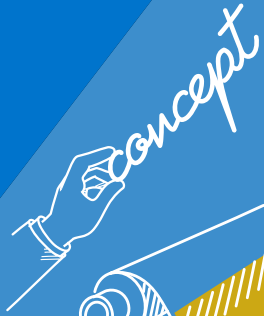
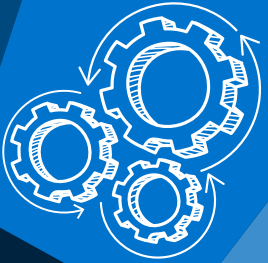
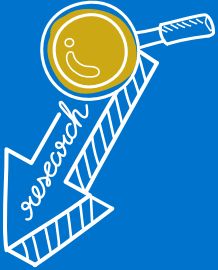


Progress Report 2022

At the heart of textile evolution



Collaborative



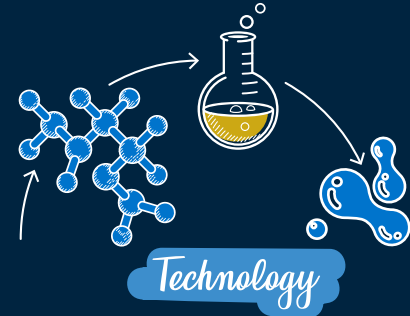
techtera



plan



success



Business Idea



management



International



A word from the president



The year 2022 was a decisive one for the innovation clusters; a year which closes phase IV, marked by a particular context (health crisis, rise in energy and material prices); but also rich in opportunities to be seized by the textile industry. This year also confirms the trend towards a greater share of private funding and the loyalty of ever more members joining the innovation cluster dedicated to the textile sector.

Techtera has spared no effort and presence in supporting its members. The year 2022 was also a record for the number of projects submitted and financed with the approval of Europe, thanks to the renewal of its Gold label.

And of course, 2022 was also an exciting new year for me, taking over the reins of the Techtera cluster, to which I express my desire to continue working in the defence and promotion of a whole sector undergoing rapid transformation.

