

Deutscher Fachverlag GmbH
Mainzer Landstr. 251
60326 Frankfurt/Germany
Tel.: +49-69/75 95-13 93
Fax: +49-69/75 95-12 90
E-mail: edi-tt@dfv.de

**Technical
Textiles**

Innovation, Technology, Application

Textile
Technology

www.technicaltextiles-dfv.com

Index 2018

Volume 61

Author Index	Page	Page	Page
Abdkader, A.; Cherif, C.; Schmidt, E.: Metal spun yarns from planed metal staple fibers for technical applicationsE 154			
Ahlfeld, T.; Gelinsky, M.; Brünler, R.; Aibibu, D.; Cherif, C.: Patient-specific and fiber-based implants for complex tissue defectsE 128			
Ahrendt, D.; Krzywinski, S.; Hoffmann, G.; Cherif, C.; Fazeli, M.: CAE-supported technology for the flexible manufacturing of complex woven 3D net-shape preformsE 81			
Aibibu, D.; Cherif, C.; Ahlfeld, T.; Gelinsky, M.; Brünler, R.: Patient- specific and fiber-based implants for complex tissue defectsE 128			
- Cherif, C.; Breier, A.; Elschner, C.; Hahn, J.; Bittrich, L.; Spickenheuer, A.; Vater, C.; Petto, C.; Gelinsky, M.; Brünler, R.; Eger, M.; Lukoschek, S.: Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant materialE 166			
Ajmeri, J.R.; Bhattacharya, S.S.: Relationship between tightness factor and moisture management properties of single jersey cotton fabrics33			
Albus, H.: Reinforcement and enhancement of nonwovens and new solvent-free manufacturing process for nanofibersE 118			
Ashir, M.; Hindahl, J.; Nocke, A.; Cherif, C.: Textile-based actuators for the development of adaptive fiber-reinforced plasticsE 86			
Bali, P.; Katkar, P.; Kadole, P.V.; Bhute, A.: Mechanical properties of polypropylene-acrylic blend nonwovens reinforced compositesE 133			
Bäz, T.: Processing basalt fibers into multiaxial and warp-knitted textilesE 22			
Bettermann, I.; Raina, A.; Gries, T.: Warp-knitted textiles for space satellitesE 220			
Bhattacharya, S.S.; Ajmeri, J.R.: Relationship between tightness factor and moisture management properties of single jersey cotton fabricsE 33			
Bhute, A.; Bali, P.; Katkar, P.; Kadole, P.V.: Mechanical properties of polypropylene-acrylic blend nonwovens reinforced compositesE 133			
Bittrich, L.; Spickenheuer, A.; Vater, C.; Petto, C.; Gelinsky, M.; Brünler, R.; Eger, M.; Lukoschek, S.; Aibibu, D.; Cherif, C.; Breier, A.; Elschner, C.; Hahn, J.: Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant materialE 166			
Bizubova, B.; Van der Schueren, L.; Buyle, G.: High-stiffness PLA yarns for bio-based self-reinforced compositesE 75			
Blüthgen, L.; Thiele, E.; Kuhne, M.: Padding elements with fiber-optic sensors for the care sectorE 27			
Bolle, T.; Donay, C.; Gesché, V.; Gries, T.; Jockenhövel, S.; Löwen, A.: Bio-hybrid implants reinforced with textiles on the way towards developing artificial replacement parts of the futureE 42			
Braun, M.: Heat and material transfer behavior of warp-knitted spacer textiles for use in compositesE 222			
Breier, A.; Elschner, C.; Hahn, J.; Bittrich, L.; Spickenheuer, A.; Vater, C.; Petto, C.; Gelinsky, M.; Brünler, R.; Eger, M.; Lukoschek, S.; Aibibu, D.; Cherif, C.: Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant materialE 166			
Breuer, M.J.E.; Zöll, K.: 3D textile wall panels made from 3D warp- knitted textilesE 160			
Brünler, R.; Aibibu, D.; Cherif, C.; Ahlfeld, T.; Gelinsky, M.: Patient- specific and fiber-based implants for complex tissue defectsE 128			
- Eger, M.; Lukoschek, S.; Aibibu, D.; Cherif, C.; Breier, A.; Elschner, C.; Hahn, J.; Bittrich, L.; Spickenheuer, A.; Vater, C.; Petto, C.; Gelinsky, M.: Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant materialE 166			
Buchmeiser, M.R.; Frank, E.: Trends in the carbon fiber marketE 21			
Buyle, G.; Van der Schueren, L.; Bizubova, B.: High-stiffness PLA yarns for bio-based self-reinforced compositesE 75			
Camenzind, M.; Rossi, R.; Haag, A.; Weder, M.: Laser transmission welding of membranes and textilesE 91			
Carus, M.: Renewable carbon is key to a sustainable and future-oriented chemical industryE 213			
Cavuldak, H.; Mitschang, P.; Goergen, C.: Cost analysis of the process chain of rCF staple fiber organic sheet manufacturingE 126			
Cherif, C.; Pohl, M.; Rittner, S.; Zierold, K.: Functionalized components made from high-performance grid plastic compositesE 24			
- Vo, D.M.P.; Kern, M.; Hoffmann, G.: Innovative contour weaving for cost effective manufacture of textile compositesE 77			
- Fazeli, M.; Ahrendt, D.; Krzywinski, S.; Hoffmann, G.: CAE-supported technology for the flexible manufacturing of complex woven 3D net-shape preformsE 81			
- Ashir, M.; Hindahl, J.; Nocke, A.: Textile-based actuators for the development of adaptive fiber-reinforced plasticsE 86			
- Hahn, L.; Rittner, S.: Online coating and drying technology for multiaxial grids made of carbon fiber towsE 120			
- Schmidt, E.; Abdkader, A.: Metal spun yarns from planed metal staple fibers for technical applicationsE 154			

