HOLZMA

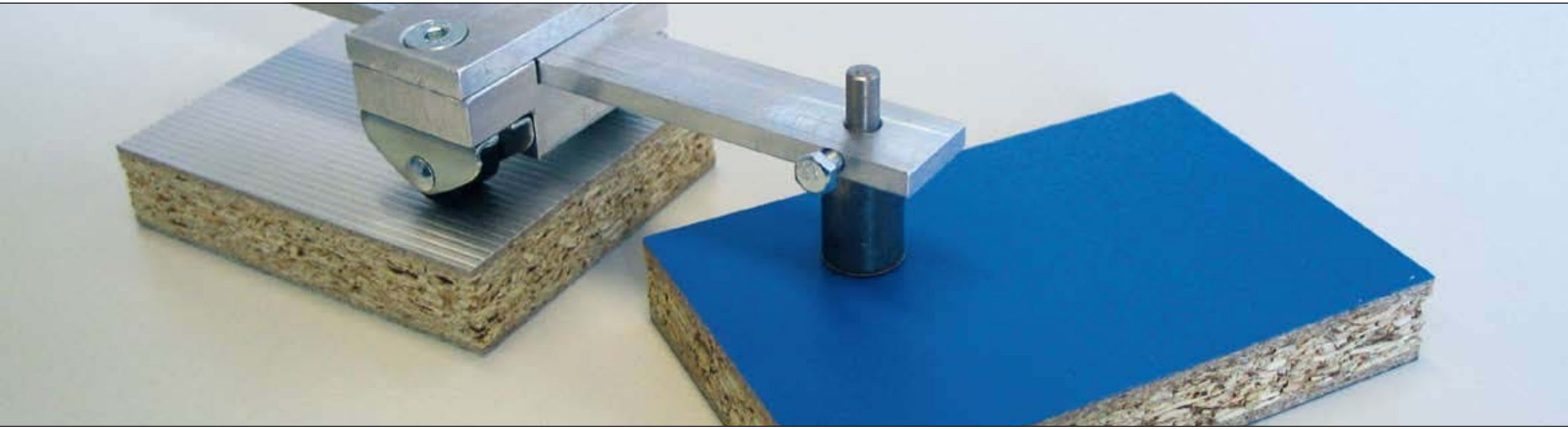
This brochure was presented to you by:

Choose the Original
Choose Success!

For the Success of Original Technology
A VDMA Campaign

Printed 09/08. Subject to technical changes.
Errors and printing errors excepted. Illustrations
may show extras not included in the basic price.

How do you protect your panels?



A company of the HOMAG Group

HOLZMA

HOLZMA Plattenaufteiltechnik GmbH
Holzmastrasse 3
75365 CALW-HOLZBRONN
GERMANY
Tel.: +49 7053 69-0
Fax: +49 7053 6174
E-Mail: info@holzma.de
Internet: www.holzma.de

