16 22 32

LayerGauge®

Devices for Measuring of Individual Layer Thickness of Multilayer Polymer Webs

DAVINOR

Davinor LayerGauge®

Savings through Knowledge

Davinor LayerGauge gives you the possibility to prevent over-gauging.
It produces you accurate results, excellent reports and advanced result sharing - fast.

Davinor ***LayerGauge*** is the most sophisticated and unique device ever designed for fast measuring of individual layer thickness in a multilayer polymer web.

Since its introduction in 1984 the Davinor ***LayerGauge*** has taken the lead in multilayer thickness measurement. It is widely used by leading film manufacturers worldwide.

Safe and easy

The Davinor ***LayerGauge*** is simple, cost-effective and safe to operate. No special skills or safety precautions are needed. Only ordinary light is used in measuring.
LayerGauge always gives user independent results. Types 32 and 22 are fully programmable devices and the sample movement during the measurement procedure is automatic. Type 32 has also programmable sample tension feature. In type 16 the sample movement is manual. Traceable reports required by quality systems are automatically created in connection with measuring.

Quick

Measuring the individual layer thicknesses of multilayered films by Davinor ***LayerGauge*** takes typically a couple of seconds.

Save materials, laboratory work and money

Based on the accurate measuring data of films processed, it is possible to optimize the operation of production lines. This prevents unnecessary wastage of materials, machine time and work. Regular measurement of film manufacturing process opens you the possibility to save considerable amounts of money.

Specially designed models available.
For more info visit at www.davinor.com.

LayerGauge® 16

LayerGauge® 22

LayerGauge® 32

EXTENSIVE AND CLEAR REPORTING

Autom. 8 lyers

Davinor *LayerGauge*®
Profile Report

Sample No. : 8 layer film
Operator : JPR
Date / Time : 04.10.2007 / 15:09

Comment : Measured automatically.

Gauge Length : 50.0 [cm]
Location Spacing : 1.0 [cm]
Locations measure
Success Rate

#	Layer Name	Nominal [um]	Ave [um]	Min [um]	Loc [cm]	Max [um]	Loc [cm]
	Total	79.0	75.9	69.8	35.0	84.8	17.0
8	Layer 8	15.0	12.9	11.2	11.0	14.5	13.0
7	Layer 7	25.0	23.1	20.1	32.0	26.8	17.0
6	Layer 6	4.0	3.9	2.8	21.0	5.2	14.0
5	Tie	5.0	5.2	3.7	43.0	7.9	12.0
4	Barrier	6.0	6.3	4.8	10.0	7.6	49.0
3	Tie	5.0	4.6	2.8	32.0	5.9	14.0
2	Layer 2	4.0	5.0	3.8	19.0	6.0	20.0
1	Layer 1	15.0	14.8	11.8	49.0	20.8	14.0

Profile report

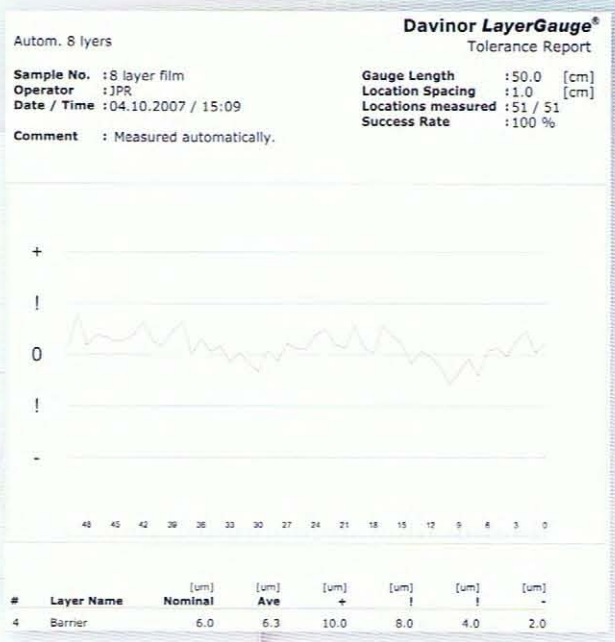
Autom. 8 lyers

Sample No. : 8 layer film
Operator : JPR
Date / Time : 04.10.2007 / 15:09

Comment : Measured automatically.

