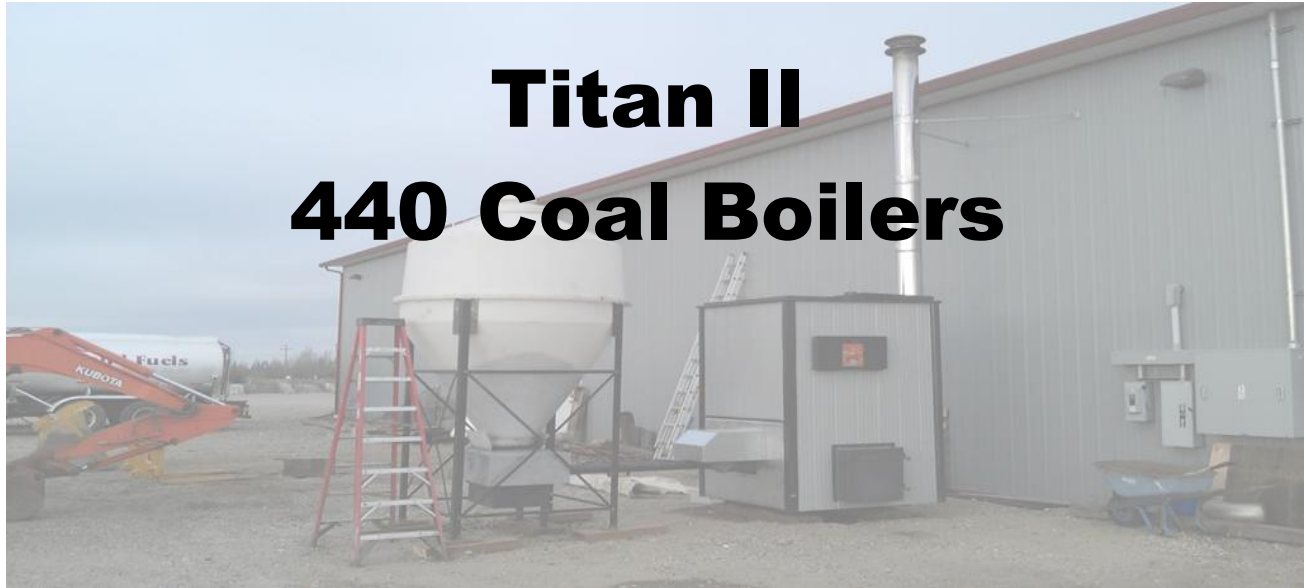


**Lower Your Heating Cost by 70%
with a New**

Titan II 440 Coal Boilers



Titan II is Approved for use Within the FNSB



Available at



**This Document Includes:
Information, Specs and Calculations for the Titan Coal Boiler System.**

Ph: 907-488-5563

Email: northlandfuelsrc@aol.com

Web-Site: northlandfuels.com

Contents

1. Fairbank North Star Borough Approval Letter
2. Titan II Spec. Sheet
3. Heating Fuel / Coal Calculation Sheet (example)
4. Customer Heating Fuel / Coal Calculation Fill In Form
5. Photo and Information Titan II 440 System
6. Photos: Installation, Internal Fire Box



Fairbanks North Star Borough Department of Transportation

809 Pioneer Road • PO Box 71267 • Fairbanks, Alaska 99707-1267 • (907) 459-1345 FAX 459-1330

RECEIVED

JAN 27 2012

January 24, 2012

Mark Sanford
OIT, Inc
PO Box 55878
North Pole, AK 99705

Dear Mr. Sanford,

The borough received your request for approval of the Titan II Coal Boiler as per Borough Code 8.21.020.

Your request was based on the September 2011 test results from Alaska Source Testing, LLC located at 520 West 58th Unit A, Anchorage, Alaska 99518, however Alaska Source Testing, LLC is not an accredited lab. The borough also contracted OMMI Test Labs (an EPA Certified Woodstove Test Facility) to test the Titan II Auger-Fed Coal Boiler and although those results were limited to a single burn rate, however, given the combination of results from both sets of test data the borough believes the Titan II Auger-Fed Coal Boiler emissions to be equivalent or better than other borough listed solid fuel burning appliances and is therefore exercising its discretionary authority to add the appliance to the list of borough approved appliances.

This approval is effective upon receipt of this letter. As a borough approved appliance any new installation must satisfy the installation requirements such as setbacks, lot size limits, and stack heights as specified in title 8.21.20 (A-F) of Borough Code as well as the prohibited fuels, nuisance, and commercial sales requirements.

