**Pre-Press**

**Scanners**
- Chromograph S 3900 drum scanner.
- Primescan D 7100 vertical drum scanner.
- NexScan F 4200 high end flatbed scanner with copydot scanning / descreening facility for digitising.

**Workflow and software**
- Esko PackEdge workflow with personnel Automation engine, Plato, Power Trapper and 3D module for ensuring seamless production of packaging jobs.
- Engview system package designer for dieline creation.
- Kodak Prinergy workflow with pre-flight check, trapping & colour management. Preps and Pandora software for imposition and step & repeat operations.
- Kodak Insite Prepress portal for online job submission, soft proofing and web approval.
- Enfocus PitStop for PDF editing.
- Kodak Staccatto FM screening up to 10 micron.
- Kodak Spotless technology enables spot colours to be reproduced using process colours with a combination of CMYK plus Orange and Green inks instead of special colour inks for every job.
- Kodak rules based automation for automatic impositioning of pages by customers.
- GMG colour server - for colour space transformation.
- GMG Ink optimiser - for optimising incoming printing data to international standard profiles.
- Latest versions of Adobe Creative Cloud, QuarkXpress, and CorelDraw are available in Mac and PC versions.

**Computer to plate system (CTP)**
- Dainippon Screen - PT-R 8900 thermal plate setter with autoplate loader with a maximum throughput of 67 plates per hour at high resolution.
- Kodak Trendsetter 800 III Quantum thermal platesetter with square spot imaging and staccato (FM) screening. Maximum throughput of 40 plates per hour.
- Creo Trendsetter 800 II Quantum thermal platesetter with square spot imaging and staccato (FM) screening. Maximum throughput of 32 plates per hour.

**Sample Making**
- Zund sample cutter for preparing carton box samples and to cut blankets for online spot varnish or water base varnish.

**Digital proofing**
- GMG colour proof system - for Certified digital contract proofs to Fogra / Gracol standards.
- GMG proof control - Quality control software to verify and certify proofs to Fogra standards.
- Epson Stylus Pro 9890 and 9880 high resolution digital printers for contract proofing.
- Epson Stylus Pro 9700 digital printer for contract proofing.
- Epson Sure Colour T7200.
- Xerox A3 Phaser 7100 A3 colour printer.

**Computer to film / Conventional platemaking**
- Heidelberg Primesetter 102 - output size 72 x 102 cms.
- Theimer printing down frames (2).
- Eurografica plate baking oven (2).
- Glunz and Jenson plate processor.
- Kodak Polychrome plate processor.

**Digital printing**
- MGI ifoil for JETvarnish 3D with inline embossing and hot foil stamping.
- Xerox iGen 150 digital printing machine for colour printing. Maximum sheet size 36.4 x 66 cms.
- Xerox Nuvera 144 EA and 200 Tandem digital printing machines for black and white printing. Maximum sheet size 32 x 47 cms.
- Autoprint alpha numeric variable data printing machine
equipped with inline scoring and perforation for coupon production.

