



Paperbase Alerting Service Sample

Finishing

00001

PI: 20202302 JA: 0202

TI: Mohawk improves competitive position with cutting-edge converting technology

AU: Donner M

JN: Pulp Pap. \$IS=0033-4081

CI: vol. 75, no. 9, Sept. 2001, pp 39-42 (C, K, P, S)

CT: AUTOMATION/ BAR CODE/ COMPANY INFORMATION/ CONVERTING/ INSTALLATION/ LABELLING/ SHEETING EQUIPMENT/ TECHNOLOGY/ WINDING/

CN: Mohawk Paper Mills

AB: Mohawk Paper Mills is a family owned company which has two small mills in the Hudson River valley in New York, USA. The company specialises in digital papers and spent over USD80m on rebuilding the paper machine at Cohoes, NY. Due to bottlenecks in converting, a separate business unit, Mohawk Speciality Converting Services was set up. By mid August 2000, a new converting system was operating on a site near the Cohoes mill. This uses the German-made Bielomatik P26-02 Sheeter, a direct drive cut size machine and its CSW100 wrapper. There are four unwind backstands, which can take 60in rolls. They supply a 56in web, centred using Bielomatik's optical edge guiding system. The decurler section ensures proper slitting and cutting. After cutting the paper is sorted using a six-pocket collector and separator. Sheets are counted electronically and any defects detected photoelectrically. A Pago automated bar code and labelling system is used. The finished reams move to an automated cartoniser. The new system has resulted in a 400% increase in converting capacity and it can do 60,000-70,000lb/shift. Mohawk can deliver any in stock order to anywhere in USA within three days.

SO: B

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PI: 20202381 JA: 0202

TI: Big reels keep on turning

AU: Karske M

JN: Griffin \$IS=1239-4645

CI: no. 2, 2000, pp 30-31 (K, P)

CT: COMPANY INFORMATION/ JUMBO ROLL/ LOGISTICS/ PAPER INDUSTRY/
REEL/ TRANSPORT/ WOUND ROLL/

CN: UPM-Kymmene

AB: UPM-Kymmene has developed a solution to the transportation of wide paper reels in a standing position, with minimal handling. The new method is based on flat transportation loaders 2.45m wide by 6m long, like those used in sea containers. Loading at port is by top lifters with extra equipment fitted for handling the flats. The number of handling operations, and use of fork lift trucks, are considerably reduced, preventing reel distortion and edge damage. Semitrailers designed as part of the system can deliver reels up to 4m wide and 1.50m diameter in a standing position. The need for such a system will become more crucial as even wider and bigger reels are developed. A new type of reach clamp truck is envisaged by Printing Papers Logistics to cope with the increased reel sizes.

SO: B

00003

PI: 20202382 JA: 0202

TI: Superwide reels

AU: Makinen J

JN: Griffin \$IS=1239-4645

CI: no. 2, 2000, pp 32-35 (K, P)

CT: CUSHIONING/ REEL/ ROLL HANDLING/ STORAGE/ WIDTH/ WINDER/ WINDING/
WRAPPING/

AB: Efficient use of superwide reels requires successful winding, handling, transportation and escorting to the press. A case study is presented which follows a superwide reel from UPM's Jamsankoski mill to a printing press at Darmstadt, Germany. At Jamsankoski, a new high capacity WinRoll winder with automatic functions produces high quality reels from 400-4,000m wide. The extra heavy superwide reel is guided through the handling system together with other reels. Special equipment is installed at every step and cushion stops prevent back bouncing, cuts and slackening. The wrapping process at the paper mill plays a key role throughout the logistic chain. Most reels from Jamsankoski travel standing on rail wagons, followed by a 36h sea voyage, then another rail wagon or trailer. UPM-Kymmene, DB and VR, a Finnish railway operator, have devised a flat design transportation system where each reel is loaded and unloaded just once. The ASV Darmstadt operation features automatic unwrapping before preparation for splicing. Careful handling throughout each stage ensures trouble free performance at the flying splice.