Philippe SANIAL – President

Figures of the year 2022

50 000

web pages visited



9 500

subscribers to the monthly French, English and Japanese newsletters



66

press mentions



4 089

LinkedIn followers, a 35% increase

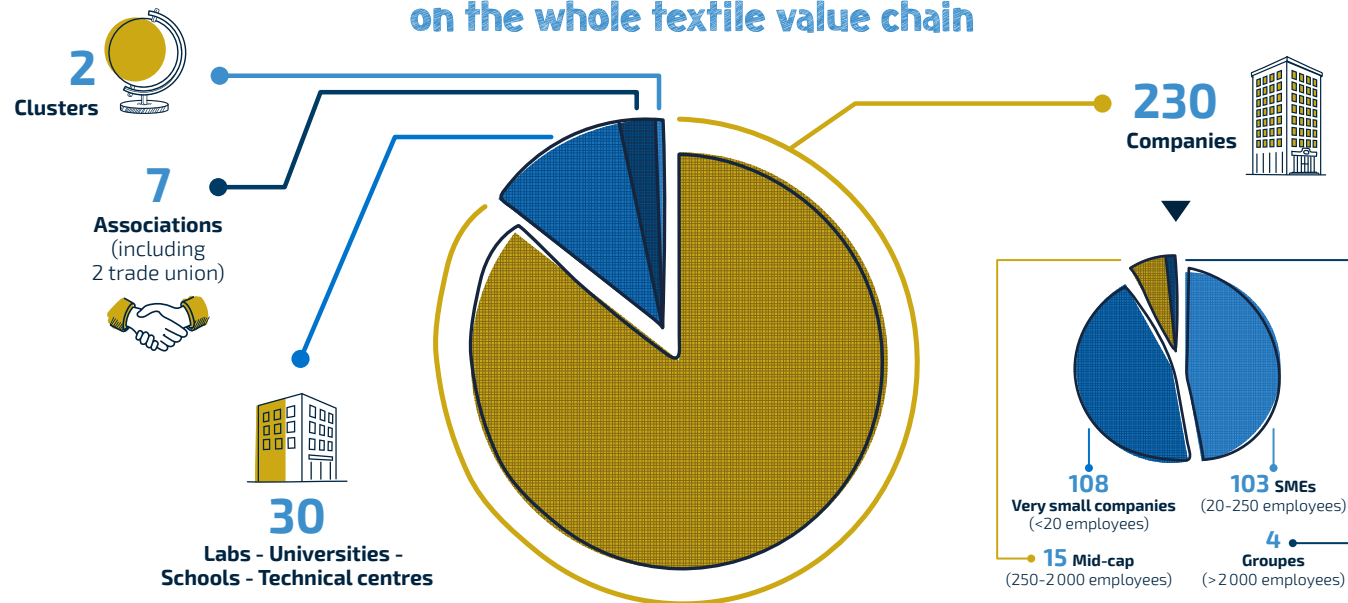


Presence on Twitter and YouTube



269 members,

on the whole textile value chain



CERTIFICATIONS



The European Cluster Management Excellence Label Gold for Techtera's highly sophisticated management and dedication to continuous improvement.



The ISO 9001 for Techtera's quality management system

Textile industry stimulation in 2022

Discovering

15 Watch actions
263 organisations
441 participants

✓ Creative watch:

- Decoration trends – Autumn/Winter Season 23-24 – Spring/Summer Season 24
- Megatrends Season 1 and 2

✓ Technical textile watch: "Matériaux" – "Industrie of the future" – "Circular Economy"

✓ Market watch:

- Textile opportunities in Mexico, Vietnam
- Defence market in Japan, Indonesia, USA
- State of the art of the German technical textiles market
- Sustainable fashion symposium

✓ Scientific watch: Iberic Lab Tour

Sourcing

- ✓ 42 supplier searches
- ✓ 170 companies contacted to answer the different issues
- ✓ 50 organisations replied to requests

Excelling

21 Competitiveness Workshops
1287 organisations
1740 participants

Perfecting

- ✓ New regulations: Extended Producer Responsibility – New French anti-waste law for a circular economy
- ✓ Cybersecurity workshop in partnership with Minalogic
- ✓ Consortium agreements

Trading

- ✓ European Infodays for innovative SME
- ✓ Reception of the European delegation EXTRATEX
- ✓ SME DGA Tour (subcontracting of the armament industry)
- ✓ Lyon Pacte PME – Textile event
- ✓ Lyon Pacte PME – IDEE Forum – Innovation Defence Enterprise
- ✓ Workshop for the preparation of international trade fairs
- ✓ Annual networking event of Techtera
- ✓ Changes in the textile and fashion industry
- ✓ **Tomorrow's textiles, along the circular economy** (3 round tables):
 - Textile ecological transition & new skills
 - Circular economy – Regulations & financing
 - Textile recycling – Feedback

Financing

- ✓ European Defence Fund 2022
- ✓ Regional and national calls for projects
- ✓ Call for proposal on flexible protection
- ✓ Call for projects for sustainable transformation
- ✓ Call for projects France 2030
- ✓ Infoday on European funding



9 Innovation Workshops
326 participants

Initiating

Conferences & congress

- ✓ Biomimicry
- ✓ Blockchain awareness
- ✓ Technical textiles for transport and energy
- ✓ Naval maritime (Sea cluster)
- ✓ Thermoregulation technical meeting with the French Directorate General of Armaments
- ✓ Hackathon (Tomorrow's Textiles: along the circular economy)
- ✓ Franco-Swedish research days
- ✓ Moisture-regulating fabrics
- ✓ Process for the production of fireproof cellulose

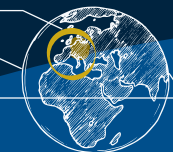
3 Clubs
67 participating organisations

- ✓ Club RECIT (Circular Economy)
- ✓ Club STeW (Smart Textiles)
- ✓ Club Industry of the future



