

ProTear DAS2

Data Acquisition Software

ProTear Touch DAS is a Windows-based data acquisition and reporting application designed for use with the Thwing-Albert ProTear Touch Elmendorf tear tester. It captures each sample set automatically via serial cable, displays data in real time, evaluates results against configurable limits, calculates statistics, and generates professional reports — giving laboratory technicians a complete tear-test management solution.

Test results are immediately displayed on the computer screen, plotted on a real-time graph and included in the statistical calculations. These results can then be saved to a file which can be recalled later to continue adding test data or for reference. Information can also be saved as an Excel file via user-friendly drop-down menus.

Customize Reports and Desktop View

User-defined labels and report headers make it easy to customize the desktop view and reports for specific applications. The real-time graph is displayed as a line chart and all test results within the limits will appear green while results that are outside the limits will appear red. Upper and lower limits are user defined and easily modified. A warning will appear after a predetermined number of tests have resulted in values outside of the limits, flagging unusual tests.

System Requirements

Instrument Model: ProTear Touch

Operating System: Windows 10 or 11 (64-bit)

Runtime: .NET 8 Desktop Runtime

Memory: 4 GB RAM minimum; 8 GB recommended

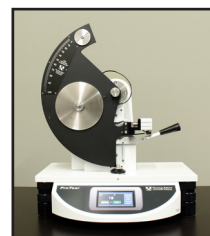
Storage: 100 MB available disk space

Connection: USB or RS-232 serial (COM port)

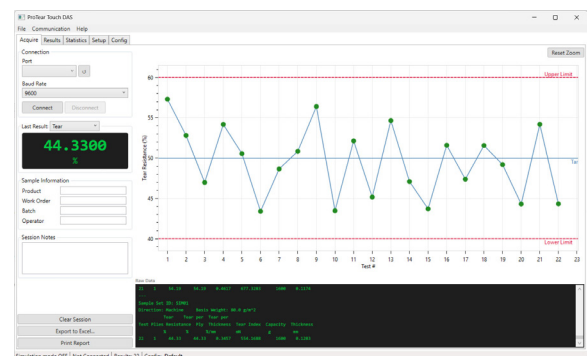
Licensing

Single installation — perpetual license

30-day trial period available



NOTE: Compatible with Thwing-Albert ProTear Touch Elmendorf tear testers. Serial cable sold separately. License includes one installation.



▲ Test results displayed on a real-time graph as a bar chart.



