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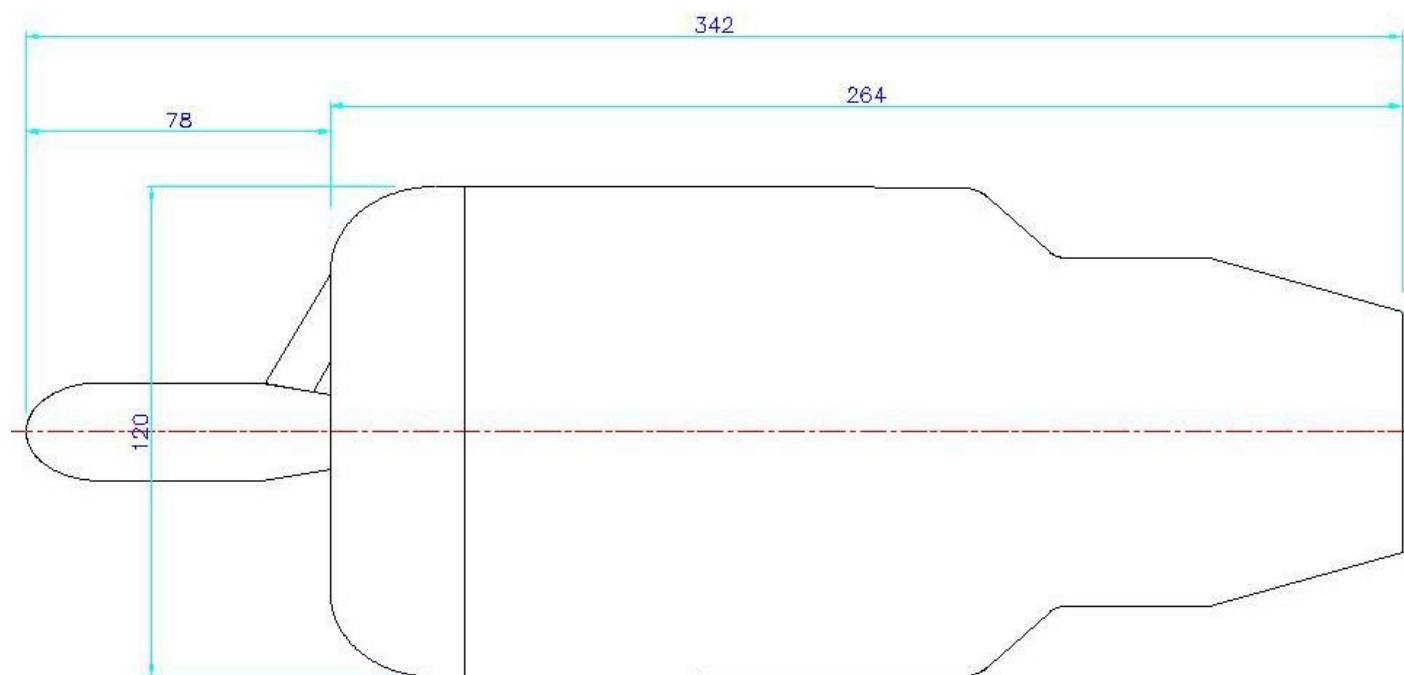
## Pegasus HP gas-turbine.

	E-start system	Air-start system
Diameter	120 mm	120 mm
Length	342 mm	264 mm
Turbine weight	2255 gram	2125 gram
System weight *	3075 gram	2705 gram
Thrust @ max. rpm	167 N	167 N
Thrust @ min. rpm	6 N	6 N
Maximum RPM	119,500	119,500
Idle RPM	37,000	37,000
Pressure ratio @ max. rpm	3,2 :1	3,2 :1
Mass flow @ max. rpm	375 gr/sec.	375 gr/sec.
Normal EGT	600 C	600 C
Maximum EGT	675 C	675 C
Fuel consumption @ max. rpm	485 gr/min.	485 gr/min.
Fuel	JP-4/petroleum/Jet A1	
Oil	4,5% aeroshell 500 mixed with fuel.	

