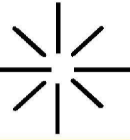




# Natural Gas Engines

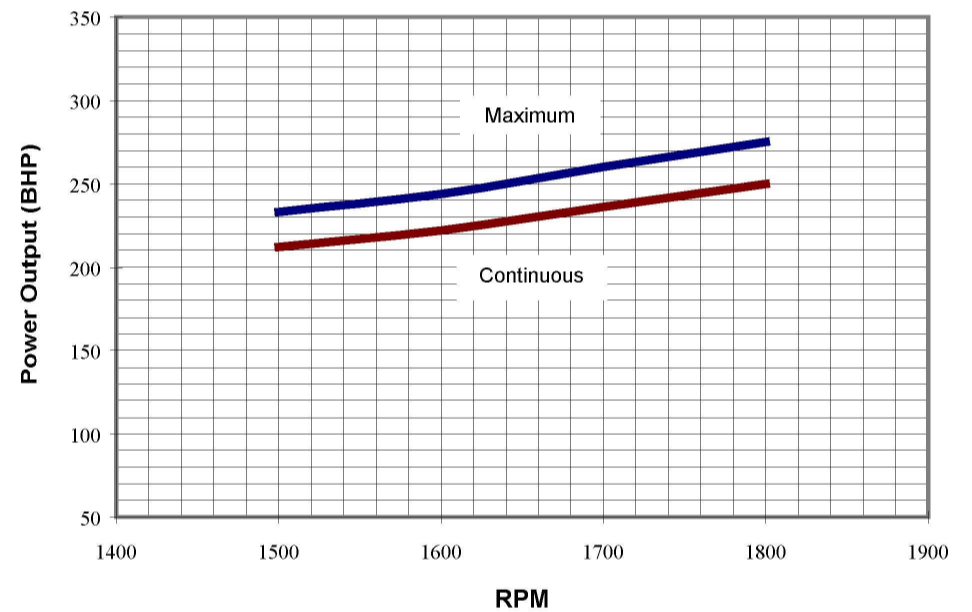
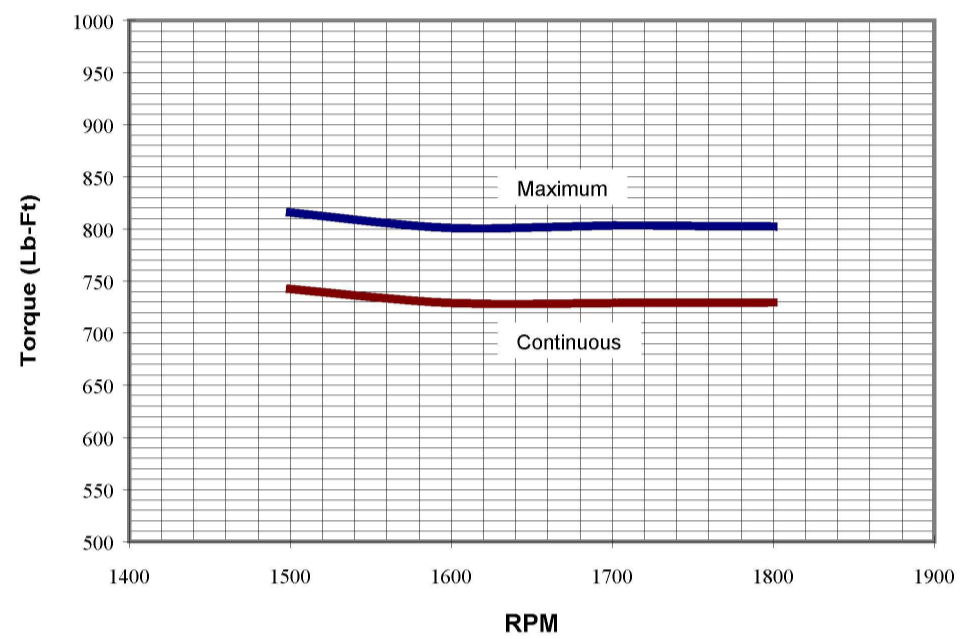


# GTA12 PERFORMANCE CURVE #7500A

<b>Model:</b> GTA12	<b>Application:</b> Industrial & Irrigation
<b>Type:</b> 4 Stroke, Inline, 6 Cylinder NG	<b>Rating:</b> 275 HP at 1800 RPM
<b>Aspiration:</b> Turbocharged & Aftercooled	<b>Bore &amp; Stroke:</b> 5.125 in. (130 mm)/6.00 in (152 mm)
<b>Compression Ratio:</b> 10:1	<b>Displacement:</b> 743 cu. in.(12L)

