

RESYSTA WORLDWIDE

We offer a completely new material standard now available worldwide, which can significantly extend your product portfolio. Moreover you will benefit from our years of experience and will receive extensive support.



TECHNICAL DATA

Density	ASTM D2395:2002	approx.1.46 kg/m ³
Coefficient of Linear Thermal Expansion	ASTM D696	3.6x10 ⁻⁵ /mC
Water Absorption and Air Humidity Behaviour	ASTM D1037:2006a	very low or none water absorption
Weathering and UV Resistance	QUV Test	Resysta surfaces treated with glaze show extremely high resistance
Skid Resistance	DIN 51097	C Rating (highest rating)
Fire Behaviour (British Standard)	BS 476 Part 6 & 7	B2, normal flammability (by adding flame retardants, a higher rating of B1 can be reached)
Fire Behaviour (US Standard)	NFPA	A Rating (flame propagation 25, smoke emission 450)
Fire Behaviour (British Standard)	BS 476 Part 6&7	Rating 1
Durability (Resistance to Wood-Destructive Fungi)	DINV ENV 12038:2002	the material has not been affected, highest durability - Class 1
Emission	DIN EN ISO 9001/14001	passed
Brinell Hardness (HB)	EN 1534	81,1 N/mm ²
Friction Coefficient μ untreated	EN 13893	0,46
Friction Coefficient μ with 2K	EN 13894	0,52
Screw Withdrawal Resistance	EN 320.2011-07	5777 N
Heat conductivity (λ)	EN 12664	0.199 W/(mK)
Water vapor permeability	DIN EN ISO 12572	$\mu=1300 \rightarrow$ sd 7.22m diffusion inhibiting
Bending Strength	ISO 178	46 N/mm ²
Bending Modulus	ISO 178	3850 N/mm ²
Tensile Strength	ISO 527	21,8 N/mm ²
Tensile Modulus	ISO 527	2340 N/mm ²
Shearing Strength	EN 392	16,8 N/mm ²
Resistance to Mould Fungal Decay	CEN/TS 15083-2	The material features almost no mass loss, highest durability classification 1 (very durable)



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Specialized to Produce





»Resysta is extremely resistant and provides for an especially beneficial eco-balance«
 »Resysta deserves the title »The better wood« in every respect.«



RESYSTA - A GIFT OF NATURE

Our aim was to develop a weather- and water-resistant material with the look and feel of precious wood. Material obtained from renewable raw material, resistant to water, sun, wind and cold and that does not splinter - even after many years. A material which is saving resources and always features consistent high quality.

We have invented it. And it can do a lot more than wood. Resysta is extremely resistant and has an exceptional eco-balance. Made from rice husks, (an agricultural raw material, which has so far not been used worldwide) it sets new standards in terms of sustainability. The haptic impression is very pleasant and the possibilities almost infinite.

RESYSTA WORLDWIDE

We provide an entirely new material standard, which is instantly available around the globe and which can expand your product portfolio considerably. You furthermore benefit from our many years of experience and will receive extensive support.

RESYSTA: UNIQUE MATERIAL WITH BIPOLAR PROPERTIES

A complex procedure (PTRH-Technology) enables us to treat the rice husk in a way that - for the first time - provides for a process taking place between a natural fiber and a polymer. This allows for the rice husk to entirely combine with the polymer. Therefore the positive properties of the silicates, contained in the rice husk are reflected in the compound. Owing to the bipolarity of the material, its surface cross-links with water but water cannot penetrate it. Furthermore, Resysta is easy to shred and pulverize for the recycling process and can be introduced to production without an intermediate step.

RESYSTA COLOR CONCEPT



Surface products specially developed for Resysta



FRIUL FILIERE SPA

is a manufacturer of dies for the extrusion of plastic material since 40 years. The company now sells complete, turn-key systems all over the world to anyone looking for high-quality performance when manufacturing Resysta profiles, from technological extrusion lines, fully customised and guaranteed 100% Made in Italy.

Customers have access to decades of experience and flexibility; a “yes, we can” approach that reflects the ongoing belief in R&D. The company holds several European and international patents and customers look to it for projects characterised by the use of complex materials or the section of the product they require.

EVERY SYSTEM IS A PROTOTYPE

From the conception to the delivery of the system, complete with machines and dies, all custom built. “Taking care of the customer and the project, for which we act as the sole partner, remains our main concern,” stresses Valdi Artico, Chairman and CEO. “Our passion for research is what leads us and determines the ambitious goals which we set for ourselves. This means we are motivated partners when undertaking projects for manufacturing special profiles and pipes which require a specific study and a made-to-measure technological solution. Starting with the customer’s idea, after a preliminary feasibility study, we take care of the combination of materials and process know-how to obtain the best possible performance in terms of production capacity and quality.”

MISSION

To be the leading provider of customized extrusion Turn-Key plants creating value for our clients, and recognized for our “can do” attitude, professionalism, flexibility, levels of service and highly motivated people.

COMPLETE COMPOSITE TERRACE SYSTEM

Friul Filiere presents one of its latest products for the decking sector, which it approaches, as always, with a completely new solution aimed at producing a terrace system with a guaranteed performance. This is not WPC. It is RESYSTA which, when extruded on Friul Filiere systems, allow the customer to achieve excellent production performances and high quality profiles.



CUSTOMERS NEED Friul Filiere is your ideal Partner for a dedicated complete extrusion plant. We carry out the best Turn Key Project tailor made for you.

TECHNICAL ADVICE all our expertise is at your disposal. Share your idea, your needs, your questions. Your Target will become our Target.

FEASIBILITY STUDY Variable markets cause a greater need for flexibility. We can help you carrying out a dedicated feasibility study in order to have a return of the investment as fast as possible.

MATERIALS AND FORMULATIONS with almost 40 years of experience, a team of experts can study the ideal formulation for the most performing plant.

ENGINEERING our highly capable engineers create the technological solution dedicated to your Turn-key project.

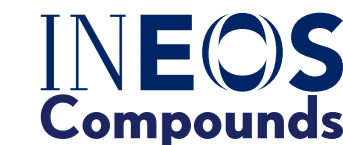
DESIGN WORK two different technical departments using 3D softwares, design machines and toolings, in order to give you a Turn-key project.

PRODUCTION OF MACHINES AND TOOLINGS we manufacture machines and toolings inside our plant thanks to last generation CNC systems, a strict quality control process and highly motivated professional people.

FINAL TEST the complete plant is tested together with the customer in Friul Filiere in order to check everything correspond to the order

START UP AND COMMISSIONING our extrusion experts train the people at customer's plant and guide them during the installation of the machines and the start up phase, to guarantee the best production performances.

AFTER SALES we will always support you. We are available for further information or clarifications on the system provided, we will follow you up on the spare parts service and respond to the urgent needs as soon as possible.



INEOS COMPOUNDS

is one of the top three manufacturers of PVC compounds with plants in Sweden, Switzerland and England.

We offer the complete product range worldwide for industry sectors: construction, automotive, electrical, medical and packaging. In addition to our extensive standard range in extrusion and injection molding grades, we also develop customized formulations in our laboratory.

Our three sites in Aycliffe (UK), Helsingborg (Sweden) and Sins (Switzerland) provide a production capacity of approximately 200,000 tons / year . With a team of 300 employees we are continuously working on new challenges of the PVC industry. This is how we ensure that more than 1,000 INEOS customers worldwide can rely on us and our products.

By conviction we compound and distribute Resysta dry blends and granulate in a market that has waited a long time for a new and innovative product. Resysta allows manufacturers to access entirely new markets. Together with our customers, we establish a global material standard.