SO: B

00004

PI: 20202429 JA: 0202

TI: Improvement of the cutting quality and increase of the service life of circular knives

AU: Reimann S

JN: Wochenbl. Papierfabr. \$IS=0043-7131

CI: vol. 129, no. 19, mid Oct. 2001, pp 1252, 1254, 1256-1258, 1260-1262, 1265-1267
(C, K, P, S)

CT: ANGLE/ CUTTER/ DEFECT/ SERVICE LIFE/ SHARPENING/ SLITTER/ SLITTING/
SURFACE TREATMENT/

AB: A new Jagenberg Papiertechnik GmbH manual discusses and illustrates the operating principles of shear cut slitters using disk blades. A check list enables operators to ensure optimum set up conditions. Parameters determining the quality of cut include the axial and radial positioning of the blades with respect to each other, as well as that of the web supporting rollers before and behind the blade assembly. A blade overlap of 1.0-1.5mm is recommended for paper, and 1.5-2.0mm for board slitting, with a 30-45 deg blade angle for single web and a 15-30 deg angle for multiple web slitting. High speed grinding should be avoided when reconditioning blades since excess temperatures can damage blade surfaces. Jagenberg's new plasma ion implantation process improves wear resistance resulting in longer service life for slitter blades. Implanted Blue Slit blades improve slitting quality and reduce dust. (9 fig, 2 tab)

SO: B

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PI: 20202453 JA: 0202

TI: Behaviour of a paper web in a set of rollers: coefficients of friction and micro-strains

AU: Rous J C; Baudin G

CI: Advances in printing science and technology volume 27: advances in paper and board performance: proceedings of the 27th research conference of IARIGAI, 10-13 Sept. 2000, Graz, Austria, pp 185-201 <Leatherhead, UK: Pira International, 2001, 263pp, GBP95.00 (ISBN 1858024382)> (C, K, P, S)

CT: CONFERENCE/ LABORATORY EXPERIMENT/ MATHEMATICAL MODEL/ PAPER PROPERTIES/ ROLL/ WINDING/

CN: IARIGAI; Pira International

AB: A laboratory device simulating an unwinding/winding process has been built to simulate physical phenomena between a paper web and a set of rollers. A theoretical model was used to determine the sliding friction coefficient between the web and the rollers. A pilot machine consisting of five rollers was used to study wrap angle, smoothness of roll surface and width of web. The smoother the roller surface, the smaller the sliding friction coefficient. The experimental values correlated with the theoretical expectations of Bradenburg's approach. A Moire technique plus image analysis was applied to the detection of micro strains in a wrapped web under tension and in contact with a roller surface. The results indicated the existence of two arcs: an adherence arc with constant displacement of the paper web and a sliding arc having increasing displacement. (10 fig, 4 tab, 4 ref)

SO: B

00006

PI: 20202797 JA: 0202

TI: Handling systems on a roll

AU: Harris A

JN: Converter \$IS=0010-8189

CI: vol. 38, no. 10, Oct. 2001, pp 18, 21 (K, P, S)

CT: AUTOMATED GUIDED VEHICLE/ FINISHING/ HEALTH/ ROLL HANDLING/ ROLL

WRAPPING/ SAFETY/

AB: Demand for handling equipment worldwide is predicted to reach USD22bn by 2002, according to a report by the Freedonia Group, USA. Automated systems assist productivity, improve safety and protect products from damage due to incorrect handling. The UK government has outlined targets to reduce deaths and major injuries by 10% by 2010 and working days lost through health and safety failure by 30%. The selection of materials handling systems therefore requires careful thought. One area of concern has been highlighted by the UK Royal Society for the Prevention of Accidents (ROSPA) is musculoskeletal injuries such as back problems caused by work. Companies supplying material handling systems include Schlumpf, Switzerland which has introduced a range of 11 hoists and portable handling systems and Kluin Romak provides four shaft handling systems. Rocla has produced laser guided vehicle systems which minimise the risk of product damage through smooth roll handling and offer real time product tracking when connected to a production management system. Roll wrapping is best carried out with liner based materials with a vapour barrier. Roll management requires an accurate identification system, typically using a barcode carrier tag.

