

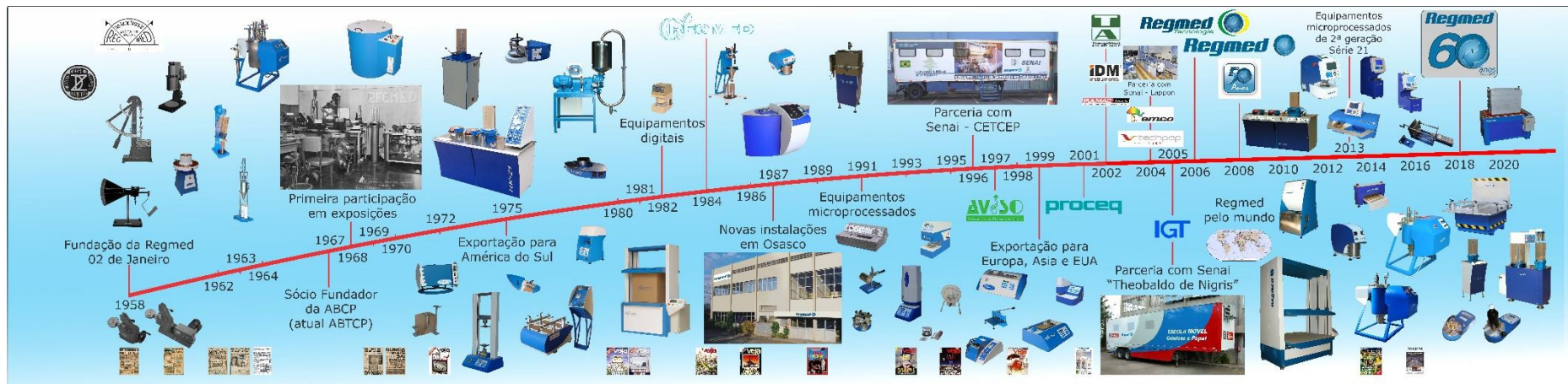


1958 - 2024

History

- Austrian Theodor Dvorak and German Max Zwiesele immigrated to Brazil in 1954 for working for Melhoramentos, a Brazilian paper mill
- Company Regmed founded in 1958 to service imported testing equipment
- Production started with local manufacture of spare parts needed for repairing imported equipment
- Second generation enters business in 1978 and impose a change in company profile from making copycats of imported equipment to developing its own equipment
- In 1988 first digital equipment developed by Regmed are successfully introduced
- In 1998 Regmed starts exporting worldwide – Europe, Asia, North America, Africa and Australia – having established closer cooperation to strategic partners like IGT, Thwing-Albert, Emco, Techpap, Pulmac and Proceq

- Timeline – The first 60 years.



Vision

- Be a market leader into Research & Development and into Quality Control departments in the pulp, paper, packaging and graphic arts industries

Mission

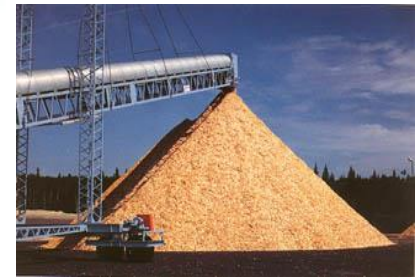
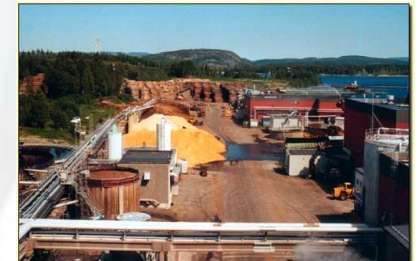
- Develop, manufacture, promote and service accurate, reliable, repeatable and reproducible testing equipment at an affordable price
- Provide commission – installation & user training – our equipment as well offer continuous after sales support for calibration and for preventive & corrective maintenance
- Be co-responsible for the success of our customers

Principles

- Honesty
- Responsibility
- Ethic
- Competence
- Commitment
- Determination
- Strength

PROFESSIONALISM

- Variability of materials
- Variability of processes
- Quality assurance
- Objective specifications for customers and suppliers
- Environmental care
- Reduce costs
- Increase profitability



- Increasing production volume and concentration



Modern Pulp Mill – 1.500.000 tons per year with single digester

- Increasing production volume and concentration



Modern Paper Machine

- capacities up to 500.000 tons per year
- widths up to 10 meters
- speeds up to 2000 m/min



How to test ?