**Presses**

**Roto Gravure, Flexo, sheet-fed Gravure, web offset, sheet-fed offset and digital printing.**

**Omet Vary Flex 10 colour Flex with Inline Gold Foil, Hot Foil, Emboss, and Diecutting.**

- Gallus ICS 850 Rotary HD Flexo Staff of the 10 Colour Machine Equipped with Inline Lamination, Hot Stampine, Coldfoil, Inline Embossing and Diecutting.
- Gallus ICS 670 rotary gravure cum HD flexo state-of-the-art 13 colour machine equipped with inline lamination, roto screen, hotstamping, cold foil and inline high precision embossing with die-cutting facility.
- Moog 3-colour sheet-fed Gravure press for printing on paper, board, PVC sheets, foil board, etc. Maximum sheet size : 74 x 104 cms.
- Two, 4-colour MAN Roland Rotoman commercial heatset web offset presses for printing 2 formes of 16 pages or 1 forme of 32 pages in A4 size. Paper weights of 36 gsm to a maximum of 135 gsm. Maximum web width 96.5 cms with 63 cms cutoff. Both the machines are equipped with Muller Martini log and compensating stackers. Maximum speed of 65,000 copies per hour.
- MAN Roland Rotoman, 16 pages, 5-colour commercial heatset web offset press with 63 cms cutoff. Maximum web width 96.5 cms. Equipped with sheeter for higher grammage paper over 135 gsm or for special purpose without folding, re-moistening unit, double parallel and delta folds. Maximum speed of 60,000 copies per hour.
- Komori 8-colour (LS 840 P) for 4/4 and 8-colour straight printing with KMS - IV, KHS, auto register and fully automatic plate loading facility. Equipped with facility for waterless printing, CIP3 connection for ink zone value presetting and PDC’s quality control station. Maximum sheet size 72 x 103 cms.
- Heidelberg Speedmaster 8-colour (SM 102 8P CP2000) for 4/4 and 8-colour straight printing. Equipped with facility for waterless printing, automatic plate change, automatic feeder setting (preset). CIP3 connection for ink zone value presetting and Techkon SpectroDrive quality control station for inline density control and closed loop colour control. Maximum sheet size 72 x 102 cms.
- Heidelberg Speedmaster 8-colour (SM 102 8P) for 4/4 and 8-colour straight printing. Equipped with facility for waterless printing, automatic plate change, automatic feeder setting (preset). CIP3 connection for ink zone value presetting and Techkon SpectroDrive quality control station for inline density control and closed loop colour control. Maximum sheet size 72 x 102 cms.
- Heidelberg Speedmaster 8-colour (SM 102 8P) for conventional and UV printing with Inline coater for UV & water based varnish. Equipped with CIP3 for ink zone value presetting, fully automatic plate change and automatic non-stop system at the feeder and delivery. Prinect Axis Control system for matching colours to ISO standards and to maintain colour consistency throughout the print run at a maximum speed of 18,000 sheets per hour. Maximum sheet size 75 x 106 cms.
- KBA 6-colour (RAPIDA RA 106) for conventional and UV printing on paper, plastic and metallised foil board. Equipped with UV interdeck cassettes for online curing, additional drying tower, inline coating unit, auto register and fully automatic plate loading facility. Equipped with CIP3 connection for ink zone presetting and PDC’s quality control station. Maximum sheet size 75 x 106 cms.
- Komori 6-colour (LS 640) for conventional and UV printing on paper, plastic and metallised foil board. Equipped with UV interdeck cassettes for online curing, additional drying tower, inline coating unit, auto register and fully automatic plate loading facility. Equipped with CIP3 connection for ink zone presetting and PDC’s quality control station. Maximum sheet size 72 x 103 cms.
- Komori 5-colour (Lithrone 540) for conventional printing, UV printing and waterless printing. Equipped with UV interdeck cassettes for online curing, additional drying tower, inline coating unit, auto register and fully automatic plate loading facility. Equipped with CIP3 connection for ink zone presetting and PDC’s quality control station. Maximum sheet size 72 x 103 cms.
curing, inline coating unit, CIP3 connection for ink zone presetting. Maximum sheet size 72 x 103 cms.

- Heidelberg Speedmaster 4-colour (102 VP) for 2/2 and 4-colour straight printing. Equipped with complete CPTronic colour console and CIP3 connection. Maximum sheet size 72 x 102 cms.
- Komori 4 colour (Lithrone 440) for conventional printing with complete computer control and CIP3 connection. Maximum sheet size 72 x 103 cms.
- Komori 4-colour (Lithrone 428) for conventional printing with complete computer control, CIP3 connection for ink zone value presetting and Techkon SpectroDrive quality control station for inline density control and closed loop colour control. Maximum sheet size 52 x 72 cms.
- Roland 702 LTTV, 2-colour UV printing machine with double coater. Equipped with cold foiling facility. Maximum sheet size 74 x 104 cms.

**Binding**

**Hard-cover binding**

- Stahl book line BL 200 fully automatic case binding (hard-cover binding) machine with a speed of 2,400 copies per hour. Equipped with facility for square back and round back casebound books with head and tail bands.
- Kolbus DA Chronos fully automatic hard-cover case making machine with a speed of 3,000 cases per hour.
- Kolbus rotary board cutter.
- Kolbus end sheet tipping machine.
- Kolbus corner cutting machine.
- Paper drilling and round cornering machines.
- Zechini semi automatic case making and case binding machine for large format casebound books.

