# Eureka
# Project partners Search Form

**Program** (select appropriate)**:**

**[X] EUREKA**

***Multilateral/Bilateral Call*** *(if applies)**:***

[X] Spain and Türkiye bilateral call – 2026

**[ ] CLUSTER**

[ ] CELTIC-NEXT
[ ] EUROGIA$^{2030}$
[ ] ITEA4
[ ] SMART
[ ] Xecs

***Thematic Call*** *(if applies)**:***

[ ] Xecs Quantum Tech

| **Contact Person Details** | |
|---|---|
| Name: Doğan Ertürk | |
| Position: R&D and International Projects | |
| Phone: +90 554 777 74 12 | Email: dogan.erturk@kadifeteks.com |

| **Organization Details:** | | | |
|---|---|---|---|
| Name: Kadifeteks Mensucat Sanayi A.Ş. (KETS) | | | |
| Country: Türkiye | Website: www.kets.com.tr | | |
| Type of Organization: | [ ] SME | [X] Large Company | [ ] University |
| | [ ] Research Inst. | [ ] Administration | [ ] Other (specify): |
| Number of Employees: | [ ] < 10 | [ ] 11-50 | [ ] 51-100 |
| | [ ] 101-250 | [X] > 250 | |

**Describe the activities, products, services, and expertise of your organization:**

- Founded in 1980, Kadifeteks Mensucat Sanayi A.Ş. (KETS) is among Europe's largest integrated upholstery fabric manufacturers. Its Istanbul and Sakarya facilities cover 165,000 m², with capacity for about 3 million metres monthly, thousands of designs and exports to over 100 countries.
- Polypropylene chips are extruded into yarn; acrylic fibre is processed into yarn, while polyester, polyamide, cotton, linen, wool and viscose are mainly purchased as yarn. We develop twisted, specialty, fancy, effect and chenille yarns in-house.
- Our chain includes package, hank and fabric dyeing; jacquard/dobby weaving; finishing, coating and lamination. We produce upholstery, curtains, velvet, indoor/outdoor, contract and technical fabrics with flame-retardant, water/stain-repellent, easy-clean and other functions.
- Two R&D Centres, a Design Centre, laboratories and IT teams support testing and scale-up. Credentials include ISO 9001, 14001, 45001 and 50001; OEKO-TEX STANDARD 100 and STeP; EU Ecolabel, GRS and Cradle to Cradle, among others. See the annex for details.

| Project Details | |
|---|---|
| Project Title | Spain–Türkiye Joint R&D Opportunities in Integrated Textiles and Industrial Technologies |
| Acronym | KETS-INNOVATION |
| Keywords | Circular textiles; advanced yarns; dyeing and finishing; water reuse; energy efficiency; industrial AI; cross-sector R&D |

**Describe your Project:**

- KETS has obtained funding for multiple national R&D projects and a Horizon Europe collaborative project involving a Spanish company. This positive experience has created strong Spain–Türkiye R&D synergy, which we now wish to expand. Our immediate priority is the bilateral Eureka call, while remaining interested in subsequent Horizon Europe partnerships.
- Circular materials and high-performance textiles: building on our nationally funded work to recover waste polypropylene as high-performance upholstery, we can investigate new recycled fibre/yarn combinations, technical woven structures and durable flame-retardant, water/stain-repellent or easy-clean finishes. Target applications may include transport, hospitals, public areas and contract interiors.
- Dyeing, finishing, water and energy efficiency: possible joint work includes reusing water from our existing reverse-osmosis system in selected processes, lower-resource dyeing/finishing recipes, improved colour consistency, waste-heat recovery, industrial heat pumps and renewable energy integration, all tested under real production conditions.
- Smart manufacturing and digital transformation: some of our production lines generate digital records, while others rely on manual tracking. This provides a real setting for co-developing sensors, data integration, AI-based quality prediction and operator decision support. These are illustrative directions, not a fixed consortium or specification; we welcome Spanish partners' complementary ideas, including proposals from adjacent sectors.

**Describe the innovative part of your project:**

- We will first define a measurable industrial problem and establish process or product baselines with the selected partner. Experimental development, laboratory testing, pilot production and industrial validation will target new knowledge, methods or products, rather than the purchase of ready-made technology.
- Materials R&D can co-design feedstock composition, yarn geometry, fabric construction, dyeing and finishing to quantify the trade-offs between recycled content, flame retardancy, abrasion resistance, fabric hand, colour and service life.
- Wet-process and energy R&D can study how recovered-water quality affects dyeing reproducibility, membrane and chemical compatibility, energy demand and heat recovery under changing production schedules, with direct comparison of quality and resource consumption.
- Digital R&D can integrate mixed-generation equipment and manual records into explainable, uncertainty-aware models that preserve operator control. Industrial pilots can test whether quality and resource predictions transfer across different fabric families and production lines.

