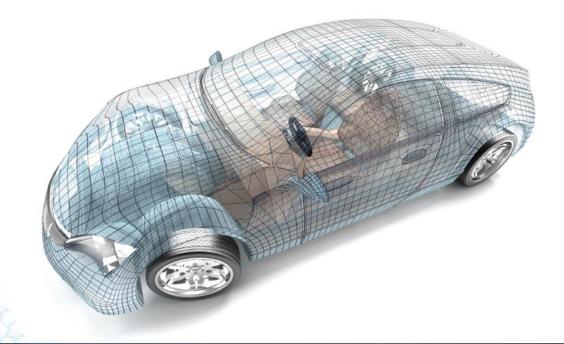


A VIRTUAL EVENT APRIL 29 - MAY 1, 2020





The World of IPCO ThermoPress Systems

A Continuous Process for the Production of Thermoplastic Composites

Presented By: Michael Tobiasz
Regional Product Specialist, Composites (NAFTA)
IPCO US LLC



Our business

We are a global industrial process company developing customized solutions to drive customer productivity

The worlds only manufacturer of both Teflon and Steel Double Belt Presses

200 M EURO

Annual sales

650 EMPLOYEES

Presence in

35+ COUNTRIES

Part of the Wallenberg Group with ~600.000 employees and > 140 Billion EURO in total annual sales of holdings



Transportation

Automotive

Mass transit

Shipping Containers

Recreational Vehicles

Aerospace

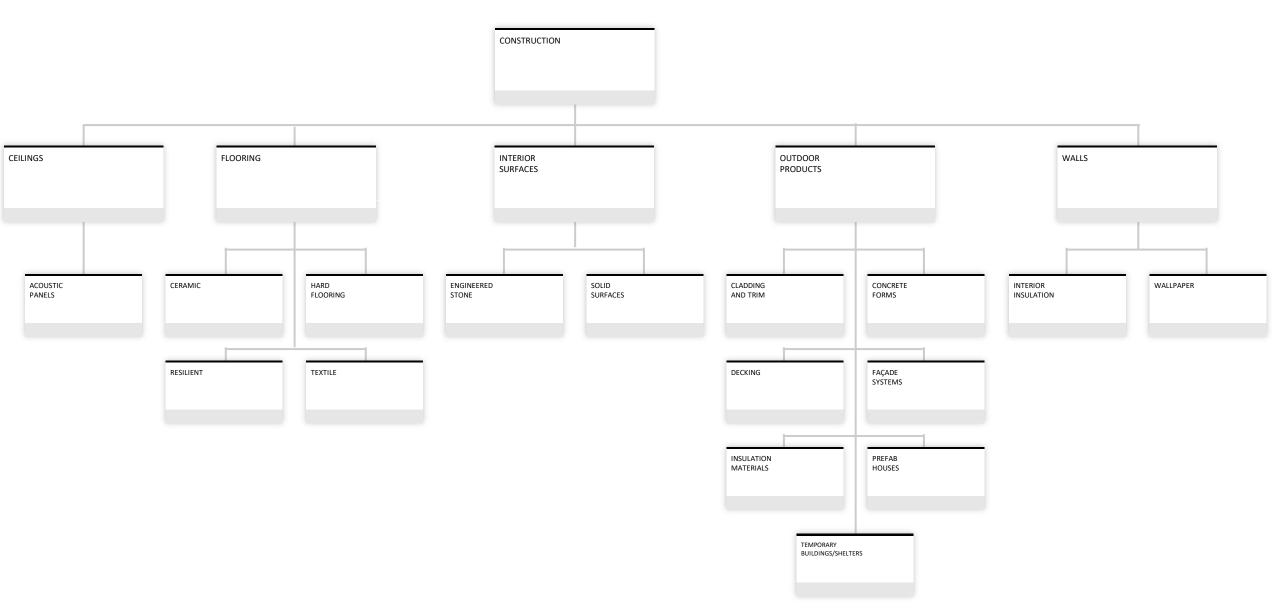
Construction



Transportation Sector Applications

TRANSPORTATION CONTAINERS TRUCK & TRAILER AUTOMOTIVE RECREATIONAL VEHICLES (RVs) INTERIOR INTERIOR BODYWORK ACOUSTIC AIR CONTAINERS SEA CONTAINERS CEILING CEILING SIDE ACOUSTIC SKIRTS INSULATION PARTS INSULATION ORGANO-DASHBOARDS FLOORS FLOORS TRAILER DOOR SHEETS WALLS PANELS WALLS UNDERBODY DOOR WALLS WIND FLOORS PANELS DEFLECTORS WHEEL HEADLINERS WALLS ARCHES HOOD/BONNET PARCEL SHELVES TRUNK LINERS