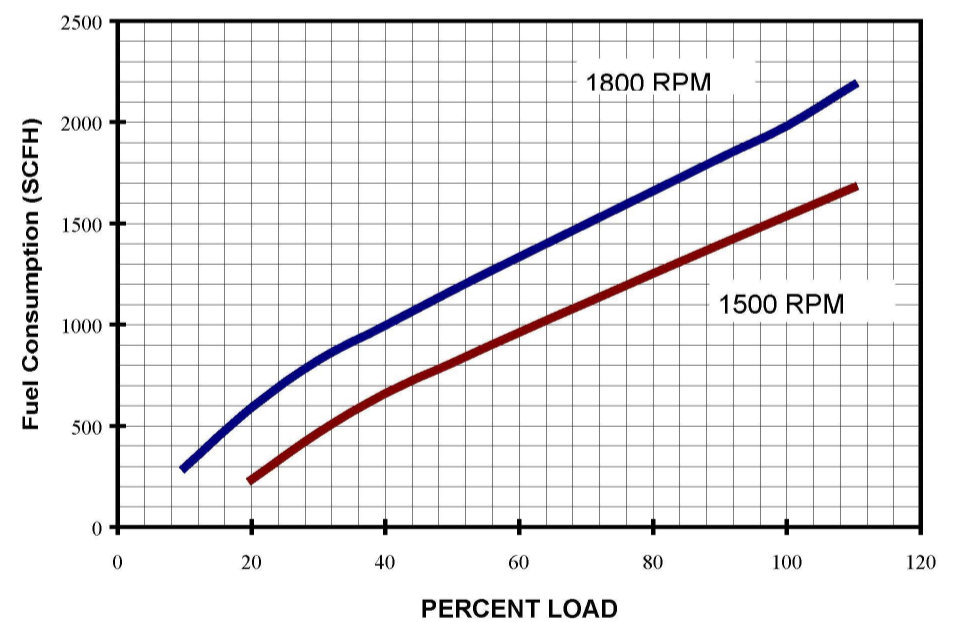
## FULL LOAD OPERATION

Engine RPM	MAXIMUM		CONTINUOUS	
	Power Hp	Torque Lb-Ft	Power Hp	Torque Lb-Ft
1800	275	802	250	729
1700	260	803	236	729
1600	244	801	222	729
1500	233	816	212	742



## FUEL CONSUMPTION

%LOAD	1800 RPM		1500 RPM	
	Hp	SCFH	Hp	SCFH
110	275	2185	233	1851
100	250	1982	212	1677
90	225	1822	191	1536
80	200	1661	169	1395
70	175	1498	148	1252
60	150	1333	127	1107
50	125	1168	106	961
40	100	996	85	811
30	75	824	64	660
20	50	590	42	468
10	25	295	21	234



Curves shown above represent gross engine performance capabilities obtained and corrected to Standard Performance Conditions of 14.73 PSIA /60° F for fuel and 29.92 "Hg./70° F for intake air. However, when ambient and/or installed conditions vary from the standard Conditions, performance characteristics can be expected to vary accordingly. This data is subject to instrumentation, measurement, and engine-to-engine variability.

RATED POWER AND RATED TORQUE CERTIFIED WITHIN +/- 5%

# RATING GUIDELINES FOR INDUSTRIAL POWER ENGINES

These guidelines are intended for general-purpose use in application requiring high utilization with long periods between overhauls.

## 1. LOAD RATINGS

1.1 \* Maximum Rating may be used for intermittent load applications (full throttle operation is cyclically interrupted) where the average load factor does not exceed the Continuous Rating and where the Maximum Rating operation does not exceed 60 minutes without interruption.

1.2 \* Continuous Rating may be used for constant load applications requiring uninterrupted service at the full Continuous Rating for extended periods of time.

## 2. DEFINITIONS

2.1 Load (Speed) factor is defined as the arithmetic mean of the Load (Speed) profile of the normal duty cycle not including periods of idle operation.

## 3. INTERNATIONAL RATING GUIDELINES

\*These ratings represent gross engine performance capabilities obtained and corrected in accordance with conditions as stated on front of curve. The ratings are in conformance with the requirements specified in ISO 3046, BS 5514 and DIN 6271.

The Maximum Rating conforms to ISO 3046 overload power and fuel stop power. The Continuous Rating may be used for continuous service in commercial applications, other than CO-GENERATION, and it conforms to ISO 3046 continuous power.

## REFERENCE STANDARDS

BS 5514 and DIN 6271 standards are based on ISO 3046.

## OPERATION AT ELEVATED TEMPERATURE AND ALTITUDE

The engine may be operated at:

MAXIMUM RATING up to 3000 ft. (914 m) altitude and 100° f (38° C) without power deration.

CONTINUOUS RATING up to 5000 ft. (1524 m) altitude and 100° F (38° C) without power deration.

For sustained operation at high load factors at higher altitudes, the engine rating should be adjusted to limit performance by 3% per 1000 ft. (305 m) altitude and 1% per 10° F inlet air temperature.