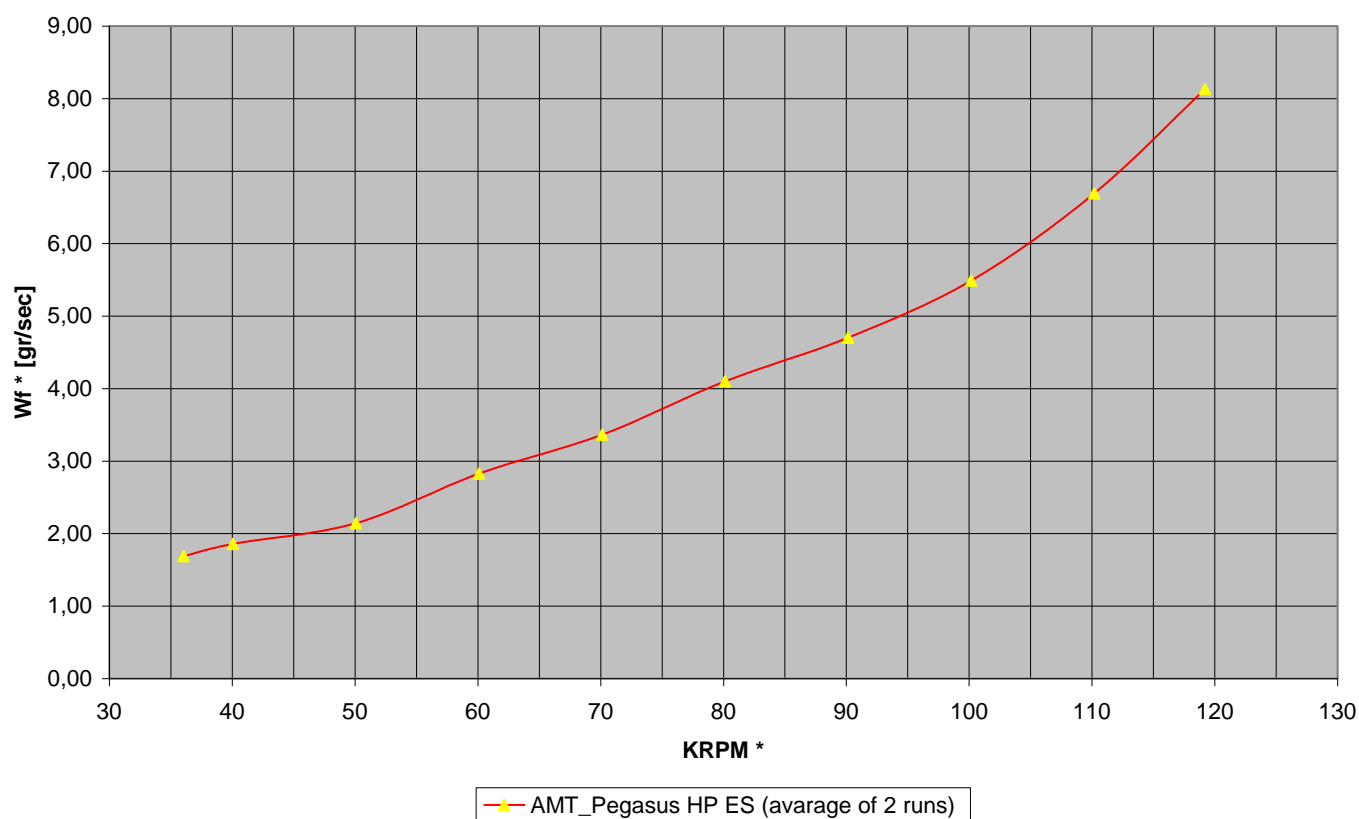
\* System airborne weight. (complete system)

Engine, ECU, pump, battery, thermo sensor, mounting straps.

