



New Commercial Product Line Ready for Launch



In the May issue of Riello News, we announced that Riello would be previewing its new commercial and process burners at the NAOHSM show in Hershey, PA. The burners were exhibited with a resounding success and Riello carried that success into the NEFI show held in Boston, MA for a repeat performance.

Well, final preparations are now being made for the North American launch. The new burner line has successfully passed all necessary approval tests and inventory is being built up to meet the expected demand.

The final firing ranges have been established as follows:

??Gas capacities from **277,000** Btu/hr to **7,813,000** Btu/hr;

??Oil capacities from **2.4** USgph to **65.6** USgph;

??Dual fuel capacities from **341,000** Btu/hr to **4,760,000** Btu/hr.

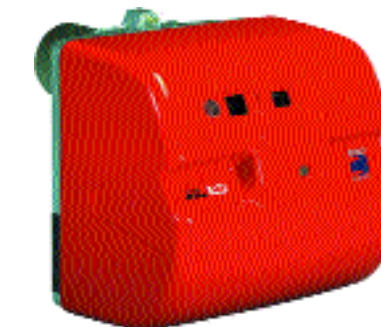
The burners will bear UL and cUL approval stickers and will also meet several regional and local jurisdictional standards (e.g. MEA for New York City).

The North American commercial/process burners will be designated as the "R" Series and were originally introduced to

Europe in 1994. The burners have had an excellent field record.

The commercial/process team has begun the task of establishing a representative network within North America and to ensure that after-sale support is second to none.

Stay tuned.



New Test Facility Completed

Riello's new 3,000 square-foot state-of-the-art test facility was recently completed.

On August 21st, the inaugural firing of a 3,000,000 Btu/hr "R" Series gas burner into a DIN-spec (European) firing chamber was a flawless performance.

Visit requests for the new facility have begun and a media event is being scheduled for early Fall, to coincide with the launch of the new commercial/process product line.

Please contact us if you wish to visit.

New Website

September 15th, 2001

A good website should be user friendly, informative and comprehensive.

With the above in mind, we set out to improve and redesign our website.

On September 15th, 2001, you will be able to navigate our website and retrieve all of the information you want on Riello Burners.

The following outlines the information that will be available:

Company

1. Profile
2. History

Products

1. Range
2. Oil burners
3. Gas burners
4. Residential applications
5. Commercial applications
6. Manuals
7. Frequently-asked-Questions (FAQs)

News & Events

Training

1. In-House
2. On-the-Road
3. Customer-specific

Job Opportunities

Corporate Links

1. Global Affiliates
2. Global Representatives
3. Customers

Contact Us

1. General
2. Area Representatives

Don't forget to visit on September 15th!

Did you know?

Riello is a global leader in the design, development and manufacture of burners and sold over 470,000 burners in 2000, more than any other manufacturer.

TECH TALK with Lew Boyce

Do you have enough air to feed that burner?

One of the chronic problems encountered in the field is the lack of available air to support proper combustion. It appears that many technicians forget the basic rules for combustion, and fail to insure that the burner has an adequate and uninterrupted flow of air, especially in today's ultra tight homes.

So, let's review the rules.

1. Air volume required

It is generally accepted that an oil burner requires air flow of approximately 1360 cubic-feet-per-hour, per gallon of firing rate. Remember, this is based upon the firing rate, so the higher the rate, the more air is required.

Did you know?

Riello introduced the "Gulliver" low NOx blue flame oil burner for Europe in 1992 and will introduce the "R2000" low NOx oil burners for North America in 2002.

BURNOUT.



Are your techs "dead on their feet" from too many callbacks?

BURN(ER) IN.



Install RIELLO burners for the utmost in reliable performance. They could revive your service margins... as well as your technicians.



2. Uninterrupted supply

The air must be delivered to the burner in an uninterrupted supply, with no obstructions between the source and the burner. Do not forget that any other appliance that shares space with the burner and requires make-up air, such as a clothes dryer, a separate provision must be made for air to that appliance.

3. Outside air

Make-up air must come from outside. It is generally accepted that an opening to the outside equal to 144 square inches per gallon of firing rate is required.

No matter how large the area where the burner is located, if there is no opening to the outside, the burner will eventually exhaust the air supply within the space.

The requirement is a "line of sight" opening that can be seen from the burner's location, with no doors or obstructions between the burner and the opening.

Without a doubt, the best way to insure an adequate and safe supply of air is to connect the burner directly to outside air.

Riello's Solution

Riello offers the BF series burners which provide an outside air connection expressly for this purpose. While many of you have seen the BF in direct vent applications, it also works exceptionally well in chimney-vented applications with fresh air intake. It is provided with a die-cast cover and back, which are very rugged, and a rubber gasket seal, which insures that all the air will come directly from the vent connection. The air connection can be made to a standard 4" pipe, with a 3" to 4" adapter. Remember, the outside terminal must be a UL recognized intake, and you need a minimum of 10 feet of pipe between the burner and the wall.