- ✓ Congress, healthcare innovation; Polymer & textile assets (SFIP)
- ✓ Natural Fiber Extraction Congress
- ✓ Annual Conference on EU-Japan Regional & Cluster Cooperation

Europe
USA
Mexique
Vietnam



Structuring

58 working groups
initiated to build R&D projects

Workshop



Support for
4 international joint missions

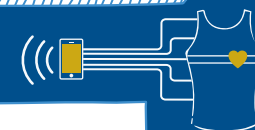
- ✓ European Textile Mission to Mexico (Texglobal)
 - ✓ Security and Defence Mission to the USA (EU-Alliance)
 - ✓ Sustainable Composite Mission to the USA (REC-N-COMP)
 - ✓ Virtual mission with Vietnam companies (Texglobal)
- ⇒ **38 companies supported**

Exporting



Support for
5 international trade fairs

- ✓ Heimtextil (Home textiles)
 - ✓ Techtextil (Technical textiles)
 - ✓ Performance Days (Sport, functional textiles) – Spring and autumn edition
 - ✓ JEC WORLD (Composites)
 - ✓ Natural Fiber Extraction (Sustainable textiles)
- ⇒ **61 companies supported**



Interclustering projects

ALPTEXTYLES — Develop collaborative solutions for the relocation of Alpine textile value chains, to make them sustainable, circular and innovative, and sensitive to heritage and consumers.

Markets: 

Budget: 2 979 693 €

Funding: Europe interreg alpine space 2022

EUROBOOSTEX — Joint European initiative in support of the textile industry for European recovery through digital and ecological transition.

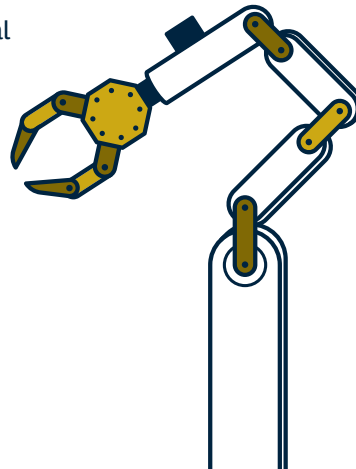
Market: 

Budget: 1 438 889 €

Funding: Europe (euroclusters) joint cluster initiatives for Europe's recovery (smp-cosme-2021-cluster)

Techtera is also a partner in interclustering projects:

- ✓ **Hub of cluster for the factory of the Future:** visit of the Digital Campus and visit of the Axel'One Innovative Processes platform,
- ✓ **EU-Alliance:** internationalisation of European SMEs technical textiles, connectivity, advanced technologies, advanced materials for the defence/security sector,
- ✓ **CONTEXT:** network of European technical textile experts,
- ✓ **REC-N-COMP:** recycled materials based composites,
- ✓ **Texglobal:** development of the innovation potential of European textile companies,
- ✓ **ECA (European Cluster Alliance):** involvement in the European network of clusters.



Quantified focus

24

R&D PROJECTS

financed and labelled
in 2022
including

**7 EUROPEAN
PROJECTS**

for an amount of

33

MILLION EUROS

16

PROJECTS

labelled in 2022

40

PROJECTS

submitted in 2022
including

**17 EUROPEAN
PROJECTS**

R&D financed projects

DÉFENSE ISL PORCHER — On a multi-scale, characterise and model the mechanical behaviour of a fabric subjected to ballistic impact.



Markets: DÉFENSE CIFRE

Budget: 151 000 €

TIBET — Prototype clothing integrating an electronic system associated with a design optimised for collecting energy.



Markets: WORTH

Budget: 26 210 €

COMPOSNET — Develop compostable anti-insect agricultural netting.



Markets: R&D BOOSTER RÉGION AURA

Budget: 648 833 €

FHATEX — Make reliable and harmonise environmental traceability and labelling for the textile industry.