- In the process – parameters for operation control
- In the laboratory – standardized test methods and qualitative test results used both technically and commercially



Standardized Tests - Laboratory

- Pulp Testing
 - Digesting, refining, drainability, hand sheets
- Paper Testing
 - Tensile, elongation, tear, burst, thickness, grammage, permeance
- Package Testing
 - Stacking, dimensional, transport simulation, drop
- Printability Testing
 - Picking, mottling, set-off, roughness, blocking

Regmed



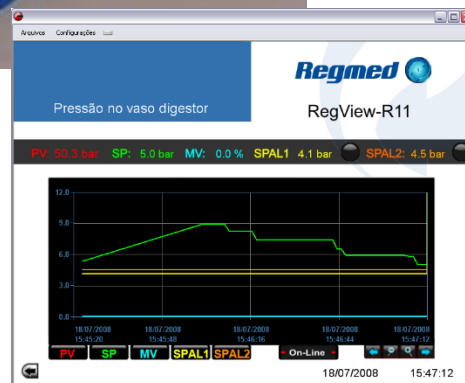


- According to SCAN CM 40
- 5 classifier trays
- Volume up to 10 L
- Oscillation amplitude 120 mm
- Oscillation frequency 160 cycles/min
- Timer up to 99 min





- 20 L main vessel
- Lid with four 1.5 L individual vessels
- Up to 12 kgf/cm² and 190°C
- 360° rotation for perfect mixture
- AISI304 stainless steel
- Safety valve
- Digital controller for temperature
- Digital indicator for pressure
- Software for PC remote programming and control
- Optional main vessel volumes 27 and 45 L
- Optional lids with 2,0 and 3,0 L individual vessels respectively for 27 and 45 L main vessels.







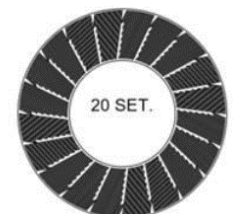
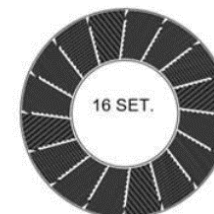
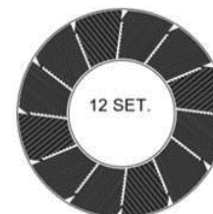


- 20 L main vessel or optional 5 L (HB-51)
- Up to 16kgf/cm² and 210°C
- 360° rotation for perfect mixture
- AISI316 stainless steel
- Safety valve
- Digital controller for temperature
- Digital indicator for pressure
- Software for PC remote programming and control





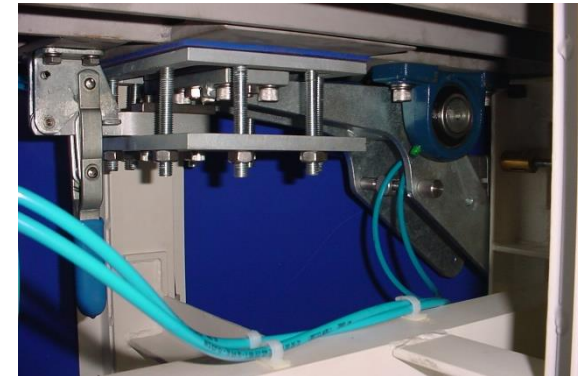
- From 2 % to 8 % consistency
- Refining discs for HW (SEL 0.38 W.s/m), SW (0.96 W.s/m) and GP (0.84 W.s/m)
- Gap adjustment 0 to 10 mm
- 50 L main tank in AISI 304 stainless steel
- 50mm recirculation piping in AISI 304 SS
- Bronze refining discs
- Bronze refining chamber with integrated cooling chambers for both discs
- Digital indication of power consumption







