

Web Drying Systems



The ETTER Engineering proprietary **High Velocity Air Drying Systems** utilize an unique Twin Vortex design which provides higher line speeds, better quality, and reduced maintenance. ETTER specializes in custom designs to meet your specific application requirements. In addition to being designed, built, and engineered in order to fit precisely with the equipment on new presses, ETTER can also design for retrofit applications to upgrade existing presses and coaters. Our systems are ideal for both water and solvent based inks and coatings. The ETTER High Velocity Air Drying System can reduce the maintenance required on your system as well as improve printing on paper, film and foils with higher line speeds.



Benefits of the ETTER Web Scrubber Design:

- Reduced maintenance with non-clogging nozzle design
- Ideal for solvent to water conversions
- Increases of over 100% line speed achieved
- Custom designed to your specific needs

Our System Capabilities Include:

- Flexo and Gravure Presses
- Infra Red Drying Capabilities
- Stack and C.I. Presses
- Web Widths from 6" to 150"
- In Line Presses
- Overhead Tunnel Dryers
- Coaters
- Multi-Station Coaters

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

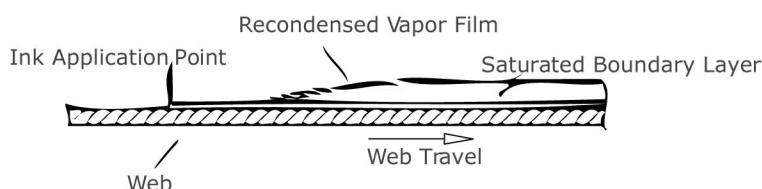
THIRD ANGLE PROJECTION

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CLIENT	ACME HEX FILES	for	MEMPHIS PLANT #2	DESIGN	DATE	BY
DESCRIPTION	DRYING SYSTEM FOR COATING LINE #7	DRAWN		CHECKED		
DRAWING NO.	1268-M-04-01	REV		RELEASED		
SHEET	1	OF	X	SCALE	NTS	

ETTER ENGINEERING Co., INC.
210 CENTURY DR. BRISTOL, CT 06010
TEL: 860-584-8842
www.etterengineering.com

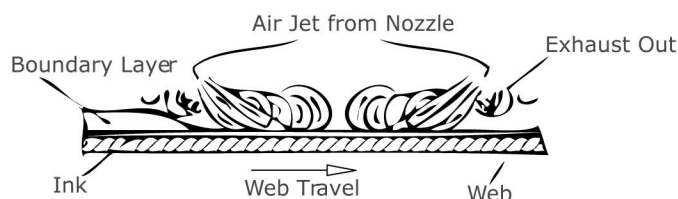
The Drying Problem:



In simplified terms, web drying involves removing a liquid carrier, either water or solvent, while retaining solids on the web. Unless external energy is applied, some of the evaporated carrier will recondense just above the web, forming a vapor boundary layer that is 100% saturated. This layer acts as a wall inhibiting any further evaporation of the carrier. This tight boundary layer actually travels with the web at almost line speed, and remains difficult to penetrate.

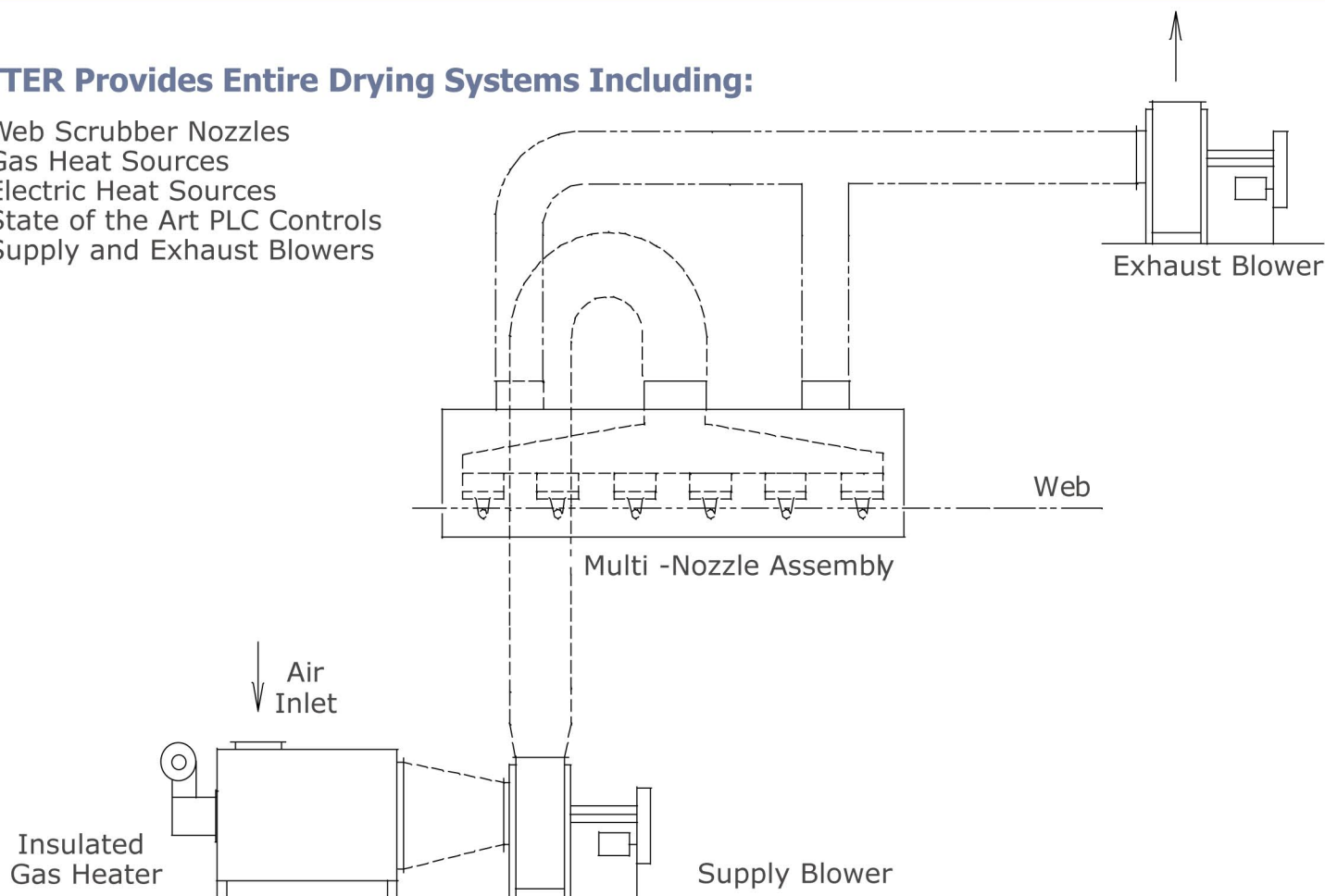
The Drying Solution:

To penetrate the boundary layer, high volume, high velocity turbulent air is utilized. Air velocity at the substrate surface should be in the turbulent range in order to maximize drying efficiency. The proprietary ETTER web Scrubber Drying Nozzle utilizes an airflow pattern that is virtually parallel to the surface. This eliminates coating disturbances, and captures evaporating vapor prior to it recondensing. While heating the air dramatically accelerates the vaporization process, proper exhaust design is just as crucial to remove the unwanted vapor.



ETTER Provides Entire Drying Systems Including:

- Web Scrubber Nozzles
- Gas Heat Sources
- Electric Heat Sources
- State of the Art PLC Controls
- Supply and Exhaust Blowers



Let ETTER help you optimize your existing system or build you a new efficient one!

