

mitech news



In this edition:

- Peel coating
- pMDI

Greetings to all

Welcome to the March news edition.

We are all aware of the virus news, but we remain confident that our countries are taking the appropriate actions. And we trust that our customers, suppliers and friends will have a safe and healthy year.

For Mitech services, we are pleased to inform that after a brief interruption from China, we are back on track.

Our main problem is delays with shipping from Europe, whilst shipping companies reschedule vessels. So we **urge customers to check stocks and order early**

Panel lamination

Peel Coat Applicators



Great Richwell Industry and Trading

Temporary Protective films for decorative laminates

The protection of high value surfaces of any product is now taken for granted: For example: phone and PC screens, plastic surfaces, colour coated sheet steel. The application of protective films ("Peel Coat") to the surface of decorative laminated panel surfaces is now commonplace.

Mitech is now successfully supplying high quality Peel Coat Applicators.

- Coating can be to top or bottom or both surfaces.
- Units can be stand-alone, or integrated into the press line
- Videos are available



Installation of a peel coat applicator in-line with a HPL press line

Engineered Panels

pMDI bonded wood panels

We are all aware that the momentum for lower and lower formaldehyde emitting wood panels follows the global regulations imposed on the wood panels industries .



From several alternative binders available, the industry has focused on pMDI.

(Polymeric diphenyl methanediisocyanate)

With the well-recognised advantages:

- Cured pMDI is completely free of formaldehyde emissions.
- The extremely effective bond of pMDI



E&P Wuertz, polymer additive technology (PAT®) products are probably the most globally respected.

Wuertz recognises all the issues with pMDI binders and has developed and refined its range. The components used in Wuertz MDI additives are free of silicone and wax and can withstand temperatures exceeding 230°C.

The extremely high temperature-resistance of the Wuertz grades allow for the manufacture of panel-surfaces with a light, natural color.

100% MDI-bonded panels made Wuertz products may immediately be used for lacquering or lamination without sanding.

All products are non-corrosive and compliant with the internationally recognised environmental standards, both for the external environment and the process environment. In particular, there are no flammable volatiles emitted at high temperatures associated with pressing.

Wuertz additive for pMDI panel production:

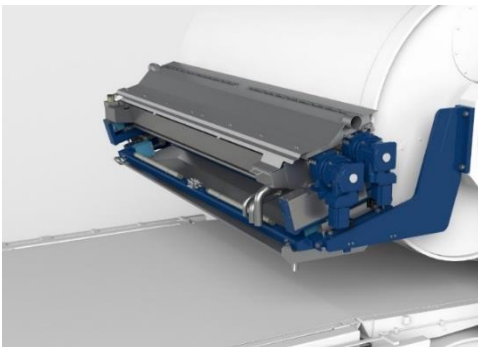
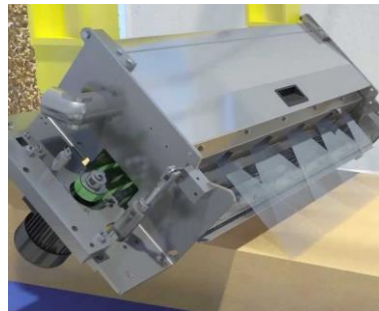
- **External Release Agent type PAT®- 7399/D** and a range suitable for the selected coating process
The use of specialised release agents are essential to ensure separation of the hot cured pMDI from the press belt or platen surfaces.
- **Internal Release Agent type PAT®-554/HW**
This is a concentrated product to be diluted with soft water or blended with wax-emulsions.
- **Tackifier type PAT®-5177/N**
MDI – in comparison with UF or MUF – generally suffers from a low cold-tack, especially considering the comparatively low dosages.
This can be a significant issue with multi-layered panels such as particleboard. So an additive to increase tack is essential.
PAT®-5177/N is also an internal release agent, and in some cases no extra release agent is required
- **Curing agent type PAT®-6288**
pMDI is catalysed by water but PAT®-6288 is a controlled reaction

Release agent application equipment:

The external release agent equipment is as important as the additive in the application process!

The most effective are the external release agents, applied directly to the hot steel press belts. The coverage of the belts must however be uninterrupted!

Commonly used coating is by nozzle system spraying, and by rotary disc system spraying. Having in mind that the spray systems must be designed to operate in a relatively hot environment.



Probably the ideal process for large scale production is with specialised coating rollers on the steel belts

- Aqueous based external release agents should not be applied to mat surfaces:.
- To back-up an external release agent, an internal release agent is often used.

A more in-depth version of this article is available on request

The April edition will include a discussion on coloured dyes and pigments for wood panels and lamination.

Please feel free to request or suggest topics for our newsletters. And we welcome questions. If we don't have the answer, Mitech has an extensive network of associates for information!

Engineered wood panels

- Conveyors
- Chippers
- Resin plants
- Chip washers
- Plywood presses
- Mat Spray Systems

Panel Lamination

- Paper impregnation lines
- Short Cycle Presses
- HPL Presses
- Veneer presses
- Press Pads
- Press Caul Plates
- Paper winders
- Paper Cutters
- Protective Foil application

Additives

- Release Agents
- Wetting Agents
- Hardeners
- Dyes and Pigments

CONTACT: Mike Green

Mitech Panel Services Pty Ltd
7, Maguire Place
Dardanup West
WA, 6236
Australia

Ph: 61 897281828
Fax: 61 894636058
Mob: 61 435651615
mike@mitechps.com
lois@mitechps.com
www.mitechps.com

