
  2. Capacity : 0.5~360 m<sup>3</sup>/min
  3. Pressure : 0~8000 mmAq
  4. Vacuum : - 5000 mmAq
- ❖ Stable air flow and less pressure variation.
- ❖ Clean air not with oil moist.
- ❖ Construction simple and easy maintenance.
- ❖ Bearings are all lubricated by oil moist.

### ❖ Why You Select

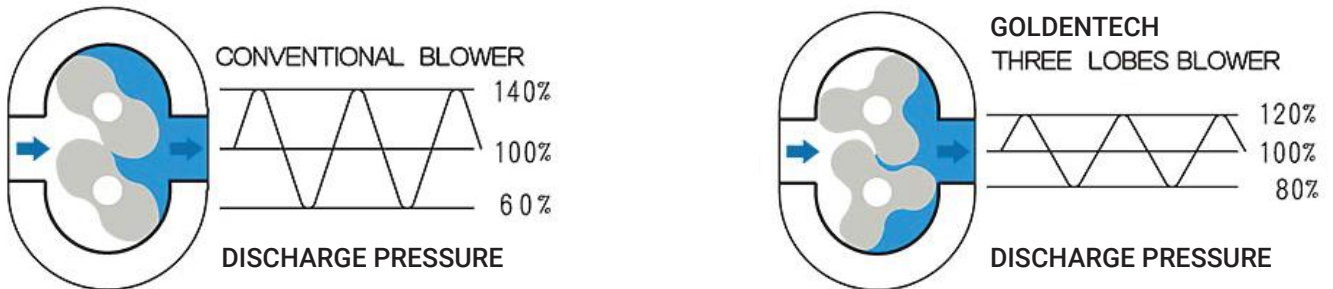
**Low Energy Consumption:** Goldentech Roots Blower has designed on three lobes' basis and it control backflow pressure to rotor. So, it reduce energy consumption.

**Lower Noise:** In a Roots Blower pressure pluses are the major noise source. Since our blower is three lobes so, this design can efficiently reduce noise by approximately 5dB.

**Longer Bearing Life :** With Modern technology and three lobe causes of less vibration. Ans the less vibration transmitted through the lobe result approximately 20% longer bearing life.

## ❖ Lower Energy Consumption

Three lobes design control backflow pressure to rotor so reduce consumption



## ❖ Lower Noise

Pressure pluses are the major noise source of blower.

Three lobes design can efficiently reduce noise by approximately 5dB.

## ❖ Longer Bearing Life

Less vibration transmitted through the lobe results approximately 20% longer bearing life. Conventional blowers result pressure pluses and vibration rob power and shorten the life of every bearing, gear and other drive train components.

