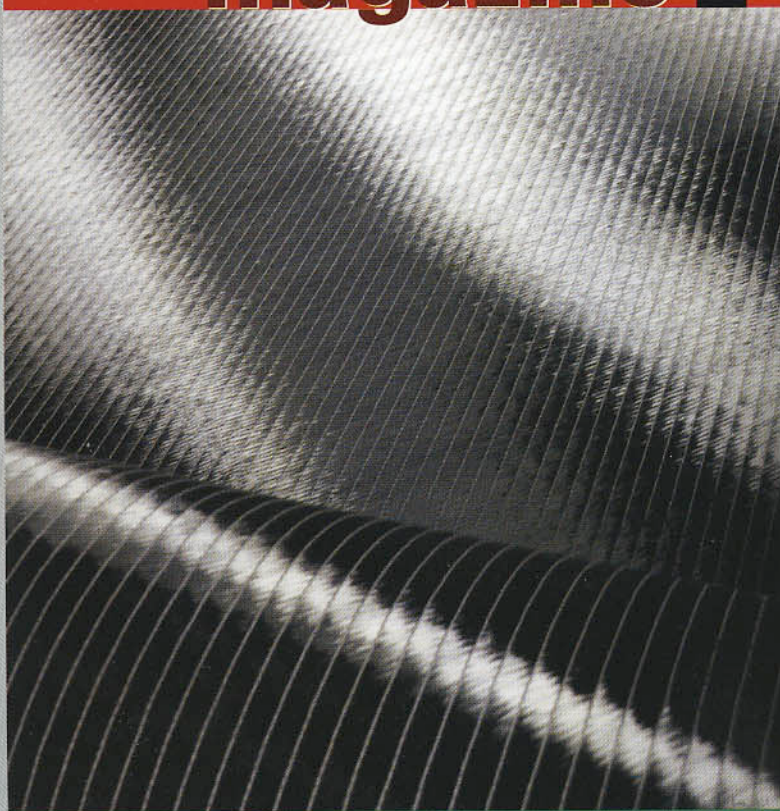


Compositi

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Autoclavi, forni e presse per materiali compositi termoplastici e termoindurenti



ITALMATIC è un'azienda italiana, certificata ISO 9001:2015, esperta nella progettazione, costruzione ed installazione di autoclavi per il trattamento dei materiali compositi termoindurenti e termoplastici nei settori: aeronautico, aerospaziale, automotive, motor-sport e nautico. Le autoclavi ITALMATIC sono fabbricate in accordo alle normative europee in vigore.

Nel corso del 2018 ha ottenuto la certificazione ASME "U" necessaria per tutti i paesi aderenti a questa normativa, quali USA, CANADA, KOREA, ARABIA SAUDITA dove l'azienda ha recentemente incrementato vendite e referenze.

ITALMATIC integra la propria offerta di impianti per il trattamento dei materiali compositi con la fabbricazione di forni e presse. Grazie alla continua ricerca e sviluppo, ha messo a punto una nuova generazione di autoclavi, idonee a lavorare a temperature di oltre 450°C, con pressioni fino a 30 bar ed oltre in atmosfera inerte tramite azoto, CO₂ o altre miscele.

Da sempre orientata verso la ricerca di soluzioni innovative in materia di "energy-saving" propone, oltre alla gamma standard delle tipologie di riscaldamento quali sistema elettrico, olio dia-



termico e vapore saturo indiretto, la tecnologia a tubi radianti con trasferimento della temperatura grazie alla combustione di una miscela di GPL/aria.

ITALMATIC utilizza un nuovo software di fluidodinamica per la progettazione del ricircolo del fluido caldo all'interno dell'autoclave determinando la configurazione di carica degli stampi ottimale, affinché siano uniformemente ventilati senza zone d'ombra che possano generare disomogeneità.

Autoclavi, forni e presse ITALMATIC sono gestiti da un sistema di controllo e supervisione di semplice comprensione e veloce apprendimento, performante e con una gestione dinamica della temperatura, con possibilità di adeguare ogni singolo ciclo in funzione del pezzo inserito; di configurare cicli con definizione del carico interno, delle termocoppie e linee vuoto collegate; di generare report in formato PDF per allarmi, eventi e trend, in maniera automatica.