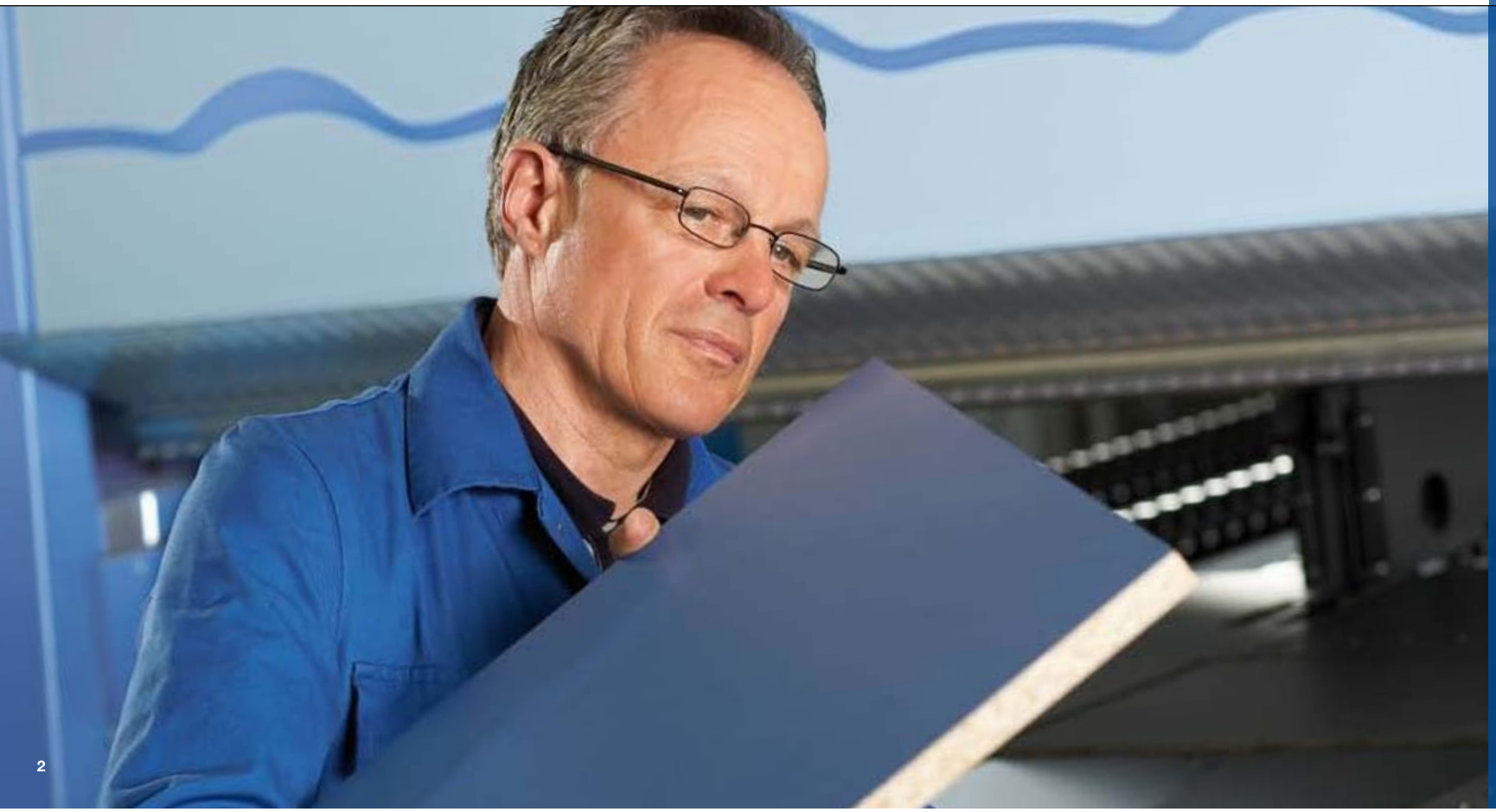
HOLZMA S.A.
Unipersonal
Pol. Ind. Mas Dorca
08480 L'AMETLLA DEL VALLES
(BARCELONA) SPAIN
Tel.: +34 93 8431700
Fax: +34 93 8431707
E-Mail: info@holzma.es

HOLZMA U.S.
Division of Stiles Machinery Inc.
1200 Tulip Drive
GASTONIA, NC 28052
USA
Tel.: +1 704 861-8239
Fax: +1 704 867-4140
E-Mail: holzma@stilesmachinery.com

Setting Standards: Solutions for Sensitive Surfaces

Ready for Sensitive Surfaces

Sensitive surfaces are playing an increasingly important role in panel processing. Whether designer furniture or kitchen manufacture – the trend is towards an ever-increasing diversity of high-quality and, as a result, scratch-prone materials.



Contents

The HOLZMA Scratch Test

How tough are various materials? In order to be able to give practical answers to this question HOLZMA, in cooperation with Rosenheim University of Applied Sciences, has developed a special testing method. It is now possible to test how sensitive your material is to scratches and make recommendations for the optimum machine configuration.