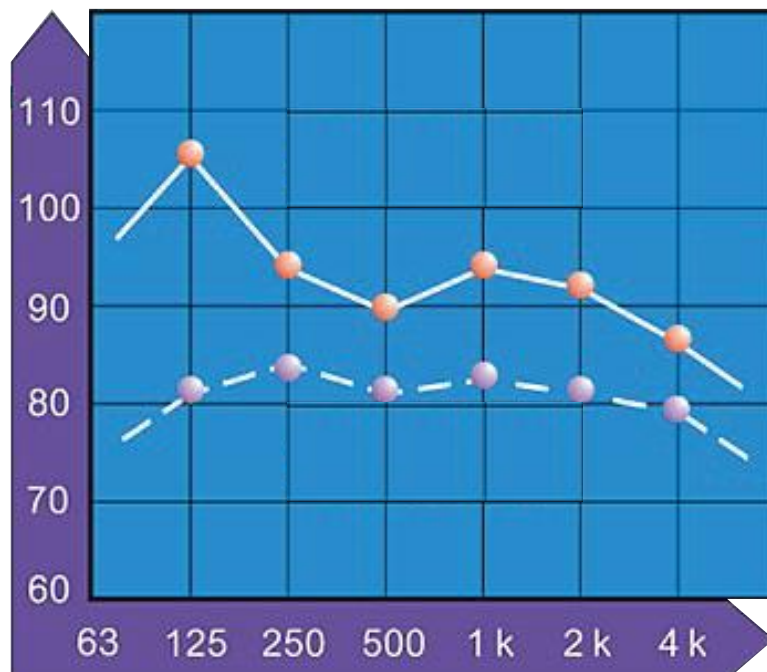


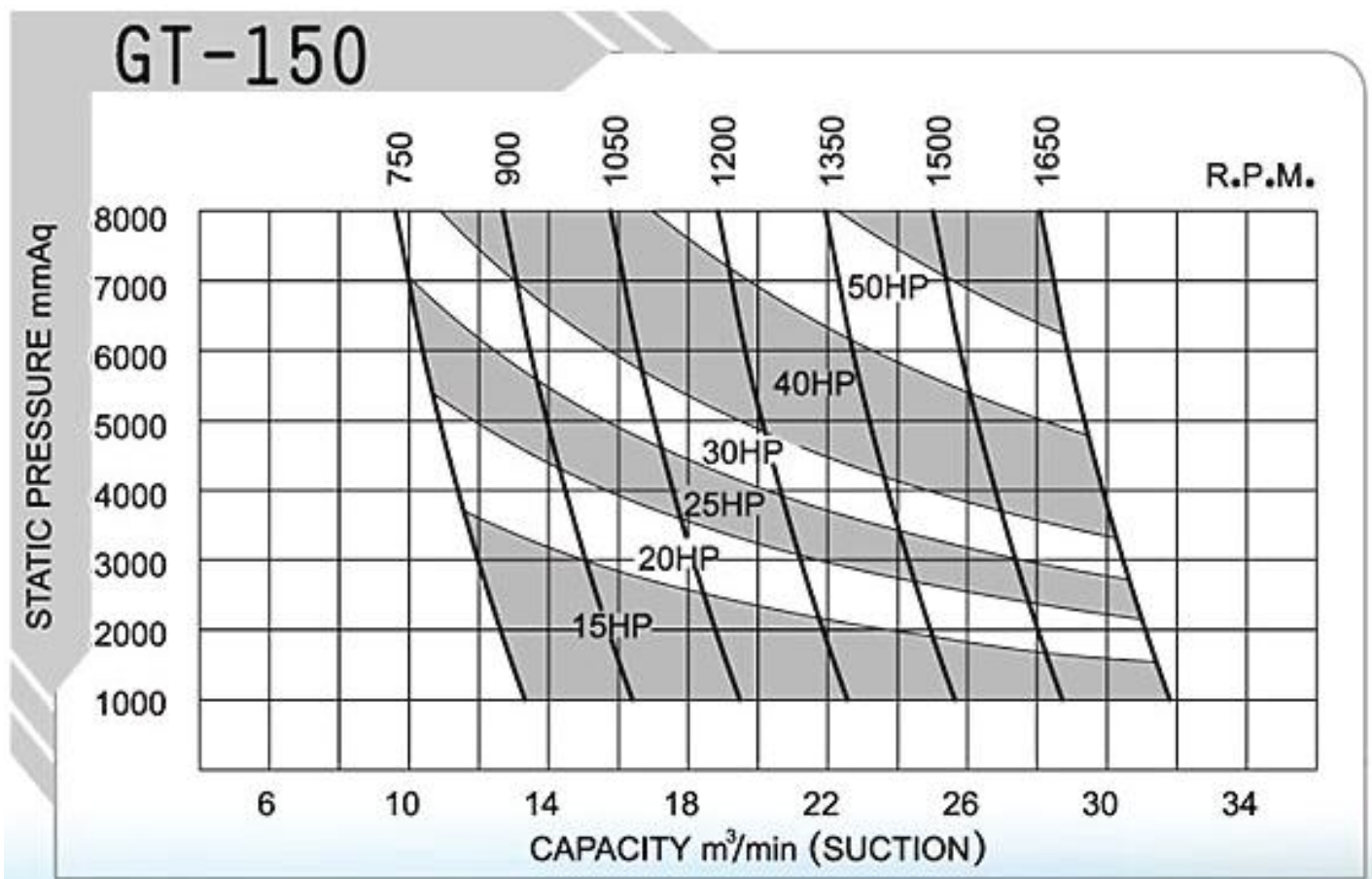
Fig: Hz

# GT-150

## ❖ GT-150 Performance Table (For Pressure)

| TYPE   | RPM  | Qs(m³/min) |      |          |       | PRESSURE(mmAq) |       |          |       |          |       |          |       | La(Kw)   |       |          |       |
|--------|------|------------|------|----------|-------|----------------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|
|        |      | 1000mmAq   |      | 2000mmAq |       | 3000mmAq       |       | 4000mmAq |       | 5000mmAq |       | 6000mmAq |       | 7000mmAq |       | 8000mmAq |       |
|        |      | Qs         | La   | Qs       | La    | Qs             | La    | Qs       | La    | Qs       | La    | Qs       | La    | Qs       | La    | Qs       | La    |
| GT-150 | 750  | 13.32      | 3.34 | 12.62    | 6.39  | 11.98          | 9.19  | 11.40    | 11.76 | 10.87    | 14.14 | 10.39    | 16.34 | 10.00    | 18.39 | 9.61     | 20.30 |
