• PB • OSB • MDF • PALLET BLOCKS

BOARD PROPERTY TESTER AND DENSITY PROFILE ANALYZER

IBX700

TO CARRY OUT LABORATORY TESTS FOR BOARD QUALITY CONTROL

The IBX700 laboratory testing machine has been designed to test the quality and mechanical characteristics of wood-based panels (particleboard, MDF, OSB) in compliance with today's standards (European, North american, and others upon request) and to then process the results obtained.
The instrument combines the laboratory tests for the mechanical properties with an analysis of the density profile without any contact between measuring instrument and product: the X-ray assembly basically consists of an X-ray generator and a sensor to pick up the rays, between which the sample is placed for the density profile analysis.
Additional accessories may be supplied upon customer request.

TESTS PERFORMED

• X-ray density profile • Dimensions (EN 325) • Density (EN 323) • Tensile strength (EN319) • Surface soundness (EN311) • Screw holding (EN320) • Bending strength and modulus of elasticity (EN310).

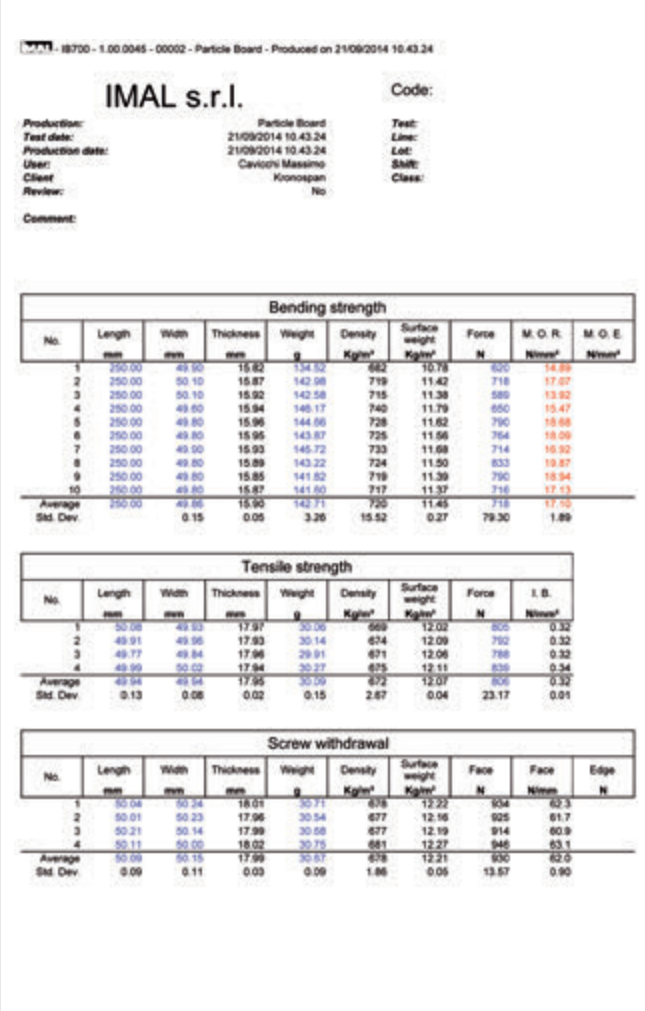
OTHER TESTS WHICH ARE POSSIBLE IN CONJUNCTION WITH OTHER EQUIPMENT

• Swelling and absorption (EN317) • Cyclic test in wet conditions (EN321) • Moisture content (EN322) • Boil test (EN1087) • Formaldehyde content (EN120) • Surface absorption (EN382) • Dimensional changes according to humidity (EN318) • PB, MDF and OSB moisture values • Particle / fiber screening test • Sand content • Hardness.

IMAL SRL · VIA R. CARRIERA, 63 · I-41126 S. DAMASO (MO) ITALY · T. +39 059 465 500 · F. +39 059 468 410 · info@imal.com · www.imalpal.com

The operator can programme and carry out the tests which need to be done to control the quality of the board produced with simple operations. The user interface has been developed in Windows, and this allows the user to unite top level graphics with the most modern software technology for filing data and the subsequent data search. All the data are stored in an ample, compatible Access database, from where they may be exported to other applications, like Excel for example, and/or printed (in graph form and/or as a numerical report).

IBX700 can import data from AUTOLAB and DPX.



IBX700 - 1.00.0045 - 00002 - Particle Board - Produced on 21/09/2014 10.43.24

IMAL s.r.l.

Code:

Production:	Particle Board	**Test:**	
Test date:	21/09/2014 10.43.24	**Line:**	
Production date:	21/09/2014 10.43.24	**Lot:**	
User:	Cavicchi Massimo	**Shift:**	
Client	Kronospan	**Class:**	
Review:	No		

Comment:

