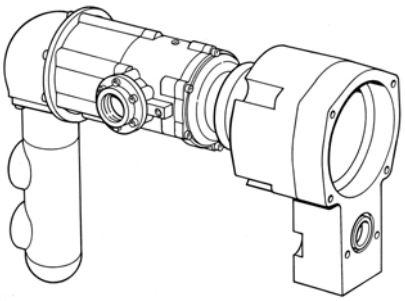
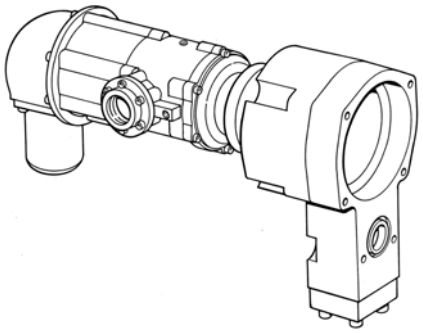


TDI
TURBOTWIN™
Model T100-C



TURBOTWIN™ Model T100-C GAS TURBINE ENGINE AIR STARTERS

- The TDI *TURBOTwin* Model T100-C turbine powered starter motor is designed for application to Solar Centaur and Taurus gas turbine engines. These Solar industrial engines are widely used for compressor drives, electrical power generation, industrial drives, and marine propulsion. The Model T100-C was designed to replace dual motor starters, both vane and turbine, on Centaur and Taurus engines. The T100-C has a mounting flange and output shaft spline that mates directly with the accessory drive assembly starter mount pad.

APPLICATION VERSATILITY

- The turbine motor used in the model T100-C is the same basic rugged design used in the complete line of *TURBOTWIN* starters. Properly installed, the *TURBOTWIN* motor is highly resistant to damage caused by wet or hard contaminated drive air/gas.

CONTAMINATED SUPPLY AIR/GAS

- Installation requires only a starter relay valve (recommend TDI *TURBOVALVE*), and operation within each starter model recommended maximum pressure. The T100-C features modular construction and individual replaceable parts are easily serviced. This provides T100-C users with simple and low cost starter repair or overhaul in the future. The T100-C air starter requires no control lines or electrical wiring for its operation, therefore the unit is ideal for remote start or "black" start conditions or applications.

SIMPLICITY

- The T100-C's efficient twin-turbine motor now delivers more torque using less air/gas than previous starter designs. The T100-C is offered in both standard pressure (12 & 15 nozzles) and low pressure (21 nozzle) versions.

LOW AIR CONSUMPTION

- The gear train and bearings are factory grease-packed for the life of the starter, therefore it requires no maintenance. There are no rubbing parts, so there is no external lubrication required. Lubricator problems, installation expense, system maintenance, and the messy and hazardous oil film around the starter exhaust are eliminated.

NO MAINTENANCE DESIGN and ENVIRNOMENTALLY SAFE

- *TURBOTWIN* T100-C starters are constructed from durable, corrosion resistant, and high quality materials. Major components are made from high strength aluminum or steel alloy. As with all *TURBOTWIN* T100 Series starters, there are no plastic parts inside.

HEAVY DUTY CONSTRUCTION

- The T100-C can be used over a wide range of drive pressures from 30 psig (2 BAR) to 200 psig (13.5 BAR). It is suitable for operation on either compressed air or natural gas. The lightweight unit is capable of delivering over 100 HP (75 kW) of cranking power at only 200 psig (13.5 BAR).

