LLOYD materials testing
AMETEK

TA1Plus

Texture Analyser for Food, Cosmetics and Packaging

2 Your Ultimate Testing Solution:

The TA1Plus builds upon the exceptional features of its predecessor, the TA1, to offer you an unparalleled testing experience. With a focus on delivering tangible benefits to our customers, the TA1Plus is designed to revolutionize your testing processes and empower your operations. Here's why the TA1Plus is the ultimate choice for your testing needs:

Exceptional Load Accuracy:

With a load accuracy of +/- 0.5% down to 1% of the load cell value, the TA1Plus offers a high dynamic range. This means you can achieve precise measurements across a wide range of forces, reducing the need for multiple load cells and enhancing efficiency.

Plug'n'Play YLC Load Cells:

Say goodbye to load train twist and alignment issues. Our innovative YLC load cells feature anti-rotation collars, ensuring seamless integration and easy axial alignment for hassle-free testing.

Large Work Area:

Enjoy enhanced flexibility with a spacious 180 mm (7.08 in) throat depth, allowing you to accommodate larger specimens and a variety of work tables. Whether you're working with bulky samples or intricate setups, the TA1Plus provides the space you need to excel.

Advanced Test Setup:

Experience effortless testing with our Windows®10/11 compatible NEXYGENPlus software. Featuring improved User Configurable Test functionality, the software complements our comprehensive texture analysis test library, empowering you to customize tests according to your unique requirements.

Application Expertise:

Benefit from our extensive experience in testing solutions. The TA1Plus can be equipped with a range of jigs, probes, and fixtures meticulously designed to streamline your testing process. Additionally, our machine can be fitted with multi-purpose grips specifically tailored for testing the strength and integrity of food packaging.

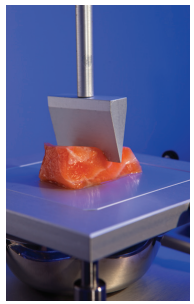
Broad Range of Applications:

From bakery products to cosmetics, the TA1Plus caters to a diverse array of industries and applications. Whether you're in the food, pharmaceutical, or cosmetics sector, our testing solution is versatile enough to meet your needs. Some of the industries we serve include Bakery, Cereals, Confectionary & Snacks, Dairy, Fruit & Vegetables, Gels, Meat, Poultry & Fish, Pasta & Rice, Pet Food, Cosmetics, and Packaging.

3 Comprehensive Testing Accessories

Unlocking the Potential of Texture Analysis with the TA1Plus

Texture analysis plays a pivotal role in quality improvement throughout the supply chain and production process. It enables the comparison of new or alternative ingredients with existing ones, ensuring consistency and quality. The TA1Plus is equipped with a wide range of accessories, including load cells, probes, jigs, and grips, to accommodate diverse testing requirements.



Standard Accessories

- Base table
- Cylinder Probe 12.5 mm (0.5 in)
- Stainless Steel Tray

Optinal Accessories

Item	Part No
YLC Series Load Cell 5 N (1.12 lbf)	01/3871 - 5N
YLC Series Load Cell 10 N (2.25 lbf)	01/3872 - 10N
YLC Series Load Cell 20 N (4.5 lbf)	01/3873 - 20N
YLC Series Load Cell 50 N (11.25 lbf)	01/3874 - 50N
YLC Series Load Cell 100 N (22.5 lbf)	01/3875 - 100N
YLC Series Load Cell 250 N (56.25 lbf)	01/3876 - 250N
YLC Series Load Cell 500 N (112.5 lbf)	01/3877 - 500N
YLC Series Load Cell 1000 N (225 lbf)	01/3878 - 1000N
Texture Analysis Probes	
Ball Probes (Diameter range1/4”-1”)	
Cone Probes (Cone angles 15°-90°)	
Cylinder Probes (Diameter range1/4”-4”)	

Texture Analysis Fixtures and Test Accessory Kits	
Back Extrusion Cell	01/2760
Butter Cutting Jig	01/2664
Kramer Type Shear Cell	01/2754
Ottawa Forward Extrusion Cell	01/2758
Warner Bratzler Shear Blade Set	01/2767
Spaghetti/Noodle Test Fixture	01/2659
Three Point Bend Food Jig	01/2756
Volodkevitch Bite Set	01/2663
Magnus Taylor Puncture Probe Set	01/3108
Comparative Dough Stickiness Jig	01/2657
Dough Preparation Set	01/2656
Gluten Dough Extensibility Jig	01/2759
Crisp Fracture Support Jig	01/2658
Knife Edge Probe Set	01/2693
18-Position Pea/Berry/Bean Test Fixture	01/3195
Texture Probe Set	01/1114
Bakery Accessories Kit	01/2696
Confectionery Accessories Kit	01/2698
Dairy Accessories Kit	01/2697
General Food Probe Kit	01/2695
Gel Bloom Kit	01/3374