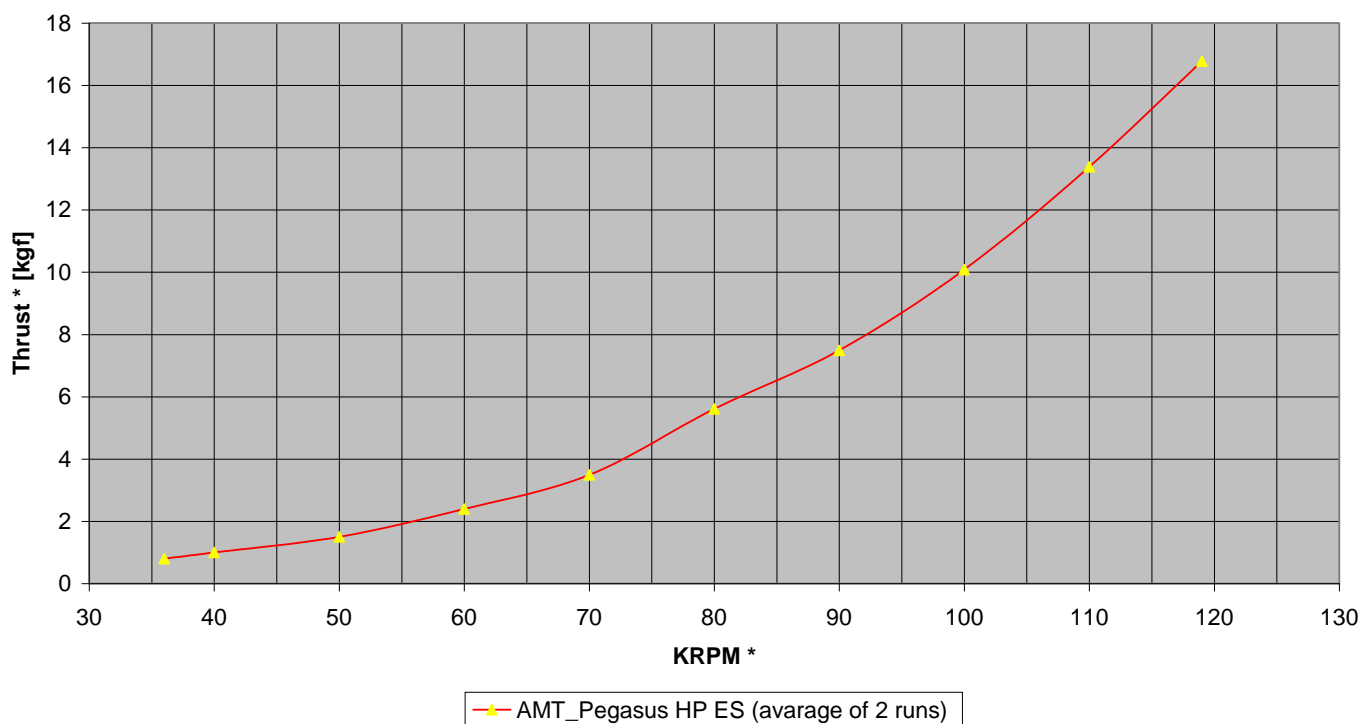
All data at STP +/- 2% **S.T.P.** : Standard Temp. & Pressure  
 Temperature : 15 Degrees Celsius / 59 Degrees Fahrenheit  
 Pressure : 1013 Mbar / 29.91 in