Markets: ADEME

Budget: 259 270 €

AURAREFIL — Develop a closed-loop recycled polyester yarn made in the Auvergne-Rhône-Alpes region.



Markets: CHALLENGE REFASHION 2021

Budget: 147 720 €

BIO SUSHY — Replace perfluorinated products (PFAS).



Markets: EUROPE – HORIZON EUROPE

Budget: 5 237 937 €

PATENTH — Develop a support platform for the environmental transition of the Textile and Clothing sector.



Markets: PIA3 RÉGIONALISÉ

Budget: 2 745 000 €

JET TRONIC — In terms of application markets, diversify the alternative technology solution to metallisation developed by the enterprise.



Markets: PIA CONCOURS D'INNOVATION

Budget: 494 600 €

SOFTWEAR III — Train young researchers in the multidisciplinary science of soft actuators to be integrated within enhanced clothing and textiles.



Markets: EUROPE HORIZON MSCA ITN 2021

Budget: 4 143 924 €

CALIMERO — Improve the life-cycle durability of bio-based industries.



Markets: EUROPE HORIZON-CL6-ZERO

Budget: 3 518 902 €

POLLUTION-01-06

FOMOF — Develop a French sector for functionalised textile products intended for military and civilian applications.



Markets: DEFENSE – RAPID-DUAL

Budget: 381 034 €

TEXAD — Develop fluid treatment modules based on photocatalytic luminous textile technology.



Markets: ANR 2021

Budget: 866 338 €

BALARELANCE — Develop an R&D platform serving the “Supply chain”.



Markets: PLAN DE RELANCE

Budget: 503 835 €

CONVERTIR — Develop a machine for carbon weaving.



Markets: PLAN DE RELANCE

Budget: 2 159 000 €

PTBE — Develop a low-emissivity tent wall for camouflage and thermal comfort.



Markets: DEFENSE – RAPID-DUAL

Budget: 671 000 €

EN.MOTION II — Develop a new manufacturing process for flexible surfaces based on aerogel.



Markets: EUROPE H2020 EIC-SEMINST-2018-2020

Budget: 3 767 636 €

MC4 — Develop European recycling value chains for glass and carbon fibre composites.



Markets: EUROPE HORIZON-CL4-2021-RESILIENCE-01-01

Budget: 7 005 173 €

Quantified focus

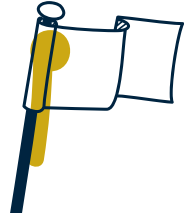
Since 2005,

267
PROJECTS
financed
For an amount
of

651,7
MILLION EUROS



The highlights of 2022



Techtera renews its Gold Label: Fine recognition of our work within Europe!

The ECEI (European Cluster Excellence Initiative) Label, issued by the ESCA (European Secretariat for Cluster Analysis), attests to the documented commitment to continuous improvement.

Out of more than 2,000 European clusters, **Techtera is the only European cluster dedicated to the textile sector to receive this award.**

The audit, carried out by two neutral experts, covers 31 indicators, making it possible to **verify the level of excellence** in terms of management, strategy, financing, services and organisation; also, efficiency and the strong European dimension.

This fourth renewal of the Gold Label is a strong message of recognition of the entire team's work; real motivation to maintain continuous improvement at the heart of the association's strategy. It is also a powerful tool for attracting industrial organisations, research and training centres and European authorities, in the service of projects for the French textile industry.

The appointment of Philippe Sanial, from the CHOMARAT group, as President of Techtera

Philippe Sanial succeeds Louis Vovelle, Senior Vice President Innovation and R&D at Elkem, who has been involved for 10 years in the cluster's presidency. Philippe Sanial is Technical Director in charge of R&D, industrialization, and methods at CHOMARAT, the French industrial textile group specialized in reinforcements for Composite materials, reinforcements for Construction materials, coated textiles & technical films. The group has been a member of TECHTERA since its creation.

Philippe Sanial has initiated **partnerships between the CHOMARAT group and national and international research centers**. He has **an in-depth knowledge of the levers of collaborative innovation**, particularly for SMEs and ETIs.