SO: B

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PI: 20203089 JA: 0202

TI: Materials handling systems for wound rolls: a comparison

AU: Heptner K

JN: Wochenbl. Papierfabr. \$IS=0043-7131

CI: vol. 129, no. 20, end Oct. 2001, pp 1352-1354 (C, K, P, S)

CT: CONVEYING/ MATERIALS HANDLING/ STORAGE/ WOUND ROLL/

AB: Semi-finished paper and board products include hard and soft materials in a range of roll diameters, lengths and weights. There is a wide choice of manual and automatic equipment for the in-plant transport, handling and storage of such rolls, designed to avoid any risk of damage that would adversely affect downstream processing. Its selection should be based on an appraisal of the specific requirements of individual cases. Storage systems with a 300tpd throughput can expect a 1.5% damage rate for manually handled storage compared with a 0.5% rate for automated storage. For products selling at USD800/t automation would save USD876,000/y. (4 fig)

SO: B

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PI: 20203090 JA: 0202

TI: Use of a mobile terminal for identification of wound rolls and pallets in the warehouse

AU: Dieckmann U; Douma J

JN: Wochenbl. Papierfabr. \$IS=0043-7131

CI: vol. 129, no. 20, end Oct. 2001, pp 1355-1356 (C, K, P, S)

CT: BAR CODE/ DELIVERY/ IDENTIFICATION/ INFORMATION SYSTEM/ LOGISTICS/ PORTABLE EQUIPMENT/ STORAGE/

AB: Cartonboard producer Cascades Arnsberg GmbH has introduced a barcode labelling system to identify individual product rolls. The system ensures the right product is shipped to the right customer at the right time. Barcode data are read using Hand Held Products' mobile Dolphin 7200 scanners. These have a maximum 10MB data storage

capacity and can read data at distances up to 6m. Prior to shipment the data are transferred to a Dolphin terminal in the delivery vehicle. (2 fig)
SO: B

00009

PI: 20203165 JA: 0202

TI: "Soft" shear cut for soft paper without dust

AU: Anon

JN: Ind. Carta \$IS=0019-7548

CI: vol. 39, no. 2, Apr. 2001, p. 97 (C, K, S)

CT: BLADE/ CUTTING/ DUST CONTROL/ SLITTER/ SLITTING/ TISSUE PAPER/

CN: Elio Cavagna

AB: The Italian manufacturer, Elio Cavagna makes the pneumatically driven 'HELIOS soft-cut' blade carriages which are ideal for cutting tissue paper used for decorative purposes. Using these longitudinal cutting units does not produce dust, and they have lower blade replacement costs. Productivity increases as less downtime is needed to replace blades. Elio Cavagna can also supply complete cutting units for winding machines and can update existing piano cutters. The company can help with cutting equipment for non paper material.

SO: B

00010

PI: 20203195 JA: 0202

TI: "Terminal velocity": is this all about nonwovens?

AU: Celli A

CI: INTC 2001 - International Nonwovens Technical Conference, Baltimore, MD, USA, 5-7 Sept. 2001, 15pp <Atlanta, GA, USA: TAPPI Press, 2001, USD175.00, CD-Rom> (K, P, S)

CT: CONFERENCE/ NEW TECHNOLOGY/ NONWOVEN INDUSTRY/ SLITTER/ WINDER/

CN: Association of the Nonwoven Fabrics Industry; TAPPI

AB: Automated, integrated, efficient, innovative fast technology with regard to winding and handling will enable a company to gain competitive advantage. The processing speed of drylaid, air laid, spunlaced and spunlamin machinery is increasing. The R and D department at A. Celli in conjunction with the University of Pisa Engineering Department have developed an innovative Super System including defect detection system; new inline non slitting winder having patent pending; and revolutionary Super slitter rewinder covered by four patents. Other features include fully automatic shaft and core handling system, and finished reels labelling and packing station. All components have proven integrated turn key installation. A new super winder has operating speeds of up to 1,000m/min and a Super slitter rewinder has operating speeds up to 2,000m/min; and a cycle time of less than 1min. The Super winder and Super slitter rewinder both feature monitoring and controlling for tension, nip and torque; flexibility to store and recall working parameters and defects detection and communication.