BROAD RANGE of OPERATION

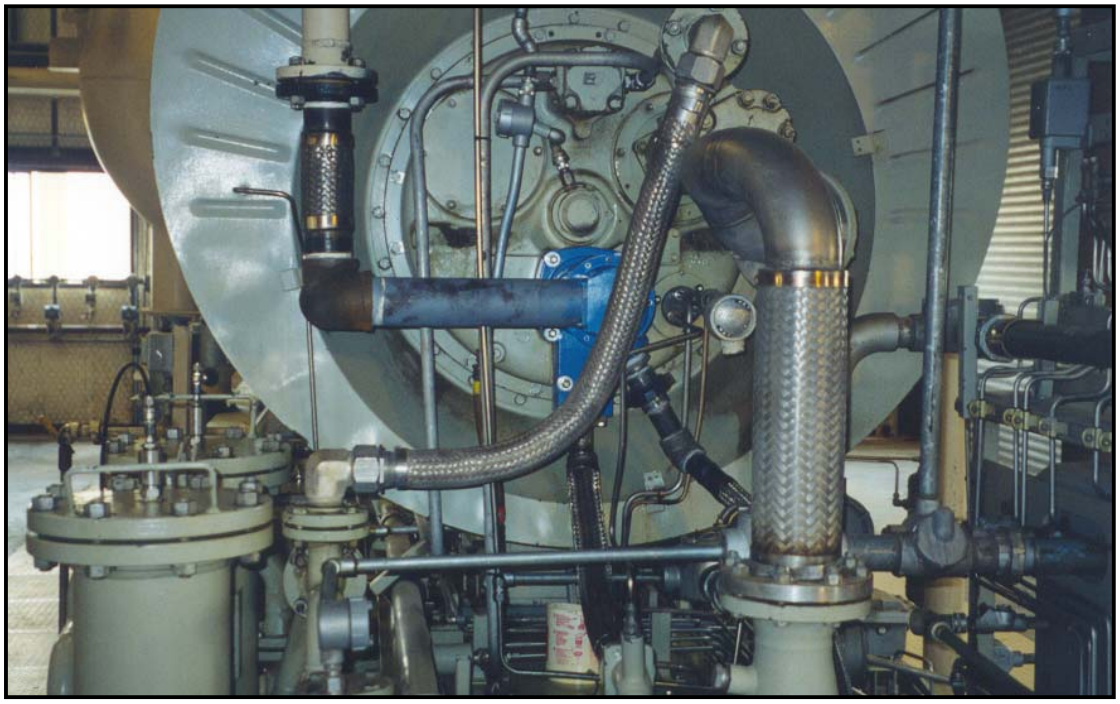
from **TECH DEVELOPMENT**
6800 Poe Avenue •Dayton, OH 45413
Tel: 937-898-9600 •Fax: 937-898-8431

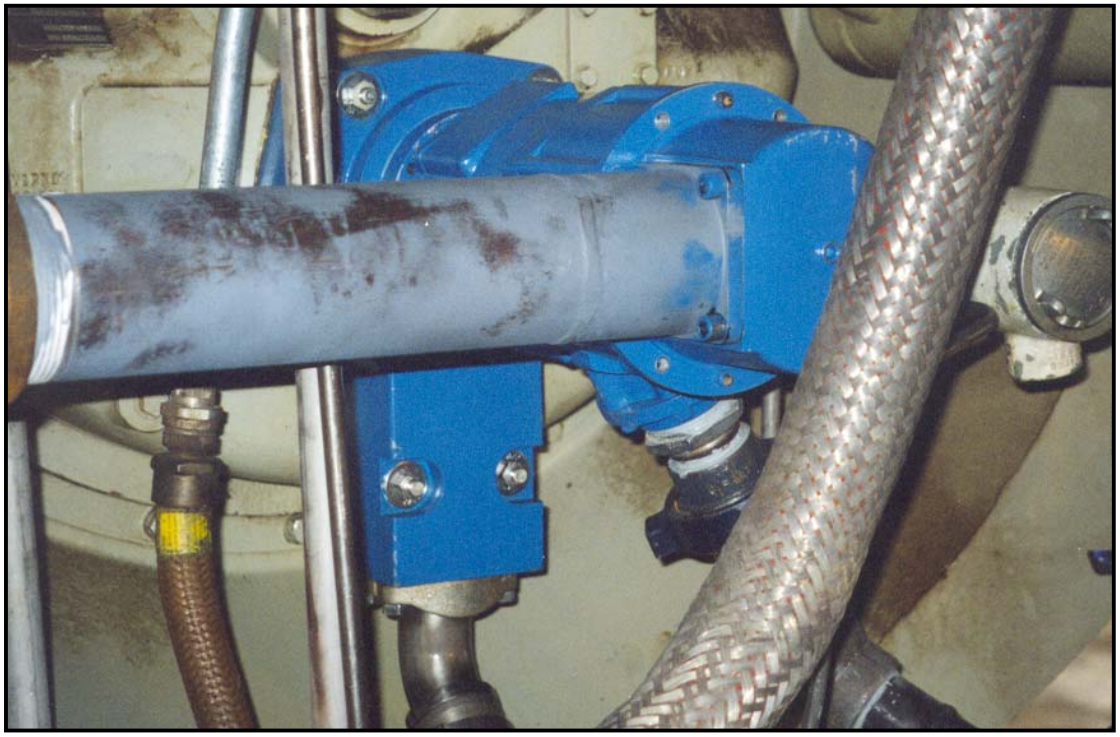
- The high horsepower of the turbine air motor combined with a planetary gear speed reducer results in a very efficient and reliable unit. A pair of axial flow turbines coupled to a planetary gear reduction set powers the *TURBOTWIN* T100-C.

