



# NT-PU37 Turbine Power Unit

The NT-PU37 is an experimental free turbine power unit (turbo expander) designed to extract usable power from an existing pressurized hot or cold gas source. The unit is self-contained and skid mounted with integral cooling and lubrication systems. The NT-PU37 is designed to be grid-tied and requires a separate gas generator to drive the turbine. More info on-line at: [nye.ca/pu37](http://nye.ca/pu37)

## General Specifications (subject to change)

The NT-PU37 37 kW micro turbine power unit consists of:

- Radial power turbine
- Parallel shaft single stage speed reducer
- Induction generator
- Lubrication and cooling system
- Welded steel skid frame

Power Turbine:

- Single stage radial turbine
- Max inlet temperature 700°C
- Max speed 90,000 RPM
- Design speed 72,000 RPM

Speed Reducer:

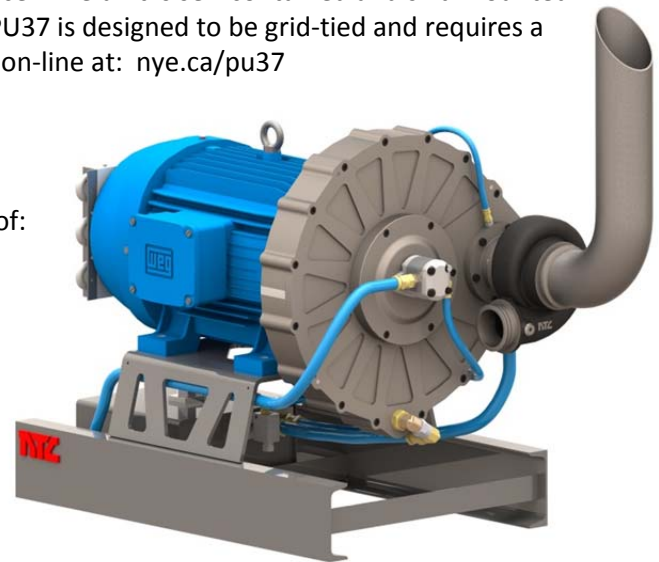
- Welded steel gearbox
- NEMA flange mounted
- Direct mounted driven helical gear
- Single stage 20:1 reduction

Generator:

- Squirrel cage induction generator
- 575V 3 Phase 60 Hz 3,600 RPM
- High efficiency TEFC 50 HP

Lubrication System:

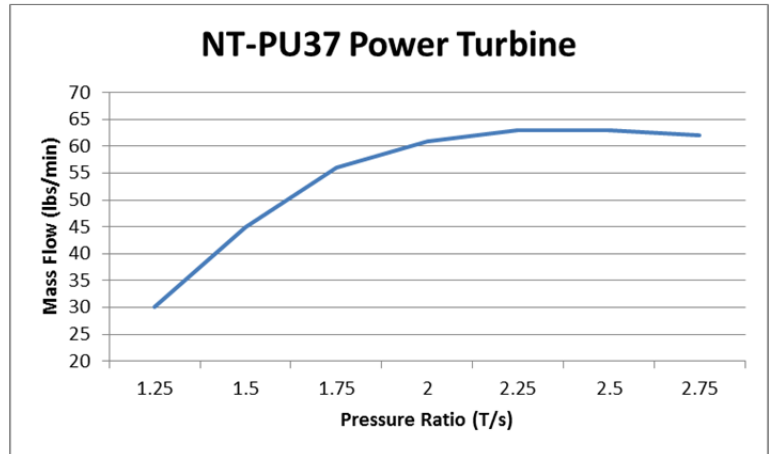
- 6 Liter dry sump
- Direct drive gear pump 75 psi
- Oil cooler and filter



L W H ~ 1090 x 640 x 810mm (not including stack)

Weight ~ 420 Kg

Turbine Inlet connection ~ 75mm ID



Estimated performance curve

The NT-PU37 is experimental research apparatus and may not be suited to any particular use or purpose. There is no warranty or promise of performance of any kind expressed or implied. Specifications are approximate and subject to change. 20110920

For more information contact the manufacturer: **Nye Thermodynamics Corporation**

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