If you have any questions please feel free to contact us at 459-1005.

Sincerely,


Dr. James Conner
Air Quality Manager
FNSB Transportation Dept.
3175 Peger Rd.
Fairbanks, AK 99709
907-459-1325

Titan Series by Decker Manufacturing LTD.

Below is a Titan II 440btu Model with 3 Ton Hopper. This system is currently in service heating a 10,000 sq/ft building. This system is fully operational using a typical 120volt/15amp circuit, providing all the heating requirements for buildings from 8,500 - 12,00sq/ft.

Included; Auto-Feed Auger, Blowers and Programmable Controls.



Specifications Titan II 440

Width	64"	Venting Size	8"
Height	98"	BTU (approx.)	440,000
Depth	60"	Water Supply	(2) x 1½"
Weight	3525lbs.	Water Return	(2) x 1½"
Door Size	22' x 24"	Stocker Head	20"
Water Capacity	186 gallons	Stocker Length	136"

(Example) of Recently Completed Project 2011:

Heating Fuel to Coal Conversion

1.) Heating Fuel Usage: Annual Gallons	9500.00
2.) Annual Gallons X - Per Gallon Price (average price for 2011)	\$3.75
3.) Heating Fuel in Annual Dollars:	\$35,625.00
4.) Heating Fuel to Coal Conversation Factor (107 gallons = 1 ton of coal)	107
5.) Estimated Annual Coal Tonnage (gallons from line 1 ÷ 107 x 1.25 (efficiency factor))	110.98
6.) Coal Per Ton Charge (Delivery cost not included)	<u>\$115.00</u>
7.) Delivery Cost if Requested	n/a
8.) Total Annual Coal Cost (line 5 x line 6)	\$12,762.85
9.) Client Savings Annual Dollars (subtract line 8 from line 3 =)	\$22,862.15
10.) Percentage Savings	64.17%
11.) Project Cost: (Titian 440, hopper, exchanger, piping, mechanical and electric)	\$22,750
12.) Estimated Years for Payoff (line 8 annual coal cost ÷ line 11 project cost)	1.00
Average Coal Cost Over 12 Months:	\$1,063.57
NOTES:	Titian II 440 model w/ hopper, exchanger, pad and mechanical hook up.
Fuel Boiler Size(s) In Btu's	2 @ 170,000btu (each) = 340,000btu
Building Size Sq. Ft	10,000sg.ft repair shop and office
Find a fill in conversion calculation form on the following page.	

Customer Fill In Form

Heating Fuel to Coal Conversion

1.) Heating Fuel Usage: Annual Gallons	
2.) Annual Gallons X - Per Gallon Price (average price for 2011)	
3.) Heating Fuel in Annual Dollars:	
4.) Heating Fuel to Coal Conversation Factor (107 gallons = 1 ton of coal)	
5.) Estimated Annual Coal Tonnage (gallons from line 1 ÷ 107 x 1.25 (efficiency factor))	
6.) Coal Per Ton Charge (Delivery cost not included)	
7.) Delivery Cost if Requested	
8.) Total Annual Coal Cost (line 5 x line 6)	
9.) Client Savings Annual Dollars (subtract line 8 from line 3 =)	
10.) Percentage Savings	
11.) Project Cost: (Titian 440, hopper, exchanger, piping, mechanical and electric)	
12.) Estimated Years for Payoff (line 8 annual coal cost ÷ line 11 project cost)	
Average Coal Cost Over 12 Months:	
NOTES:	
Fuel Boiler Size(s) In Btu's	
Building Size Sq. Ft	
Find a fill in conversion calculation form on the following page.	

Easy to Install

The Titan coal system is easily connected to your existing fuel boiler system. Along with a properly rated heat exchanger and circulation pump the Titan II boilers can provide all the heating requirements for your home, business or shop. The Titan system is attached to your existing fuel boiler using a heat exchanger (as seen below) the Titan systems becomes your primary energy source, while the fuel boiler remains available as an additional heat source.

Typical Installation



Impressive Savings

The installation above shows a 400,000btu exchanger connected to an existing fuel boiler system. The Titan Coal Boiler System provides all the required heat for a 10,000sg/ft building/shop. Prior to installation this client spend (on average) \$38,000 a year for heating fuel. In their first year of using coal this clients heating cost dropped 65% a savings of approximately \$25,000

Burner Box (flame)