DESCRIPTION OF OPERATION

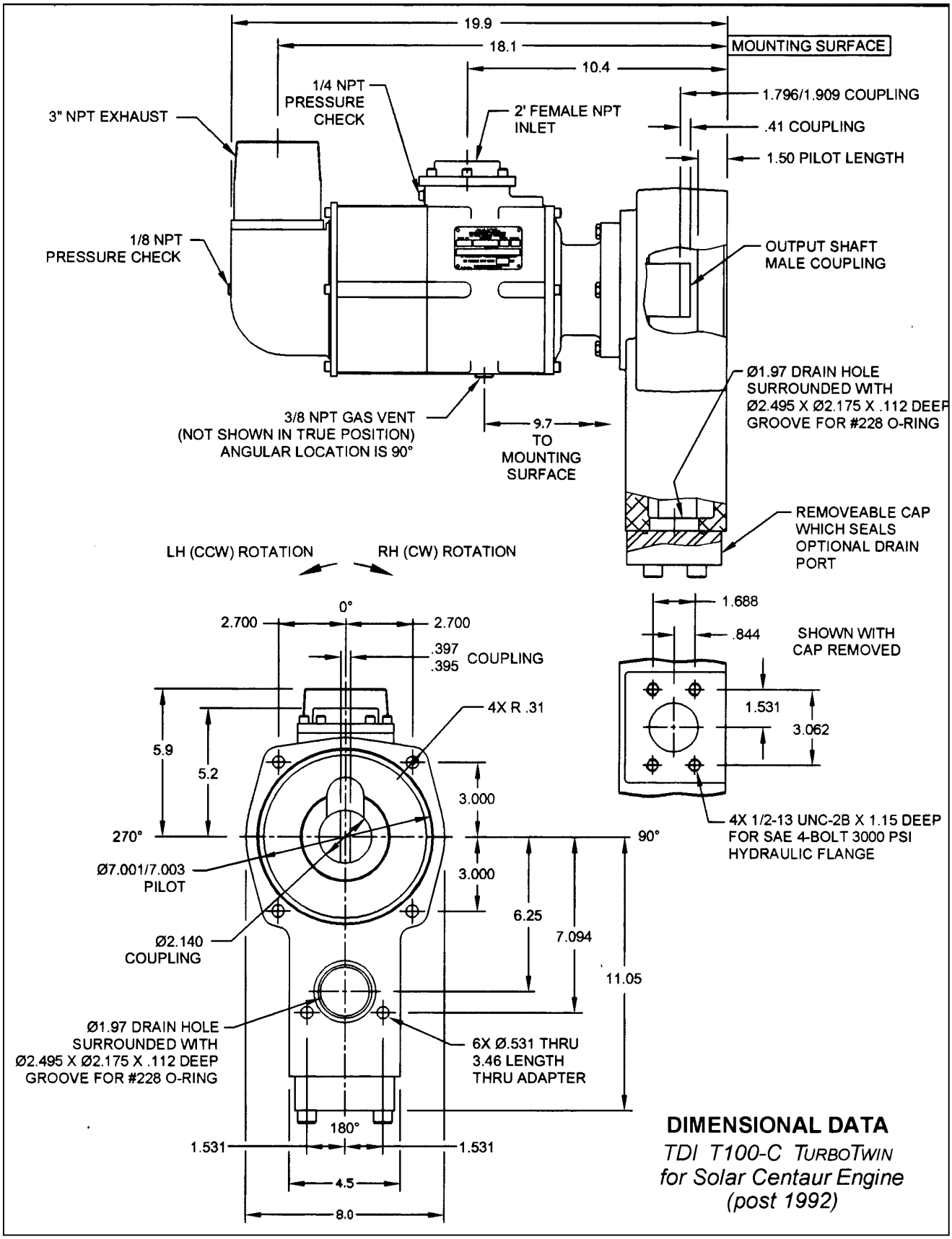
- Tech Development Inc. introduced the first turbine technology for starting industrial engines in 1979. The *TURBOTWIN* T100-C starters feature an innovative and more reliable turbine motor than anything on the market today. The *TURBOTWIN* T100-C is the result of TDI's continuing turbine starter design innovations.