**Describe the market expectations of your project:**

- Our thousands of fabric variants and customers in over 100 countries provide insight into needs ranging from residential upholstery and curtains to hotels, healthcare, public buildings, mass transport and outdoor applications. End-use technical requirements will be assessed for each proposed product.
- A key benefit for a Spanish partner is the opportunity to develop its technology with one integrated manufacturer, from raw material through finished fabric, and assess it in our laboratories and real industrial production lines before commercial deployment.
- A successful project may produce new product families or more efficient manufacturing for KETS, while enabling the Spanish partner to commercialise a differentiated material, chemical, equipment, software or process solution with other customers as well.
- For each proposal, we will jointly agree on the target application, technical performance, test methods, certification pathway, intellectual property, dissemination and commercialisation responsibilities, with mutual benefit as the guiding principle.

| **Possible Partner Profile:** | | |
|---|---|---|
| Type of Partner Needed (multiple choices are allowed) | [X] SME<br>[X] University<br>[ ] Administration | [X] Larger Company<br>[X] Research Institution<br>[ ] Other (specify): |

**Describe the expertise of possible partner(s) required for your project:**

- Spanish companies and specialist teams working on advanced fibres, polymers, yarns, recycling, flame retardancy, functional coatings and finishing chemistry, or high-performance technical textiles.
- Technology developers in reclaimed water, membranes, industrial heat pumps, waste-heat recovery, thermal storage, renewable integration and energy-management R&D.
- Partners developing industrial AI, sensors, automation, machine connectivity, digital twins, process modelling, predictive quality or industrial software.
- We welcome SMEs, larger companies, universities and research/technology centres alike. Partner roles and consortium structure will follow the bilateral call's eligibility rules; related technologies beyond the examples above are also welcome.

**Describe the role of possible partner(s) in your project:**

- Jointly select a concrete industrial challenge, define the research question and measurable targets, and establish work packages that reflect the complementary strengths of both partners.
- The Spanish partner may develop a new material, formulation, process, machine, sensor or software; universities and research centres can contribute scientific research, modelling, testing or analysis as appropriate.
- KETS will contribute yarn, dyeing, weaving, finishing, engineering, IT and laboratory capabilities for sampling, pilot trials, performance testing, process improvement and industrial-scale validation.
- Partners will prepare the Eureka proposal and agree on funding, IP and commercial exploitation. Successful outcomes can support a lasting Spain–Türkiye collaboration and future Horizon Europe projects.

Deadline for Partner Search: As early as possible, aligned with the official bilateral call timetable

# KETS Industrial Capability Overview

### Industrial scale and global markets

KETS combines more than four decades of textile manufacturing with an extensive catalogue of thousands of designs, fabric constructions, textures and finishes. Approximately 3 million metres of monthly fabric capacity, integrated operations in Istanbul and Sakarya, and exports to over 100 countries support the development and commercial deployment of products for residential upholstery, curtains, hotels, public buildings, healthcare, transportation, indoor/outdoor furniture, decorative textiles and niche technical uses. Application-specific requirements are evaluated separately.

### Raw materials and specialist yarn engineering

Our input strategy changes with the fibre: polypropylene is purchased as chips/pellets and converted into yarn through in-house extrusion; acrylic is sourced in fibre form and processed into yarn; polyester, polyamide, cotton, linen, wool, viscose and other materials are primarily sourced as yarn. We can then apply twisting, combinations, chenille and other specialty or fancy-yarn effects, adjusting composition, count, texture, strength, colourability and final use. This flexibility allows us to evaluate recycled, alternative and blended materials in realistic production conditions.

### Integrated processing and functional products

After yarn development, our dyehouse supports package, hank and fabric dyeing and specialised colour effects. Jacquard and dobby weaving create varied constructions, weights, textures and designs. Wet, mechanical and chemical finishing, functional surface treatments, coating and lamination enable flame retardancy, water and stain repellency, easy-clean behaviour and other performance targets. A Spanish partner's new material or technology can therefore progress through successive industrial processes within one manufacturing organisation and be evaluated in a finished fabric.

### Testing, product development and industrial validation

Two R&D Centres, a Design Centre and in-house physical/chemical testing facilities support prototype design, process trials, performance assessment and scale-up. The test portfolio and internal reporting cover methods for abrasion and pilling (such as EN ISO 12947 and 12945), colour fastness (EN ISO 105 series), flammability (including BS 5852 and EN 1021), water repellency, cleanability, tearing and tensile properties. The applicable methods, measured results and end-use approvals are specified for each product rather than assumed across the entire range.

### Sustainability, digital capabilities and collaborative R&D

KETS works on recycled-content textiles and the recovery of polypropylene waste into high-performance fabrics, while exploring more circular materials and safer functional chemistries. Renewable electricity generation, reverse-osmosis treatment and studies on reuse of treated water in dyeing/finishing complement our energy and resource-efficiency work. An in-house IT team supports data integration and industrial digitalisation, with both digitally recorded and manually monitored machinery represented in production. We offer joint research, prototyping, pilot runs, testing and commercial-scale demonstration to industrial and academic partners.