INK/PRINTING
Industry Product Guide
Preventive Maintenance and Calibration Program:

The IDM Preventive Maintenance and Calibration (PM&C) program has been designed to make the maintenance and calibration of your valuable testing equipment more cost effective by preventing breakdowns and downtime by regular calibration, service and replacement of defective parts. IDM's PM&C system takes care of all service and repair needs you may have. It is an on-site maintenance and calibration service available on a regular basis, suitable to your needs and your testing equipment.

The PM&C program is the best way to ensure your testing equipment is maintained in optimum working condition. PM&C team members are supplied with the necessary means to sustain your testing equipment’s peak performance throughout its lifetime, benefiting both you and your equipment. Testing equipment in your facility (or at IDM) will be calibrated using industry-wide, internationally recognised standards or by your specific requirements. Calibrated instruments are labelled accordingly and documented with an IDM full calibration report or certificate of conformance (whichever is applicable). All calibrations are maintained in IDM’s calibration database and you will be notified when your next service/calibration is due. IDM’s Calibration work is comprehensive- adjusting your equipment to give you the right results, whenever possible.

Through this system of scheduled PM&C, IDM can help you improve productivity by reducing down time, minimising unscheduled maintenance and the need for service calls. We schedule in agreed dates and periods for the PM&C program, and give you prior notification so you have time to prepare yourself. This service is available in Australia only at this point of time.

IDM provides OEM services:

- Project development from concept to completion
- Conceptual 3D modelling & precise manufacturing drawings to make your product come to life
- Design individual components to complete machinery
- Research & development project management
- Over 50 years of experience designing customised instruments and machines
- Designing production machinery & specialists in testing instruments
- Cost-effective design simplification
- Integrating numerous automation technologies such as pneumatic, hydraulic, servo drives, sensor technology, PC control, PLC interfaces, safety devices, linear motion etc.
- Flexible in-house manufacturing utilising CNC lathe & milling machines, general machining, surface grinding & fabrication
BK Drying Recorders

A needle carrier holding six hemispherical ended needles travels the length of the six 305 x 25 mm test strips in 6, 12 or 24 hours. Other speeds are available. A time scale on the side cover is graduated to suit the three different travel times.

Brightmeters

IDM offer a range of economical and easy to use brightness testers which provide instantaneous digital read outs of TAPPI/GE brightness, with the option of measuring with and without the excitation of fluorescent agents.

PROFILE/Plus™ TAPPI Brightness

The PROFILE/Plus TAPPI Brightness measures optical properties according to industry standards including colour, opacity, fluorescence, TAPPI Brightness and colour difference.

Carton Crease Proofer

This user friendly instrument is commonly utilised in ink laboratories to assist the development of flexible coatings that resist cracking on commercial cartons. It allows the operator to quickly produce quality carton board crease samples without committing machine time.

The unit comes complete with robust rules & dies which are of the same quality of those used with a full scale cut and crease machine.

Coefficient of Friction Testers

IDM supply a range of COF Testers for determining the static and kinetic friction of plastic film, sheeting, paper and other sheeted materials used in the printing industry.

Options across the COF Tester range include variable speeds, software, incline plane, heated platen, sample vacuum.
Colour Analyzer  
Model: RBG-1002  
The RGB-1002 is a portable colour analyser equipped with an external sensor probe having a 45º / 0º colour measuring geometry. The accurate microprocessor supplies excellent repeatability using the spectral analysis method to determine the color of the sample.

Colour Check Cabinets  
C0048 Series  
The Colour Check Cabinet was produced to answer visual colour matching needs. Used for assessing colour changes under different light sources, to determine suitability of materials for industrial applications where there is the need to maintain color consistency and quality. Fluorescent daylight, incandescent and optional black light may be used either individually or in combination.

Colour Comparative System  
Model: ColorStriker  
The ColorStriker is user-friendly and can be used in various industries to test almost any material or surface type, including textiles, paint, varnishes, wood, tiles, plastics and more. Users can easily create and manage a custom color archive. With the integrated texture library, the desired color effect can be checked on screen for a wide variety of applications.

Color Touch Series  
CTX, CTPC, CT2  
With swing-in calibration, primary calibration, Color Touch PC software, sample viewing, and optional equipment, the Color Touch series boasts functionality that is far beyond standard color evaluation.

Samples may be measured under 4 different calibrated light sources or 2 user defined sources and units are capable of sampling whiteness under different fluorescing conditions.
PROFILE/Plus™ Color Touch

The PROFILE/Plus™ Color Touch can measure the same sample under 3 different UV sources and calculate color data with 6 color spaces, 10 illuminants and 2 observers. PROFILE/Plus™ Color Touch can be optionally equipped with ERIC 950TM technology for measuring recycled content and deinking efficiency.

Colour Proofing Kit
Model: Quickpeek

The Quickpeek Color Proofing Kit is used to quickly produce a proof that replicates how ink will appear on a printed copy from the press. Different rollers can be used for heat set inks or UV inks.

Contact Angle Tester
Model: PGX+

The Contact Angle tester is designed to check surfaces properties for contamination, adhesion and printability of various materials. It measures the dynamic contact angle as wetting, absorption and spreading over time. With an integrated camera which captures 80 images per second, this user-friendly unit runs via USB connection to a PC.

Crease & Stiffness Tester + Sample Cutter
Model: C0039

The sample cutter (C0016) is used to accurately prepare specimens for testing. Crease and stiffness testing of carton board, paper, printing and packaging materials are important measures to have correct and uniform. As board stiffness and crease recovery (spring back) is important in the performance of cartons on high speed packaging machines and when manual folding. The value of crease stiffness is technically important in the folding of carton blanks during their erection and closure.