**Perfect/soft-cover binding**

- Muller Martini Corona C-15 perfect binding line with 18 stations and stream feeders. Facility for card gluing, static loose insertion and PUR binding. Asir 3 automatic signature image recognition in all the feeders. Maximum speed of 15,000 copies per hour. The machine is compatible with JDF.
- Muller Martini StarPlus, 30-clamp binder with 18-station gatherer. Equipped with complete interchangeable hot and cold glue pots for two-shot gluing, IR dryer, lining station, inline Merit 3-knife trimmer.
- Astronic 180 fully computerised thread sewing machine with a speed of 10,800 sections per hour.
- Smyth Freccia fully computerised thread sewing machine with a speed of 9,000 sections per hour.
- Shoei SM40-7KTT folding machine for various types of miniature folding. Minimum fold size 20mm.
- Shoei SPT56-4-4K folding machine with normal pile feeder. Maximum sheet size 50 x 70 cms.
- Shoei SRK82-4KLL folding machine with round pile feeder. Maximum sheet size 70 x 100 cms.
- Shoei SHK82-4KLL folding machine with high pile feeder. Maximum sheet size 70 x 100 cms.
- Shoei SRT-82-6/4/2K folding machine with a combination of round pile feeder and buckle gatefold. Maximum sheet size 70 x 100 cms.
- Shoei Star folding machine with round pile continuous feeder.
- Stahl folding machine with round pile continuous feeder.
- MBO folding machine with round pile continuous feeder.
- Stahl folding machine with double gatefold.
- Sperr and Lechner bundling press.
- Solema binding automation system with drying tower connecting, StarPlus, Stahl book line, 3-knife trimmers and shrink wrapping machines. Also equipped with stackers for hard cover and soft cover books.
- Zenith fully automatic 3-knife trimmers (2) with computerised control.
- Polar automatic programmable guillotine machine (3).
- Pivano automatic programmable guillotine machine.
- Wohlenberg automatic programmable guillotine machine.
- Robocut Programable Cutting Machine.

**Saddle stitching (pinning)**

- Muller Martini Prima Plus saddle stitcher with 7-station stream feeder gatherer and cover feeder. Also equipped with facility for card gluing and Automatic Make Ready System (AMRYS). Asir 3
Two Sakurai screen printing SC 102 cylinder machine, online with Giardina IR / hot air / UV drying line for spot UV and aqua varnish and also for printing with UV inks.


Bobst expertcut die-cutter with blanking. Equipped with register to print technology. Maximum speed 9000 Sheet per hour.

Bobst Spanthera 106 LER die cutter with blanking. Maximum speed of 9,000 sheets per hour.

Two Bobst Expert foil 102 machine for foiling, Cutter, Hologream embossing and die-cutting. Maximum speed of 8,000 sheets per hour.

Bobst Speria 102 foil master machine for foiling, embossing and die-cutting. Maximum speed of 7,500 sheets per hour.

Bobst Autoplaten SP 102 BMA machine for foiling, embossing and die-cutting. Maximum speed of 7,500 sheets per hour.

Nikko Autoplaten Arrow 105 XR die-cutting machine. Maximum speed of 7,500 sheets per hour.

Sanwa Autoplaten TRP-1060-SV AXIA die-cutting and creasing machine with on-line stripping. Maximum speed of 8,000 sheets per hour.

Foild Kama Diecutting with Inlion Stripping and Blanking

Simpla cutter die-cutting machine. Heidelberg platen with auto.

Miller Johannisberg 104S cylinder foiling machine.

Heidelberg cylinder foiling machine.

Oros edge gilding machine.

Bobst-Expert Fold (110A-2) high performance folder & gluer for straight, lock bottom, 4 & 6 corner glueing cartons. Attached with cold glue, hot melt glue and special plasma treatment glueing. Equipped with code reader and finger ejector for quality control.

Nikko folder gluer with Nordson hot melt gun.

Renz DTP 340 - semi automatic coil binding machine.

Renz punch 500 ES-Punching machine.

Max thickness - 4 mm

Max punch width - 30 cm / 12”

Lotus 102 SF-F / 3-in-1 combined sheet lamination, window lamination and UV varnishing machine.

Paper Plast (WD2 EVOSL - 112) fully automatic cold and thermal lamination machine with a speed of 80 meters per minute. Maximum sheet size 112 x 140 cms.

Lamtex T176 fully automatic thermal lamination machine with sheeter and jogger.

Lamtex Merlin 760 fully automatic waterbased lamination machine.

Lamina (Type 1116 FAS + 1600) fully automatic sheet to sheet lamination machine for paper & cardboard with water based glue. Maximum sheet size 110 x 160 cms.

Heiber + Schroder window patching machine WPS 1100-2 with sheet length of 80 - 800 mm and width of 80 - 1100 mm. Window length of 40 - 560 mm and width of 30 - 940 mm. Facility to patch pre-printed window films in sheet format.

