

PARAFIX Engineered Adhesive Solutions



Contents

- About us
- What we do
- 3. Markets
- Supply partners
- **Products**
- **Converting capabilities**

- Manufacturing support services
- **Custom presentations**
- <u>Automation</u> 9.
- 10. Quality
- 11. Customer service
- 12. Why partner with us?





About us

- Founded in 1969
- 1996 acquired AT&C Ltd
- 2000 acquired Thames Ltd
- 2002 established Parafix Hungária Kft.
- Total 250 employees
- 4 manufacturing facilities
- Established European presence
- Produce 350m die-cut parts annually
- 100+ converting machines
- c. £18m business







What we do

We use these suppliers:

- 3M (Preferred Converter)
- Adhesives Research
- Advance
- **Avery Dennison**
- DuPont
- Freudenberg
- **Furukawa**
- Laird (Preferred Converter)
- Nitto
- Pall
- Porex (Preferred Converter)
- Rogers (Preferred Converter)
- Scapa
- Tesa
- Vancive

For these applications:

- **Bonding**
- Sealing
- Cushioning/damping
- EMI/RFI shielding
- Medical solutions
- Masking & Protection
- Insulation
- Reflection
- Thermal management
- Venting & Filtration

Using these techniques:

- Rapid prototyping
- Rotary die-cutting
- Flat-bed die-cutting
- Laser cutting
- Lathe slitting
- Rewind slitting
- Laminating
- Guillotining
- Thermoforming
- Automation













Markets

























Healthcare

Strong relationships with global leaders in medical material technology, combined with continued investment in our 2 ISO Class 7 clean rooms and converting processes, make Parafix an ideal partner at every stage of your medical device life cycle. From R&D, design, prototyping and testing, through to full production and automated assembly, you can be confident in our commitment to superior quality solutions, demonstrated by our ISO13485 accreditation and FDA registration.

- Sealing & securing in ostomy & incontinence
- Diagnostics spacer & lid assemblies
- Woundcare dressings & plasters
- Components for electronic medical devices
- Filtration materials for gas & liquid management

- Microplate sealing
- Pulse oximetry
- Gas management in respiratory monitoring devices
- Stick to skin for wearable devices
- Optical industry components



















Automotive

Parafix works with design and development engineers from AOEMs and tiered suppliers to offer a range of applications and product support into this market. We provide materials and manufacturing processes to meet the appropriate approvals and specifications, including ISO 9001:2015, ISO 14644-1 Class 7 clean room capability and IATF 16949 compliance.

- ✓ Bonding of internal trim, rear view mirror & instrument panels
- Bonding entertainment & navigation screens
- Bond & seal parking sensor gaskets, external trim & emblems
- ✓ Wing mirror assembly including bonding of heating elements.
- Bonding engine management systems into housing
- ✓ Sound/vibration dampening in cabin enclosure, panels & handles

- Airbag assembly
- Motor venting
- Gap fillers in bumpers
- Paint protection
- Roof ditch sealing
- Sealing electronic enclosures



















Electronics

Parafix is a key supplier in all areas of the electronics industry. With access to the latest electronics materials, we supply custom components to bond, seal, vent, shield, insulate, protect and cushion a wide variety of electronic devices. Our conversion expertise coupled with automated pick & place capability, ensures our standard and bespoke offerings are in easy to use formats for large or small volume manufacture.

- Acoustically transparent meshes for microphones/speakers \checkmark
- Weatherproof sealing of portable electronics
- Thermal management of batteries & LEDs
- EMI/RFI shielding of wirelessly transmitting devices
- Light guides and backlight reflectors
- Battery pack mounting, insulation & cushioning

- Flex circuit grounding & bonding
- LCD attachment & dust protection
- High airflow & hydrophobic vent patches
- Silicone keypad bonding
- Component attachment
- PCB manufacture & repair tapes



















Industrial

Parafix offers a wide range of industrial grade materials that are suitable for assembly, sealing attachment, protection and masking applications. They offer characteristics such as attachment to a range of substrates, high performance adhesives and resistance to corrosion, chemicals and extreme environments.

- Very high performance adhesives for structural assemblies
- Assembly of similar & dissimilar substrates
- Replacing of mechanical fasteners in fabricated metal products
- Assembly of skins & stiffeners for internal & external signs
- Assembly, shielding & protection of machinery & equipment

- Removable fixing of point of sale items
- Custom masking for paint processing
- Foam spacers for glass manufacturing
- Plate mounting in flexographic printing
- Battery sealing, bonding & insulation



















Lighting

As a key supplier into the lighting industry, we understand the needs and challenges of this market. We offer thin and lightweight materials for high performance bonding, sealing, venting, insulation, thermal management and reflection for enhanced product performance and design, reduced weight, reduced energy consumption and enhanced lifespan.