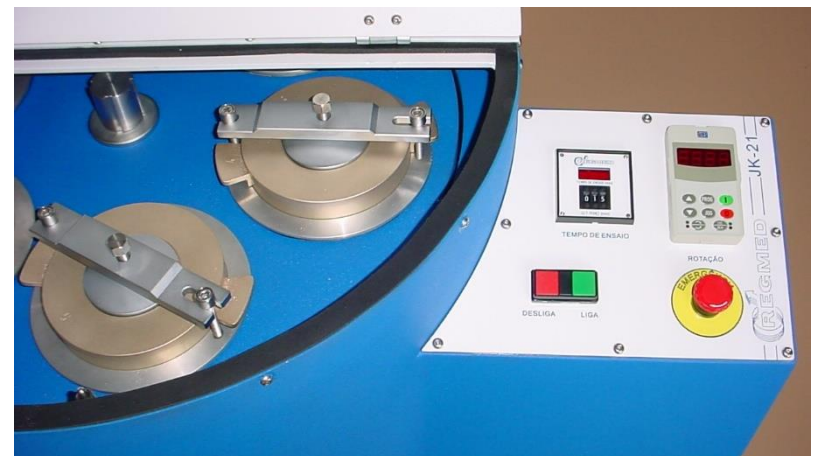
- ISO 5264/1 and TAPPI T200
- 23L tube in AISI 304 Stainless Steel
- 360 g O.D. pulp → 1.57% consistency
- Digital controller for speed
- Digital controller for force
- Digital countdown timer
- Quick release latch for easy access to bedplate assembly







- Up to six simultaneous 16g samples at 6%



Canadian Freeness CF-21

- ISO 5267/2 and TAPPI T227
- For freeness measurements of any pulp
- Pneumatic Driven



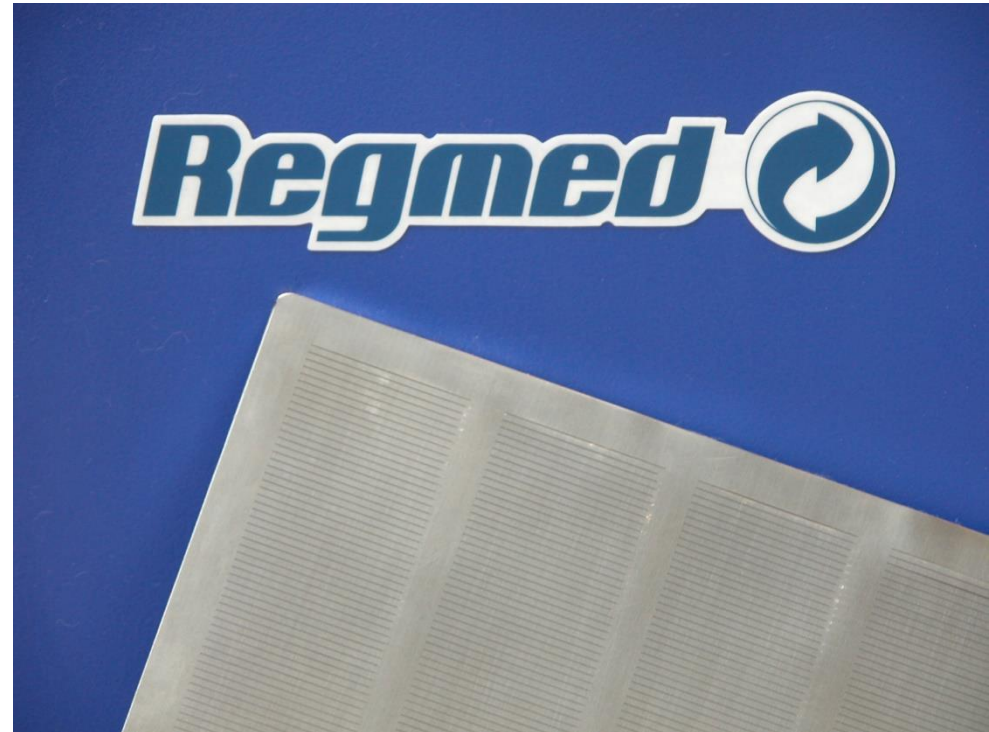
Schopper-Riegler SR/P

- ISO 5267/1
- For freeness measurements of any pulp
- Pneumatic Driven





- TAPPI T275
- Rugge design with stainless parts
- Stainless steel 150 micron slotted screen



Fiber Classifier B-H/6-12



- Merkblat VI/1/66
- Three screens :
 - 0.2 x 20 mm Slotted stainless steel plate
 - 40 mesh bronze screen
 - 120 mesh bronze screen
- Adjustable stroke 6 or 12 mm :



Pulp Disintegrator DSG-21



- ISO 5263/1 & /2 and TAPPI T205
- Digital controller for number of revolutions
- Latency Removal Device DSG-DL ISO 5263/3



Pulp Distributor D-150



- Merkblatt Nr. V/6/61
- 10 L square graduated container
- 150 rpm chromed propeller