Automotives

Interior / Exterior Thermoplastic Components





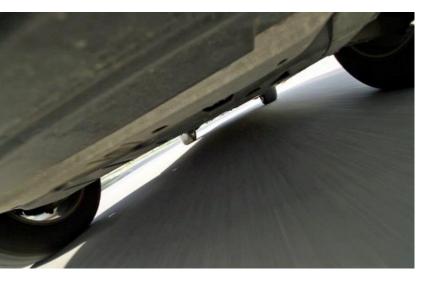
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Automotive Thermoplastic Composites



Thermoplastic Interior/ Exterior Components









Underbody Panel

Wheel Well Liner

Interior Door Panel Component



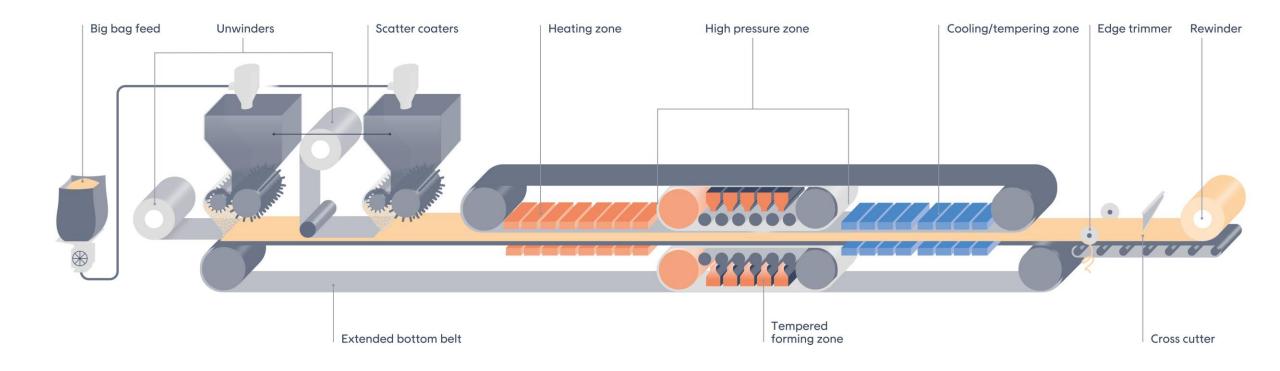
ThermoPress Double Belt Continuous Process Technology

- Consolidate multiple layers of similar or dissimilar properties
- Calibrate, consolidate, cross-link, tempering and cooling under controlled temperature and pressure conditions
- Increase mechanical strengths, densities and stiffness
- Laminate film layers on surface and center to maintain acoustical properties, and as a binder
- Consolidate pre-laminated sheets onto, for example, a Honeycomb core
- Impregnation of composite materials with a thermoplastic or thermoset resin in liquid, powder or film form
- Precision Scattering
- Scattering of powder, granules, flakes
- Adding reclaimed fibers into core
- Surface treatments