Also, because of the BF's design, it is the quietest burner available on the market today.

Do you really need that post-purge?

The question of whether it is necessary to post-purge an oil burner is a source of much discussion, and disagreement.

The idea of purging the standby heat up a chimney, or out a wall at the end of a firing cycle is counter-productive and wasteful. However, we have now reached a point where many jurisdictions and manufacturers require a post-purge to insure system cleanliness and performance, and may even require a power venter to assist.

I submit to you that the need for post-purge is really a by-product of poor burner design, and the lack of the proper components on many oil burners.

Let's examine each of these issues.

1. Poor burner design

Many manufacturers require a post-purge as they find that the burner end cone overheats, and the nozzle "cokes" up. This is the result of overheating the end cone because the burner is unable to move the heat off the head. What is really required is a high static pressure burner that can overcome system static resistance (chamber pressure) and push the heat away. Interestingly, another result of insufficient static pressure is after drip. If the end cone is overheated when the burner shuts off, the heat soaks back down the drawer assembly. Any air trapped between the nozzle and the pump shut-off will expand from the heat, and push the oil from the drawer assembly out the nozzle. The long term effect of this condition is fouling of the nozzle and retention head, and excessive sooting in the heat exchanger, possibly causing a system breakdown.

2. Lack of proper components

A more significant cause of fouled systems and seasonal sooting is a burner lacking the proper components. In order to insure a clean start, an oil burner requires a pre-purging control, which allows the burner to come up to full air flow and pump pressure prior to starting. Otherwise, without the pre-purge, the burner starts with a cloud of soot and unburned fuel oil. In addition, an oil burner requires an oil valve to provide positive cut-off to the nozzle during shut-down. Without a valve, the burner "rumbles" to a stop, and spews out as much as a #7 smoke, and a cloud of soot. The net result of the lack of these components is the necessity to clean the system annually.

In conclusion, the requirement for a post-purge is really derived from bad industry experiences with improperly designed and equipped burners. If you examine the Riello 40-Series burners, you will discover that they are equipped with a pre-purging control and an instant opening oil valve. These components provide for ultra-clean starts and stops, which drastically reduce, or even eliminate seasonal sooting. In addition, they are designed to provide high static pressure at the head, which means that the end cone is substantially cooler than conventional burners, which prevents after-drip and turbulator "coking".

The next time you open a boiler installed with a Riello burner make note of the condition of the chamber and heat exchanger. You will likely find a minimal coating of ash on the chamber floor, and no soot evident on the heat exchanger.

Did you know?
Riello was founded in 1920.

Our Global Mission Statement

We work to contribute to the prosperity and the progress of human society, with products that produce heat through an efficient and controlled combustion process, caring for the environment and people.



Did you know?

Riello has been the industry catalyst for change (because of its advanced burner technology) in North America for over 20 years.

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PREVIOUS ISSUE ARTICLES

RIELLO BURNERS Previews New Commercial Product Line at NAOHSM Show

A descriptive overview of the new commercial products that will be available for Fall 2001.

New 5-Year All Parts Warranty for Oil Burners Used in Residential Applications

The announcement and description of an industry-leading warranty program on North America's standard-setting burner line.

New Digital Control Box for 40-Series Burners

The announcement of the availability this Fall of a plug-n-play digital control box for Riello's popular 40-Series burners.

New Electric Air Damper Assembly

The announcement of the introduction this Fall of an electric air damper assembly as standard equipment on the 40-Series F3 and F5 model burners.

New State-of-the-Art Test Facility for North America

A description of the new 3,000 square-foot test facility that will be completed in June 2001.

Message from the President

A brief address of the latest developments at Riello Burners North American operations including: organizational changes; new commercial products introduction; the development of a residential application Low NOx burner line for 2002; and, the construction of a new test facility.

Please contact us if you would like a copy of the May 2001 issue.

Customer Surveys

In an effort to improve its Customer service, Riello Burners will be mailing surveys to selected Customers during the first week of October 2001. This will present an excellent opportunity for Customers to provide feedback to Riello Burners and to suggest necessary or desired improvements. The surveys will address only Customer service related issues and will cover area representatives, order desk and technical support.

Customers are encouraged to participate in the surveys.

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Best Wishes NORA

Riello Burners congratulates and supports the efforts of NORA and extends its sincere wishes for future success.

Riello is prepared to make its resources available to the NORA Board and its committees and sub-committees in an effort to strengthen the Oilheat community.

Riello Burners is in a position to bring a somewhat different and unique perspective to NORA because of its international presence and experience, and because of its depth of technical resources and breadth of product lines.

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