Handsheet Former FC-21

- ISO 5269/1 and TAPPI T205
- TAPPI Sheet Mold
- 152 mm (6 inches) round sheets



Handsheet Former FQ-21



- ISO 5269/1
- 163 mm square sheets
- Pneumatic bubbling for homogenization of pulp suspension





- ISO 5269/1
- 163 mm square sheets
- 50 L reservoir for pulp suspension
- PLC controlled
- Automatic dosing system for pulp fraction
- Automatic sheet forming sequence





- ISO 5269/1 and TAPPI T205





- ISO 5269/2 and ISO 5269/3
- Rapid-Köthen Sheet Former
- 200 mm (8 inches) round sheet
- Integrated dryers
- PLC controlled



Coluna Formadora de Folhas Automática "Rapid Köthen"- SF-RK-SS

- Formador de folhas dotado de sistema automático de formação comandado por PLC
- NT – ABNT NBR ISO 5269/2 e 5269/3



Hand sheet Dryer TD-RK



- ISO 5269/2
- Rapid-Köthen Sheet Dryer
- Dries sheets up to 200 mm (8 inches)
- Digital temperature controller
- Digital countdown timer



- ISO 535 and TAPPI T441
- Rugged design with stainless parts
- Single action quick trigger
- 125 x 125 mm template
- 10 kg couching roller
- Blotting paper

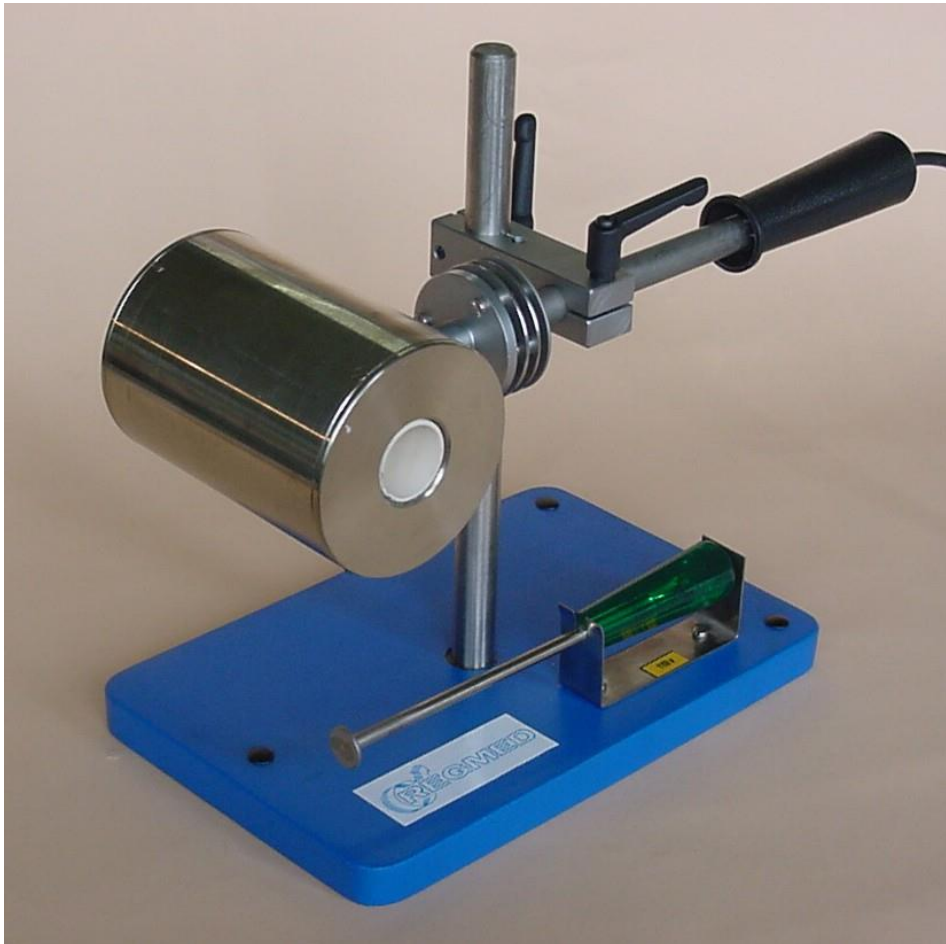


Regmed Water Vapour Transmission PVA/4



- ISO 2528 and TAPPI T448

- (900 +/- 25) °C
- Ø25 mm x 120 mm chamber



Micrometer ME-1000



- ISO 534
- ISO 3034
- TAPP T411
- 0 to 10 mm
- 1 micron resolution
- Test units in micron, mm or mils
- Statistics



