McDonald Manu Furnace on pellets

Posted by STINEY - 25 Nov 2012 15:17

Happy Heating Season to all you guys!

I'm a long time corn burner (CornFlame 2100) and posted a bunch of tuning adventures on the old forum.

(Which ironically is the only site that a search engine will pull up for some reason, both at home and work. Might be something for the site owner to look into?)

Anyways, this year is the first year for burning pellets. I have a McDonald Manufacturing Cozy Cornburner Furnace, and have blocked the lower ring of holes with screws, added a reostat to the combustion fan, and made a quick/easy way of changing the room blower fan speed. Otherwise stock. It is easy to light and runs effortlessly.

However - with the timer 1.5 on and 1.5 off, it will take the house up to 90 degrees if the wind is not blowing and the temps are in the 40's. Have to shut it down and let the 2100 do the work. Not a major problem, okay?

Here is the part I can't get. Outside temps in the 20's-30's, and the furnace can only make 62 in the house. Thermostat set at 90, no improvement. Set the timer to 1.5 off and 6 on, and I have 68 in the house, plus I have relit the 2100 so I'm not really crediting the Furnace with that increase.

What gives? Room blower is on high (though I've tried medium and low with no real difference in house temp)

I'll try to put up pictures of my setup. Can't quite get the forum software to cooperate.

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Re: McDonald Manu Furnace on pellets

Posted by STINEY - 18 Jan 2013 16:31

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Re: McDonald Manu Furnace on pellets
Posted by STINEY - 18 Jan 2013 16:31

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Re: McDonald Manu Furnace on pellets
Posted by STINEY - 18 Jan 2013 16:32

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It seems to hold at 350* - IF I pull that weird "clinker" thing about every 3-4 hours.

Here is the clinker thing. And what the fire looks like.

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Re: McDonald Manu Furnace on pellets
Posted by Nogas - 18 Jan 2013 17:00

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I know it's a little expensive, but have you tried to add a little corn to your pellets yet? Pick up a couple of bushels of corn and clean it, and add about a 5 gallon bucket to 2 bags of pellets and see how it burns.

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Re: McDonald Manu Furnace on pellets
Posted by STINEY - 18 Jan 2013 21:58

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Actually I have tried that. No real change to report.

I'm still using my SnowFlame 2100 on a daily basis, and since its a positive pressure stove corn is all I burn in it. It burns roughly 120-130 bushels a winter.

Burning both the furnace and stove I can keep the house @ 70* without burning Fuel Oil.

I was hoping this winter I could sell the wagon of corn and just burn pellets, without using the stove at all. That ain't happening.....

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Re: McDonald Manu Furnace on pellets
Posted by Nogas - 18 Jan 2013 23:17

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I have to use both too, but mostly the stove.

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Re: McDonald Manu Furnace on pellets
Posted by STINEY - 21 Jan 2013 14:20

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Update - so with no real change other than flicking that weird "clinker" out of the way every few hours, my door temps are finally up. For the whole weekend and this morning it read 450*

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Re: McDonald Manu Furnace on pellets
Posted by Nogas - 21 Jan 2013 16:21

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BRAVO
Must be getting more air to the fire and a more complete burn!

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Re: McDonald Manu Furnace on pellets
Posted by tallcorn - 22 Jan 2013 01:50

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I just read your postings. It looks like you are making heat but it either isn't getting picked up by the heat exchanger or it is going up the stack. Can you slow/reduce the exhaust and still maintain the burn pot level? Evidently the pellets have a high silica content that are making the clinkers. You might test some other pellets. The pellets must burn lower in the burn pot and don't push the clinker up.

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Re: McDonald Manu Furnace on pellets
Posted by STINEY - 22 Jan 2013 15:51

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