DEVELOPMENT HISTORY





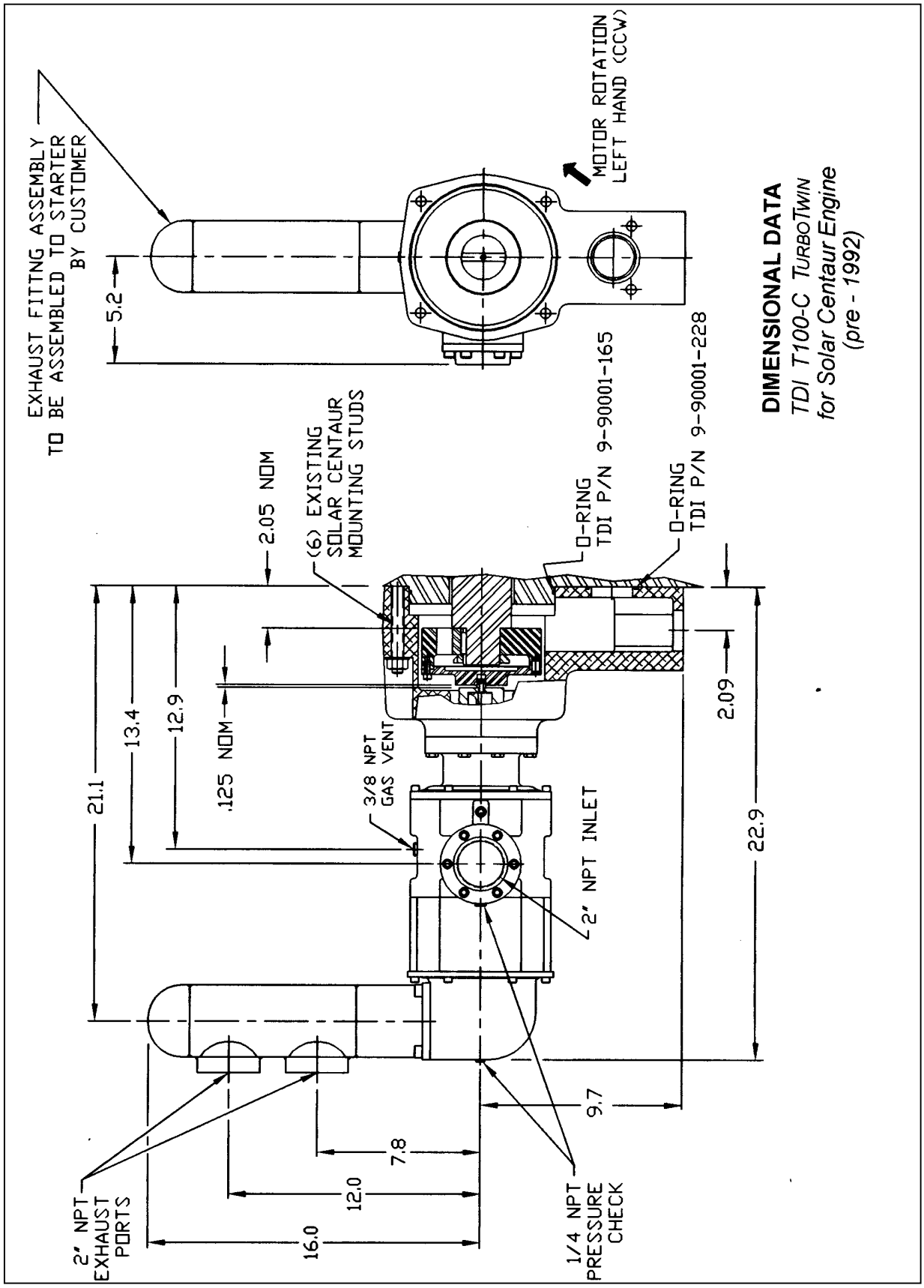
from **TECH DEVELOPMENT**
6800 Poe Avenue •Dayton, OH 45413
Tel: 937-898-9600 •Fax: 937-898-8431



