



Resource Wise for the Future

A Newsletter for Conscious Consumers from Advanced Fiber Technology

April 2009

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We appreciate any feedback and comments on our first newsletter. Our skin is thick so all comments are welcome.

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A Word or Two of Welcome

The purpose of a newsletter is to provide specialized information to a targeted audience. We had to decide who the targeted audience would be and decided not only would it be our customers, but also our customer's customers.

With this in mind, the newsletter focus became a little broader in that we would include items of general interest, whether energy conservation or specific topics related to installing insulation. While we think of ourselves as insulation contractors, we are also businesses. So we're going to include a topic or two of interest along those lines.

We hope you'll enjoy our newsletter and would appreciate any comments or topics you'd like covered in a future issue. Our goal is to issue a newsletter at least twice a year.

We chose "Resource Wise for the Future" as our newsletter theme as that's really what our industry should be about. We are, or should be, the experts our customers look to for guidance on the best way to manage our energy resources.

Here goes. Enjoy the ride.

Doug Leuthold

An Invitation to Look Behind the Scenes



AFT is located in the Crossroads Industrial Park in Bucyrus, Ohio.

Through the years, we've had the chance to showcase our facility to many of you. We've even had the pleasure of seeing some of you more than once. Admittedly, we are in the middle of Ohio where it is quaint and quiet, but we honestly love company!

Our door is always open, not only to you but to your customers. You'd be surprised how many builders would enjoy a behind the scenes tour to see how cellulose insulation is produced.

The AFT facility was built in 2001 with 22,500 square feet. Since, it has been expanded since to 51,500 square feet. Our manufacturing process is state-of-the-art in

the industry and we are the only producer in North American to have an R&D line for new product development.

To support our growth, we've added a second packaging system and increased the capabilities of our paper handling and size reduction equipment. The second packaging system is fully automated with plans to fully automate the first packaging system.

One question we often get asked is 'why don't you have the plastic, string, etc. found in our competitors' products?'

Visit and we'll show you the secret of the AFT patented TF-9000 fiberizer. It's one of the keys.



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We're on the Web!
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Home Energy Usage

How do we properly communicate to builders and homeowners where energy is consumed in residential structures?

The largest source of energy consumption in a home is heating and cooling at 43% according to the 2007 Building Energy Data Book. This is followed by a water heater 12%, lighting 11%, computer / electronics 9%, appliances 9%, refrigeration 8%, and other minor uses amount to 8%.

The U.S. Department of Energy's office of Energy Efficiency and Renewable Energy has a Home Energy Checklist available on their website. This lists many obvious items such as turning down the thermostat, replacing incandescent lights with compact fluorescents (CLF's), insulating hot water pipes, sealing air leaks, adding insulation, just to mention a few.

Only 20% of the homes built before 1980 are well insulated.

If you're involved in retro-fit work, think about providing the homeowner with a copy of this checklist.

While traditionally thinking about wall and attic insulation, how about offering to install a hot water heater insulating blanket or insulating the hot water piping. Offer to caulk around doors and windows. These are some simple ways to expand your service to your customers.

Info Update: *Insulation and Tax Credits*

The American Recovery and Investment Act of 2009 (commonly known as the Stimulus Bill), contains tax credits for improving energy efficiency of residential housing. One of the many available tax credits is for adding insulation.

As with any government program, there are guidelines that must be followed. This Act provides a credit against taxes for insulation improvements placed in service in the taxpayer's principal residence between January 1, 2009 and December 31, 2010. The tax credit is for 30% of the material costs up to a maximum amount of \$1,500. The installed insulation must meet the requirements of the 2009 International Energy Efficiency Code (IECC) and amendments.

Vapor retarders and insulated siding DO NOT qualify. The homeowner must keep a copy of the Manufacturer's Certification Statement for their tax record keeping. Our statement can be downloaded from www.advancedfiber.com

Home builders are eligible for a \$2,000 tax credit for a new energy efficient home that achieves 50% energy savings for heating and cooling over the 2004 International Energy Efficiency Code (IECC). At least 1/5 of the energy savings must come from the building envelope improvements.

For more information related to other energy efficiency tax credits, you can visit www.energystar.gov. Your tax preparer will be able to provide you with the specific tax forms necessary to claim tax credits under the above program.