- ISO 5636/5 and TAPPI T560 - Gurley
- Selectable measuring scales of 10, 25, 50, 100, 200, 300 and 350 mL
- Statistics

Tensile Tester DH-21



- ISO 1924/2 and TAPPI T494
- Pneumatic Clamps 25 or 50 mm
- Sample Detection
- 500 N or 100 N
- 1 to 200 mm/min test speed
- 300 mm/min return speed
- 180 to 100 mm aperture
- Test units N and kgf
- Statistics

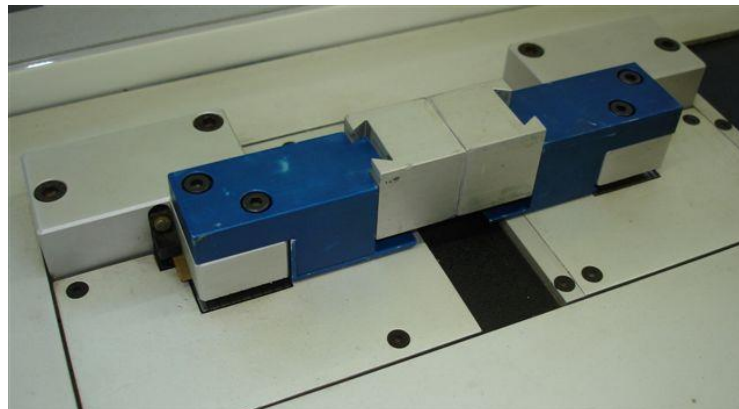




DI-DEL Z-Direction Test Fixture



Pneumatic Precision Sample Cutter 15x300 or 50x300 mm



Burst Tester BT-21



- ISO 2758 and TAPPI T403 for paper
70 to 1100 kPa (10 to 150 psi)
- ISO 2759 and TAPPI T807 & T810 for
corrugated – 350 to 5500 kPa (50 to 800 psi)
- Test units kPa, kgf/cm² and psi
- Statistics

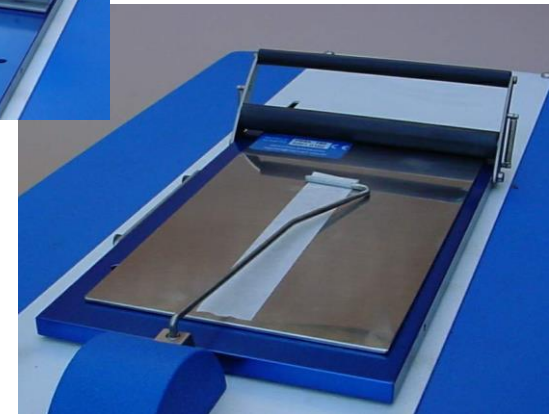
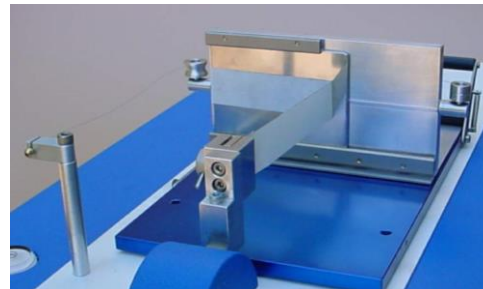


- ISO 13820
- 120 mm square compression plates
- 80 mm aperture
- Test units N, kgf or lbf
- Statistics
- Complete set of standard accessories including samples cutters, test fixtures and complimentary equipment





- ISO 8295
- TAPPI T549 and T816
- ASTM D1894, D3247, D3330 and D4917
- 20 N capacity
- Test speed of 150 or 300 mm/min
- Test stroke 150 mm
- Statistics



SHORT SPAN COMPRESSION TESTER *SCT-21*



- Determinação da resistência à compressão de papéis miolo e capa
- O software dispõe de programa completo para ensaio de compressão com opção de cálculos estatísticos e de resistência e índice.
- *ABNT NBR ISO 9895 - TAPPI T-826*

Box Calipers C-INT



- ASTM D2658
- 1 mm resolution
- XS → 100 to 170 mm
- S → 120 to 200 mm
- M → 200 to 350 mm
- L → 360 to 650 mm
- XL → 650 to 1200 mm



