

THE TREATING EDGE

BARE ROLL
COVERED ROLL
UNIVERSAL ROLL

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Technically Speaking

To Drive or Not to Drive, That is the Question! *When do I Need to Drive My Treater Roll?*

by Tom Gilbertson, Product Sales Manager

This article is the second in a continuing series that will briefly address some technical aspects of properly applying corona treating equipment to converting or extrusion processes.



As with most technical questions, the decision to drive the treater roll hinges on a number of primary parameters which can be influenced by still more secondary considerations. The simple rule of thumb on this questions is any web (substrate), whether film or foil, that is one mil or less and will be run at 500 fpm or more should be treated on a driven roll. So, there you have the primary factors that determine whether or not the roll is driven – film gauge and line speed.

Why are these parameters so important? At line speeds below 500 fpm and web tensions above 1.5 pli (pounds per linear inch), the substrate will remain in intimate contact with the treater roll, causing it to rotate at line speed without being driven. As the line speed is increased and the web tension is decreased, as it must on lighter weight substrates, air gathers between the web and the treater roll, thereby preventing the web from rotating the roll at line speed. Problems that result from this situation are backside treatment and scratches or marks on the substrate.

Now, here is where the issue becomes more complicated. In addition to line speed and substrate gauge, which determines web tension (pli), the following factors would impact the decision to drive the treater roll:

- 1) Amount of wrap around the treater roll. One hundred and twenty (120) degrees is minimum, however 180 degrees is required in many cases to insure proper treater roll speed.
- 2) Type and diameter of treater roll. A bare-roll may be easily driven by the web, but a ceramic coated- or covered-roll of large diameter may be too heavy and may have too low a surface coefficient-of-friction to be driven at line speed by the web.
- 3) Substrate Extensibility. Film that is highly extensible, such as LLDPE, may require a driven treater roll, even if other factors, such as a low line speed, would indicate that a driven roll is unnecessary.
- 4) Slip Content. Film with very high levels of slip that are “at the margin” for other factors may require that the roll be driven.

These are the factors that must be considered when reviewing an extrusion or converting line for the addition of a corona treating system. Obviously, if the station requires a nip roll, then the treater roll must be driven. However, the factors discussed above may require the roll be driven even if no nip is required.

For a fuller discussion of this subject, please request my technical paper, “To Drive or Not to Drive!”

Thomas Gilbertson



INSIDE:

Enercon's Service
Commitment to You

Enercon Boosts
Chilean Cast Film
Operation

Enercon Customer Service at Work for You

Our Customer Service Program begins long before the customer ever receives his new Enercon Corona Treating System. Quite often, customers perform a variety of tests in our Corona Treating Laboratory to help them determine the parameters of the system that they are about to order. Our engineers and applications specialists, along with our laboratory equipment are available, free of charge, to customers and prospective customers to help them resolve the surface treatment issues confronting them. In addition, we offer machine operator and machine maintenance training at our facility, also free of charge. Quite often, this training takes place before a system is delivered.

Some customers prefer to have this training conducted at their facility in conjunction with the start-up of their new system. In these situations, we send a Field Service Engineer to the customer's facility to supervise the installation of our equipment, start it up, and provide operator and maintenance training. This service is provided at a rate 40% below our standard service rates,

plus travel and living expenses.

We have found that more than half of all emergency service situations can be diagnosed via the telephone. For this reason, we maintain around-the-clock, emergency service capability. A fully qualified Field Service Engineer is never further away than your telephone. A Field Service Engineer can be dispatched quickly if the situation requires it.

All of our equipment is warranted against defects in materials and workmanship for a period of 15 months from shipment or 12 months from start-up, whichever is shorter. Any parts or labor that may be required during the warranty period to resolve failures caused by normal wear and tear will be supplied free of charge. Travel and living expenses incurred are the responsibility of the customer.

Enercon has created, and is expanding, yet another customer service tool - our website (www.enerconind.com). We now have trouble shooting tips and diagnostic procedures,

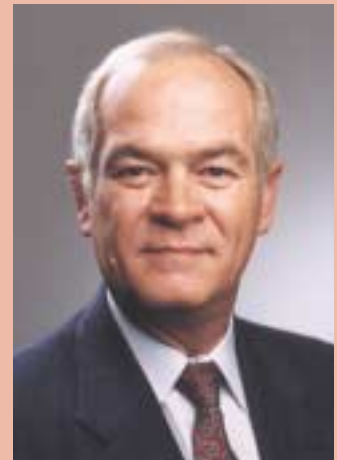
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PEOPLE NEWS

John Smallshaw, Sales Manager, has been with Enercon for over two years, working primarily with Enercon's East Asian-based customers. From the very beginning of his Enercon career he has immersed himself in the application and operational aspects of corona treating equipment, making sales, application and service visits directly with end-users in countries such as Korea, China, Taiwan and Indonesia. John brings an interesting combination of talents to Enercon, with the experience of a well-traveled and seasoned veteran.