Author Index

Page

Page

Page

- Ahlfeld, T.; Gelinsky, M.; Brünler, R.; Aibibu, D.: Patient-specific and fiber-based implants for complex tissue defectsE 128
- Breier, A.; Elschner, C.; Hahn, J.; Bittrich, L.; Spickenheuer, A.; Vater, C.; Petto, C.; Gelinsky, M.; Brünler, R.; Eger, M.; Lukoschek, S.; Aibibu, D.: Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant materialE 166
- Hellmann, S.; Hübner, M.; Trümper, W.: Automated and highly productive preforming of textile reinforcing structuresE 169
- Franz, C.; Hoffmann, G.: Curved spacer lightweight structures based on warp-knitted fabricsE 218
- Daberao, A.M.;** Turukmane, R.N.; Gulhane, S.S.: Basalt – technical fiber for civil applicationsE 69
- Donay, C.;** Gesché, V.; Gries, T.; Jockenhövel, S.; Löwen, A.; Bolle, T.: Bio-hybrid implants reinforced with textiles on the way towards developing artificial replacement parts of the futureE 42
- Eger, M.;** Lukoschek, S.; Aibibu, D.; Cherif, C.; Breier, A.; Elschner, C.; Hahn, J.; Bittrich, L.; Spickenheuer, A.; Vater, C.; Petto, C.; Gelinsky, M.; Brünler, R.: Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant materialE 166
- Eibl, S.;** Müller, M.: Decomposition of PU coatings due to degradation of contained phosphoric flame-retardantsE 38
- Elschner, C.;** Hahn, J.; Bittrich, L.; Spickenheuer, A.; Vater, C.; Petto, C.; Gelinsky, M.; Brünler, R.; Eger, M.; Lukoschek, S.; Aibibu, D.; Cherif, C.; Breier, A.: Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant materialE 166
- Estermann, M.;** Haag, A.; Schmid, M.: Lasering of man-made fibers instead of sewingE 37
- Fazeli, M.;** Ahrendt, D.; Krzywinski, S.; Hoffmann, G.; Cherif, C.: CAE-supported technology for the flexible manufacturing of complex woven 3D net-shape preformsE 81
- Fink, H.;** Schumacher, S.; Gutmann, J.S.; Oberthür, M.: Improved dyeing ability and UV stability of aramids by finishing with polyvinylamineE 157
- Fourné, R.;** Gries, T.; Jockenhövel, S.; Paar, G.-P.; Kossel, G.-P.; Molano, C.; Pich, A.: Solution spun co-extruded PLA fibers with pH-neutral degradation characteristicsE 18
- Francalanci, F.;** Garofalo, L.; Marinetti, M.; Proserpio, R.: Carbon fiber PAN precursor production – new approachE 72
- Frank, E.;** Buchmeiser, M.R.: Trends in the carbon fiber marketE 21
- Franz, C.;** Hoffmann, G.; Cherif, C.: Curved spacer lightweight structures based on warp-knitted fabricsE 218
- Garofalo, L.;** Marinetti, M.; Proserpio, R.; Francalanci, F.: Carbon fiber PAN precursor production – new approachE 72
- Gelinsky, M.;** Brünler, R.; Aibibu, D.; Cherif, C.; Ahlfeld, T.: Patient-specific and fiber-based implants for complex tissue defectsE 128
- Brünler, R.; Eger, M.; Lukoschek, S.; Aibibu, D.; Cherif, C.; Breier, A.; Elschner, C.; Hahn, J.; Bittrich, L.; Spickenheuer, A.; Vater, C.; Petto, C.: Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant materialE 166
- Gesché, V.;** Gries, T.; Jockenhövel, S.; Löwen, A.; Bolle, T.; Donay, C.: Bio-hybrid implants reinforced with textiles on the way towards developing artificial replacement parts of the futureE 42
- Goergen, C.;** Cavuldak, H.; Mitschang, P.: Cost analysis of the process chain of rCF staple fiber organic sheet manufacturingE 126
- Gries, T.;** Jockenhövel, S.; Paar, G.-P.; Kossel, G.-P.; Molano, C.; Pich, A.; Fourné, R.: Solution spun co-extruded PLA fibers with pH-neutral degradation characteristicsE 18
- Jockenhövel, S.; Löwen, A.; Bolle, T.; Donay, C.; Gesché, V.: Bio-hybrid implants reinforced with textiles on the way towards developing artificial replacement parts of the futureE 42
- Tutsch, M.; Lechthaler, L.; Simonis, K.; Popzyk, M.-I.; Peiner, C.: Functionalized 3D textile to protect against extreme heat loadsE 130
- Bettermann, I.; Raina, A.: Warp-knitted textiles for space satellitesE 220
- Gulhane, S.S.:** Review on accoustic properties of textilesE 29
- Daberao, A.M.; Turukmane, R.N.: Basalt – technical fiber for civil applicationsE 69
- Gutmann, J.S.;** Oberthür, M.; Fink, H.; Schumacher, S.: Improved dyeing ability and UV stability of aramids by finishing with polyvinylamineE 157
- Haag, A.;** Schmid, M.; Estermann, M.: Lasering of man-made fibers instead of sewingE 37
- Weder, M.; Camenzind, M.; Rossi, R.: Laser transmission welding of membranes and textilesE 91
- Hahn, J.;** Bittrich, L.; Spickenheuer, A.; Vater, C.; Petto, C.; Gelinsky, M.; Brünler, R.; Eger, M.; Lukoschek, S.; Aibibu, D.; Cherif, C.; Breier, A.; Elschner, C.: Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant materialE 166
- Hahn, L.;** Rittner, S.; Cherif, C.: Online coating and drying technology for multiaxial grids made of carbon fiber tows120
- Hellmann, S.;** Hübner, M.; Trümper, W.; Cherif, C.: Automated and highly productive preforming of textile reinforcing structuresE 169
- Heuberger, M.;** Leal, A.A.; Hufenus, R.: Multifunctional liquid-core melt-spun filamentsE 208
- Hindahl, J.;** Nocke, A.; Cherif, C.; Ashir, M.: Textile-based actuators for the development of adaptive fiber-reinforced plasticsE 86
- Hoffmann, G.;** Cherif, C.; Vo, D.M.P.; Kern, M.: Innovative contour weaving for cost effective manufacture of textile compositesE 77
- Cherif, C.; Fazeli, M.; Ahrendt, D.; Krzywinski, S.: CAE-supported technology for the flexible manufacturing of complex woven 3D net-shape preformsE 81
- Cherif, C.; Franz, C.: Curved spacer lightweight structures based on warp-knitted fabricsE 218
- Hübner, M.;** Trümper, W.; Cherif, C.; Hellmann, S.: Automated and highly productive preforming of textile reinforcing structuresE 169
- Hufenus, R.;** Heuberger, M.; Leal, A.A.: Multifunctional liquid-core melt-spun filamentsE 208
- Imminger, H.-J.:** Newly developed nonwovens for the acoustically effective rangeE 100
- Jockenhövel, S.;** Paar, G.-P.; Pich, A.; Kossel, G.-P.; Molano, C.; Fourné, R.; Gries, T.: Solution spun co-extruded PLA fibers with pH-neutral degradation characteristicsE 18

The Tailor-Made International Trade Publications for the Whole "Textile Chain"



4,800 copies
English, 4 issues p. a.