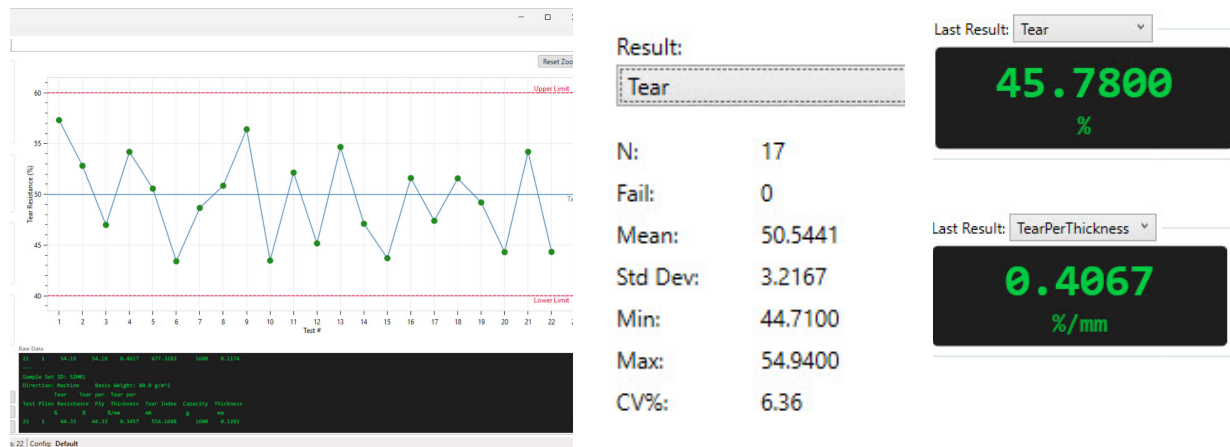
Thwing-Albert
Instrument Company



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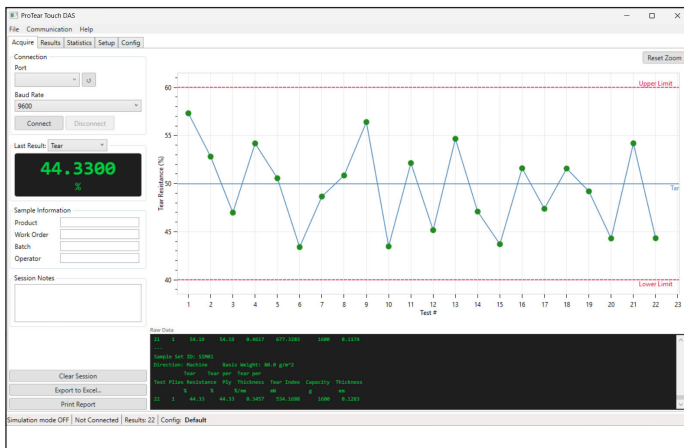
thwingalbert.com

Key Features

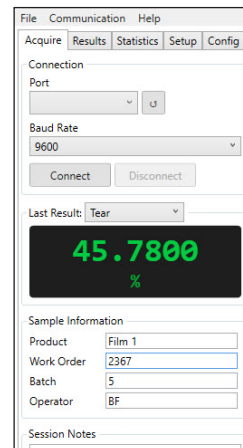


- Real-time data acquisition via serial connection to the ProTear Touch tester.
- Automatic recognition of every result the tester sends — Tear Resistance, Tear per Ply, Tear per Thickness, and Tear Index — along with direction (Machine, Cross-Machine, Radial), basis weight, thickness, and capacity.
- Supports all tester units: %, g, mN, N, and lbf for tear results; mil and mm for thickness.
- Live measurement chart with pass/fail color coding, target line, limit lines, and automatic scaling centered on target.
- Independent target, upper and lower limits, and valid range for each result type, with automatic pass/fail determination and popup, audible, and status-bar warnings.
- Complete statistical analysis for every result type, including Count, Fail Count, Mean, Standard Deviation, Minimum, Maximum, and Coefficient of Variation (CV%).
- Exclude individual readings with one click — chart and statistics update instantly while excluded results remain visible on reports for a complete record.
- Show or hide result columns to match your test method; exports and reports follow your selection.
- Configuration change warning alerts operators if tester settings change partway through a session.
- Simulation Mode for demonstrations and operator training without a connected device.
- Printed reports and on-screen print preview with chart, statistics, and full results table, plus optional automatic printing after a set number of results.
- Microsoft Excel export with results, statistics, session notes, and chart.
- Named configuration profiles — save and recall complete setup settings for different products or test specifications, with a default loaded at startup.





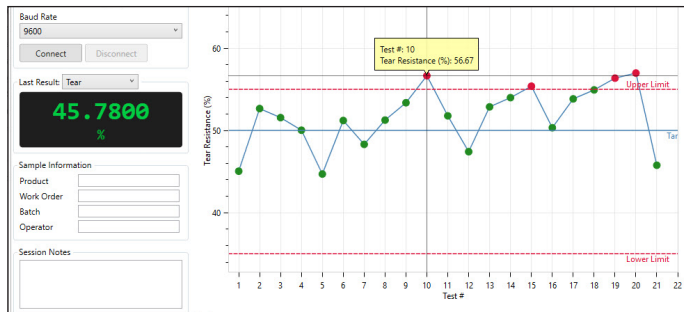
Main Screen - Test Results



Last Test Result

The Settings screen is divided into three sections: Warnings, Chart Options, and Auto Report. The Warnings section has checkboxes for Popup dialog, Audible beep, and Status bar. The Chart Options section has checkboxes for Show target line and Show limit lines. The Auto Report section has a Print after field set to 0 and a note that valid results (0 = off).