He will also be able to rely on **a solid base within TECHTERA**, both in terms of structure and teams, and the governance bodies.



Members of the Executive Board



Growth of Techtera's activity in Europe

European research and innovation funding programmes give pride of place to textiles. As such, Techtera has supported its members and submitted several European projects.

Techtera is also a partner of European projects including EuroBoostEX, Caliméro and MC4 funded in 2022.



EuroBoostEX - Digital and ecological transition (2022-2025)

EuroBoostEX aims to stimulate the environmental and digital transition of European textile small/medium enterprises, and to boost their competitiveness at an international level.

How?

- ✓ By promoting innovation by funding new products or services,
- ✓ By supporting the adoption of advanced digital technologies,
- ✓ By supporting requalification of the textile workforce and strengthening skills through training,
- ✓ By exploring international opportunities in Australia,
- ✓ By leading a European textile network for the resilience and the generation of growth opportunities for small/medium enterprises.



MC4 - Circularity and performance of carbon and glass fibre composite value chains (2022-2025)

Carbon and glass fibre composites are essential in many technical applications, for which their lightweight properties and high performance are particularly appreciated.

However, the European value chains of these materials need to be optimised on two major levels: environmental impact and economic impact.

MC4 aims to implement research and innovation action, which takes into account the specific needs of the two value chains.

How?

- ✓ By developing recycling processes concerning the matrix/fibre chemical separation for carbon fibre, and concerning a new type of resin for the direct reuse of the composite material for fibreglass,
- ✓ By implementing processes to achieve a 60% recycling rate in supply chains with the use of appropriate quality assessment of recycled material,
- ✓ By ensuring the possibility of correctly using recycled materials in different fields of application,
- ✓ By giving European industry the means to master and use these patented processes for manufacturing recycled materials.



Multi-level Circular
Process Chain for Carbon
and Glass Fibre Composites

Caliméro - Life cycles and biobased industries (2022-2025)

CALIMERO focuses on the transition to a sustainable traditional industry for five target sectors: construction, wood, textiles, paper, chemical additives.

The project is organised around three phases: collect of all the data, analysis and processing (artificial intelligence models with life cycle analysis) – and application to practical cases.