ITALMATIC offre un servizio post-vendita grazie a tecnici specializzati disponibili sul campo, su richiesta in 24/48/72 ore secondo il Paese dell'impianto.

NORBLAST

Treatments for Additive Manufacturing

The Norblast Group, a company specialised in the design and construction of machines for finishing the surfaces of components using high-tech sandblasting treatments, offers standard solutions and customised systems for numerous applications in all sectors, including Additive Manufacturing, for finishing components made using modern 3D printing.

The use of this new technology requires final surface finishing treatments for both aesthetic and functional reasons: due to current limits inherent in the additive processes, the products made have an unacceptable surface quality and roughness, and with some additive technologies at the end of the process the components remain covered with residues that must neces-

sarily be removed before the piece can be used.

Norblast surface finishing solutions – specifically designed based on the materials involved, the characteristics of the component and the typical requirements of the additive technology implemented – are able to give the treated parts particularly attractive aesthetic effects and surface roughness that are appropriate for correct operation.

An Italian company that uses one of the most modern additive printing technologies for the production of some plastic components used in the transfer, supply and measurement of lubricants and fuels has worked with Norblast to develop a system for the removal of all the inevitable 3D printing residues. In fact,

Solvent regeneration... From waste to resource

Nowadays the market, the quality systems and the local laws recommend increasingly "GREEN" standards. Preserving what surrounds us is today more than ever important for the conservation of the environment and the humans.

Recovering the solvent used to wash the tools used in painting and resin-coating activities, through distillation, with a view to reducing not only the waste but also the company costs, with the CIEMME systems is possible.



Although not considered an activity that falls within the production process, the recovery of the acetone or spent solvent offers considerable advantages from an economic and environmental point of view. Reducing costs for raw materials and waste disposal can play an important role in improving the company's profitability.



The different distillation processes, thanks to the technology and the components of great reliability, the maximum safety and the absolute ease of use, make CIEMME solvent purifiers a series of easy-to-use products.

Established in the year 1982 in Modena, CIEMME is a reference point in both the Italian and international market in the field of the design, production and sale of plants and equipment for purification, solvents recovery and management with highly professional systems.

Certified since 2000 ISO 9001, manufactures certified TUV and ELECTRO SUISSE plants to be used in areas with danger of explosion (Atex) and self-cleaning systems with scraper blade manufactured by CIEMME, certified TUV ATEX 1 / 2G.

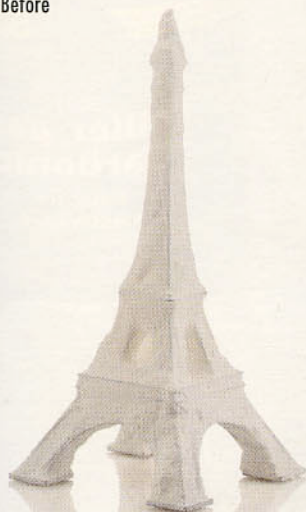
With due attention to the Research and Development, CIEMME guarantees cutting-edge technologies in line with the current directives in explosion protection and customize their systems to meet the needs of customers and different markets.

Its systems have no installation costs and limited maintenance requirements.

Regenerating acetone or polluted solvents through distillation leads to consequent economic savings. So, the 90-95% of the solvent can be reinserted in the production cycle and the initial characteristics remain unchanged. In addition to cost reduction, the added values and advantages are:

- reduction of spaces for the dirty solvent storage
- more quality and safety in the workplace
- fast investment amortization time (less than a year)
- independence from external waste disposal companies
- excellent after sales support with highly qualified staff
- pulverization of residues.

Before



After



in order to use the products made it is necessary to remove the residual 3D print dust from the entire component, paying particular attention to the mechanical coupling threads which must be thoroughly cleaned without changing their shape to preserve proper operation. Norblast has supplied the customer with a solution that meets both its aesthetic and operational needs. It is a compressed air sandblasting system that eliminates 3D printing residues, cleans the couplings and removes the dust from the internal ducts in order to allow the correct assembly of the components and eliminate possible obstructions to the flow of fluids within. The solution is also partially automated using a system with a rotating basket.