ThermoPress CB system diagram with Rewinder





IPCO Composite solutions ThermoPress portfolio



Pressure by heating or cooling plates: 0.01 bar

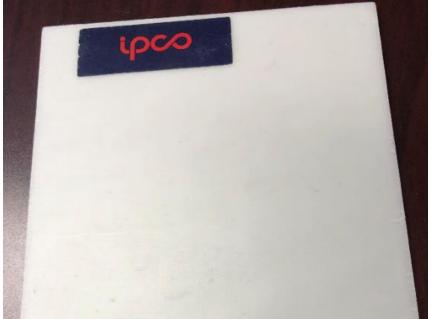
Thermoplastic GFPR Uni-directional Tape









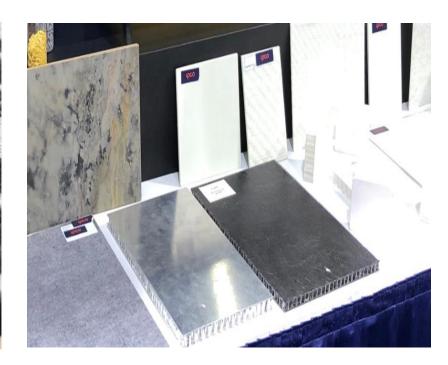








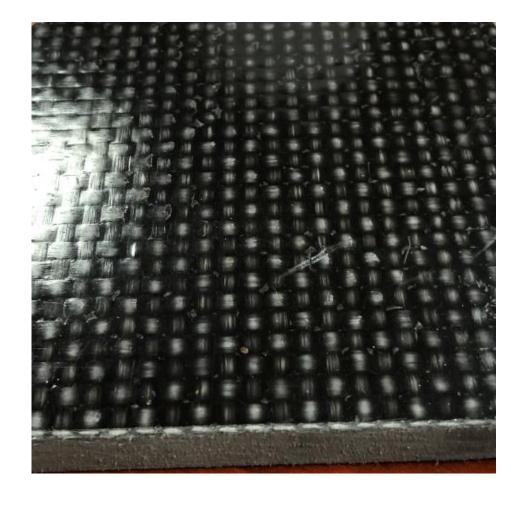




Hardfill waste fiber Honeycomb panel. Acoustic properties









Automotives

Sustainable processing of reclaimed / recycled thermoplastic fiber









Scattering of post industrial fibers

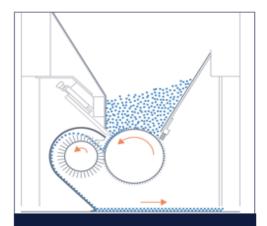
Recycled fiber layer between needle felts

Consolidation of sheet materials

Wheel Well Lining

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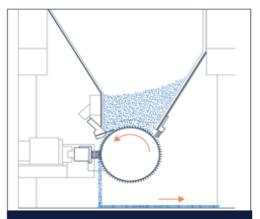


SCATTERPRO G

Rotating brush-off system

for granulates, flakes, chips, glass, carbon black, etc.

(1 mm - 20 mm)

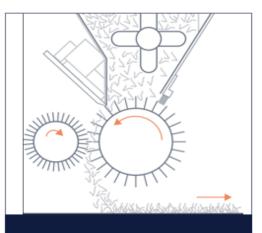


SCATTERPRO P

Oscillating brush-off system

for powder, glitter, chips, sand, glass, corundum, etc.

(0,03 mm - 1,2 mm)

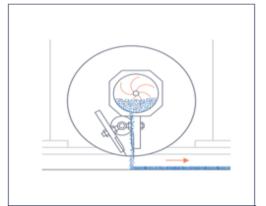


SCATTERPRO F

Rotating brush-off system

for fibers

(0,5 - 8 mm)



SCATTERPRO RSS

Rotary Screen system

for granules, sesame, semolina, etc

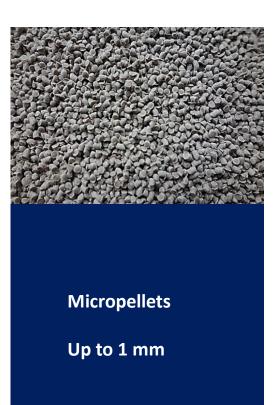




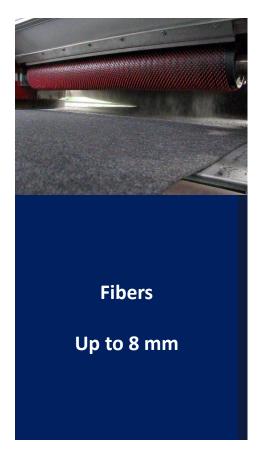


Powder

50-500 μm



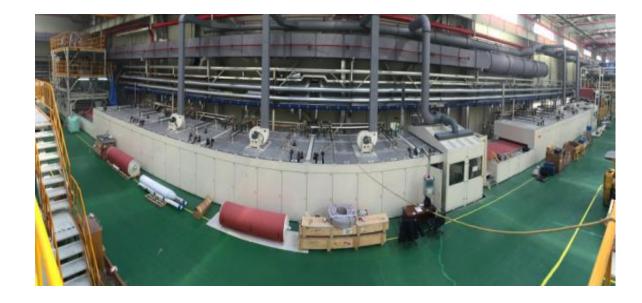




Examples of Installed Lines



















Quick-Release Hybrid belts (patent pending) for Class A surface preparation

IPCO ThermoPress Recent Innovations

Special configuration for Honeycomb production

Multi-stage sequential processing

Horizontal process sequence

Linear, isobaric, and isochoric pressure

Process benefits:

An environmentally sustainable production process

Operational efficiencies, consistent and repeatable qualities

Small footprint, minimal operator assignment

Smooth surface preparation

40 years experience manufacturing double belt presses, and 110 years manufacturing steel belts





Thank you for your participation in this session.

Thanks as well to the ACMA for organizing the TCC, and given the current situation, the revised format of the conference.

For any additional information on the IPCO ThermoPress & ScatterPro Technology, do not hesitate to contact us.

My colleagues and I remain at your disposal

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