NOTE The number of existing houses to be reinsulated under the Stimulus Bill will challenge the various state agencies to get the work done on a timely basis. We encourage insulation contractors to contact their local weatherization agency and make them aware of your interest and ability to support their efforts.

Check Out Our New Site

We've revised our website to more accurately reflect the scope of our business.

We have three aspects of our business. They are production of cellulose insulation, industrial fibers, and wastepaper processing systems. On our home page, you'll be able to select cellulose insulation. There you will find a section for "Homeowners" and "Builders".

We have recently created an "Introduction to Cellulose Insulation". It's a slide presentation that steps through basic insulation principals and installation of cellulose insulation. The slides contain general information that enables the presenter to add commentary as they see fit. Need it tailored for a specific audience, let's us know the changes and we'll make them for you.

We've also added more information on the "green" aspect of cellulose insulation.

The Technical Resources section of our website contains many useful documents we've put together that will answer many of the homeowners' and builders' questions.

Our website address is www.advancedfiber.com.

Air Leakage

How does heated or cooled air escape a house? Floors, doors, and ceilings account for 31% followed by ductwork at 15%. Fireplaces are 14% and penetrations are 13%. Doors are 11% and windows are 10% with other items amounting to 6%.

Many air leaks and drafts are easy to find because they are easy to feel - like those around windows and doors. But holes hidden in attics, basements, and crawlspaces are usually bigger problems. Sealing these leaks with caulk, spray foam, or weather stripping will have a great impact on improving your comfort and reducing utility bills.

Homeowners are often concerned about sealing their house too tightly; however, this is very unlikely in most older homes. A certain amount of fresh air is needed for good indoor air quality and there are specifications that set the minimum amount of fresh air needed for a house. If you are concerned about how tight your home is, hire a contractor, such as a Home Energy Rater, who can use diagnostic tools to measure your home's actual leakage. If your home is too tight, a fresh air ventilation system may be recommended.

Spray Tips - Wear, Tear and Replacement

When is the last time you checked the conditions of the spray tips? *Maybe you don't want to know.*

Believe it or not, liquids do and *can* cause the metal orifice of spray tips to erode. The harder the water (which means it has higher mineral content), the faster the tips will erode. When erosion of your spray tips occurs, several other things are affected.

Spray tip wear is typically characterized by an increase in tip capacity, i.e. increased water flow, followed by a general deterioration of the spray pattern.

The increase in the tip capacity can sometimes be recognized by a decrease in the pump pressure as there is less restriction at the tip. Flat spray patterns with elliptical orifices experience a narrowing of the spray pattern.

Stainless steel tips are three times more abrasion resistant than brass and steel.

Most of us would probably acknowledge the tips aren't changed frequently enough. Mark a calendar with a change date and stick to the date.



Spray Tips - Capacity and Water Droplet Size

How much water are you spraying? The answer should be the least amount possible.

It's not as difficult to figure out as you would imagine. The Spraying Systems Technical Handbook contains this information.

The capacity per tip in gallons per minute is based upon tip size and pump pressure. Once you determine the combined gallons per minute for all the tips, you simply multiply that times 8.34 pounds per gallon and you have the pounds per minute. Compare this to the pounds of fiber and you'll get the theoretical moisture content for the sprayed material.

The smaller the water droplet size, the greater the dispersion throughout the fiber mass. In general, the smaller water drop sizes are influenced by smaller tip

orifice opening and higher pump pressures. As you go smaller in the tip orifice, you may need to put a finer filter on the water tank since it becomes easier for particles to clog the smaller tip orifice openings.

Some contractors put surfactants in the water tank to decrease the droplet size and increase the effectiveness of the water. In fact, some use a dishwashing detergent to achieve this surfactant effect because it is non-foaming. The recommended amount is 1 cup of detergent per 100 gallons of water.

Another tip from the contractors is to use a lemon or lavender scented detergent. The homeowners love it.

Courtesy of Dave Krendl of Cool Machines for his commentary on general spray tip techniques.

Spray Tips - Sizes

2501, 25015, 4002, 007 (just kidding).

What do these numbers mean?

The first two numbers are the spray angle at 40 psi. The 2501 has a spray angle of 25 degrees while the 4002 has a spray angle of 40 degrees. These spray angles are based upon water.