4,613 copies
German/English, 5 issues p. a.



3,835 copies
German, 4 issues p. a.



10,420 copies
English, 4 issues p. a.



Online Magazine
www.chemical-fibers.com

For the Fiber, Textile and Apparel Industries



Online Magazine
www.melliand.com



4,800 copies
English, 1 issue p. a.



7,000 copies
Chinese, 12 issues p. a.



TRENDBOOK Technical Textiles 2018/2019
Innovations, Trends, Markets
Start up the future with Technical Textiles
with the 4 leading themes:
Production • Mobility • Life • Re-Vision

Contact: Technical Trade Publications


Advertising dept.: Tel. +49 69 7595-1722 • Fax +49 69 7595-1820 • E-Mail adv-mtb@dfv.de

Editorial dept.: Tel. +49 69 7595-1393 • Fax +49 69 7595-1390 • E-Mail edi-mtb@dfv.de

Subscriptions: Tel. +49 69 7595-1973 • Fax +49 69 7595-2930

Author Index Page

<p>- Löwen, A.; Bolle, T.; Donay, C.; Gesché, V.; Gries, T.: Bio-hybrid implants reinforced with textiles on the way towards developing artificial replacement parts of the futureE 42</p> <p>Kadole, P.V.; Bhute, A.; Bali, P.; Katkar, P.: Mechanical properties of polypropylene-acrylic blend nonwovens reinforced compositesE 133</p> <p>Karnop, M.: Energy-efficient and formaldehyde-free coating technology for glass fibersE 123</p> <p>Katkar, P.; Kadole, P.V.; Bhute, A.; Bali, P.: Mechanical properties of polypropylene-acrylic blend nonwovens reinforced compositesE 133</p> <p>Kern, M.; Hoffmann, G.; Cherif, C.; Vo, D.M.P.: Innovative contour weaving for cost effective manufacture of textile compositesE 77</p> <p>Khokar, N.: Weaving 3D fabrics for reinforcing advanced composite materialsE 88</p> <p>Kossel, G.-P.; Molano, C.; Pich, A.; Fourné, R.; Gries, T.; Jockenhövel, S.; Paar, G.-P.: Solution spun co-extruded PLA fibers with pH-neutral degradation characteristicsE 18</p> <p>Krzywinski, S.; Hoffmann, G.; Cherif, C.; Fazeli, M.; Ahrendt, D.: CAE-supported technology for the flexible manufacturing of complex woven 3D net-shape preformsE 81</p> <p>Kuhne, M.; Blüthgen, L.; Thiele, E.: Padding elements with fiber-optic sensors for the care sectorE 27</p> <p>Leal, A.A.; Hufenus, R.; Heuberger, M.: Multifunctional liquid-core melt-spun filamentsE 208</p>	<p>Lechthaler, L.; Simonis, K.; Peiner, C.; Popzyk, M.-I.; Gries, T.; Tutsch, M.: Functionalized 3D textile to protect against extreme heat loadsE 130</p> <p>Löwen, A.; Bolle, T.; Donay, C.; Gesché, V.; Gries, T.; Jockenhövel, S.: Bio-hybrid implants reinforced with textiles on the way towards developing artificial replacement parts of the futureE 42</p> <p>Lukoschek, S.; Aibibu, D.; Cherif, C.; Breier, A.; Elschner, C.; Hahn, J.; Bittrich, L.; Spickenheuer, A.; Vater, C.; Petto, C.; Gelinsky, M.; Brünler, R.; Eger, M.: Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant materialE 166</p> <p>Marinetti, M.; Proserpio, R.; Francalanci, F.; Garofalo, L.: Carbon fiber PAN precursor production – new approachE 72</p> <p>Mitschang, P.; Goergen, C.; Cavuldak, H.: Cost analysis of the process chain of rCF staple fiber organic sheet manufacturing126</p> <p>Möhring, U.: Additive manufacturing – potential for the future of textilesE 49</p> <p>Molano, C.; Pich, A.; Fourné, R.; Gries, T.; Jockenhövel, S.; Paar, G.-P.; Kossel, G.-P.: Solution spun co-extruded PLA fibers with pH-neutral degradation characteristics18</p> <p>Müller, M.; Eibl, S.: Decomposition of PU coatings due to degradation of contained phosphoric flame-retardants38</p> <p>Nebel, K.: Circular economy and technical textiles137</p> <p>Nestler, D.; Schäfer, K.: Lightweight car seats based on multi-material design containing warp-knitted spacer textilesE 31</p>	<p>Nocke, A.; Cherif, C.; Ashir, M.; Hindahl, J.: Textile-based actuators for the development of adaptive fiber-reinforced plasticsE 86</p> <p>Oberthür, M.; Fink, H.; Schumacher, S.; Gutmann, J.S.: Improved dyeing ability and UV stability of aramids by finishing with polyvinylamineE 157</p> <p>Paar, G.-P.; Kossel, G.-P.; Molano, C.; Pich, A.; Fourné, R.; Jockenhövel, S.; Gries, T.: Solution spun co-extruded PLA fibers with pH-neutral degradation characteristicsE 18</p> <p>Peiner, C.; Gries, T.; Lechthaler, L.; Simonis, K.; Popzyk, M.-I.; Tutsch, M.: Functionalized 3D textile to protect against extreme heat loadsE 130</p> <p>Petto, C.; Gelinsky, M.; Brünler, R.; Eger, M.; Lukoschek, S.; Aibibu, D.; Cherif, C.; Breier, A.; Elschner, C.; Hahn, J.; Bittrich, L.; Spickenheuer, A.; Vater, C.: Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant materialE 166</p> <p>Pich, A.; Fourné, R.; Jockenhövel, S.; Paar, G.-P.; Kossel, G.-P.; Gries, T.; Molano, C.: Solution spun co-extruded PLA fibers with pH-neutral degradation characteristicsE 18</p> <p>Pohl, M.; Rittner, S.; Zierold, K.; Cherif, C.: Functionalized components made from high-performance grid plastic compositesE 24</p> <p>Popzyk, M.-I.; Peiner, C.; Gries, T.; Tutsch, M.; Lechthaler, L.; Simonis, K.: Functionalized 3D textile to protect against extreme heat loadsE 130</p> <p>Proserpio, R.; Francalanci, F.; Garofalo, L.; Marinetti, M.: Carbon fiber PAN precursor production – new approachE 72</p> <p>Raina, A.; Gries, T.; Bettermann, I.: Warp-knitted textiles for space satellitesE 220</p> <p>Rittner, S.; Zierold, K.; Cherif, C.; Pohl, M.: Functionalized components made from high-performance grid plastic compositesE 24</p> <p>- Cherif, C.; Hahn, L.: Online coating and drying technology for multiaxial grids made of carbon fiber towsE 120</p> <p>Rossi, R.; Haag, A.; Camenzind, M.; Weder, M.: Laser transmission welding of membranes and textilesE 91</p> <p>- Six, A.: Drug equipped polymer fibers for "Medication you can wear"E 207</p> <p>Schäfer, K.; Nestler, D.: Lightweight car seats based on multi-material design containing warp-knitted spacer textilesE 31</p>
---	--	--