Settings



Out of Range Data

The Easy to Exclude Out of Range Data screen shows a table of test results. A yellow box highlights Test # 10, which is above the Upper Limit. The table has columns for Ext, Sample ID, Direction, Test#, Plies, Tear, Tear Unit, Cap, Cap Unit, Thickness, Thick Unit, T/Thick, and T/Thick Unit. The interface includes a menu bar, a toolbar, and a sidebar with connection settings and sample information.

Ext	Sample ID	Direction	Test#	Plies	Tear	Tear Unit	Cap	Cap Unit	Thickness	Thick Unit	T/Thick	T/Thick Unit
1	SIM01	Machine	1	1	45.0600	%	1600	g	0.1222	mm	0.3686	%/mm
2	SIM01	Machine	2	1	52.6700	%	1600	g	0.1313	mm	0.4012	%/mm
3	SIM01	Machine	3	1	51.5700	%	1600	g	0.1316	mm	0.3920	%/mm
4	SIM01	Machine	4	1	50.0400	%	1600	g	0.1222	mm	0.4095	%/mm
5	SIM01	Machine	5	1	44.7100	%	1600	g	0.1289	mm	0.3468	%/mm
6	SIM01	Machine	6	1	51.2200	%	1600	g	0.1137	mm	0.4506	%/mm
7	SIM01	Machine	7	1	48.3200	%	1600	g	0.1308	mm	0.3695	%/mm
8	SIM01	Machine	8	1	51.2700	%	1600	g	0.1272	mm	0.4032	%/mm
9	SIM01	Machine	9	1	53.3800	%	1600	g	0.1144	mm	0.4665	%/mm
10	SIM01	Machine	10	1	56.6700	%	1600	g	0.1083	mm	0.5230	%/mm
11	SIM01	Machine	11	1	51.7900	%	1600	g	0.1180	mm	0.4387	%/mm
12	SIM01	Machine	12	1	47.4300	%	1600	g	0.1124	mm	0.4220	%/mm
13	SIM01	Machine	13	1	52.8800	%	1600	g	0.1100	mm	0.4807	%/mm
14	SIM01	Machine	14	1	54.0000	%	1600	g	0.1154	mm	0.4680	%/mm
15	SIM01	Machine	15	1	55.3900	%	1600	g	0.1281	mm	0.4325	%/mm
16	SIM01	Machine	16	1	50.3400	%	1600	g	0.1195	mm	0.4214	%/mm
17	SIM01	Machine	17	1	53.8500	%	1600	g	0.1111	mm	0.4597	%/mm
18	SIM01	Machine	18	1	54.9400	%	1600	g	0.1185	mm	0.4635	%/mm
19	SIM01	Machine	19	1	56.3700	%	1600	g	0.1212	mm	0.4651	%/mm
20	SIM01	Machine	20	1	56.9900	%	1600	g	0.1098	mm	0.5190	%/mm

Easy to Exclude Out of Range Data

The Statistics View screen shows a table of test results. The table has columns for Ext, Sample ID, Direction, Test#, Plies, Tear, Tear Unit, Cap, Cap Unit, Thickness, Thick Unit, T/Thick, and T/Thick Unit. The interface includes a menu bar, a toolbar, and a sidebar with connection settings and sample information.