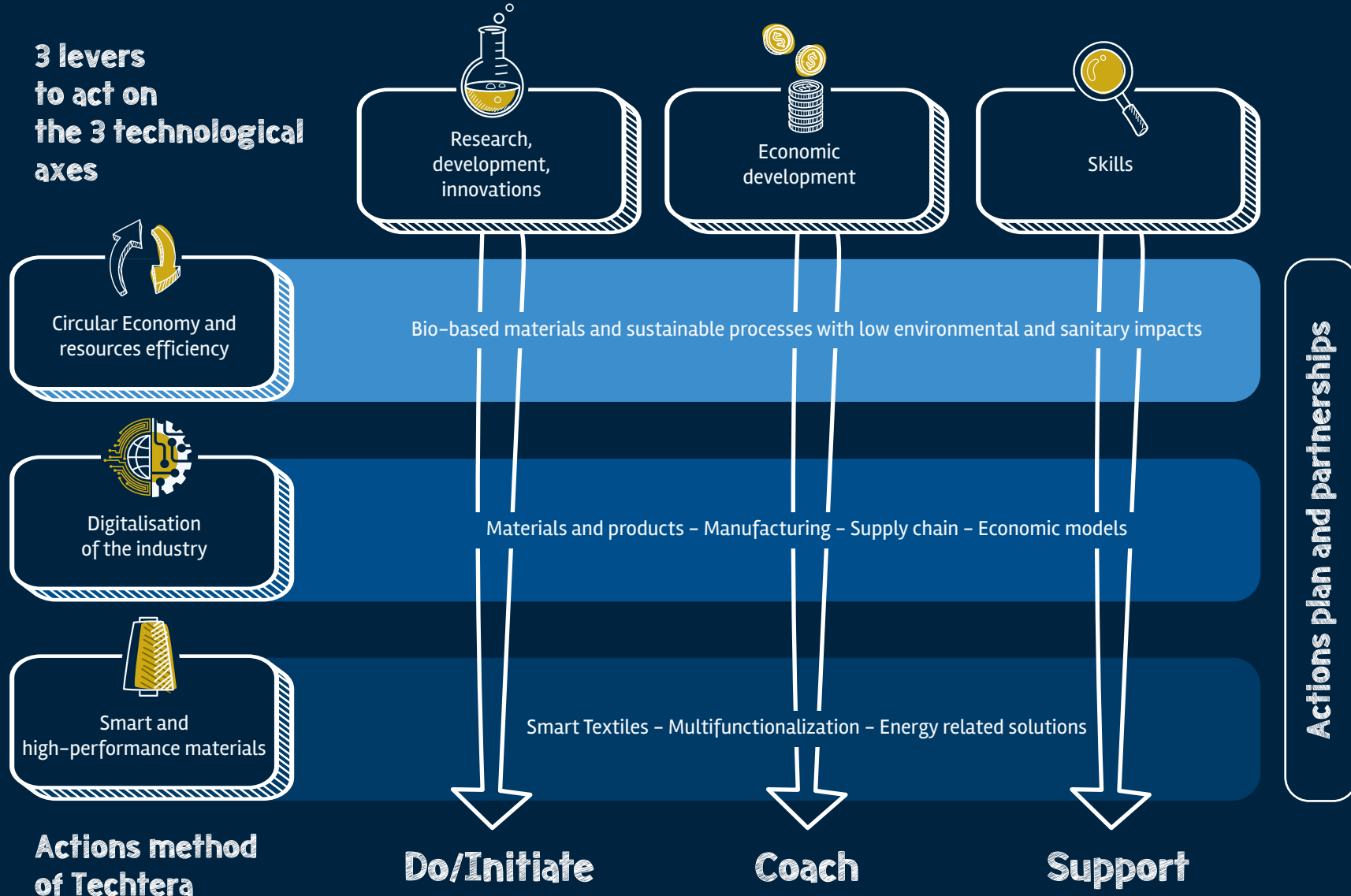
How?

- ✓ By exchanging best practices between sectors with historical similarities,
- ✓ By identifying and defining impactful strategies for the use of bio-sourced materials
- ✓ By developing and disseminating models for analysing and taking impact parameters into account,
- ✓ By laying the foundations for economic and social life cycle analysis in the textile sector,
- ✓ By strengthening the skills of the ecosystem through training.



CALIMERO
IMPROVING BIO-BASED INDUSTRIES LIFE CYCLE SUSTAINABILITY

Techtera roadmap 2023-2026



Premium Members 2022

3DEUS DYNAMICS — 3DITEX — 4F — ACCES (ASSOCIATION CHRÉTIENNE DE COORDINATION, D'ENTRAÏDE ET DE SOLIDARITÉ) — ACOUSTEAM — ACTIVATION — AD MAJORIS — AE2M — AERO TEXTILE CONCEPT — AET — AFELIM (ASSOCIATION FRANÇAISE DE L'ÉLECTRONIQUE IMPRIMÉE) — AFITEXINOV — AJ BIAIS — AKTID — ALLIANCE MACHINES TEXTILES — ALPEX PROTECTION — ALSATEX — ALSATHERM SERVICES — ALTHOFFER — ANDRITZ PERFOJET — APF ENTREPRISE ALSACE — APF FRANCE HANDICAP — ART MARTIN — ATELIER SYSTÈMES DE PROTECTION — ATG TECHNOLOGIES — AUTHENTIQUE BRODERIE — AXEL'ONE — BALAS TEXTILE — BARDUSCH — BARRAL — BELINAC — BERTHEAS & CIE — BG COUTURE — BLANCHARD TECH & YARNS — BLANCHISSERIE DU REFUGE — BLAST SOLUTIONS ET ASSOCIÉS — BLEUFORET — TRICOTAGE DES VOSGES — BOLDODUC — BROCHIER TECHNOLOGIES — BUITEX INDUSTRIES — C.H.A.B. — CALDERA — CAP CONTAINER — CARLHIAN — CAWE FTB GROUP — CEA-LITEN — CEDREM — CENTRE NATIONAL D'ÉVALUATION DE PHOTOPROTECTION — CENTRE TECHNOLOGIQUE NOUVELLE AQUITAINE COMPOSITES ET MATÉRIAUX AVANCÉS — CETI — CHAMATEX — CHAVANOZ INDUSTRIE — CHEMICA — CHOMARAT TEXTILES INDUSTRIES — CLIM8 — CNRS INSTITUT CARNOT MICA — COLORATHUR — CORDERIE MEYER-SANSBOEUF — COUBLANC TEXTILES — CROUVEZIER DÉVELOPPEMENT — CTIPC — CTMI COTTON TEXTILES MATÉRIAUX INNOVANTS — CTP — CTTN — IREN — DE