|        | 900  | 16.40      | 4.01 | 15.70    | 7.67  | 15.06          | 11.03 | 14.49    | 14.11 | 13.95    | 16.97 | 13.48    | 19.61 | 13.09    | 22.07 | 12.70    | 24.36 |
|        | 1050 | 19.49      | 4.68 | 18.79    | 8.95  | 18.15          | 12.86 | 17.58    | 16.47 | 17.04    | 19.80 | 16.57    | 22.88 | 16.18    | 25.75 | 15.78    | 28.41 |
|        | 1200 | 22.58      | 5.35 | 21.88    | 10.23 | 21.24          | 14.70 | 20.66    | 18.82 | 20.13    | 22.62 | 19.65    | 26.15 | 19.26    | 29.42 | 18.87    | 32.47 |
|        | 1350 | 25.66      | 6.02 | 24.96    | 11.50 | 24.33          | 16.54 | 23.75    | 21.17 | 23.21    | 25.45 | 22.74    | 29.42 | 22.35    | 33.10 | 21.96    | 36.53 |
|        | 1500 | 28.75      | 6.68 | 28.05    | 12.78 | 27.41          | 18.38 | 26.84    | 23.52 | 26.30    | 28.28 | 25.83    | 32.69 | 25.44    | 36.78 | 25.05    | 40.59 |
|        | 1650 | 31.84      | 7.35 | 31.14    | 14.06 | 30.50          | 20.21 | 29.92    | 25.88 | 29.39    | 31.11 | 28.91    | 35.96 | 28.52    | 40.46 | 28.13    | 44.65 |

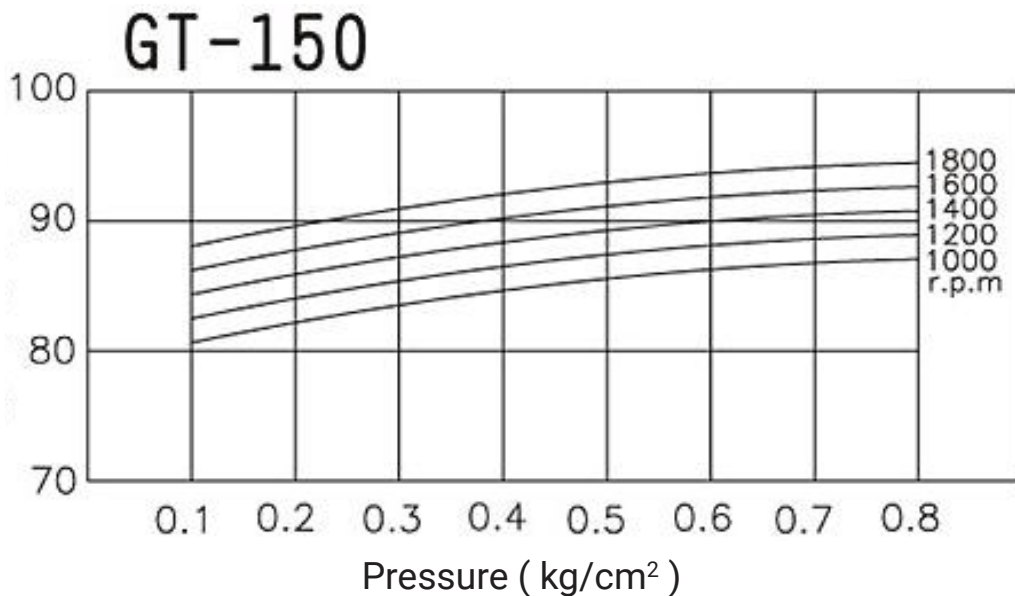
## ❖ GT-150 Performance Curve (For Pressure)