Ext	Sample ID	Direction	Test#	Plies	Tear	Tear Unit	Cap	Cap Unit	Thickness	Thick Unit	T/Thick	T/Thick Unit
1	SIM01	Machine	1	1	45.0600	%	1600	g	0.1222	mm	0.3686	%/mm
19	SIM01	Machine	19	1	56.3700	%	1600	g	0.1212	mm	0.4651	%/mm
18	SIM01	Machine	18	1	54.9400	%	1600	g	0.1185	mm	0.4635	%/mm
17	SIM01	Machine	17	1	53.8500	%	1600	g	0.1171	mm	0.4597	%/mm
16	SIM01	Machine	16	1	50.3400	%	1600	g	0.1195	mm	0.4214	%/mm
15	SIM01	Machine	15	1	55.3900	%	1600	g	0.1281	mm	0.4325	%/mm
14	SIM01	Machine	14	1	54.0000	%	1600	g	0.1154	mm	0.4680	%/mm
13	SIM01	Machine	13	1	52.8800	%	1600	g	0.1100	mm	0.4807	%/mm
12	SIM01	Machine	12	1	47.4300	%	1600	g	0.1124	mm	0.4220	%/mm
20	SIM01	Machine	20	1	56.9900	%	1600	g	0.1098	mm	0.5190	%/mm
11	SIM01	Machine	11	1	51.7900	%	1600	g	0.1180	mm	0.4387	%/mm
9	SIM01	Machine	9	1	53.3800	%	1600	g	0.1144	mm	0.4665	%/mm
8	SIM01	Machine	8	1	51.2700	%	1600	g	0.1272	mm	0.4032	%/mm
7	SIM01	Machine	7	1	48.3200	%	1600	g	0.1308	mm	0.3695	%/mm
6	SIM01	Machine	6	1	51.2200	%	1600	g	0.1137	mm	0.4506	%/mm
5	SIM01	Machine	5	1	44.7100	%	1600	g	0.1289	mm	0.3468	%/mm
4	SIM01	Machine	4	1	50.0400	%	1600	g	0.1222	mm	0.4095	%/mm
3	SIM01	Machine	3	1	51.5700	%	1600	g	0.1316	mm	0.3920	%/mm
2	SIM01	Machine	2	1	52.6700	%	1600	g	0.1313	mm	0.4012	%/mm
10	SIM01	Machine	10	1	56.6700	%	1600	g	0.1083	mm	0.5230	%/mm
21	SIM01	Machine	21	1	45.7800	%	1600	g	0.1126	mm	0.4067	%/mm

Tear
N: 21 Fail: 0
Mean: 51.6510 %
SD: 3.7170
Min: 44.7100 Max: 56.9900
CV: 7.20

Tear per Thickness
N: 21 Fail: 0
Mean: 0.4337 %/mm
SD: 0.0468
Min: 0.3468 Max: 0.5230
CV: 10.79

Statistics View

The Generate PDF Reports screen shows a table of test results. The table has columns for #, Sample ID, Direction, Test#, Plies, Tear (%), Cap (g), Thick (mm), and T/Thick (%/mm). The interface includes a menu bar, a toolbar, and a sidebar with connection settings and sample information.

#	Sample ID	Direction	Test#	Plies	Tear (%)	Cap (g)	Thick (mm)	T/Thick (%/mm)
1	SIM01	Machine	1	1	45.0600	1600.000	0.1222	0.3686
2	SIM01	Machine	2	1	52.6700	1600.000	0.1313	0.4012
3	SIM01	Machine	3	1	51.5700	1600.000	0.1316	0.3920
4	SIM01	Machine	4	1	50.0400	1600.000	0.1222	0.4095
5	SIM01	Machine	5	1	44.7100	1600.000	0.1289	0.3468
6	SIM01	Machine	6	1	51.2200	1600.000	0.1137	0.4506
7	SIM01	Machine	7	1	48.3200	1600.000	0.1308	0.3695
8	SIM01	Machine	8	1	51.2700	1600.000	0.1272	0.4032
9	SIM01	Machine	9	1	53.3800	1600.000	0.1144	0.4665
10	SIM01	Machine	10	1	56.6700	1600.000	0.1083	0.5230

Generate PDF Reports