DIMENSIONAL DATA

TDI T100-C TurboTwin
for Solar Centaur Engine
(post 1992)

from **TECH DEVELOPMENT**
6800 Poe Avenue •Dayton, OH 45413
Tel: 937-898-9600 •Fax: 937-898-8431

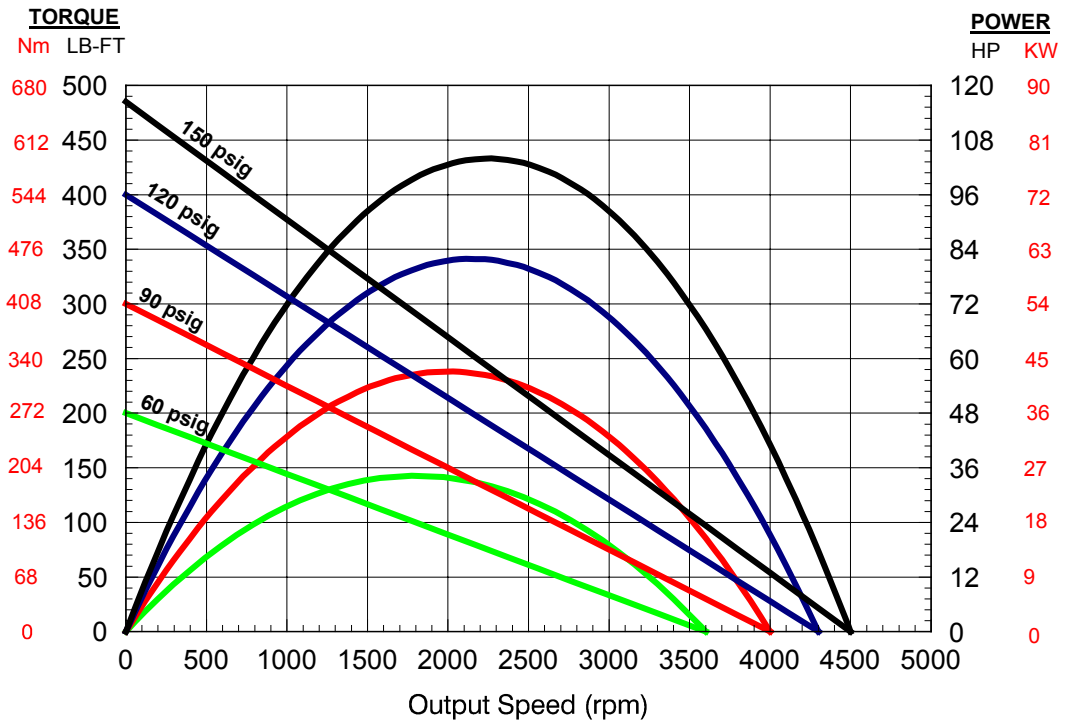


from **TECH DEVELOPMENT**
6800 Poe Avenue •Dayton, OH 45413
Tel: 937-898-9600 •Fax: 937-898-8431