Reflection embossing machine for producing special reflection embossing patterns on paper, boards and metallised foil boards.

Automatic flocking machine.

Paper bag making machine.

Envelope making machine.

Semi automatic stripping machine.

Champion cutter / blanking (2Nos.)

Crathern rigid boxline CMG 2000 machine for producing rigid boxes for luxury packaging and standard slipcases for books.
• Reflection embossing machine for producing special reflection embossing patterns on paper, boards, and metallised foil boards.
• Automatic flocking machine.
• Paper bag making machine.
• Envelope making machine.
• Semi automatic stripping machine.
• Champion cutter / blanking (2 Nos.)

Rigid Box

• Crathern rigid boxline CMG 2000 machine for producing rigid boxes for luxury packaging and standard slipcases for books
• 24 Servo controlled precision roll to sheet cutting machine. Maximum width 600 mm, maximum dia 600 mm, cut cross length 10 mm to 9999 mm, material thickness 25 gsm to 600 gsm.
• ZDJ 1000CJ Automatic grooving & corner cutting machine. Width of board 150 - 950 mm, length of board 150 - 450 mm, slot gap 0 - 900 mm, thickness of board 1 - 3 mm, number of slot at one time 6 pieces.
• ZDJ 1000 high speed automatic plate type grooving machine. Width of board 120 - 950 mm, length of board 60 - 450 mm, slot gap 0 - 900 mm, thickness of board 0.3 - 3 mm, number of slot at one time 12 pieces
• ST036XL hard cover machine. Maximum cover size 680 x 405 mm, minimum cover size 150 x 110 mm, centre board width 5 100 mm, centre board thickness 0.3 - 5 mm, gutter width 3 -17 mm, flap bending width 7 - 14 mm, cover material thickness 80 - 200 gsm, board thickness 0.8 - 5 mm.
• Hongming HM-ZD240-3 automatic rigid box machine. Minimum size 45 x 35 x 10 mm, maximum size 220 x 120 x 70 mm.
• Hongming HM-B50A automatic gluing machine. Paper width 80 mm - 800 mm, paper thickness 80 gsm - 200 gsm, board thickness 1 mm - 4 mm.
• Hongming HM-500A rigid box forming machine. Case size minimum 120 mm x 80 mm x 10 mm, case size maximum 500 mm x 400 mm x 120 mm.
• Hongming HM-YP300B box pressing machine. Case size minimum. Case size minimum 50 x 50 x 10 mm, case size maximum 250 x 200 x 80 mm.
• Hongming HM-YP540B box pressing machine. Case minimum size 90 x 80 x 10 mm, case size maximum 500 x 400 x 200 mm.
• Hongming HM-40 corner pasting machine. Box minimum size 40 mm x 40 mm x 10 mm, box maximum size no problem.
• Hongming HM-JS 720 white glue machine - maximum width 700 mm.

Poly wrapping / Shrink wrapping

• Sitma 950-E automatic poly wrapping machine with a maximum speed of 20,000 copies per hour for products up to a maximum height of 60 mm. Equipped with electronic first page opener and with feeder for inserts up to 8 mm thickness along with missing and double feed detection. Also equipped with print registration system for preprinted films and double sealer for header band. Compensating stacker specifically designed for magazines, books, newspapers etc.
• Sitma 1005-I automatic poly wrapping machine with a maximum speed of 13,000 copies per hour for products up to a maximum height of 80 mm. Equipped with feeder for inserts up to 8 mm thickness. Also equipped with 3D cover mounter with facility for hot melt tipping and print registration system for preprinted films. Compensating stacker for magazines, direct mail catalogues etc.
• Mini Pack Mailbag mini poly wrapping machine.
• Fully automatic shrink wrapping machine (sleeve wrapper).
• Fully automatic shrink wrapping machine (L bar sealer).

Quality control / LAB

• Reflection densitometers (5) and inline spectro densitometers (6) for quality control in printing.
• Gretag Mactbesh spectrolino / spectroscan and profile wizard software to create ICC profiles.
• PITSID bind control.
• Eutech scientific pH / conductivity meter.
• Focusight FS-500 carton quality checking machine (4).
• Gloss meter.
• UV curing tester (2).
• Hanatek crease tester.
• Hanatek board stiffness tester.
• Hanatek rub abrasion tester.
• Digital weighing scale.
• Friction tester.