SO: B

00011

PI: 20203210 JA: 0202

TI: Interaction of liquid sprays with nonwovens

AU: Xuemin Chen; Kamath Y K

CI: INTC 2001 - International Nonwovens Technical Conference, Baltimore, MD, USA, 5-7 Sept. 2001, 10pp <Atlanta, GA, USA: TAPPI Press, 2001, USD175.00, CD-Rom> (K, P, S)

CT: CONFERENCE/ NEWTONIAN FLUID/ NONWOVEN INDUSTRY/ SILICONE/ SPUNBONDED NONWOVEN/ SURFACE PROPERTIES/ WETTING/

CN: Association of the Nonwoven Fabrics Industry; TAPPI

AB: Experiments have been conducted into the interaction of simple Newtonian liquids on a spunbonded polypropylene (PP) nonwoven. The interaction of wetting and nonwetting liquids with untreated spunbond PP nonwoven was examined using an imaging system comprising a high speed digital camera and video zoom lens, image acquisition board and fibre mounting assembly. The computer program was developed to display images on screen in real time and acquire and store them on hard drive. The surface of the fabric comprised two distinct regions: one fibrous and then other a relatively smooth thermally bonded region. Each region had a different response on contact with liquids. Wetting liquids accumulated in fibrous regions by spreading whilst bonded regions were devoid of liquid. Liquid formed islands in areas of high fibre density due to pinning. The uniformity of fibre density in nonwovens is therefore important. For non wetting liquids, there was preferential coalescence in bonded regions whilst smaller droplets occluded among fibres in fibrous regions. Evaporation of imbibed liquid was slower due to the lower surface area. (8 fig, 2 ref)

SO: B

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PI: 20203283 JA: 0202

TI: In the reel: news of cores, chucks and shafts

AU: Anon

JN: Converting Today \$IS=0264-715X

CI: vol. 15, no. 10, Nov. 2001, pp 33-34, 36 (P)

CT: CHUCK/ NEW EQUIPMENT/ REEL/ WINDING/

AB: The new Con-Ex Series shaft from Rimor is said to provide high reel weight carrying capacity, whilst still achieving a low overall shaft weight. Gripping is by continuous rubber slips, which the company claims makes it ideal for both continuous core and multi-slit applications. Schlumpf offers a range of new and enhanced products, including the QuickGrip range of torque activated mechanical core chucks, SF mechanically expanding mandrels and shafts, SDE-LT leaf type pneumatic concentric core chucks, and SDE-SF mechanically concentric core chucks. Rexam Medical Packaging has installed a fourth set of Elite Cameron's patented differential airshafts, which have resulted in significant production improvements. Svecom claims that its 640/PI airshaft's aluminium ergal construction is superior to others, and says that it centres cores and runs faster; holds more weight; has greater gripping power; achieves greater expansion; and is easier to repair than any other shaft. (2 fig)

SO: B

00013

PI: 20203529 JA: 0202

TI: THC expands into foreign markets

AU: Anon

JN: Papel (Spain) \$IS=

CI: no. 85, June - July 2000, pp XIX-XXIen; pp 28-30es (C, K)

CT: COMPANY INFORMATION/ CONVEYOR/ MATERIALS HANDLING/ STORAGE/ SUPPLIER/ WOUND ROLL/

CN: Talleres Hermanos Carrascosa

AB: Talleres Hermanos Carrascosa (THC) is a small family run business in Spain, with 75 years of tradition and experience, currently dedicating 50% of its human and technical resources to maintenance and repairs for the paper industry. At the end of the 1980s a new generation took over, and THC introduced the design and manufacturing of end of line systems, specifically destined for the paper industry. The production installations have just been the object of major investment to improve the buildings and renovate the machinery. The company is presently implementing the startup of a complete bobbin conveying system for Omega Papier, which has recently started up a new tissue paper machine. THC's conveying system is designed for bobbins of up to 4.3t, with diameters between 1,150-2,500mm, being able to divide into two widths in the Pope Reel. There are three conveying lines: machine room, warehouse facility and converting room. THC has also developed a bobbin conveyor system that permits the winder to weigh and label the bobbins in an upright position as well as transporting them to the storeroom.