- TAPPI T830 and ASTM D5264
- Adjustable test speed 20 to 210 mm/s
- (10 to 120 strokes / min)
- Heatable test bed adjustable up to 60°C
- Digital countdown timer

Resistência da Colagem RC-21

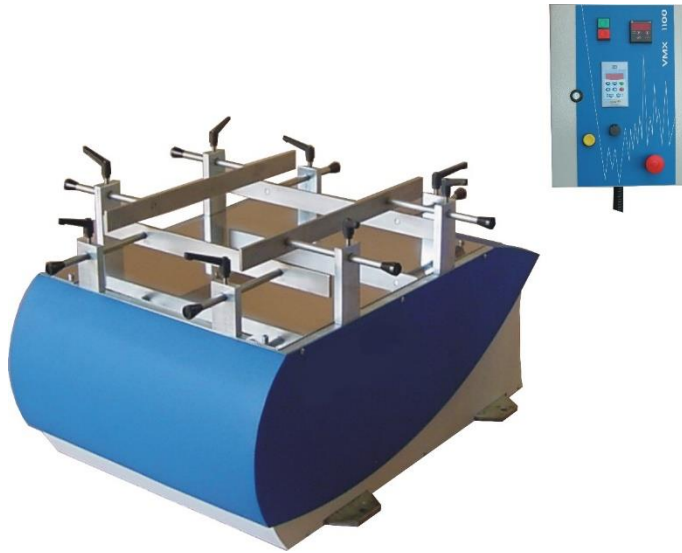
- Para a avaliação da qualidade de colagem entre papéis capa e miolo de PO por imersão em água
- NT - ABNT NBR 10530 / ISO 3038 / FEFCO N°9





- ISO 12048 and TAPPI T804
- 40.000 N & 1.000 x 1.000 x 1.000 mm
- 60.000 N & 2.000 x 2.000 x 2.000 mm
- Test units N and kgf
- Adjustable test speed 5 to 25 mm/min
- Positioning speed 250 mm/min
- Statistics

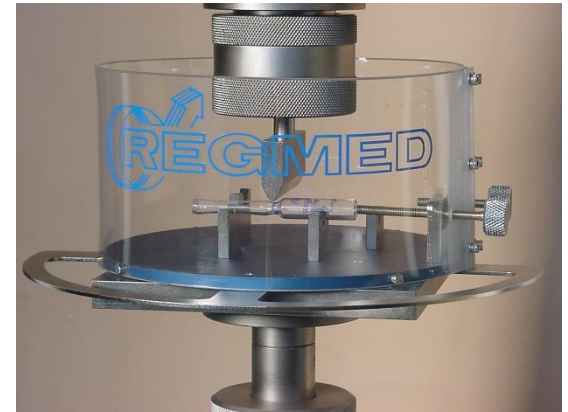




- ISO 2247/B and ASTM D999/A1



- ISO 2247 A/B and ASTM D999/A2















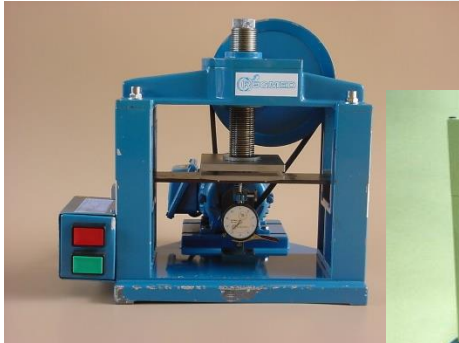
Technical Evolution

- Horizontal Tensile Tester
- ISO 1924/2 and TAPPI T-494



Technical Evolution

- Crush Tester & Testing Accessories
- ISO 13820, ISO 13821, ISO 12192, ISO 3035, ISO 3037 and ISO 7263
- TAPPI T-809, T-811, T-821, T-822, T-825, T-839 and T-843



Technical Evolution

- Hand sheet Former Rapid-Köthen
- ISO 5269/2 and ISO 5269/3



From electro-mechanical controllers
(relays) to state-of-the art PLC

Technical Evolution

- Handsheet Dryers Rapid Köthen
- ISO 5269/2 and ISO 5269/3



Technical Evolution

- Box Compression Testers P-4000M & P-6000M
- ISO 12048 and TAPPI T-804











Thwing-Albert
Instrument Company