TDI *TURBO*TWIN T100-C PERFORMANCE CURVES

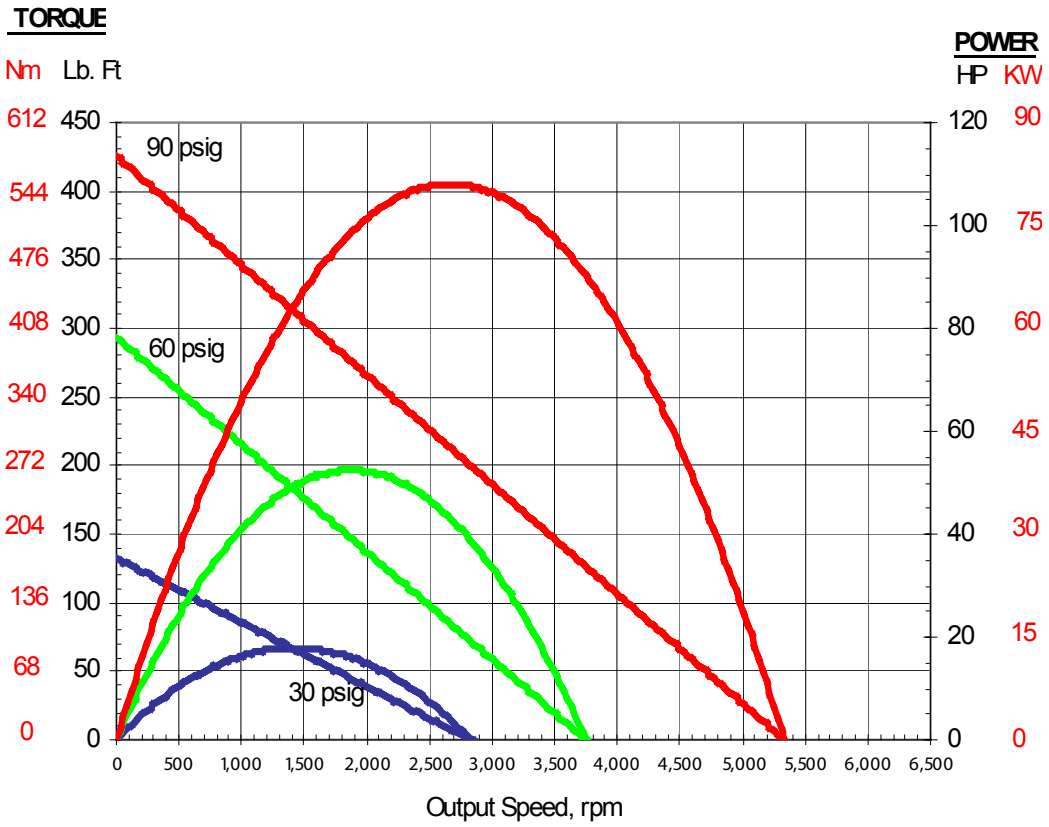
Model: T115-C
15 Nozzles
70° F Compressed Air
9:1 Gear Ratio

INLET Pressure	FLOW (Scfm)	FLOW (Nm3/h)
60 PSIG	796	1353
90 PSIG	1115	1896
120 PSIG	1434	2438
150 PSIG	1754	2982



Model: T121-C
21 Nozzles
70° F Compressed Air
9:1 Gear Ratio

INLET Pressure	FLOW (Scfm)	FLOW (Nm3/h)
30 PSIG	620	1054
60 PSIG	1070	2140
90 PSIG	1560	2652



from **TECH DEVELOPMENT**
6800 Poe Avenue •Dayton, OH 45413
Tel: 937-898-9600 •Fax: 937-898-8431