Web Handling & Converting Course
March 3-4, 2008

Winding Operations Course
March 5-6, 2008

Holiday Inn Riverwalk, Neenah
Neenah, Wisconsin USA

Past Participants Have Said:
“Now I’ll be able to...
...troubleshoot wrinkle and baggy edge issues;
...reduce downgrade/wrinkle;
...assist in troubleshooting quality and runnability issues that affect production and waste;
...reduce waste on the winder by eliminating wrinkles;
...improve roll formation;
...design a prevention method regarding roll defects for our customers”

• Increase your problem solving skills through team activities and practical problem-solving exercises
• Get personalized answers to specific questions and operating situations
Web Handling & Converting Course

Attend this two-day course and discover how to:
- Minimize waste and maximize productivity by effectively moving webs through the machines
- Eliminate wrinkling by alignment and spreading
- Achieve increased production volume due to less downtime and quality losses
- Impact the bottom line immediately by utilizing the tools, knowledge, and a shared understanding of web handling

Save Time and Money by Effectively Diagnosing and Treating:
- Baggy Webs
- Web Breaks
- Tension and Drive
- Wrinkles
- Wound Roll Defects
- Problems

Course Overview
Web Handling and Converting teaches the "must-know" areas of web handling, including tension control, nips, roller design, spreading and wrinkling. The Course can equip you with the tools, knowledge, and a shared understanding to immediately improve the bottom line and help you improve quality and reduce waste. In addition to important converting related topics such as slitting and winding, the course also covers the physics of how web machinery operates. Though theory is included, the emphasis is placed on practical problem-solving techniques. This popular and informative course is highly-rated and has been attended by more than 1,600 students.

Learning Outcomes
After successfully completing this course, participants should be able to:
- Identify the rules governing the path of a web
- Identify the design and maintenance requirements for rollers
- Determine the best tension setting and methods for controlling tension
- Identify maintenance and web quality issues related to nip uniformity
- Explain how moisture affects webs
- Explain why wrinkles are formed and how they can be prevented to reduce waste
- Identify methods of spreading and their application
- Identify methods for guiding and their application
- Identify methods for slitting and their application
- Identify methods of winding and be able to troubleshoot wound roll defects

Who Should Attend?
Anyone working with web machinery can benefit from this unique course. The physics of web handling are applicable to any of the web industries such as paper, film, and nonwovens. The course is vital to manufacturers and converters of web products and also to machine builders, component suppliers, and material suppliers. Those who will benefit most include:
- Mill/Plant Engineers
- Maintenance Engineers and Lead Operators
- Process/Product Engineers
- Process/Product Designers
- Quality Assurance Personnel
- Sales/Service Personnel
- Component and Material Suppliers
- Technical Managers/Engineers/Technologists

Preliminary Course Schedule
Monday, March 3, 2008
8:00am - 5:00pm
- Web Handling: Laws governing web behavior
- Rollers: The foundation of web processes
- Tension: Setpoints, draw, dancer and load cell control
- Nips: Calendering, Laminating, Winding, etc.
- Moisture and Temperature effects on webs and rolls

Tuesday, March 4, 2008
8:00am - 5:00pm
- Wrinkling: Diagnosing and preventing wrinkles
- Spreading: For widening, slit separation and preventing wrinkles
- Guiding: Passive, unwind, rewind, steering, and displacement
- Slitting: Razor, Laser, Log Saw, Score, Shear, Waterjet
- Winding: How to wind a good roll

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Attend this two-day course and discover how to:

- Maximize winder throughput through human engineering and automation
- Troubleshoot wound roll stresses and defects
- Improve winder operation through improving the mechanical design and maintenance of your machines

Who Should Attend?
The course is vital to manufacturers and converters of web products as well as machine builders. Those who will benefit most include:

- Maintenance Engineers
- Lead Winder Operators
- Process Engineers
- Product Engineers
- Process/Product Designers
- Machine Designers
- Machine Builders
- Managers, Supervisors and Foremen
- Technical Managers/Engineers

Course Overview
Winding Operations will help you understand the winding literature, read between the lines and then go beyond to prevent or solve real problems on your products and machines. On day one, the very basics, such as the objectives of winding and winder options, will be reviewed and then we will proceed to winder machine mechanical and control details. On day two, winding theory, roll quality measurement techniques, and roll defect analysis will be addressed.