FIL EN AIGUILLE — DEUTSCHE INSTITUTE FÜR TEXTIL- UND FASERFORSCHUNG DENKENDORF (DITF) — DEVEAUX — DIATEX — DMC — DOLLFUS & MULLER — DS + M PORCHERET — DUTEL — ÉCOLE CENTRALE LYON — ÉCOLE NATIONALE D'INGÉNIEURS DE TARBES — ÉCOMOBILIER — EFFBE FRANCE — ELKEM SILICONES FRANCE — EMANUEL LANG — ENERSENS — ENNOBLISSEMENT TECHNIQUE DE CERNAY (ETC) — ENSAD (ÉCOLE NATIONALE SUPÉRIEURE DES ARTS DÉCORATIFS) — ENSAIT — ÉTABLISSEMENT DENIS ET FILS — EUROPROTECT FRANCE — ÉVÉNEMENTIEL EN VAL D'ARGENT — EVENT DRESS CODE — EVER'INNOV — EXTRACTHIVE — FEAT-COOP — FESTO — FIBROLINE — FILATURE DE LAINE PEIGNÉE D'AJOIE (FLASA) — FINAL ADVANCED MATERIALS — FONTANILLE — FOTIA DMT — FREUDENBERG PERFORMANCE MATERIALS — FRIP'VIE — GAMMAO — GARNIER-THIEBAUT — GIBAUD — GIE INGÉNIERIE@ LYON — GLATFELTER — GROUPE SAC PERSONNALISABLE — HEIM TEXTILE CONCEPT ET DIFFUSION (HTCD) — HENRI NICOLET COTEXTILE — HERAUD RUBANS — HOLDING TEXTILE HERMÈS — HOWA TRAMICO — HUGOTAG ENNOBLISSEMENT — I J M — INNOTHERA NOMEXY — INOUID — INSA DE LYON — INSTITUT DE RECHERCHES EN INGÉNIERIE DES SURFACES — INSTITUT FRANÇAIS DU TEXTILE ET DE L'HABILLEMENT (IFTH) — INSTITUT FÜR TEXTILTECHNIK DER RWTH AACHEN — INSTITUT MINES TELECOM — ISABELLE LAURENT STYLE — ITECH — JEPLAN — JET METAL TECHNOLOGIES — JRC REFLEX — JULIEN FAURE — KAYSER