Densometer
Model: PAG-1000

The air permeance is the flow of air through unit area under unit pressure difference in unit time, under specified test conditions and is expressed in um/Pa.s. This equipment is user friendly due to it’s built-in computer and exclusive testing software.
DuPont Impact Tester

The DuPont Impact Tester has been designed to test the endurance of coated material, when impacted by a falling weight at specified points. The purpose of the test is to see if test specimens can resist the effect of rapid impact testing. The DuPont Impact Tester can also be used on paintings with coated materials.

Elcometers – Fineness of Grind Gauges

Elcometers are used to determine the particle size and fineness of grind of materials such as paints, pigments, inks, coatings and other similar products.

Gloss Meters – Multi Angle

A range of Gloss Meters are available to determine the specular reflection of various materials. Gloss Meters can measure in 20°, 60° or 80°, all in the one single unit, with results displayed instantly, including the difference, pass/fail and statistics on display.

TEST/Plus™ Gloss

Whether on a car or printed material, gloss attracts your attention and pulls the consumer in. This instrument combines industry standardized measurement technology with an innovative control package that allows the user to tailor build their testing and evaluation capabilities.

Built on the Android software platform, the interface can be customized with the features and capabilities important to you. Available in 75 and 20 degree angles.

Guillotines

IDM Instruments supply a range of Guillotines to suit various applications. Bench top and free standing units are available.

Haze Meters – Hand Held

IDM supplies Haze meters, which can measure both gloss and haze in one easy to use instrument. These units are useful for measurement on the finished product and quality control in the production process.
**Ink Pipette**

An efficient and clean method of measuring and applying a precise volume of ink to the Proofer unit.

It is clearly marked with graduations of 0.1 ml enabling the operator to measure an accurate and repeatable volume of ink up to 1.0 ml in 0.05 ml increments.

**Ink Proofer + Printer**

The Proofer design is widely used by ink manufacturers and printers as an essential quality control tool. The 200 x 50mm prints produced are used for colour checking as well as measurement of density, penetration, set-off and drying. For use with the Ink Pipette.

**Ink Rub Testers**

**Model: I0001 – Single Arm**

**Model: I0002 – Twin Arm**

Ink Rub Testers are designed to determine the quality of adhesion, and scuff resistance of ink to paper surfaces, plastic and aluminium film. The method of operation is that a 2 or 4 lb weight with a clean white board is swept across the test piece for a set number of times, and then closely examined.

Heated weights are also available for these units.

**Inkometer - Electronic**

**Model: 1100**

This machine measures the apparent tack of printing ink under conditions closely approximating the dynamic conditions of the ink-distribution system of a printing press.

The testing instrument provides the highest accuracy and efficiency for research and development, quality control and process evaluation to verify, test and improve quality.

**Linear Measurescope**

This unit is designed to assist the calibration processes for industrial printing machines. Operation includes laying out a print registry roll onto a flat surface and place the Linear MeasureScope on top, aligned with the sample edge.
Opacimeter
Model: BNL-3

This unit provides unparalleled levels of precision and accuracy for opacity measurement and control. This easy to use instrument is considered the industry standard. It has been designed to adhere rigorously to pulp and paper industry test ASTM and TAPPI methods.

Page Pull Tester

The Page Pull Tester has been designed and manufactured to measure the strength required to pull pages out of bound books and magazines. The force is displayed on the digital read out, ensuring a quality bound book is provided to customers.

Permeability Cups - Vapometers

Used for determining the water vapor permeability of sheet materials such as specialty paper grades, polyethylene, building material, leather, weatherproof clothing, vinyl, foil, laminates and other thin sheet materials. This property is essential in determining if a material is moisture proof or has the ability to protect contents from the transmission of water vapor.

PROFILE/Plus™ Roughness & Porosity

The Technidyne PROFILE/Plus Roughness and Porosity measures surface roughness and air permeance according to industry standard methods.

Includes two sided measurements, selectable reporting units, dry diaphragm air compressor, NIST traceable laminar flow elements, barometric pressure and temperature compensation.

PROFILE/Plus™ Tensile

With a precise punch and die assembly to ensures constant sample size, this unit automatically performs sample clamping, measurements of MD and CD tensile strength, elongation, and TEA all on its own.

User defined measurement parameters means that grade specific reporting units can be selected.
Rub Proof Tester  
Model: I0005

The Rub Proof Tester is used to evaluate the ink transfer from printed / coated materials from rubbing. 3 x dead loads are included to place one on top of the upper disc to achieve a known pressure.

The sample holders are manufactured from stainless steel to enable dry or wet rubs and a digital cycle counter stops the test at the pre-set value.

Stainless Steel Cutting Templates

Manufactured from stainless steel with an easy to grip handle to provide a consistent cut out sample to use with various testing apparatus.

Custom sizes are available.

Tackmaster -92

This machine is a durable tester that is specifically designed to accurately test ink tack. The unit is simple in design and requires minimal maintenance.

Thickness Gauge Digital Indicator with Stand  
Model: T0013

Providing statistical results, this unit can be used on many different materials where an accurate measurement of thickness is required. Different options can be fitted to suit custom requirements including mm/inch gauge readout and special foot sizes.

Viscometers  
CAP Series

The CAP units come complete with the customer's choice of torque range, cone spindle and temperature control (Low or High)  
CAP 1000+ : Single speed unit  
CAP 2000+ : Variable speed unit with optional software
If you have any questions, or require assistance with any testing & measuring equipment, please contact:

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