Learning Outcomes
After successfully completing this course, participants should be able to:

- Identify the TNT’s which control wound roll tightness
- Describe how fiber cores are made and how they might be held by cores or chucks
- Identify the classes and arrangements of winders commonly used
- List electrical and mechanical maintenance concerns
- Describe ways of improving productivity
- Describe the stresses in a wound roll
- Identify wound roll defects
- List methods for wound roll quality measurements

Preliminary Course Schedule

**Wednesday, March 5, 2008**
8:00am - 5:00pm

- Winding controls for roll tightness
- Cores
- Winder arrangements
- Mechanical Design and Maintenance: How mechanicals affect winder operation
- Electrical Design and Maintenance: How controls affect winder operation
- Productivity - How to maximize winder throughput through human engineering and automation

**Thursday, March 6, 2008**
8:00am - 5:00pm

- Theory: Mechanics of winding
- Diagnosing and treating wound roll defects
- Wound roll quality measurement and inspection

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Dr. David Roisum - Course Instructor for Both Courses

Dr. Roisum is a well-known authority in the area of web handling and converting. He has authored eight books published through TAPPI PRESS which include Winding, Rollers and Web Handling. His newest books include Winding Machines, Models and Measurements co-authored with Dr Keith Good and Web and Roll Defect Terminology book compiled by Duane Smith, both of which are must-haves for anyone serious about winding or defects. Additionally, he has written more than 200 articles, conference papers and other publications. He has been a technical editor for Converting Magazine with a monthly column entitled Web Works since 1994. Dr. Roisum was elected TAPPI Fellow in 2003. Dave has a variety of industrial employments including machine designer and manager of R&D for a web machine builder and corporate converting expert for a Fortune 100 web company. He is now a principal of Finishing Technologies Inc., providing consulting services to manufacturers and converters of paper, film, nonwovens and other web materials. His experience has brought him into nearly 1,000 plants.
General Course and Registration Information

CEUs
The Education Project Center of TAPPI has been reviewed and approved as an Authorized Provider by the International Association for Continuing Education and Training (IACET), 1620 I Street, NW, Suite 615, Washington, DC 20006. TAPPI will award 1.5 CEUs for each course to participants who attend at least 80% of the educational sessions and complete a final program evaluation.

Registration
Save by registering early! Fees are $995 for TAPPI members and $1495 for nonmembers attending one course who register by February 15, 2008. After February 15, fees are $1660 for TAPPI Members and $2490 for nonmembers attending one course.

Attend Both Courses and save. Fees are $1690 to attend both courses if registered by February 15, 2008. After February 15, the fee is $2540 to attend both courses.

Team Discounts
Bring a Team and save even more! Receive an additional discount by having three or more register together from the same company. Multiple registrant fees are $745 each for TAPPI members and $1120 for nonmembers registered by February 15, 2008, after that date, Multiple Registrant fees are $1410 for members and $2115 for nonmembers.

For more information or to register by phone, call TAPPI’s Registration Line at 1.800.332.8686 (US) 1.800.446.9431 (Canada) or +1.770.446.1400 (Worldwide). You can also fax your form to: +1.770.209.7206 or mail it to TAPPI, P.O. Box 933644, Atlanta, GA 31193-3644, USA.

Hotel Information
Holiday Inn Riverwalk, Neenah
123 East Wisconsin Avenue
Neenah, WI 54956 USA
+1.920.725.8441

Be sure to reserve your room by February 15, 2008 and mention that you are part of the TAPPI event to take advantage of TAPPI's special room rate of $89 single/double.

Airfare
**Delta** Delta is the official airline for all TAPPI events. For Special Rates, book your flight online at the course webpage at www.tappi.org. Simply scroll to the bottom of the webpage and click on the Delta Logo.

Car Rental
Both Hertz and Avis offer discounted car rental rates to course participants.

AVIS Avis offers special discounts off regular rates for course participants. To reserve your car, call 1.800.831.8000 and refer to the code AWD: #U226600.

Hertz Save $5 a day up to $25 off your rental car during the course. This special offer is valid one week before through one week after the March 3-6, 2008 course dates. Make your reservations on line at www.hertz.com using your CDP #1752380 and Promotional Code #105825. Or, call 1.800.654.2210 in the U.S.

General Information and Guarantee
Expenses for continuing education taken to maintain or improve professional skills may be tax deductible. Certain restrictions apply. Check with your accountant for details.

At TAPPI, we stand behind the quality of our courses. If you are not completely satisfied that the course delivered what was promised, we will refund your registration fee.

Cancellations
If you find that you have to cancel, your full registration fee will be refunded if TAPPI's Registration Department receives written notification (fax acceptable at +1.770.446.6947 by February 15, 2008). Please note: There will be a 50% refund for all written cancellations made after (February 15, 2008) but no later than 5 business days prior to the start of the conference (February 25, 2008). Understandably, after this time, no refunds can be issued. Substitutions, however, will be accepted any time without a penalty.
Registration Form

GENERAL INFORMATION (Please print or type)

Please circle: Mr. Ms. Mrs. Dr. Sr. Jr.