Technical Textiles
Innovation, Technology, Application

Volume 61

2018

Issue 1	Pages	1 – 48
Issue 2	Pages	49 – 102
Issue 3	Pages	103 – 136
Issue 4	Pages	137 – 190
Issue 5	Pages	191 – 230

Author Index

Page	Page	Page
Schlichter, S.: Composites – a textile product?E 1	Thiele, E.; Kuhne, M.; Blüthgen, L.: Padding elements with fiber-optic sensors for the care sectorE 27	Weder, M.; Camenzind, M.; Rossi, R.; Haag, A.: Laser transmission welding of membranes and textiles.....E 91
Schmid, M.; Estermann, M.; Haag, A.: Lasering of man-made fibers instead of sewing.....E 37	Thilagarathi, G.; Viju, S.: Sustainable fibers for oil spill clean-up.....E 19	Wied, L.; Schumann, A.: Digitalization as an opportunity for the textile industry103
Schmidt, E.; Abdkader, A.; Cherif, C.: Metal spun yarns from planed metal staple fibers for technical applicationsE 154	Trümper, W.; Cherif, C.; Hellmann, S.; Hübner, M.: Automated and highly productive preforming of textile reinforcing structuresE 169	Wizemann, G.: Technical nonwovens for protective applications – new approach in the field of needling technologyE 97
Schumacher, S.; Gutmann, J.S.; Oberthür, M.; Fink, H.: Improved dyeing ability and UV stability of aramids by finishing with polyvinylamine.....E 157	Turukmane, R.N.; Gulhane, S.S.; Daberao, A.M.: Basalt – technical fiber for civil applications.....E 69	Zierold, K.; Cherif, C.; Pohl, M.; Rittner, S.: Functionalized components made from high-performance grid plastic composites.....E 24
Seide, G.: In for bio-based polymers, in for bio-based additives!E 191	Tutsch, M.; Lechthaler, L.; Simonis, K.; Popzyk, M.-I.; Peiner, C.; Gries, T.: Functionalized 3D textile to protect against extreme heat loadsE 130	Zöll, K.; Breuer; M.J.E.: 3D textile wall panels made from 3D warp-knitted textilesE 160
Senthilkumar, P.: Design and performance of geotextilesE 226	Van der Schueren, L.; Bizubova, B.; Buyle, G.: High-stiffness PLA yarns for bio-based self-reinforced compositesE 75	
Simonis, K.; Popzyk, M.-I.; Peiner, C.; Gries, T.; Tutsch, M.; Lechthaler, L.: Functionalized 3D textile to protect against extreme heat loadsE 130	Vater, C.; Petto, C.; Gelinsky, M.; Brünler, R.; Eger, M.; Lukoschek, S.; Aibibu, D.; Cherif, C.; Breier, A.; Elschner, C.; Hahn, J.; Bittrich, L.; Spickenheuer, A.: Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant materialE 166	
Six, A.; Rossi, R.: Drug equipped polymer fibers for "Medication you can wear"E 207	Viju, S.; Thilagarathi, G.: Sustainable fibers for oil spill clean-up.....E 19	
Spickenheuer, A.; Vater, C.; Petto, C.; Gelinsky, M.; Brünler, R.; Eger, M.; Lukoschek, S.; Aibibu, D.; Cherif, C.; Breier, A.; Elschner, C.; Hahn, J.; Bittrich, L.: Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant material.....E 166	Vo, D.M.P.; Kern, M.; Hoffmann, G.; Cherif, C.: Innovative contour weaving for cost effective manufacture of textile composites.....E 77	