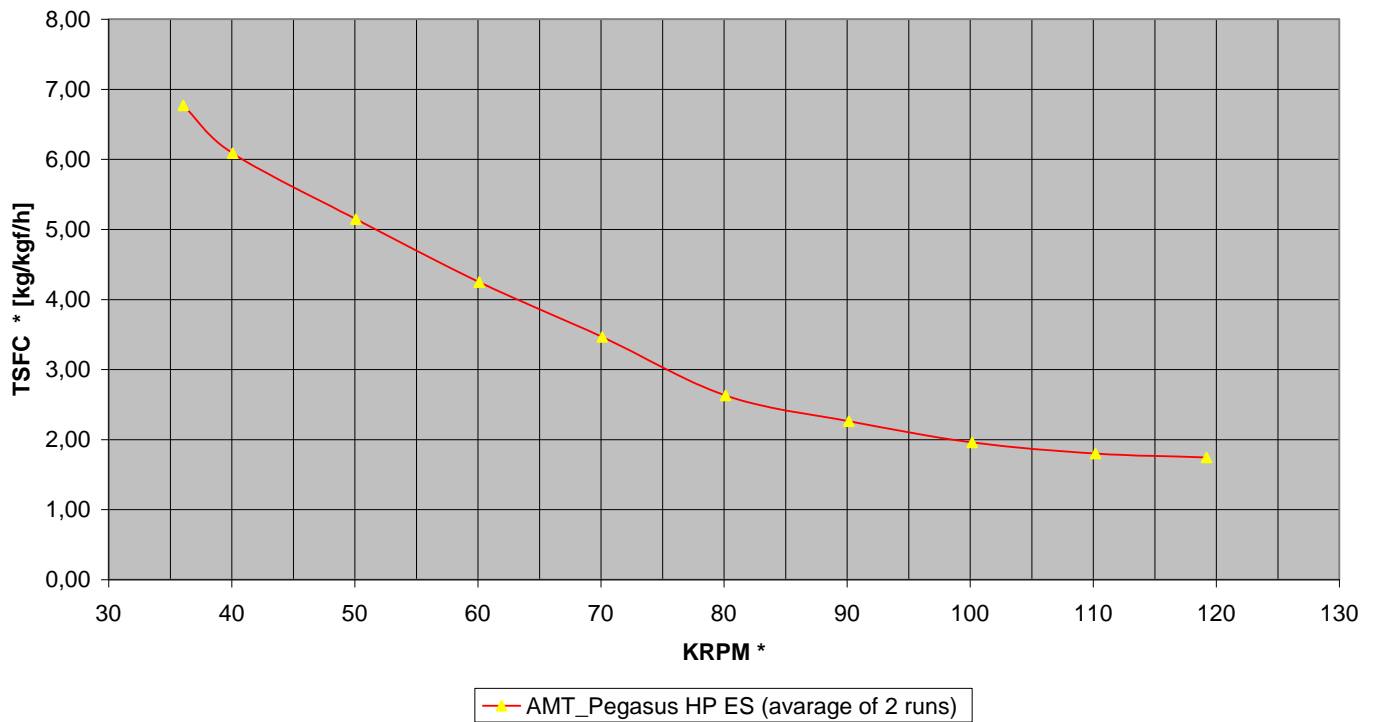
**Fuel Flow VS. RPM (@ STP )**  
**AMT Pegasus HP ES**



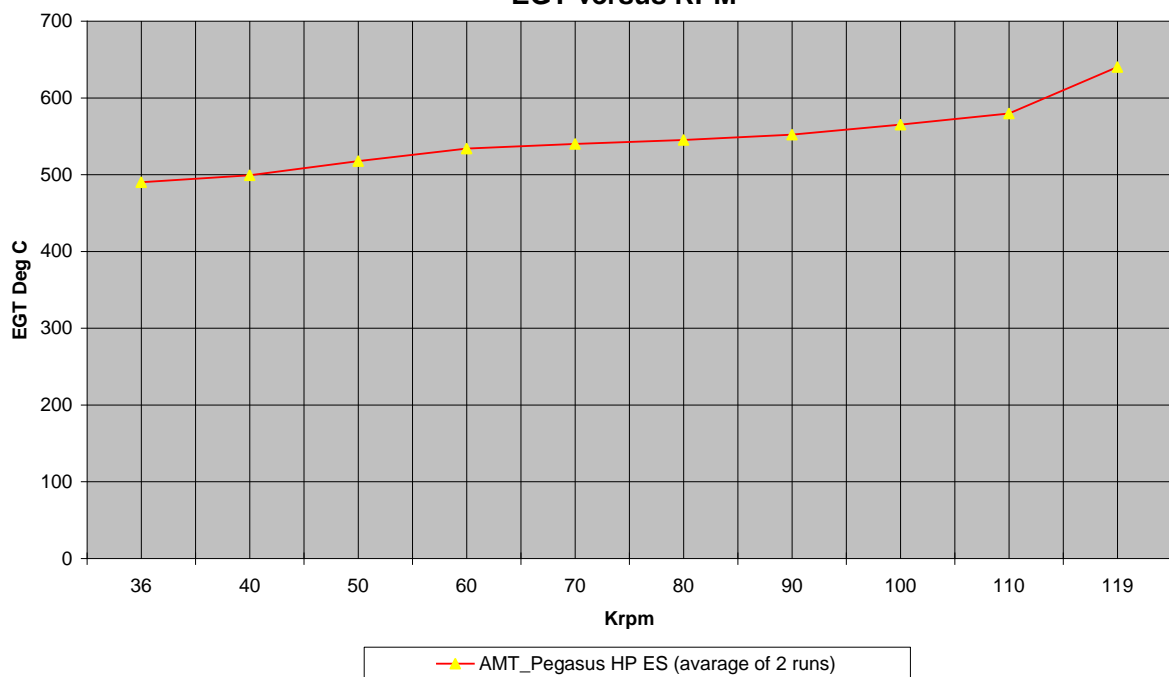
**Thrust VS. RPM (STP)**  
**AMT Pegasus HP ES**