JOHN SMALLSHAW



HANK EDMUNDS

Smallshaw will now add the Southeastern United States (**Florida, Georgia, North Carolina, South Carolina and Alabama**) to his territory. John is fluent in Spanish, French and German, along with some skills in Chinese. In his 20 years of industrial sales and marketing experience he has worked in a variety of European and Asian locations.

Hank Edmunds has recently joined Enercon as a Regional Sales Manager for Corona Treating Systems. Hank will be responsible for the West Coast marketplace.

Cast Film Operation Opts for Enercon

Interpak has been a leader in manufacturing plastic films in Santiago, Chile, for 35 years. Newly equipped with the most modern cast film technology in the world, the company is taking no chances with quality. A corona treating system and an integrated measurement and control system were part of the deal.



Interpak, a family-owned company, constructed a new facility to accommodate their second Black Clawson cast film line, installed at the end of 1998. This new line is dedicated to the production of diaper films and has an operating speed of 600 fpm (183 mpm).

The new line is equipped with one extruder (the existing line has three). They are both combination flat cast film/stretch lines, adaptable to polypropylene, diaper films, low-density polyethylene and others, based upon market demands.

Located down the line, before the rewind station, is an Enercon corona treater, equipped with a covered roll and 1-in. stainless steel segments for lane treating capabilities. Corona treatment is necessary on the diaper films to provide good adhesion for the adhesive

tapes that hold the diapers in place.

The Enercon station has four electrode assemblies. Two electrodes are located on each side of the treater roll, for treatment of either the A side or B side of the film. The way the film is threaded through the station determines which side is being treated. The 104-in. roll face provides a treat width up to 82 in. (2,083 mm). An Enercon 5 kW, Series 2000 power supply equipped with watt density control and computer interface, powers the system.

According to Interpak, the Enercon equipment has proven to be very dependable. It reportedly runs well all the time, with no downtime, which is important in this 24 hours a day, seven days a week operation.

Excerpted from CONVERTING MAGAZINE, March, 1999

Donatas Satas Remembered

by David Markgraf, Vice President, Sales and Marketing

On September 3rd of this year the converting industry suffered a great loss with the passing of Don Satas. Don was a consultant specializing in adhesives and coating technology, and had made many contributions to the field.

I personally had the pleasure of working with him on several of the publications that he both authored and edited, including the "Handbook of Pressure Sensitive Adhesive Technology," which has a

prominent position in its field.

Satas served as an independent consultant for his own company, Satas & Associates, for almost 25 years. He also held 12 U.S. patents and several foreign patents.

His range of activities, society memberships and experience was vast, and he will be missed by all who knew him. However, his memory will remain through his research and development that has helped to expand his field.

At Work For You, continued

along with drawings and schematics to facilitate problem resolution in the field available online. This has already proved extremely helpful to both our international and domestic customers.

We also offer preventative maintenance services for customers whose equipment is out of warranty. This service involves a complete inspection of the equipment, performance of any required repairs or maintenance, operator and maintenance training, and development of routine maintenance protocol with spare parts recommendations. We provide this service at a 20% discount from our standard service rates plus travel and living expenses.

To find out more about how our Customer Service Program can work for you, please contact Ted Cox or Paul Reed at 262-255-6070.



1999/2000 SCHEDULE OF EVENTS

<u>SHOW/CONFERENCE LOCATION</u>	<u>DATE</u>	<u>FACILITY/BOOTH PRODUCT</u>
Flexo Printing Seminar (contact Lisa Topp at Enercon for information)	February 10, 2000	Location TBA Arlington, TX
InfoFlex 2000	March 12-15, 2000	Orlando, FL
FFTA Forum	March 12-15, 2000	Orlando, FL The Dolphin Hotel
PaPro/Drupa	May 18-31, 2000	Dusseldorf, Germany
Symposium		
TAPPI (for more information, visit www.tappi.org)		
PLC Film Extrusion Short Course	January 19-21, 2000	Los Angeles, CA
PLC Extrusion Coating Short Course	February 21-23, 2000	San Antonio, TX
Mid-Year Conference	February 24, 2000	San Antonio, TX
PLC Trouble Shooting for Flexible Packaging	May 2-4, 2000	Chicago, IL

The number you have dialed, 414... Has been changed to 262...

Effective as of Sept. 25, 1999, Enercon's area code has been changed to 262.
Please make note of this change.