Subject Index

Page	Page	Page
Fibers/Yarns	Innovative yarns and cost-saving manufacturing methods at JEC WorldE 68	Solution spun co-extruded PLA fibers with pH-neutral degradation characteristicsE 18
Basalt – technical fiber for civil applicationsE 69	Metal spun yarns from planed metal staple fibers for technical applicationE 154	Spread carbon-fiber tows offer new market opportunitiesE 216
Carbon fiber PAN precursor production – new approachE 72	Multifunctional liquid-core melt-spun filamentsE 208	Sustainable fibers for oil spill clean-upE 19
Composites – a textile product?E 1	Online coating and drying technology for multiaxial grids made of carbon fiber towsE 120	Textile-based actuators for the development of adaptive fiber-reinforcement plastics.....E 86
Cost analysis of the process chain of rCF staple fiber organic sheet manufacturingE 126	Processing basalt fibers into multiaxial and warp-knitted textilesE 22	Trends in the carbon fiber marketE 21
Curved spacer lightweight structures based on warp-knitted fabrics.....E 218	Reinforcement and enhancement of nonwovens & new solvent-free manufacturing process for nanofibers.....E 118	
Drug equipped polymer fibers for "Medication you can wear"E 207	Renewable carbon is key to a sustainable and future-oriented chemical industry.....E 213	Technical Textiles
Filtech Preview.....E 44-46	Review on acoustic properties of textilesE 29	3D textile wall panels made from 3D warp-knitted textilesE 160
Functionalized components made from high-performance grid plastic compositesE 24		Automated and highly productive preforming of textile reinforcing structures.....E 169
High-stiffness PLA yarns for bio-based self-reinforced compositesE 75		Bio-hybrid implants reinforced with textiles on the way towards developing artificial replacement parts of the futureE 42
Improved dyeing ability and UV stability of aramids by finishing with polyvinylamineE 157		

Subject Index	Page	Page	Page
CAE-supported technology for the flexible manufacturing of complex woven 3D net-shape preforms.....	E 81	Technical nonwovens for protective applications – new approaches in the field of needling technology	E 97
CO ₂ laser cutter for cutting aramid by eurolaser.....	E 224	Textile-based actuators for the development of adaptive fiber-reinforcement plastics.....	E 86
Contour weaving for cost effective manufacture of textile composites.....	E 77	Warp-knitted textiles for space satellites.....	E 220
Cost analysis of the process chain of rCF staple fiber organic sheet manufacturing.....	E 126	Weaving 3D fabrics for reinforcing advanced composite material.....	E 88
Curved spacer lightweight structures based on warp-knitted fabrics.....	E 218	Weaving technology for advanced technical fabrics.....	E 132
Decomposition of PU coatings due to degradation of contained phosphoric flame-retardants	E 38		
Design and performance of geotextiles.....	E 226	Nonwovens	
Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant material.....	E 166	Filtech Preview.....	E 44-46
Energy-efficient and formaldehyde-free coating technology for glass fibers.....	E 123	Large-area stitching automat with up to 3,200 stitches/min	E 135
Filtech Preview.....	E 44-46	Mechanical properties of polypropylene-acrylic blend nonwovens reinforced composites	E 133
Functionalized 3D textile to protect against extreme heat loads	E 130	Newly developed nonwovens for the acoustically effective range	E 100
Functionalized components made from high-performance grid plastic composites	E 24	Nonwovens made of "somewhat different fibers"	E 171
Heat and material transfer behavior of warp-knitted spacer textiles for use in composites.....	E 222	Technical nonwovens for protective applications – new approaches in the field of needling technology	E 97
KM.ON – digital driven innovation by Karl Mayer	E 225	Western Europe: Chemical fiber titer program for nonwovens 2018	E 94-97
Laser transmission welding of membranes and textiles.....	E 91		
Lighter protective clothing	E 80	Machinery/Processes	
Lightweight car seats based on multi-material design containing warp-knitted spacer textiles	E 31	Metal spun yarns from planed metal staple fibers for technical application	E 154
Non-nuclear solutions for inline quality control of basis-weight.....	E 164	Online process for non-stop production of sacks.....	E 36
Odor control function for polyester textiles	E 40	Processing basalt fibers into multiaxial and warp-knitted textiles	E 22
Online process for non-stop production of sacks.....	E 36	Weaving 3D fabrics for reinforcing advanced composite material.....	E 88
Padding elements with fiber-optic sensors for the care sector	E 27		
Patient-specific and fiber-based implants for complex tissue defects.....	E 128	Research	
Processing basalt fibers into multiaxial and warp-knitted textiles	E 22	3D textile wall panels made from 3D warp-knitted textiles.....	E 160
Relationship between tightness factor and moisture management properties of single jersey cotton fabrics.....	E 33	Automated and highly productive preforming of textile reinforcing structures.....	E 169
Review on acoustic properties of textiles	E 29	Basalt – technical fiber for civil applications	E 69
Spread carbon-fiber tows offer new market opportunities.....	E 216	Bio-hybrid implants reinforced with textiles on the way towards developing artificial replacement parts of the future	E 42
		CAE-supported technology for the flexible manufacturing of complex woven 3D net-shape preforms.....	E 81
		Carbon fiber PAN precursor production – new approach.....	E 72
		Contour weaving for cost effective manufacture of textile composites	E 77
		Cost analysis of the process chain of rCF staple fiber organic sheet manufacturing.....	E 126
		Curved spacer lightweight structures based on warp-knitted fabrics.....	E 218
		Decomposition of PU coatings due to degradation of contained phosphoric flame-retardants	E 38
		Design and performance of geotextiles.....	E 226
		Embroidered hernia meshes made of chitosan with locally adjustable, graded stiffnesses for use as implant material.....	E 166
		Energy-efficient and formaldehyde-free coating technology for glass fibers.....	E 123
		Functionalized 3D textile to protect against extreme heat loads	E 130
		Functionalized components made from high-performance grid plastic composites.....	E 24
		Heat and material transfer behavior of warp-knitted spacer textiles for use in composites	E 222
		High-stiffness PLA yarns for bio-based self-reinforced composites	E 75
		Improved dyeing ability and UV stability of aramids by finishing with polyvinylamine	E 157
		Laser transmission welding of membranes and textiles.....	E 91
		Lightweight car seats based on multi-material design containing warp-knitted spacer textiles	E 31
		Mechanical properties of polypropylene-acrylic blend nonwovens reinforced composites	E 133
		Metal spun yarns from planed metal staple fibers for technical application	E 154
		Multifunctional liquid-core melt-spun filaments	E 208
		Non-nuclear solutions for inline quality control of basis-weight by Hammer-IMS.....	E 164
		Odor control function for polyester textiles	E 40
		Online coating and drying technology for multiaxial grids made of carbon fiber tows	E 120
		Padding elements with fiber-optic sensors for the care sector	E 27
		Patient-specific and fiber-based implants for complex tissue defects.....	E 128
		Reinforcement and enhancement of nonwovens and new solvent-free manufacturing process for nanofibers	E 118
		Relationship between tightness factor and moisture management properties	