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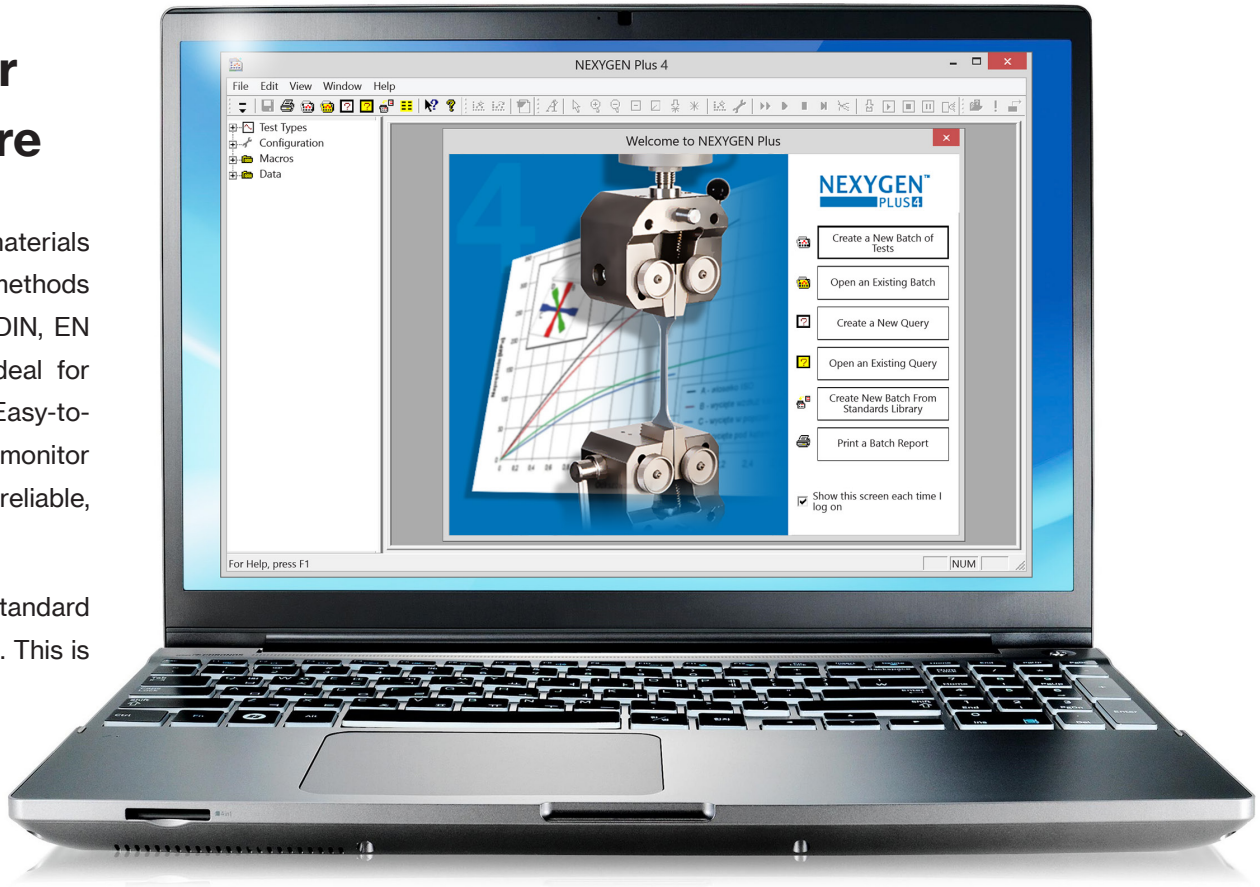
4 NEXYGENPlus 4.1

Your Complete Software Solution for Material Tests Today and in the Future

NEXYGENPlus 4.1 software is the hub of Lloyd Instruments' materials testing systems. It features an extensive library of pre-set test methods that meet domestic and international standards such as ASTM, DIN, EN and ISO along with advanced user configurable test set-ups ideal for product and component testing, R&D use and specialized testing. Easy-to-use NEXYGENPlus 4.1 software allows an operator to control and monitor all aspects of the system from a single front end, providing fast, reliable, accurate testing and data analysis.

Unique to the NEXYGENPlus 4.1 software is that all available standard modules and reporting functions are included in the software price. This is what we call an All Inclusive testing experience.



"NEXYGENPlus 4.1 gets the job done easier, faster, and with more flexibility than has ever been possible before."

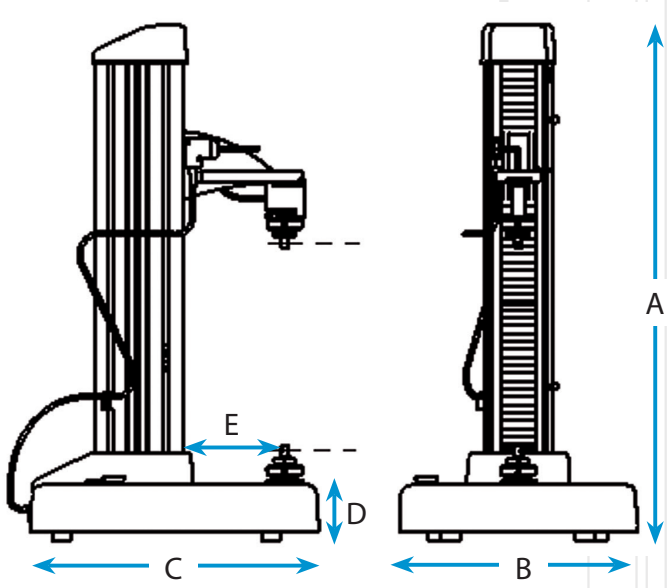
Powerful Analysis and Reporting Tools

NEXYGENPlus 4.1 helps you get the job done easier, faster, and with more flexibility than most other systems on the market. It provides almost unlimited testing and results processing capability in the familiar Excel and Word environment.