How the HOLZMA Scratch Test works

The tester consists of an aluminium arm at the end of which one of two attachments is fitted: a carbide tooth with defined angle and tip radius, or a flat pad with sandpaper of a standardised grade. The attachments are applied to the surface of the panel, one after the other, under a load that can be moved along a scale from one to seven on the aluminium arm. The tester is pulled across the test material. The sensitivity class (1 = highly sensitive, 7 = trouble-free) can then be calculated from the degree of damage.

Test procedure

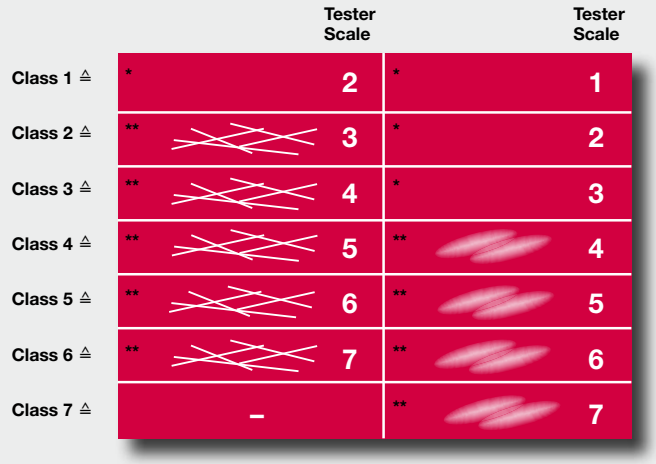
Step 1:
The panel is divided vertically into two halves and horizontally into seven sections using a marker pen.

Step 2:
The horizontal sections are numbered from top to bottom. On the right half from 1-7 for the sandpaper test, and on the left half from 2-7 for the metal point test. The bottom section on the left remains unnumbered.

Step 3:
Now the tester is pulled across each section of the panel surface – fitted with the metal point for one half, and with the sandpaper for the other. After each horizontal section, the load on the tester arm is scaled up in accordance with the numbering. In order to increase the reliability of the result, the test should be repeated several times.

Test with the pointed attachment:
Produces effects simular to those caused by saw waste in the machine or by misadjustment

Test with sandpaper attachment:
Produces effects similar to those caused by unevenness, for example due to unsuitable rollers

