

VAMAN - le petit - Nano Steam Turbine Generators

Technical Data Sheet

Turbine Model

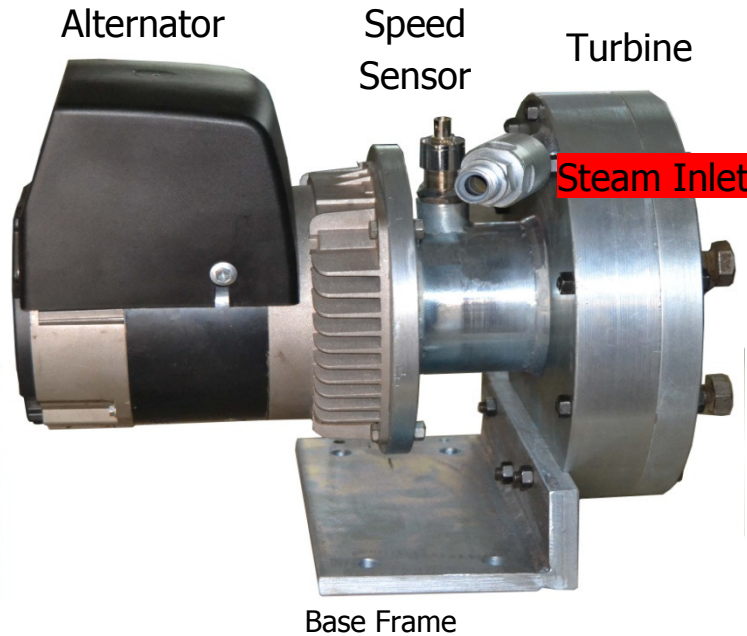
VAMAN VD 01

Prime Mover for	1.3 KVA Alternator
Power Generation	1.25 KVA, 220 Volts, Single Phase, 50 Hz
Design	A.P.I. Standard - Overhung Design
Type	Single Stage, Single Disc
Casing	Vertically Split
Seals	1 Carbon Ring on High Pressure side only
Bearing	Two for better load distribution
Speed Governor	Steam flow regulation by Globe Valve
Turbine Speed	3000 RPM
Steam at Inlet Point	35 Kg/ Hour /10.5 Bar G /190°C - 98% Dry
Steam at Discharge End	35 Kg/ Hour / 1.0 Bar G / 120 °C - Wet
Thermal Efficiency of the Turbine	≈ 47%
Mechanical Efficiency of the Turbine	≈ 33%
Assumed mech. eff. for the AC Generator	84%
Overall Efficiency of the Unit	≈ 25%
Inlet & Discharge Connections	15 mm Globe valve - & 75 mm Flange
Approximate dimensions (L x W x H)	600 x 300 x 700 mm
Weight	45 Kg
Material of Construction	
Casing & Cover	Boiler quality Plates rolled, welded and machined
Main Shaft	EN-19 -Solid Forged & Machined
Turbine Wheel	250 mm Ø machined from Boiler Quality Plate
Blades	86 Nos made of Stainless Steel 410 Grade

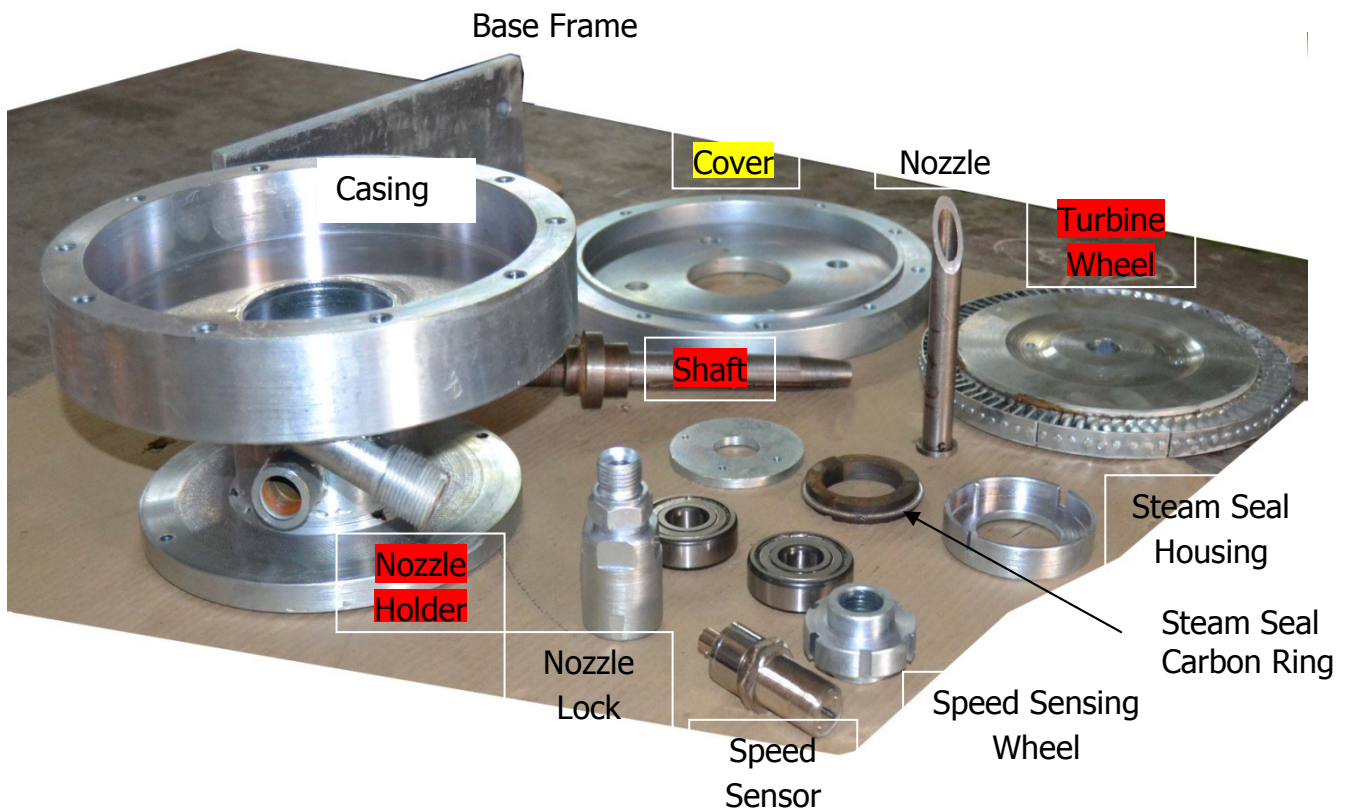
The turbine wheel with 86 blades mounted on the shaft is dynamically balanced for smooth operation

The technical details presented are for reference only. We reserve the right to amend, add or delete, modify any or the entire component due to constant Research and Development to improve the efficiency of the system.

VAMAN - le petit - Nano Steam Turbine Generators Parts & Components



Discharge Flange



All parts should go together without forcing. You must remember that the parts you are reassembling were disassembled by you. Therefore, if you can't get them together again, there must be a reason. By all means, **do not use a hammer**. IBM Manual, 1925

Curious minds want to know, engineering minds get answers.