SO: B

00014

PI: 20203596 JA: 0202

TI: Spunlace nonwovens: upgrading by binder bonding and thermofusion

AU: Watzl A

CI: INTC 2001 - International Nonwovens Technical Conference, Baltimore, MD, USA, 5-7 Sept. 2001, 15pp <Atlanta, GA, USA: TAPPI Press, 2001, USD175.00, CD-Rom> (K, P, S)

CT: CONFERENCE/ FINISHING/ NONWOVEN INDUSTRY/ SPUNLACED NON-WOVEN/

CN: Association of the Nonwoven Fabrics Industry; TAPPI

AB: Spunlace products have the largest growth rate of all nonwovens. Spunlace nonwovens may be further finished or additionally bonded with regard to impregnation with chemical binders; finishing with chemicals; dyeing or printing; and thermofusion or heatsetting. Most compact design is installation of complete lines with inline finishing processes. There are also lines in operation that further bond the web inline after spunlacing and which include intermediate during stage. Parameters for layout of production lines can be evaluated by inline trials for all wet and dry finishing processes conducted with regard to fibre opening/blending, web formation with card, spunlacing with an Aquajet spunlace system, an impregnation process, through air drying/heatsetting and an automatic winder. Offline trials with preentangled nonwovens may be conducted for all liquid and foam impregnation methods and heatsetting processes. The Fleissner one drum dryer with adjustable or stationery needle rings has application for heatsetting processes of nonwovens that require material width to be controlled and shrinkage avoided whilst under temperature influence.

SO: B

00015

PI: 20203924 JA: 0203

TI: Challenges for the formation of wound rolls of offset printing paper of low grammage

AU: Ramis E; Corral O; Millar M

JN: Celul. Pap. (Chile) \$IS=0716-2308

CI: vol. 16, no. 2, May 2000, pp 30-32, 34, 36-37 (C, K, P, S)

CT: DEFECT/ GRAMMAGE/ OFFSET PAPER/ PRINTING PAPER/ WEB TENSION/
WINDER/ WINDING/ WOUND ROLL/

AB: The rapid development of colour offset technology to print magazines placed paper manufacturers under great pressure to switch to reels. However, the reels had many additional parameters of concern, such as the friction coefficient. The latter is largely dependent on the type of fibre used to produce the paper, as well as on the diameter of the rolls. A graphic model illustrates the limitation of the paper reels in terms of tear and wrinkle formation, in relation to backstanding tension, where a white zone defines the correct parameters. Two winding techniques are evaluated: a steel roll and a steel roll with a multidrive bicompression covering. (5 fig, 4 ref)

SO: B

00016

PI: 20205056 JA: 0203

TI: Laser guided loading system

AU: Holmquist J R

CI: 2001 IEEE annual pulp and paper industry technical conference, Portland, OR, USA, 18-22 June 2001, pp 31-36 <Piscataway, NJ, USA: IEEE Industry Applications Society, 2001, 246pp, USD150.00 (ISBN 0780367456)> (K, P, S)

CT: COMPANY INFORMATION/ CONFERENCE/ LASER/ LOADING/ NEWSPRINT/
ROLL HANDLING/ SHIP/

CN: IEEE Industry Applications Society

AB: Westwood Shipping Lines of Weyerhaeuser Co was encountering damage to paper rolls caused during the ship loading process, affecting roll quality and causing the rolls to be rejected by the customer. The rolls were made, stored in a warehouse in an upright position and handled by lifting from the top with a vacuum platen. It is however difficult for the crane operator accurately to gauge the position of the rolls on the hold floor. Various options were considered and it was decided to use lasers, mounted at specific angles. Two laser beams would converge at one point, preventing the operator from slamming the rolls on the bottom of the hold and into each other. Lasers were installed on the end of the frames to help the operator know how close the rolls were to the sides of the ship and to the other rolls. A modification of the system using six laser emitting lines was devised to overcome problems encountered when laser beams fell between the rolls as one set of rolls was placed above another. The project was very successful in reducing roll damage and has led to an increase in the speed of loading. (11 fig, 6 ref)

SO: B

00017

PI: 20205316 JA: 0203

TI: Winding: anthology of published papers

AU: Gronewold J; editor

CI: Atlanta, GA, USA: TAPPI Press, 2000, 383pp, USD74.10 (ISBN 1930657528) (C, K, P)

CT: DRIVE/ REEL/ ROLL/ WINDER/ WINDING/ WOUND ROLL/ WRINKLE/

CN: TAPPI Press

AB: Extraordinary progress has been made in winder development and the greatest progress in technological developments in winders has taken place in period 1970-2000. This was also the period of the most prolific writing and when the science of winding was born. The aim of publication is to allow easy access to the most fundamental papers and detailed information on winding. This anthology of technical references on the winding process is but a small fraction of the total number of papers available. Around 50% of the papers included in this collection were published after 1990.