Subject Index	Page	Page	Page
of single jersey cotton fabrics.....	E 33	Acquisition of Inapal by Teijin.....	E 144
Review on acoustic properties		Acquisition of J.H. Ziegler	
of textiles	E 29	by Teijin	E 112
Solution spun co-extruded PLA fibers		Acquisition of Kordarna and Avgol	
with pH-neutral degradation		by Indorama Ventures.....	E 141
characteristics	E 18	Acquisition of Leister by Krelus.....	E 116
Sustainable fibers for oil spill		Acquisition of M. Dohmen	
clean-up	E 19	by Archroma complete.....	E 112
Technical nonwovens for protective		Acquisition of Patrick Yarn Mill	
applications – new approaches		by Coats	E 11
in the field of needling		Acquisition of remaining 30 % of	
technology.....	E 97	Chinese JV by Lenzing.....	E 196
Textile-based actuators for the		Acquisition of Royal Adhesives &	
development of adaptive		Sealants	E 14
fiber-reinforcement plastics.....	E 86	Acquisition of TenCate Advanced	
Warp-knitted textiles for space		Composites by Toray.....	E 56
satellites.....	E 220	Additive manufacturing – potential	
Weaving 3D fabrics for reinforcing		for the future of textiles.....	E 49
advanced composite material.....	E 88	Brief information	E 3-17, E 51-66, E 106-116, E 140-152, E 194-206
Textile Industry		Circular economy and	
US\$ 7 million investment		technical textiles	E 137
by Porcher subsidiary BGF.....	E 199	Coatema/Kroenert: Under one	
2 new plants in China		umbrella	E 205
by Autoneum.....	E 144	Composites – a textile product?	E 1
Acquisition of acetylene arbon black		Digitalization as an opportunity for the	
by Orion	E 195	textile industry.....	E 103
		Fusing natural cotton with copper	
		compound by Argaman	E 52
		In for bio-based polymers, in for	
		bio-based additives!	E 191
		Inauguration of new production	
		facility by Brückner	E 116
		Innovation and sustainability	
		by Märkische Faser	E 210
		Innovative yarns and cost-saving	
		manufacturing methods at	
		JEC World	E 68
		ITMA Asia + CITME Preview.....	E 174-188
		Management.....	E 10, E 12, E 14, E 60, E 62, E 112, E 114, E 148, E 150, E 152, E 200, E 202, E 204
		Name change for Treves.....	E 12
		New Publications.....	E 9, E 41, E 131, E 153, E 189
		Prof. Thomas Gries at ITA Aachen.....	E 206
		Renewable carbon is key to a	
		sustainable and future-oriented	
		chemical industry.....	E 213
		Sale of Drive Systems to Dana	
		by Oerlikon	E 116
		Takeover of AC-Automation	
		by Oerlikon	E 61
		Trends in the carbon fiber market	E 21

		Editorial Program 2019	Volume 62
Issue		Issue	Main Topics
1 March Publication date March 8, 2019	Technical fibers and yarns; PET fibers and yarns; Composites; Nano-functionalized textiles; Mobile textiles; Construction textiles; Finishing of technical textiles; Textile filters; Nonwovens technologies and innovations Technical making-up; Current market reports	3 June Publication date June 14, 2019	Technical fibers/yarns; Industrial textiles; Sportswear; Smart textiles; Geotextiles; Finishing of technical textiles; Nonwovens technologies and innovations; Techtexil Review, ITMA 2019 Preview: machinery for the production and processing of technical textiles and nonwovens Technical making-up; Current market reports
2 May Publication date May 3, 2019	Technical fibers; PA fibers/yarns; Euroseil ; Work and protective clothing; Medical textiles; Mobile textiles; Finishing of technical textiles; Nonwovens technologies and innovations; Techttextil Preview, Texprocess Preview Technical making-up; Current market reports	4 September Publication date September 20, 2019	PP fibers; Carbon fibers, Protective textiles; Sportswear; Textiles for transportation; Euroseil ; Industrial textiles; Construction textiles; Filter technology; Hofer Vliesstofftage: preview; ITMA Review: developments on machinery for technical textiles and nonwovens Current market reports
		5 December Publication date November 22, 2019	Cellulosic fibers; Polyester fibers; Technical knits; Flame-retardant textiles; Construction textiles; Medical textiles; Protective textiles; Nonwovens technologies and innovations; Technical making-up; Current market reports