Bending strength

No.	Length mm	Width mm	Thickness mm	Weight g	Density Kg/m³	Surface weight Kg/m²	Force N	M. O. R. N/mm²	M. O. E. N/mm²
1	250.00	49.90	15.82	134.52	682	10.78	820	14.89	
2	250.00	50.10	15.87	142.98	719	11.42	718	17.07	
3	250.00	50.10	15.92	142.58	715	11.38	589	13.92	
4	250.00	49.60	15.94	146.17	740	11.79	650	15.47	
5	250.00	49.80	15.96	144.66	728	11.62	790	18.68	
6	250.00	49.80	15.95	143.87	725	11.56	764	18.09	
7	250.00	49.90	15.93	145.72	733	11.68	714	16.92	
8	250.00	49.80	15.89	143.22	724	11.50	833	19.87	
9	250.00	49.80	15.85	141.82	719	11.39	790	18.94	
10	250.00	49.80	15.87	141.60	717	11.37	716	17.13	
Average	250.00	49.86	15.90	142.71	720	11.45	718	17.10	
Std. Dev.		0.15	0.05	3.26	15.52	0.27	79.30	1.89	

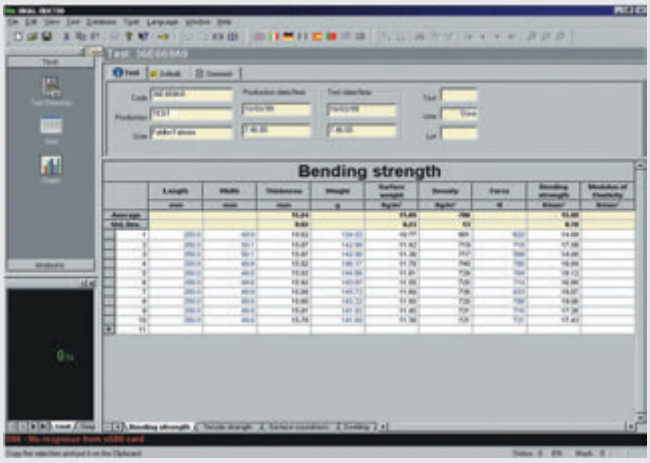
Tensile strength

No.	Length mm	Width mm	Thickness mm	Weight g	Density Kg/m³	Surface weight Kg/m²	Force N	I. B. N/mm²
1	50.08	49.93	17.97	30.06	669	12.02	805	0.32
2	49.91	49.96	17.93	30.14	674	12.09	792	0.32
3	49.77	49.84	17.96	29.91	671	12.06	788	0.32
4	49.99	50.02	17.94	30.27	675	12.11	839	0.34
Average	49.94	49.94	17.95	30.09	672	12.07	806	0.32
Std. Dev.	0.13	0.08	0.02	0.15	2.67	0.04	23.17	0.01

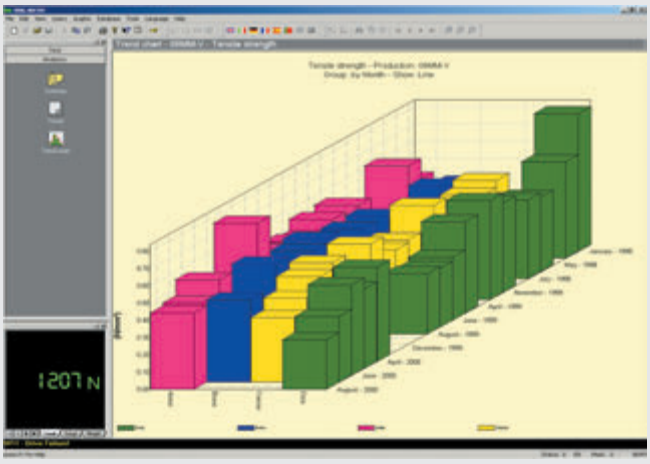
Screw withdrawal

No.	Length mm	Width mm	Thickness mm	Weight g	Density Kg/m³	Surface weight Kg/m²	Face N	Face N/mm	Edge N
1	50.04	50.24	18.01	30.71	678	12.22	934	62.3	
2	50.01	50.23	17.96	30.54	677	12.16	925	61.7	
3	50.21	50.14	17.99	30.68	677	12.19	914	60.9	
4	50.11	50.00	18.02	30.75	681	12.27	946	63.1	
Average	50.09	50.15	17.99	30.67	678	12.21	930	62.0	
Std. Dev.	0.09	0.11	0.03	0.09	1.86	0.05	13.57	0.90	

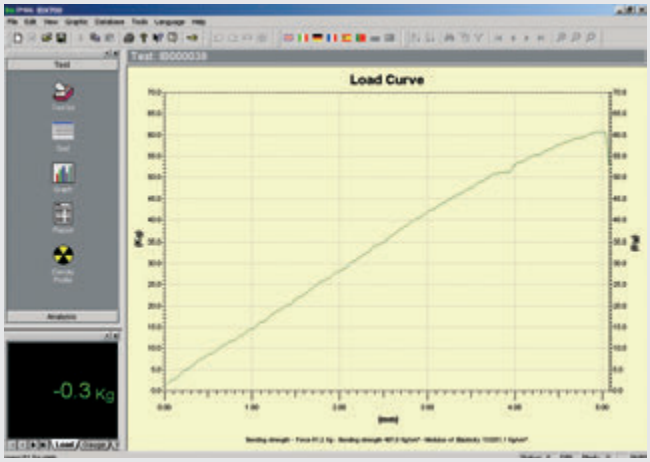
BENDING STRENGTH CHART



PRODUCTION TREND GRAPH



BENDING STRENGTH, LOAD CURVE GRAPH



PRODUCTION TREND GRAPH