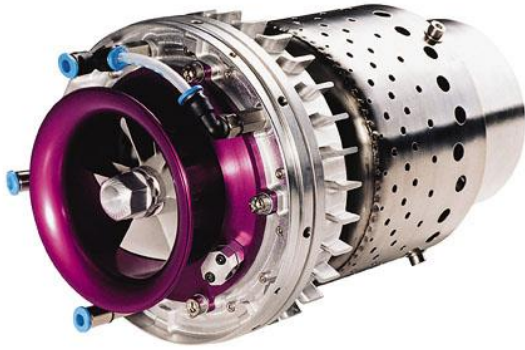


### SFC VS. RPM (STP) AMT Pegasus HP ES



### AMT\_Pegasus HP ES @ STP EGT versus RPM





**Picture top.**

Internal view of the Pegasus HP air start version.



**Picture right.**

View of the Pegasus HP Electric start.

**A standard Pegasus HP E-start set contains the following parts.**

- 1 x Fully tested Pegasus HP E-start gasturbine.
- 1 x Version 2.0 Electronic Control Unit.
- 1 x CTF switch harness to program ECU.
- 1 x Solenoid valve for kerosene.
- 1 x Solenoid valve for gas.
- 1 x Pegasus fuel pump.
- 1 x Rear engine mount
- 1 x Front engine mount + EGT sensor mount.
- 1 x Nicad battery pack 12 volt 600 Mah.
- 1 x Battery pack charge cable.
- 1 x Safety clip for RPM sensor.
- 1 x Glowplug connector.
- 1 x Thermo sensor ( K-type).
- 1 x Glowplug wrench.
- 1 x Glow plug Rossi 8 (spare).
- 1 x Turbine Oil 1 Ltr ( Aeroshell 500).
- 1 x Manual Pegasus HP E-start.
- 2 x Sticker.
- 1 x 3 meter Festo PP3 tube.
- 1 x 2 meter Festo PP4 tube.
- 1 x Festo fuel filter.

## Electronic Control Unit

**AMT Netherlands** developed in house a fully automatic ECU to control the turbine, main reason for this development was that there was a need for fully automatic starting turbines.

The latest update was to comply with the latest **AMA** requirements, with this software update (V29) we made it also possible to use lithium polymer (LiPo) batteries without changing anything to the settings of the ECU. The lithium polymer batteries are available for all our engine types.

### Features.

- \* One or Two channel operation.
- \* ECU works on 10 cell Nicad or 4 cell Lipo.
- \* Output for fuel solenoid valve.
- \* Output for propane solenoid valve.
- \* Output for glow plug.
- \* Output for E-starter.
- \* Programmable failsafe timer, standard set to 1 second delay before full stop.
- \* Log file of last 22 min, of run @ 1 seconds interval.
- \* At error, last 8 sec. log is available in 0.2 sec intervals.
- \* Serial 2400 Baud, rs232 level output.
- \* Weight 160 gram / 5,4 oz.
- \* Fuzzy logic software, for fast throttle response.
- \* No adjustments needed.
- \* Ridged small ECU housing.
- \* All high quality cables with gold plated connectors.
- \* Standard "K type" EGT probe connector.



All specifications are subject to change without notice.

For latest information see **AMT Netherlands** website at [Http://www.amtjets.com](http://www.amtjets.com)