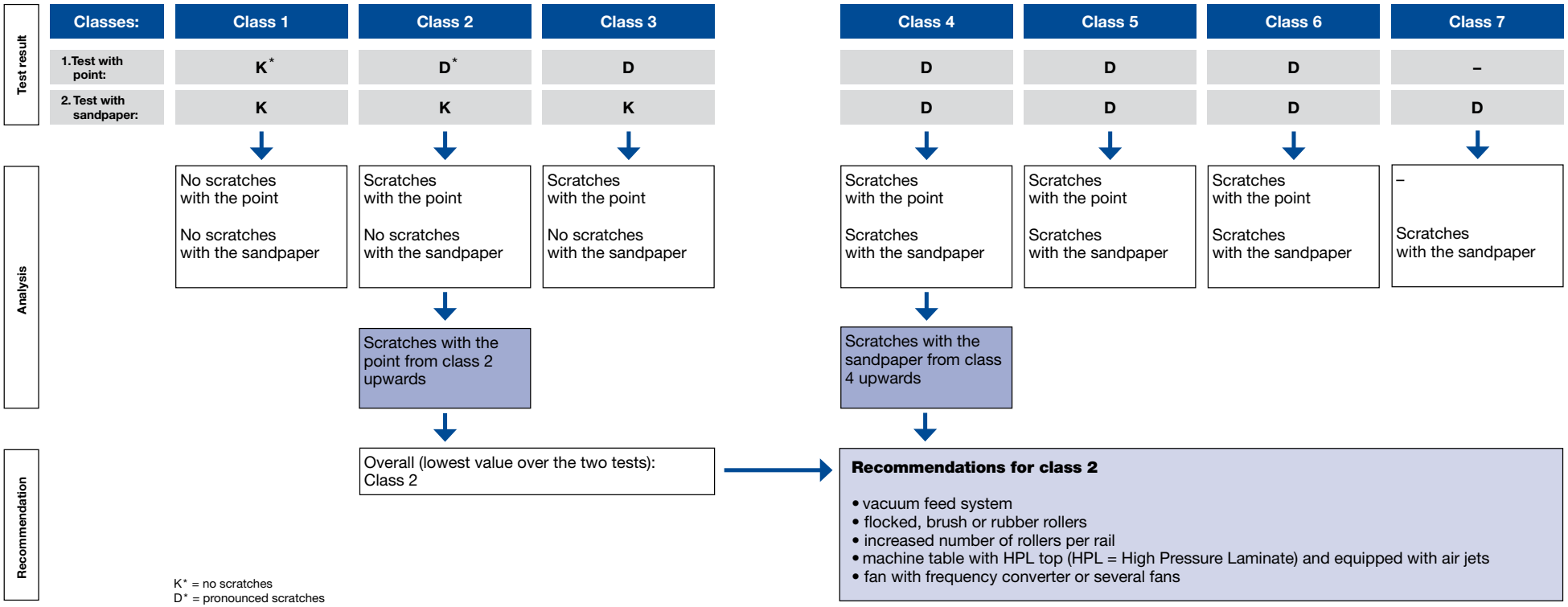


* No visible scratches, because the surface is not damaged under this load.

** Pronounced, clearly visible scratches, badly damaging the surface.

The HOLZMA Scratch Test – Analysis

The panel material is classified by visual inspection. First, the class at which the test with the point causes pronounced scratches is established. Then the class at which the sandpaper test causes pronounced scratches is determined.The tests with the point and the sandpaper provide two sensitivity values. The smaller of the two values is then taken for the recommendations. The result must be verified again in a field test.



Sensitivity can be Measured

Surfaces can be classified in seven different sensitivity classes (1 = highly sensitive, 7 = trouble-free), so that the right equipment can be recommended.

How scratch-sensitive is your material?

HOLZMA knows the answer – because we have by now tested very many currently popular materials and decors. The results have been stored in a dedicated material database. Your HOLZMA sales advisor will be pleased to give you more information. Even better: if there is no data in our database for the material you have requested, we shall be happy to test it for you.

Class 1

Characteristics

- highly sensitive material
- often protected by plastic foil
- scratches result from the slightest unevenness, for example from saw waste, or even from contact with finger nails

Recommendations

- vacuum feed system
- flocked, brush or rubber rollers
- increased number of rollers per rail
- machine table with anodised aluminium top and equipped with air jets
- fan with frequency converter or several fans

Class 2

Characteristics

- very sensitive material
- scratches normally result from the slightest unevenness, for example from saw waste

Recommendations

- vacuum feed system
- flocked, brush or rubber rollers
- increased number of rollers per rail
- machine table with HPL top* and equipped with air jets
- fan with frequency converter or several fans

Class 3

Characteristics

- fairly sensitive material
- many panels fall into this class

Recommendations

- flocked, brush or rubber rollers
- increased number of rollers per rail
- machine table with HPL top* and equipped with air jets
- fan with frequency converter

Class 4

Characteristics

- not very sensitive
- scratches normally only result when a certain book height is exceeded

Recommendations

- optimise the number of roller brakes
- standard rollers

Class 5

Characteristics

- surfaces are trouble-free
- scratches normally only occur if the machine is out of adjustment

Recommendations

- standard machine
- if any problems should occur, check the machine against the check list, e.g. level of roller rails, level of clamps, machine table plates, ...

Class 6

Characteristics

- surfaces are trouble-free
- scratches normally only occur if the machine is out of adjustment

Recommendations

- standard machine
- if any problems should occur, check the machine against the check list, e.g. level of roller rails, level of clamps, machine table plates, ...