FILTERTECH — KERMEL — KEYBOP CONSEIL — KURARAY — L&L PRODUCTS EUROPE — LA FABRIQUE — LA TANNERIE VÉGÉTALE — LABONAL — LABORATOIRE IMEP-LAHC — LABORATOIRE INTERUNIVERSITAIRE DE BIOLOGIE DE LA MOTRICITÉ — LABORATOIRE ITODYS (INTERFACES TRAITEMENTS ORGANISATION ET DYNAMIQUE DES SURFACES) — LABORATOIRE LOCIE (LABORATOIRE OPTIMISATION DE LA CONCEPTION ET INGÉNIERIE DE L'ENVIRONNEMENT) — LABORATOIRE LPMT (LABORATOIRE DE PHYSIQUE ET MÉCANIQUE TEXTILES) — LABORATOIRES INNOTHERA — LE JACQUARD FRANÇAIS — LES MOULINAGES DE RIOTORD — LES TISSAGES DE CHARLIEU — LESAGE PARIS — LYCÉE LA MARINIÈRE DIDEROT (PLATEFORME TEXT'IN) — LYON INGÉNIERIE PROJETS — MAILLE VERTE VOSGIENNE — MAISON MA BILLE — MAISON TROGLER — MAFROY ET MILLION — MANUFACTURE HARTMANN (EURO TF) — MANUFACTURES DE MODE — MAPA — MAPEA — MARCK & BALSAN — MARDUEL — MASSEBEUF TEXTILES — MATÉRIELS INDUSTRIELS DE SÉCURITÉ — MAYA CAMPUS — MCVE TECHNOLOGIE — MDB TEXINOV — MECANIUM — MERMET — MILLET MOUTAIN GROUP — MITWILL TEXTILES EUROPE — MOBIL ELASTO FRANCE — MONDOR — MORAH — MOULINAGE DU SOLIER — N. SCHLUMBERGER — NCV INDUSTRIES — NDS ELECTRONICS — NEYRET TEXTILE IDENTIFICATION — NOPPI — NORMALU — OPENFAB — ORION — OTEGO — QUATINAGE D'ALSACE — OURDISSAGE ENCOLLAGE D'AMPLEPUIS (O.E.A.) — OSV (OUTDOOR SPORTS VALLEY) — PALO IT

LYON — PARADOX — PHILEA TEXTILES — PHP-PHILIPPE — PIERRE ROCLE — PMG ARDÈCHE — POCKUS CONSEIL — POLE TEXTILE ALSACE — POLYMAGE — PORCHER INDUSTRIES — PORCHER TISSAGES — PRESTA'TERRE — PRONEEM — PROTECHNIC — PROTHELIOS — RECYC'ELIT — RÉGION AUVERGNE-RHÔNE-ALPES — REVALOREM — RINCO ULTRASONICS — ROBERT LEVY — ROVITEX — SABLE CHAUD — SAERTEX FRANCE — SAMAYA — SASYTEX — SATAB — SCHAEFFER PRODUCTIQUE — SEMPATAP — SENFA (DUBIN HASKELL JACOBSONDISTRIBUTION FRANCE DAVAL ASH) — SEPARATIVE — SERAM — SERGE FERRARI — SERMA TECHNOLOGIES — SIGVARIS — SKEED INTERNATIONAL — SKYTED — SOFT MATERIALS ENGINEERING (SME) — SO SPONGE — SO3D — SOBO CONCEPT — SFIP (SOCIÉTÉ FRANÇAISE DES INGÉNIEURS DES PLASTIQUES) — SOFILA — SOFILETA — SOLAR CLOTH SYSTEM — SOLARMTX — STEVTESS — SULITEC — SUPPLEO — TAT — TECHNI SANGLES — TENTHOREY — TEXTI SONICS — THANN TEXTILES — THEVFAB — THUASNE — TICA LAB — TIL — TISSAGE DU MOULIN — TISSAGE MOULINE THILLOT — TISSAGES L. RECORBET & FILS — TISSUS GISELE — TLC SYNERGIES — TOILTECH — TOPTX CUBE — TRIUM TECHNOLOGY — TRIUMPH INTERNATIONAL — TRIUS SAFETY — UNION DES INDUSTRIES TEXTILES (UIT) — UNITEX — UNIVERSITE CLAUDE BERNARD LYON 1 — UNIVERSITE SAVOIE MONT BLANC — UP'TEXTILE — VELCOREX SINCE 1828 — VERNE & CLET — VILLAGE DES CREATEURS — VIRHEALTH — WOODOO



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