5 Specifications

Dimensions:

A	**Height Standard Travel**	1001 mm (39.4 in)
B	**Width (excluding console)**	460 mm (18.1 n)
C	**Depth**	557 mm (21.9 in)
D	**Base Height**	108 mm (4.3 in)
E	**Throat Depth**	180 mm (7.1 in)
	Weight (standard travel)	52 kg (115 lb)



Technical Specifications:

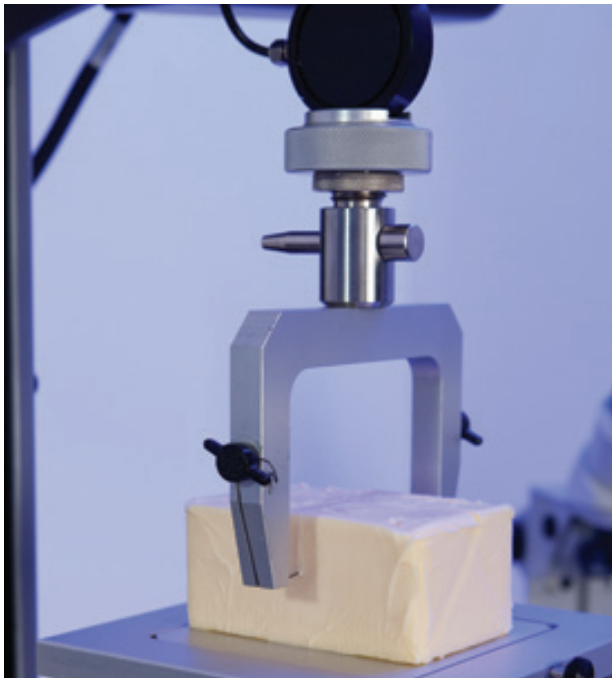
Force Capacity	1000N/225 lbf
Crosshead Speed Range	0.01 to 2032 mm/min
Return Speed	2032 mm/min (80 in/min)
Speed Accuracy	+/- 0.1% above 0.1 mm/min
Extension Resolution	0.04 microns
Load Cell Accuracy	< ± 0.5% of reading down to 1/100 of load cell capacity Resolution 32-bit A/D converter Min. Load Resolution 1 part in 109
Data Transfer Rate to PC	1 kHz
Data Sampling Rate	8kHz
Supply Voltage	207-253 VAC at 50 Hz or 103.5-126.5 VAC at 60 Hz
Load Measuring System	EN ISO 7500-1:2015 Class 0.5 ASTM E4
Operating Temperature	10 to 40° C /50 to 104° F
Control Modes	Position, Load Rate, and Strain Rate contro

6 Ordering

Order number			Description
TA-1Plus			TA1Plus
			Model
	SH		Standard Travel
	EH		Extended Travel
			Power
		115V	US Power Cord
		230V	UK and Euro Power Cord
		230V - CNAU	China and Australian Power Cord
			Order number sample
TA1+	EH	230V	TA1Plus, Extended Travel, UK and Euro Power Cord

7 Support

When you invest in a Lloyd TA1Plus Series Material tester, you're not just acquiring a piece of equipment; you're gaining a partner in material testing excellence. Beyond its exceptional performance and versatility, the TA1Plus Series stands out for its unwavering customer support and comprehensive after-sales service.



Expert Guidance and Training

Lloyd understands that maximizing the potential of your TA1Plus tester may require training and expert guidance. Our dedicated team of engineers, technicians, and partners are here to provide you with personalized support throughout your testing journey. From initial setup and operation to troubleshooting and advanced testing techniques, our experts are readily available to address your needs and ensure you're getting the most out of your machine.

Preventive Maintenance and Repairs

Preventive maintenance is key to ensuring your TA1Plus tester delivers optimal performance and durability over its lifespan. Lloyd's proactive maintenance program keeps your machine in top condition, preventing costly downtime and ensuring consistent results. Our team of skilled technicians performs regular inspections, calibrations, and adjustments to maintain your machine's precision and reliability.

Timely Repairs and Spare Parts

In the event of unexpected issues, Lloyd's rapid response repair service ensures your testing operations don't suffer. Our network of experienced technicians is dedicated to providing prompt and effective repairs, minimizing disruption to your workflow. Additionally, we maintain a vast inventory of genuine Lloyd spare parts, ensuring you have the necessary components to keep your machine up and running.

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