SO: B

00018

PI: 20205320 JA: 0203

TI: Moving towards continuous production flow

AU: Farm L; Makinen J

JN: Fiber Pap. \$IS=1457-1234

CI: vol. 2, no. 4, 2000, pp 22-23 (C, K, P, S)

CT: AUTOMATION/ PROCESS CONTROL/ REEL/ ROLL HANDLING/ WINDING/

CN: Valmet

AB: Valmet's new inline solution, together with Continuous Winding and Continuous Roll Handling technology, fully automates the production flow from the reel to the conveyor system. Valmet's inline solution integrates the reel and the winder into one entity, maximising operational efficiency and saving space. Parent reel handling has been automated for optimum cycle time and easy operation. The transfer of parent reels and reel spools is performed by a synchronised transfer system, which is much safer than the conventional rail and crane system. OptiCart, a fully automated reel escort, is a key element of the inline solution. The Continuous Handling concept minimises the operators tasks, and not only handles roll ID barcode marking, but also automates the roll stream as it enters the roll handling system.

SO: B

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PI: 20205428 JA: 0203

TI: Optimizing winder performance

AU: Daul M

CI: 2001 Engineering finishing and converting conference, San Antonio, TX, USA, 16-20 Sept. 2001 (held 2-6 Dec. 2001), 12pp <Atlanta, GA, USA: TAPPI Press, 2001, USD90.00 (ISBN 1930657838)> (C, K, P, S)

CT: CONFERENCE/ MODERNISATION/ REEL CHANGE/ SLITTER/ TRIM WASTE/ WINDER/

CN: TAPPI Press

AB: The winder is an important production machine that affects the appearance and runnability of the paper mill's rolls. Winder optimisation starts in-house, with proper maintenance and attention. Particular attention should be paid to minor adjustments and small tasks that total up to capacity robbing time through the day, and ways to

minimise these tasks should be investigated. Reasons for optimising or upgrading a winder include capacity, roll quality, safety, manpower requirements, maintenance and component availability/obsolescence. There are a number of considerations in determining whether to upgrade an existing winder or to replace it. In some cases of grade change, the decision is clear, while in other situations, budgeted money or allocation of cost determines direction. Automation increases winder efficiency, increases capacity and increases winder safety. Safety must be a priority, and proper guarding, safety devices, mechanical latches and control interlocks must be integrated to the winder. The greatest improvement in capacity and safety can be achieved from the installation of automatic setchange. Performance can also be improved by installing or modernising automatic slitter positioning, slitter maintenance, trim removal, unwind and reel change, web spreading equipment, rider roll systems, control systems and drives. (12 fig)
SO: B

00020

PI: 20205440 JA: 0203

TI: General sheeter component overview and function

AU: Margarida T S

CI: 2001 Engineering finishing and converting conference, San Antonio, TX, USA, 16-20 Sept. 2001 (held 2-6 Dec. 2001), 11pp <Atlanta, GA, USA: TAPPI Press, 2001, USD90.00 (ISBN 1930657838)> (C, K, P, S)

CT: CONFERENCE/ MODERNISATION/ SHEETING EQUIPMENT/ TECHNOLOGY TRENDS/

CN: TAPPI Press

AB: Paper rolls arrive at the sheet finishing operation either by trucks, rail or clamp truck. The mode of transport of the rolls determines their condition when they reach the finishing equipment. Production gains from increased machine speed are limited by increased downtime. In the unwind section, the transition from shafted to shaftless rollstands has improved productivity and safety. The "mathematical" digressive brake system compares the speeds of the draw roll and paper roll to determine the diameter of the former. The brake pressure required to create a desired tension can then be calculated. A dancer tension system compensates for out of round rolls. Angle or bar type decurlers are typically used on uncoated papers or boards whilst for coated materials, a roller type is employed. Motorised stand shaft and automatic steering roll edge guiding systems have a good payback on installation. Non stop web splicers or flying splicers enable rolls to be changed without stopping the sheeter. Modern air loaded slitters mermit more accurate position and penetration adjustment. Modern cutters employ double rotary knives and servo drives. A matrix can be used to determine the return from upgrades or modernisation to converting equipment. (7 fig, 1 tab)

SO: B