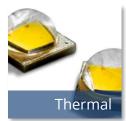
- Gaskets & diffuser plates in street lighting
- Die-cut reflective sheets & thermal management in strip lighting
- Diffuser plate, reflective materials & venting port cover in troffer lighting
- Flame resistant, electrically conductive components for bay lighting circuit board
- Adhesive laminated, reflective foam gasket end cap in linear light fixture
- Thermally conductive bonding between heat sink & LED panel
- Insulating die-cut in LED bulb

















Military & Defence

We offer trusted solutions for a range of safety critical applications in this market. High performance materials meet Defence standards and carry the necessary NATO, Government, Military and Defence specifications. They offer characteristics such as flame resistance, low outgassing and shock absorption designed to perform in the most demanding environments.

- Seal & strengthen flares & countermeasures
- Bond, seal & shield display windows
- Shock proofing & ruggedising laptops & tablets
- Silicone keypad bonding for environmental sealing
- Vibration & sound dampening for auto test equipment
- Thermal management in portable battery packs

- Electrical conduction in illuminated panels
- Foam sealing gaskets for sonar equipment
- Venting patches for antenna systems
- Impact cushioning for protective headwear
- Shielding of communications equipment
- Shielding of signal noise in military vehicles















Safety & Security

Our trusted solutions are manufactured to the stringent quality requirements and safety critical needs that this market commands. We offer industrial and specialist materials, including highly reflective SOLAS grade films, high performance bonding tapes, protection and anti-shatter films, venting materials and tapes for thermal management, shielding and electrical insulation.

- Gas sensor venting
- Bonding & thermal management of PCBs
- Cushioning & dust protection in personal radios
- Battery shielding & insulation in personal locators

- Anti-shatter film for glass protection
- Vibration dampening foam in fire detectors
- Bonding & sealing of access systems
- Shielding & grounding of fire control panels

















Aerospace

The safety critical needs of this market are met with our wide range of specialist products, which carry the necessary Aerospace, NATO, Government, Military and Defence specifications. These high performance materials offer characteristics such as flame resistance/self extinguishing, low outgassing and excellent resistance to oil, chemicals, moisture, high temperatures and shock. Design and manufacture needs are met with opportunities for lightweighting and enhanced product lifespan.

- Erosion protection on leading edge of propellers & wings
- High temperature insulation of sensor assemblies
- Bonding windows to mouldings in entertainment consoles
- Sealing & shielding of helicopter blade tracking monitors
- Sound & vibration dampening of cabin enclosures

- Splicing flame retardant panels
- Reclosable fasteners for access panels
- Communications equipment wind shield
- Sealing of in-flight monitoring equipment
- Bonding of galley equipment















Renewable energy

We offer a range of specialist materials, including UL certified products, which can withstand the toughest of environments, including exposure to UV light, wind, rain, hail, salt spray and other debris.

- Moisture, heat & UV protection of photovoltaic modules
- Bonding of solar module frames & junction boxes
- Cosmetic masking of bus wires & connections
- High airflow moisture proof venting

- Bonding of rails to solar modules
- Blade leading edge erosion protection
- Flexible masking of irregular surfaces
- Thermally conductive bonding









Building interiors

Products in this market are subject to continual use and require materials that are durable and reliable. We offer a range of solutions for high performance bonding, cushioning, protection and removable fastening to suit all applications and to enhance product aesthetics and lifespan.

- Cushioning of professional flooring systems
- Window safety & security glazing films
- Concealing of fixing holes in furniture
- Scratch/damage protection

- Vibration reduction in HVAC appliances
- Invisibly bonding office partitions & trim
- Removable fasteners for access panels
- Cushioning bumpon feet for doors & drawers















Supply partners

We have formed close relationships with World leading material manufacturers and hold Preferred Converter status with a number of these. For our partners, this means access to a range of products and opportunities for unique material combinations.



































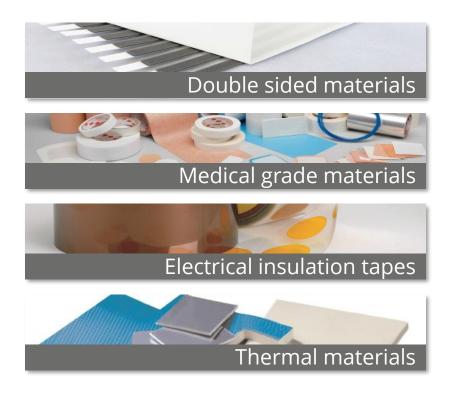


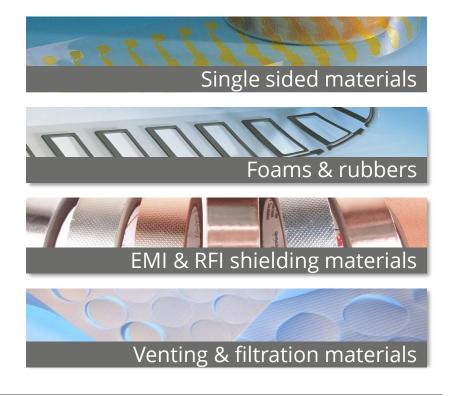




Products

Our large and varied supply base enables us to offer trusted and complementary products from the following product groups:









Double sided materials

- Double sided tapes
- Transfer tapes
- Double sided foam tapes
- ✓ 3M VHB™ tapes
- Heat activated films