Class 7

Characteristics

- surfaces are trouble-free
- scratches normally only occur if the machine is out of adjustment

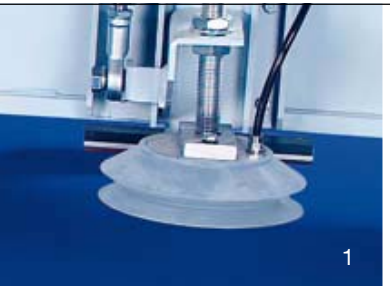
Recommendations

- standard machine
- if any problems should occur, check the machine against the check list, e.g. level of roller rails, level of clamps, machine table plates, ...

* High Pressure Laminate

Solutions for Sensitive Surfaces

From feeding through to destacking, HOLZMA offers you a proven range of solutions to protect sensitive surfaces. Purpose-designed and tailored to your needs.


1


2


3

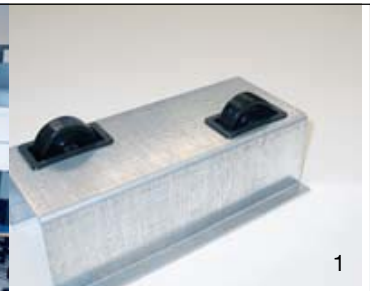
Vacuum Feed

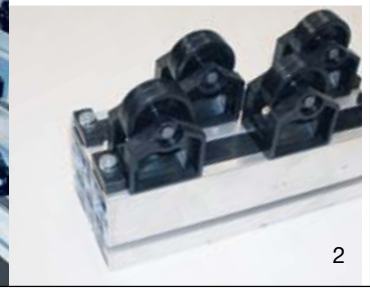
The vacuum feed system (picture 1) ensures that panels are positioned gently on the rear machine table. It eliminates friction-intensive push-feeding. The material-specific suction cups are also suitable for porous materials.

The special “2in1” solution (pictures 2 and 3) combines two feeding options in one. Panels are automatically either pushed onto the rear machine table or laid on it by vacuum suction cups. This makes “2in1” the right answer to the increasing diversity of materials.

Rollers

- Proven and cost-effective: our standard black rollers are suitable for trouble-free materials. They come on top hat rails or extra-stable combi-profile rails (pictures 1 and 2).


1


2


3

- Flocked and gentle: these rollers prevent shiny marks and scratches on sensitive panel materials (picture 3).
- Extra-safe and adaptable: brush rollers are the number one choice for sensitive materials that have to be moved not only backwards and forwards, but also at right angles to the material flow direction. For example during alignment (picture 4).


4

Performance Package

HOLZMA now also offers attractively priced option packages especially for sensitive panel materials.

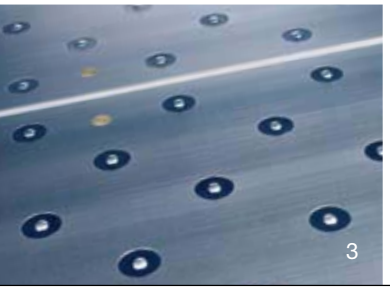
Dust Extraction

Improved dust extraction due to optimised flow conditions – uniformly along the entire length of the pressure beam as well as through the angular fence. This significantly reduces the risk of scratches caused by sawdust and waste.