Company Index		Page	Page	Page
ABB Switzerland		E 208	Crealet	E 122
AC-Automation	E 61, E 205	Dako		E 211
Acker Textilwerk		Dana		E 116
ADAMOS		Devan Chemicals	E 13, E 14, E 114	
Advansa	E 94, E 95, E 96	DiloGroup	E 60, E 133, E 152	
AeroComposit		M. Dohmen		E 112
Afitex		Dolan		E 95
AHP		Dollfus & Muller		E 177
Albaad		DowDuPont Specialty Products		E 201
Albani Group		Dr. Schenk Industriemesstechnik		E 227
Alexium International	E 58, E 112, E 204	Dralon	E 140, E 148	
Alfa-Rotec		DS Fibres		E 94, E 95
Andritz	E 63, E 64, E 116, E 174	DSM Dyneema		E 12, E 106
Andritz Asselin-Thibeau		Dual		E 65
Andritz Nonwoven		DuPont	E 95, E 96	
Anowo		DuPont Consumer Solutions		E 201
Applycon		DuPont Industrial Biosciences		E 141
Aquafil Engineering		DuraFiber Technologies		E 159
Archroma	E 13, E 58, E 60, E 112	Eastman Chemical		E 204
Argaman Technologies		EAT		E 82
Arvind		Ecofil Kapell		E 96
Asahi Kasei	E 4, E 113	Ecofil Kapell		E 96
Asahi Kasei Medical		Ecofil Kapell		E 96
Asglatex Ohorn		EcoWipes		E 15
Astris Carbon		Elbit Vision Systems		E 60
ATH Altonaer-Technologie-Holding	E 150, E 205	Ems-Chemie	E 94, E 95, E 96	
ATS Elektronik		emtec Electronic		E 225
Autefa Solutions	E 62, E 174	Enka International		E 148
Autoneum	E 13, E 55, E 56, E 112, E 116, E 143, E 144, E 150	EnvisionTec		E 19
Avgol		Epitropic Fibres		E 94
Avgol Industries		Erhardt+Leimer		E 176
Ayegh Khodro Toos		ES FibreVisions		E 96
Barmag Spinnzwirn	E 116, E 205	Eschler		E 198
Beaulieu Fibres International		Eschler Textil		E 160
Beaulieu Real		EuroFabrics		E 197
Bekaert Bekintex		EuroFibers		E 197
Belgian Fibres	E 95, E 96	eurolaser	E 60, E 224	
Berry Global		Europa NCT		E 95
BGF Industries		Evonik Fibres	E 95, E 96	
BinNova Metal Fiber Technology		Fait Plast		E 92
Biteam		Far Eastern Spunweb		E 57
BMS		Faurecia Clean Mobility	E 110, E 143	
BMSvision		Fibertex Nonwovens		E 46
BMW		FiberVisions		E 96
Bolger & O'Hearn		Fibre Extrusion Technologies		E 60
Bonas Textile Machinery		Fidion	E 94, E 96	
Brückner Textile Technologies	E 16, E 61, E 116, E 124	Fil.Va		E 96
Busschaert Engineering		First Quality Enterprises		E 111
BWF Tec		Flylow Gear		E 149
Carl Meiser		Forbo Siegling		E 177
centrotherm		Fourné Maschinenbau		E 18
Century Synthetic Fibre		Frana Polifibre	E 94, E 96	
Cerex Advanced Fabrics		Freudenberg		E 55
Cetex		Freudenberg Far Eastern Spunweb		E 57
Cetex-Rheinfaser		Freudenberg Performance Materials	E 55, E 57, E 62, E 146	
Chemosvit Fibrochem		H.B. Fuller		E 14
Chemours	E 14, E 114, E 202	Gartner		E 49
Chomarat	E 202, E 216	Genkinger		E 185
Christian Dierig		Gertex		E 148
CHT		Gherzi Textile Organisation		E 103
Clariant		Gherzi van Delden	E 103, E 108, E 227	
Coatema Coating Machinery	E 150, E 205	Glaeser Group		E 210
Coats	E 11, E 200	Glatzeder		E 223
Cobble Van de Wiele		Gmöhling Transportgeräte		E 176
Dr. Collin		Gneuss Kunststofftechnik		E 178
Conbility		W.L. Gore & Associates		E 80
ContiTech		Graf & Co.		E 176
Covestro	E 59, E 60, E 112	Grass		E 227
		Green Threads		E 196
		Groz-Beckert	E 97, E 150, E 171, E 179	
		Hahl		E 108
		Hammer-IMS		E 164
		Harris		E 220
		Heimbach Filtration		E 45
		HeiQ Materials	E 80, E 113, E 199, E 201	
		Herzog	E 152, E 174, E 217	
		Hexaflex		E 198
		Hexcel		E 21
		Hoftex Group		E 113
		Huntsman Textile Effects	E 114, E 149, E 202	
		Hyosung		E 6
		Ideal Fibres & Fabrics		E 96
		IDTechEx		E 9
		IFG Asota		E 95, E 96
		IFG Drake		E 96
		imat-uve		E 111
		Inapal Plasticos		E 144
		Inca-Fiber		E 54
		Indorama Ventures	E 108, E 140, E 141, E 200	
		Innovatec Microfibre Technology		E 46
		Invista	E 108, E 141, E 194	
		iSi Automotive		E 205
		Itochu		E 194
		James H. Heal		E 16
		Japan Vilene		E 55, E 62
		Johns Manville		E 45
		Jou Jou Fish		E 196
		Jowat	E 58, E 62, E 114	
		Jumbo-Textil	E 58, E 113, E 224	
		JX Nippon ANCI		E 118
		JXTG Group		E 118
		Karl Mayer	E 16, E 36, E 43, E 63, E 65, E 129, E 182, E 216, E 220, E 225	
		Karl Mayer Digital Factory		E 63, E 225
		Karl Mayer Technische Textilien	E 16, E 25, E 65, E 120, E 216	
		Karl Menzel Maschinenfabrik		E 45
		Kelheim Fibres		E 94
		Kendrion		E 148
		Kermel		E 95
		Kern-Liebers Knitting Parts		E 176
		Kisbu		E 60
		Kordarna		E 141
		Korteks		E 14
		Kraiburg TPE		E 198
		Kraig Biocraft Laboratories		E 108, E 195
		Krelus		E 116
		Kroenert	E 150, E 205	
		Krüss		E 162
		KSL		E 217
		Kümpers		E 3
		Kyowa Interface Science		E 227
		Laroche		E 184
		Lectra	E 10, E 14, E 65, E 82, E 135, E 205	
		Leister Technologies		E 92, E 116
		Lenzing	E 3, E 10, E 51, E 60, E 94, E 106, E 107, E 140, E 194, E 196, E 227	
		Lenzing (Nanjing) Fibers		E 196
		Lenzing Instruments		E 186
		Lenzing Plastics		E 96
		Life Materials Technologies		E 12, E 59
		Lindauer Dornier		E 62, E 82, E 86
		Litzler		E 21
		LK International		E 201
		Loepfe Brothers		E 116, E 165
		Lohmann		E 14
		Madeira Garnfabrik Rudolf Schmidt		E 21
		Mahlo	E 16, E 64, E 227	
		Makita		E 56
		Manifattura Fontana		E 64

Start up the future

with Technical Textiles



€ 149

Technical Textiles in Application

Trend reports and Textile Startups

Recognized experts report on future perspectives and offer market prognoses

Company profiles

Supplier products and services from all market segments

European market data

Company data listed in clearly laid out tables (approx. 120 pages)

Please also visit:

www.dfv-tfz.de/en/5197-2

Approx. 330 pages, with numerous illustrations, diagrams and tables; spiral binding. ISBN 978-3-86641-884-4

3-part compendium for daily use

YES, I wish to order ____ copies of Trendbook
TECHNICAL TEXTILES 2018/2019, € 149* each /
ISBN 978-3-86641-884-4

Surname / First name Company

Address/Postcode/City/Country

Phone Email

Date Signature

* All Prices include VAT. Postage and packaging not included.