# GT-150

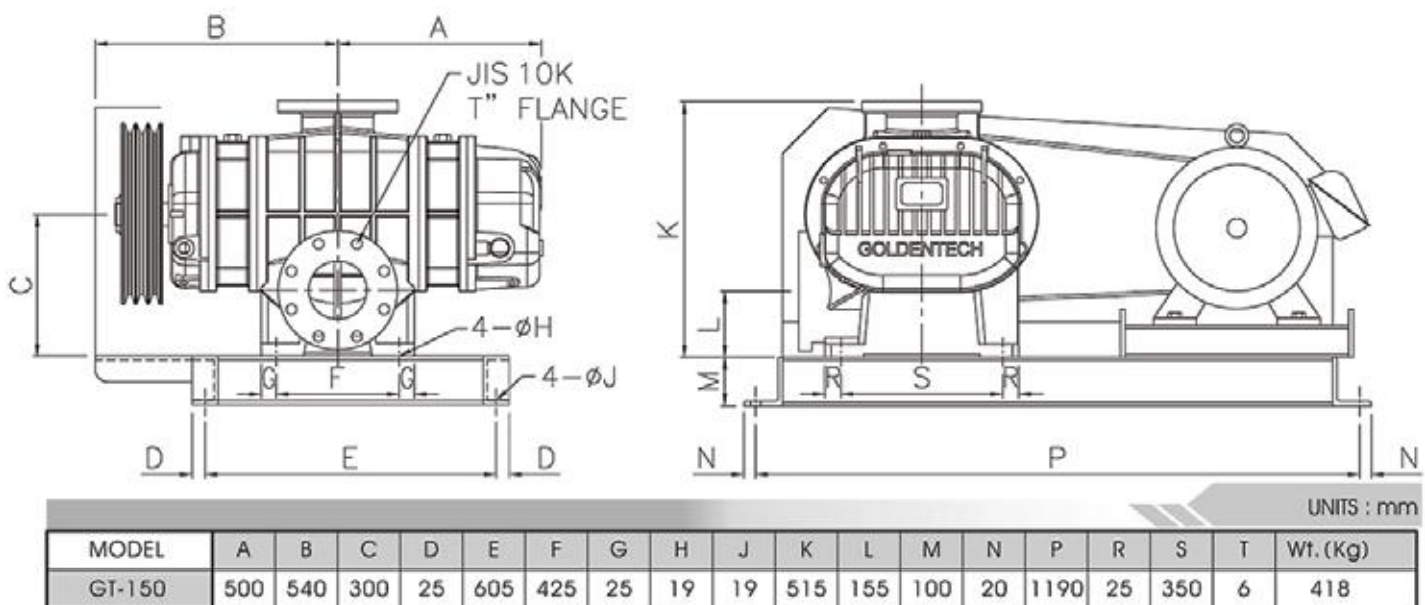
## ❖ Noise Level Of Blower

1. LEVEL MEASURED AT DISTANCE 1 METER FOR THE BLOWER FITTED WITH STANDARD SILENCER.
2. NOISE LEVEL MAY BE DIFFERENT ACCORDING TO THE EXTEND PIPE LENGTH AND AMBIENT CONDITION.