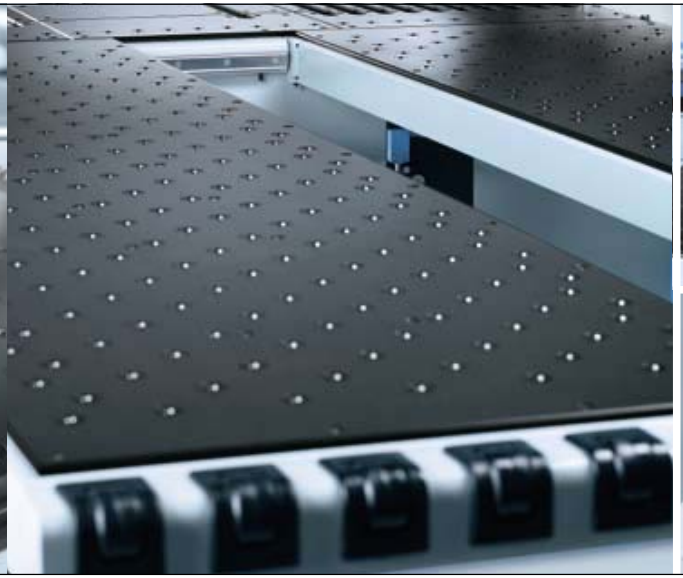
Air Tables

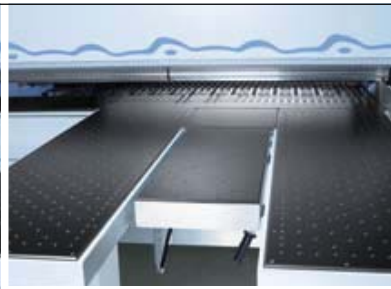
The arrangement of the jets in the air table, especially their proximity to the edge, is the result of many technical tests. Panels or books of panels are raised uniformly and glide across the table. That's ergonomic and prevents the material from being damaged.


1


3


2





Machine Tables

- Machine tables without air jets are suitable for all trouble-free materials (picture 1).
- Machine tables with air jets permit panels to glide on a cushion of air. This prevents damage to the material as well as reducing drag (picture 2).
- Anodised aluminium machine tables with air jets have rounded edges and carefully masked socket cap screws for particularly sensitive materials (picture 3).

In addition, a 30 degree bevel at the feeding edge makes it possible to turn the material smoothly. Scratches are reliably prevented. An additional tiltable air table (top picture on the right) provides a continuous support surface, preventing panels from sagging. Rollers at the end of the air table facilitate scratch-free feeding and removal of panels.

Fan

Infinitely-variable air pressure regulation for the air tables and the air jets in the machine table is achieved, depending on the model, either by a fan with frequency converter or by having several fans.

Questionnaire

Dear Customer,
Please remember to fill in your address.
Your data will, of course, be treated confidentially!

Name: _____

Company: _____

Street: _____ City: _____

Telephone: _____ E-mail: _____

1. **How do you rate the panel material you use?**
   Approx. ____ % very sensitive (surface can be scratched by a fingernail)
   Approx. ____ % sensitive
   Approx. ____ % not sensitive

2. **Which panel material is at risk of being damaged?**
   (Name of material, manufacturer, colour, number of problem panels per shift, thickness, weight per panel)

   _____

   _____

   _____

3. **Have you had problems with panels in the past?** (Please tick)
   ☐ Yes ☐ No (proceed to question 7)

4. **Which materials have caused problems?**
   (Name of material, manufacturer, colour, number of problem panels per shift, thickness, weight per panel)

   _____

   _____

   _____

5. **At which stages of the manufacturing process did the problems occur?** (Please tick)
   ☐ Cut-to-size ☐ Roller conveyors ☐ Mid machine table
   ☐ Feeding ☐ Table surfaces ☐ Positioning fence
   ☐ Unknown ☐ Other: _____

6. **Have you taken any steps to remedy the problems?** (Please tick)
   ☐ No
   ☐ Yes, namely: _____

   _____

   _____

7. **Do you cut sensitive panels ☐ singly or ☐ in books?** (Please tick)

8. **Problems with sensitive material occur when books are higher than _____ mm**

9. **Is there sufficient compressed air at the removal table?** (Please tick)
   ☐ Yes
   ☐ No

10. **What would you like to improve / change on your present panel saw?** (Please tick)
    ☐ Nothing
    ☐ I need the following additional functions on my panel saw:

    _____

    _____

    ☐ Others: _____

11. **How are the panels fed to the machine?** (Please tick)
    ☐ Manually from the front – if yes:
        ☐ with vacuum lifter
        ☐ by hand
    ☐ Automatically, pushed off lift table
    ☐ Automatically, laid in the machine by vacuum feeding system