#	Layer Name	Nominal [um]	Ave [um]	+ [um]	! [um]	! [um]	- [um]
8	Layer 8	15.0	12.9	15.0	13.0	11.0	9.0
7	Layer 7	25.0	23.1	29.0	27.0	20.0	18.0
6	Layer 6	4.0	3.9	8.0	6.0	2.0	1.0
4	Barrier	6.0	6.3	10.0	8.0	4.0	2.0
2	Layer 2	4.0	5.0	8.0	6.5	3.0	1.5
1	Layer 1	15.0	14.8	23.0	21.0	11.0	8.0

Tolerance report, All layers



Autom. 8 lyers

Davinor *LayerGauge*®
Tolerance Report

Sample No. : 8 layer film
Operator : JPR
Date / Time : 04.10.2007 / 15:09

Comment : Measured automatically.

Gauge Length : 50.0 [cm]
Location Spacing : 1.0 [cm]
Locations measured : 51 / 51
Success Rate : 100 %

#	Layer Name	Nominal [um]	Ave [um]	+ [um]	! [um]	! [um]	- [um]
4	Barrier	6.0	6.3	10.0	8.0	4.0	2.0

Tolerance report, One layer

GENERAL DESCRIPTION OF *LayerGauge*

- Thickness gauge for multilayer materials. Optical measurement method, safe to use. Fully automatic systems for high volume Quality Control measurement and process monitoring use.

HARDWARE

- Sample Handling from manual to fully automatic.
- Programmable number of measuring points and distance between points. Up to 5 cm (2 inch) wide sample with no limit in length. Movement guided by software controlled brake in type *32*.
- Type *16*, manual sample relocation.
  - Vacuum sample holding (Optional).

Thickness Range

- Maximum sample thickness 650 µm (25 mil) with automatic movement.
- Type *16*, maximum total thickness 380 µm (15 mil).

Size & Weight

- 41(w) x 35(d) x 25(h) cm, 30 kg (16 x 14 x 10 inch, 66 lbs.).

Connections

- Power 90...260 Vac, 50/60 Hz (AutoSense). Maximum power consumption 150 VA. PC connection via USB bus.

Computer Package (Optional)

- Standard PC and accessories as agreed. Programs and instrument settings ready installed and fully tested.

SOFTWARE

General Description

- M-Flex32 GUI software for PC computers using Windows 2000/XP operating system.

Layer Detection

- Unlimited number of layers. Wide range of signal analysis and peak search functions for fully automated measuring. ***LayerGauge 16*** models max. number of layers is 16.

Reporting

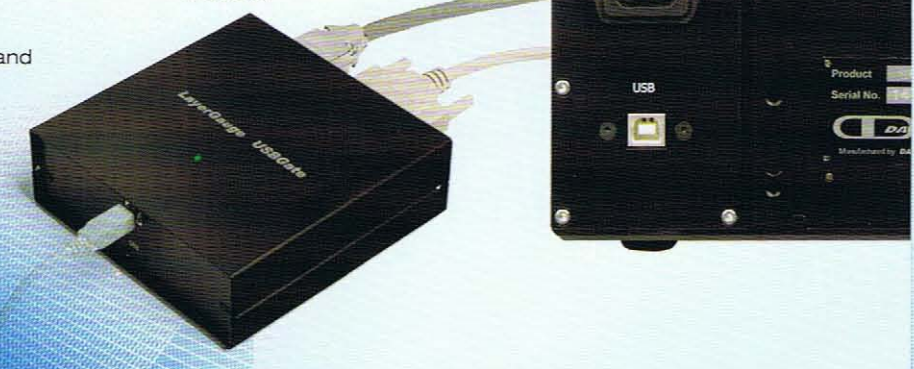
- Thickness Profile Graph, Tolerance Graph and Numerical Data Report. Custom reports available.

Calibration

- Software-driven calibration procedure.

OTHER

- A Turnkey Package available, including all hardware and software, shipping, installation and on-site user training services.
- External ***USB Gate*** available for all previous LayerGauge models.



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