## ❖ Outline Dimension

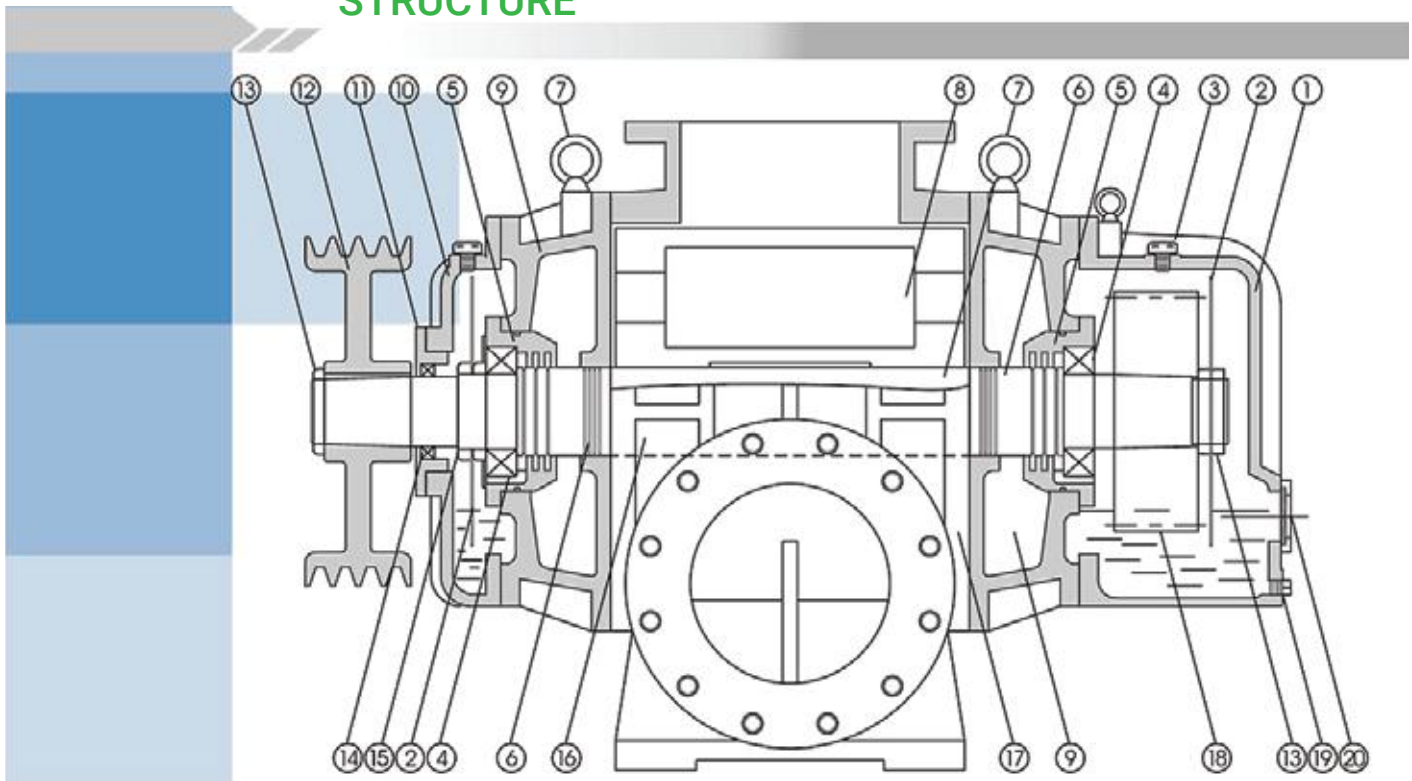
GT-080~150



(WT. FOR MAINBODY)

# GT-150

## STRUCTURE



## MATERIAL LIST

| NO. | NAME           | MATERIAL | NO. | NAME        | MATERIAL |
|-----|----------------|----------|-----|-------------|----------|
| 1.  | Gear Case      | FC250    | 11. | Seal case   | FC250    |
| 2.  | Oil splash     | SS400    | 12. | Pulley      | FC250    |
| 3.  | Oil plug       | S45C     | 13. | Nut         | SS400    |
| 4.  | Bearing        | SUJ2     | 14. | Seal        | NBR      |
| 5.  | Bearing case   | FC250    | 15. | Nut         | SS400    |
| 6.  | Labyrinth seal | SS400    | 16. | Shaft       | SCM440   |
| 7.  | Eye bolt       | S45C     | 17. | Main casing | FC250    |
| 8.  | Rotor          | FC250    | 18. | Timing gear | SCM415   |
| 9.  | Side cover     | FC250    | 19. | Oil drain   | S45C     |
| 10. | Oil case       | FC250    | 20. | Oil gause   | S45C     |



## ❖ INSTALLATIONS