What's the relevance of 40 psi to the spray angle? A 2501 tip has a spray angle of 34 degrees at 80 psi and 42 degrees at 200 psi.

01 vs 015. These are the capacity size. The 01 tip has an orifice opening of .026 inches and a 015 has an opening of .032 inches.

A 2501 at 200 psi will deliver 0.22 gpm while a 25015 at 200 psi will deliver 0.34 gpm. Larger orifice, more gpm at the same pressure.

Courtesy of Spraying Systems Co. Technical Handbook available online www.spray.com

How Well Are You Prepared For a Business Disaster?

The unplanned business disaster has hit and it will hit again.

The flood, the fire, the computer hard drive failure, etc. How well are you prepared for these business contingencies?

We focus so much on daily challenges of providing services to our customers that we can forget about disasters that can hit our business and their impact.

How will you survive if you lose all your financial data, customer list, accounts receivable, etc?

Can you go by memory to recall which invoices are outstanding?

Back up your electronic files and keep that backup offsite. Coordinate with your insurance agent regarding a business interruption plan.

Business as Unusual - Focus on Short Range Objectives

One way of maximizing effectiveness is to operate with clearly defined goals and objectives. That enables you to get the best mileage out of your personnel.

You will get your best results at this time if you focus intensely on short range targets. Long-term goal-setting requires more time and effort and there is more guesswork involved. Also your people will benefit from seeing short range goals achieved. It builds confidence and restores momentum to the company.

Concentrate on quarterly, monthly, and even weekly performance targets. You will need to do an equally good job of communi-

cating them to the people who will be responsible for their achievement.

Keep the spotlight on your short range goals and give employees feedback regarding progress that is being made toward goal achievement. Employee attitudes and the overall work climate are important, for both tangible and intangible reasons.

Relight the fire in your company.

Make customer satisfaction a top priority. Things may be changing inside your company in this economic climate but the need for a satisfied customer never changes.

"Business as Unusual"
by Price Pritchett & Ron Pound



Include a calendar of upcoming events or a special offer that promotes a new product.

Don't Make a Sale, Make a Long-Term Customer

Establishing ongoing relationships with customers enhances the long-term success of most small companies.

It's more cost effective and a lot less stressful to serve ongoing accounts than it is to continually search for new business.

To secure a long-term customer, sales personnel need to "look beyond the sale." They need to form a relationship with the customer.

The basis for establishing such a relationship is to address the five key needs of every customer.

- 1) Excellence of products and services on an ongoing basis
- 2) Competitive and fair pricing, assuring good value

- 3) Top quality after-sales service
- 4) An ongoing seamless relationship between customer and sales staff;
- 5) The need for a customer to feel smart or right if questioning the purchasing decision.

Addressing these needs and any other pertinent needs should be the basis for every sales presentation. When customers become enmeshed in the understanding these needs will be satisfied, closing the sale takes on an entirely new ease and naturalness. The sale at that point becomes more of working out the details of the relationship.

This is an excerpt from the above titled National Federation of Independent Business report dated 1/26/2009.



KRENDL

GV180 Gas Vacuum



Known for durability and high production, the Krendl GV180 vacuum is designed with a steel fan and chamber, powered by a rugged Briggs and Stratton 18HP V-Twin gas engine. This vacuum is intended for removing all types of blown insulation and for recycling wet spray.

FEATURES AND BENEFITS

- 6" (15.2 cm) inlet and outlet allows for substantial volume.
- 18 HP Briggs & Stratton V-Twin engine utilizes a positive pressure lubrication system.
- 12 volt Magnatron® Electronic Ignition system allows for easy starting.
- Mounting frame w/ 11" pneumatic wheels allows for easy transportation.
- Hour meter / tachometer monitors the use and rpm of the engine.
- Dynamically balanced steel fan to eliminate engine vibration.
- Inlet and outlet guards provide operator safety.
- Steel fan chamber withstands abrasion.
- Capable of moving 7000 lbs. of cellulose per hour.

VACUUM SPECIFICATIONS

FANSIZE/TYPE	FAN DIAMETER inches (cm)	PRODUCTION
LARGE STEEL	18" (46)	7000 lbs/hr



GENERAL SPECIFICATIONS

Dimensions: 36" long x 28" wide x 48" high
 Weight: 240 lbs. (109 kg.)
 Motor: 18hp/3400rpm (no load)

