TDI TURBOSTART

Introducing The Turbotwin™ T30. A Better Way To Start Industrial Engines.

It's Fast and More Powerful.

The T30 generates up to 25% more stall torque than other starters in its class. Its highly efficient twin-turbine motor design gives you more cranking capability with less air, and gets your engine up and running in a hurry!

You Control The Start Cycle.

Unlike starters which require a mechanical automatic trip valve (ATV), the T30 uses aerodynamics to control starter motor speed. This allows the operator (or automated panel) total control of the start cycle.

It's Lightweight And Compact.

The T30 is lighter than any other air starter in its class. It weighs as little as 29 pounds overall, which makes it easier to handle, and less costly to ship.

It Thrives Under The Worst Conditions.

Because the T30 is a turbine motor it has no rubbing vanes to stick, swell, or wear out, and using wet or contaminated air or gas is never a problem. Its open air path design allows it to tolerate conditions that would clog or damage other starters. And, because the T30 is corrosion-resistant, it's always dependable \dots even when operated on sour natural gas (with H^2S) or in marine applications

Environmentally Friendly ... No Lubrication Required.

Because the T30 is *vane-less*, lubrication of the drive air/gas is unnecessary. Using the T30 also eliminates fugitive starter exhaust emissions and hazards caused by messy, oily starter, exhaust residues. And the T30 gearbox and bearings are factory grease-packed for the life of the starter . . . with no oil sumps to check and refill. Add it all up and the result is clean, maintenance-free starter operation.

Unique Safety Features.

The T30's simple aerodynamic speed control helps protect it from damage caused by starter motor overspeed. And, its steel motor inlet housing and low-mass turbine rotors provide fail-safe operation.

Repair Costs Are Dramatically Reduced.

The T30 has only half the moving parts used in other starters. All parts are individually replaceable, which means you need no special assemblies to complete whatever repairs might be needed. The T30 is so simple and compact, that repairs are easy, and the costs are minimal.

Built To Last.

No plastic or composite materials are used in the T30 series. All components are made from durable high-strength steel or aluminum alloys.

Maximum Application Flexibility.

The T30 fits a wide range of engine applications (from 6 to 20 liters) using inertia or pre-engaged, making one unit capable of starting many different types of engines. Several configurations are available including the T30-I which offers the simplest installation. Piping consists of a single starter supply line, and either a manual valve or TDI pilot operated pneumatic relay valve. Installation couldn't be simpler.

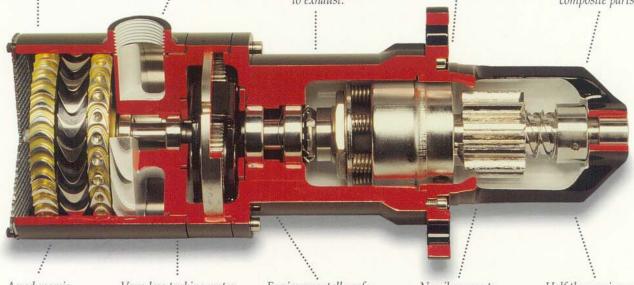


Designed For Long Lasting Power And Performance. .



Low consumption one inch NPT inlet.

Weighs 29 pounds and is 11.5 inches from mounting flange to exhaust. Rotatable mounting flange provides installation flexibility. Heavy-duty construction all steel or aluminum alloys. No plastic or composite parts.

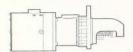


Aerodynamic Speed Control prevents overspeed. Vane-less turbine motor is dependable even on dirty, wet air/gas.

Environmentally safe with no required lubrication of the drive air/gas, bearings, or gears.

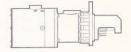
No oil sumps to check and fill. Half the moving parts of other turbine starters. All parts are individually replaceable.

Flexibility To Meet Any Requirement.



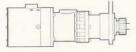
T30-I Inertia Engagement

Soft inertia engagement configuration is ideal for manual operation. Meets high-torque, low-consumption requirements and is natural gas ready.



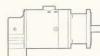
T30-P Pre-Engaged

Reliable 100 percent pre-engagement system for high-duty cycles. Features a posi-tork® drive with overunning clutch. System requires a pilot controlled relay valve such as the TDI Turbovalve™.



T30-Y Pre-Engaged/ Overhung Pinion

Versatile 100 percent preengaged, overhung design fits restricted spaces and features metric pinions and various mounting options. Meets European engine configuration requirements.



T30-M Industrial Air/Gas Drive Motor

Basic air motor configuration with applications up to 20 horsepower. Well-suited for replacement of rotary vane motors and some electric motors. Additional applications include pre/post lube pump motors and various extended cycle applications.



Turbovalve™ Starter Relay Valve

This engineered accessory for the T30 features a robust, rebuildable design. Metal alloy construction and plating resists corrosion. The system is air or gas operable and can be electrically or pneumatically actuated. 1 1/4 or 1 1/2 inch NPT configurations

Available Exhaust Adapters.



2 inch NPT Elbow



Exhaust Closure Plate (ECP)



2 inch NPT Straight

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