First Name ___________________________ MI ______ Last Name ___________________________

TAPPI Member # __________________________ Badge Name ___________________________

Title ___________________________ Company Name/Division ___________________________

Company Address ___________________________ City ______ State/Province _______ Zip/Postal Code ______ Country ___________

Telephone ___________________________ Fax ___________________________ Email ___________________________

Is this the first TAPPI event you have attended? □ yes □ no

REGISTRATION FEE (check only one)

Early Bird Discount After 2/13/08

□ Individual TAPPI Members US$995 US$1660

□ Non-member US$1495 US$2490

□ Multiple Registrants

3 or more members before 2/15/08* US$745 US$1410

3 or more members before 2/15/08* US$1120 US$2115

TAPPI Membership Fee

□ Renew my membership (12 months) US$174

□ Join TAPPI now US$174

*Must fax in all registration forms at same time

PAYMENT

(All fees are in US dollars and must accompany registration)

□ Payments by check: Endorsed is check number _________ for the full amount of $ _________

(Make checks payable to TAPPI, check must be in US dollars.)

Please mail check to:

TAPPI, P.O. Box 933644
Atlanta, GA 31193-3644, USA

□ Payment by Credit Card: Date of Wire _______ Amount $ _________

□ Payment by Wire Transfer: Date of Wire _______ Amount $ _________

Attend Both Courses and SAVE!

Individual attending both US$1690 US$2115

TAPPI Membership Fee

□ Renew my membership (12 months) US$174

□ Join TAPPI now US$174

*Must fax in all registration forms at same time

1. WHAT TYPE OF COMPANY DO YOU WORK FOR? (choose only one)

□ Pulp and Paper/Paperboard Manufacturing (1)

□ Paperboard Packaging Independent Converting Plant (4AD)

□ Paperboard Packaging Independent Converting Plant (4AC)

□ Paperboard Packaging Headquarters (4AH)

□ Independent Consultant: Engineering, Technical Production or Research (2)

□ Manufacturer of Machinery, Equipment, Chemicals or Supplies (7)

□ Woodlands Operation (3)

□ Flexible Packaging Converting Plant (4BO)

□ Flexible Packaging Headquarters (4BH)

□ Dealer or Distributor of Supplies (8)

□ University Professor (9A)

□ Full Time Student (9B)

□ University Library (9C)

□ Press (10A)

□ Library (10B)

□ Government (10D)

□ Nonwovens (14)

□ Allied to the Industry (12)

□ Industry Customer (End User) (16)

2. WHAT IS YOUR PRIMARY JOB FUNCTION? (check one)

□ Libraries – Corporate (A)

□ Corporate Management (B)

□ Production (C)

□ Technical/Research & Development (D)

□ Engineering (E)

□ Purchasing (F)

□ Marketing & Sales (G)

□ Traffic & Shipping (H)

□ Marketing/Graphic Arts (I)

□ Technical Production or Research (2)

□ Access to new technology

□ Networking/Peer Interactions

□ Program Content

□ Access to new technology

□ Travel Costs

□ Meeting Location

□ Access to customers

□ Networking/Peer Interactions

3. WHAT IS YOUR PRIMARY INDUSTRY? (check one)

□ Pulp Mill Only (P)

□ Technical/R&D Facility/Headquarters (H)

□ Paper/Paperboard Mill Only (P)

□ Independent Operations or Converting Plant (Q)

□ Integrated Pulp/Paper/Paperboard Mill (D)

□ Woodlands Operation (3)

□ Marketing/Graphic Arts (I)

□ Technical/R&D Facility/Headquarters (H)

□ Industry Customer (End User) (16)

3. WHAT IS YOUR PRIMARY INDUSTRY? (check one)

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□ Paper/Paperboard Mill Only (Q)

□ Independent Operations or Converting Plant (Q)

□ Integrated Pulp/Paper/Paperboard Mill (D)

□ Paper/Paperboard Mill Only (P)

□ Woodlands Operation (3)

□ Marketing/Graphic Arts (I)

□ Technical/R&D Facility/Headquarters (H)

□ Industry Customer (End User) (16)

4. HOW DID YOU HEAR ABOUT THE COURSE? (check one)

□ Tappi.org website

□ Email

□ Brochure

□ Newsletter

□ Colleague/Co-worker

□ Other

5. WHEN CHOOSING A COURSE THE MOST IMPORTANT FACTOR TO ME IS:

□ Registration Fee

□ Program Content

□ Access to new technology

□ Travel Costs

□ Meeting Location

□ Access to customers

□ Networking/Peer Interactions

□ Registration Fee

□ Program Content

□ Access to new technology

□ Travel Costs

□ Meeting Location

□ Access to customers

□ Networking/Peer Interactions

The contact information you provide may be used by TAPPI or its business associates to notify you of items that may be of interest to you. I understand that under certain laws and regulations, TAPPI must have written permission in order to communicate with me via fax or e-mail. I hereby give TAPPI, TAPPI’s business associates, the TAPPI Foundation, and TAPPI’s Local Sections written permission to communicate with me via fax and/or e-mail.

Signature/Date

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Photocopy this form as necessary for multiple registrants.
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