--	--	--	--	--	--	--	--

Customer ID if available

Please order at:

Dagmar Henning

Tel.: +49 69 7595-1722

Fax: +49 69 7595-1820

dagmar.henning@dfv.de

29042016

dfv media group

Company Index		Page			Page			Page
Märkische Faser	E 94, E 210	Radici Chemiefaser	E 95, E 96	Tanatex Chemicals	E 58			
Mayer & Cie.	E 33, E 180	Radici Yarn	E 95	Technical Absorbents	E 95, E 148			
Meera Industries	E 65	RadiciGroup	E 107	Teijin	E 3, E 51, E 56, E 106, E 107, E 144			
Memry	E 86	Reifenhäuser Reicofil	E 227	Teijin Aramid	E 4, E 56, E 95, E 199			
Metsä Group	E 194	Reliance Industries	E 140, E 146	Teijin Carbon	E 51, E 96			
Microban International	E 59, E 112	Research and Markets	E 9	Teijin Carbon Europe	E 148			
Microsoft	E 140	Rhovyl	E 96	Teijin Frontier	E 3, E 10, E 11, E 56, E 111, E 112, E 146, E 148, E 200			
Milliken	E 199	Rieter	E 172, E 202	TenCate	E 56			
Mitsubishi Chemical	E 21	Royal Adhesives & Sealants	E 14	Tenowo	E 113			
Mogul Nonwovens and Composites	E 12	SABIC	E 149, E 202	Terrot	E 178			
Monarch Knitting Machinery	E 149	Saga Automotive Interiors	E 113	Tesca	E 10			
Monforts Textilmaschinen	E 44, E 64, E 184, E 204	Georg Sahn	E 205	Texnology	E 180			
Montefibre	E 95	Sandler	E 44, E 57, E 148	Textechno Herbert Stein	E 63, E 186			
Müller Textile Group	E 45	Santex Rimar	E 114	The Fiber Year	E 106, E 150			
Multitexx	E 46	Santized	E 40	The FilamentFactory	E 159, E 207			
Nahtlos	E 37, E 93	Saurer	E 17, E 62	Thrace NG	E 46			
Nano-Care	E 13	Schappe Techniques	E 68	Tintex Textiles	E 10			
Nanosurf	E 207	J. Schmalz	E 131	Toho Tenax	E 21, E 51			
NatureWorks	E 114	Schoeller Textil	E 10, E 11, E 112, E 198, E 204	Toray Industries	E 21, E 56, E 216			
Neuenhauser	E 185	Scholze	E 185	Trans-Textil	E 200			
Neuenhauser Automation	E 185	Schwing Technologies	E 181	Treves TSC	E 12			
Neuenhauser Rosink	E 185	SDL Atlas	E 34	Trevira	E 94, E 96, E 108, E 111, E 148			
Neuenhauser Winding Technology	E 185	Seaqual 4 U	E 109	Trützschler	E 12, E 186			
Noble Biomaterials	E 97	Sefar	E 46	Trützschler Nonwovens & Man-Made Fibers	E 15, E 115, E 227			
Norafin Industries	E 44	SGL Automotive Carbon Fibers	E 4	TWE	E 46			
North Sails	E 168	SGL Carbon	E 3, E 4, E 21	Unifi	E 142, E 202			
North Thin Ply Technology	E 216	SGL Kumpers	E 3	Unitech Industries	E 188			
Northrop Grumman Astro Aerospace	E 220	Shandong Ruyi Technology Group	E 194	Uster Technologies	E 60, E 99			
nova-Institute	E 213	Shaoyang Textile Machinery	E 203	Van de Wiele	E 187, E 204			
Odlo Sports Group	E 199	Sheng Hung Industrial	E 204	Voith	E 15, E 115			
Oerlikon	E 61, E 116, E 203, E 205	Siemens	E 227	J.H. vom Baur Sohn	E 44			
Oerlikon Barmag	E 17, E 202	Silac Industrie	E 164	Vuchv	E 76			
Oerlikon Barmag Huitong Engineering	E 203	Sioen Felt & Filtration	E 44	VX Aerospace	E 216			
Oerlikon Manmade Fibers	E 60, E 61, E 116, E 150, E 203, E 205	Sioen Industries	E 64	Wacker Chemie	E 13			
Orion Engineered Carbon	E 4, E 195	Sohler-Neuenhauser	E 185	Weinlich	E 35			
Patrick Yarn Mill	E 11	Solmax-GSE	E 204	Weko Weitmann & Konrad	E 188			
Pedex	E 198	Solvay	E 110, E 143	Wellman International	E 95, E 96			
Pegas Nonwovens	E 56, E 111, E 150	Spinnova	E 141	Welspun India	E 198			
Perlon	E 43, E 108, E 198	Stahl Group	E 202	Wolverine World Wide Leathers	E 201			
Pfaff Industrial	E 114, E 116, E 135, E 217	Stahl Holding	E 148	Xentrys Barcelona	E 96			
PFNonwovens	E 150	Starlinger	E 61, E 64, E 116, E 205	Xerium Technologies	E 116			
Phifer	E 46	Stäubli	E 82, E 86, E 132, E 185	Yanfeng Global Automotive	E 135			
Pidilite Industries	E 58	STC Spinnzwirn	E 205	Youngone	E 200			
Porcher Industries	E 51, E 168, E 199	Stoll	E 186	J.H. Ziegler	E 112			
Premium Aerotec	E 110, E 143	STS Textiles	E 130	Zorlu	E 140			
Prodigy Textiles	E 108	Superba	E 187	Zschimmer & Schwarz	E 200			
PyroTex Industries	E 227	Sympatex Technologies	E 92	Dr. Zwissler Holding	E 148			
R.Stat	E 95, E 97	Syngenta	E 207	zwissTex	E 148			
R2G Group	E 56, E 111	Syngroup Consulting	E 140	Zytek	E 97			
		Synthomer Deutschland	E 123					