- Thermally conductive double sided tapes
- Electrically conductive double sided tapes
- Optically clear double sided tapes
- Ultra clean, low outgassing double sided tapes
- Reclosable fastenings



















Single sided materials

- Plastic film tapes
 - ✓ PET
 - ✓ PVC
 - ✓ PTFE
 - ✓ UHMW-PE
- Protection films
- Masking tapes

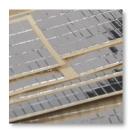
- Cloth tapes
 - ✓ Glass
 - Acetate
- Foil tapes
 - ✓ Copper
 - ✓ Aluminium
 - Lead
- Acrlylic, rubber and silicone adhesive systems. PSA and thermosetting

















Medical grade materials

- Double sided medical tapes
- Single sided medical tapes
- ✓ Hydrophilic films
- Medical grade foam tapes
- Silicone medical tapes

- Medical grade films
- Medical grade foils
- ✓ Non-woven & woven medical tapes
- Hydrocolloid tapes
- Reclosable fastenings



















Foams & rubbers

- Polyurethane foam
- Polyurethane rubber
- ✓ Neoprene foam
- Polyethylene foam
- ✓ Polyester foam
- Silicone foam

- Silicone rubber
- ✓ PVC foam
- ✓ Bumpons™
- ✓ Medical grade
- Electrically conductive elastomers

















Electrical insulation tapes

- Polyester tapes
- Epoxy tapes
- Polyimide tapes
- ✓ PTFE film tapes
- ✓ Vinyl tapes
- ✓ Paper tapes
- ✓ Glass cloth tapes

- Acetate cloth tapes
- Antistatic tapes
- Filament reinforced tapes
- Composite film tapes
- Self amalgamating tapes
- Non-adhesive materials



















EMI & RFI shielding materials

- EMI and RFI shielding tapes
- Electrically conductive tapes
- Electrically conductive elastomers
- Metallised fabric materials
- Microwave absorbing materials
- Fabric over foam

- Knitted wire mesh
- Fingerstock
- Spring contacts
- Board level shields
- Vent panels

















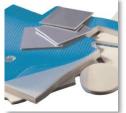


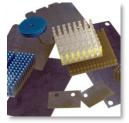
Thermal management materials

- Thermally conductive tapes
- Thermally conductive gap pads
- Thermally conductive grease

- Electrically conductive interface materials
- Thermally conductive electrical insulators
- Phase change thermal interface materials

















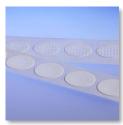
Venting & filtration materials

- Hydrophobic materials
- Oleophobic materials
- ✓ PTFE porous plastics
- ✓ PE
- ✓ PP
- ✓ PVDF
- ✓ EVA

















Converting capabilities

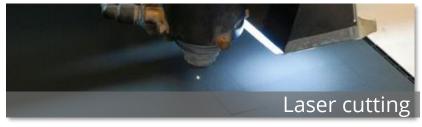












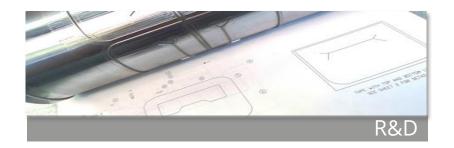








Manufacturing support services

















Custom presentations

Standard or complex presentation formats to aid quick and accurate assembly.

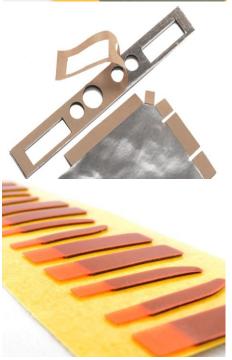
Part presentations

- Slit roll
- Sheet
- Disc
- Washer
- Picture frame
- Custom shape
- Zone coated

Liner presentations

- **Exposed adhesive**
- Split-back
- **Tabbed**
- Perforated
- Butterfly
- Location holes
- **Printed**





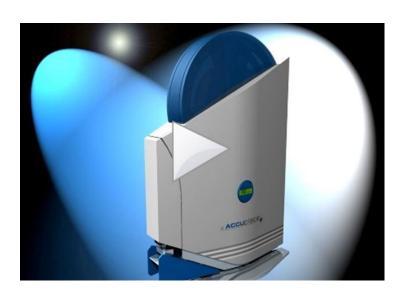




Automation

Our automated pick and place equipment is specifically designed to apply tricky to handle adhesive components. The equipment is easy to incorporate into your manufacturing processes and offers flexibility in its use as only vacuum chucks and target part nests are customised. You could benefit from:

- Faster assembly
- Consistent accuracy
- Consistent quality
- Reduced costs
- Increased throughput
- Competitive & technological edge







Quality

External accreditation

- ✓ ISO 9001:2015 Quality Management (UK and Hungary)
- ✓ ISO 13485:2016 & EN ISO 13485:2016 Medical Devices (UK)
- ✓ ISO 14001:2015 Environmental Management (Hungary)
- ✓ ISO 14644-1 Class 7 Clean Room (UK)
- ✓ IATF 16949:2016 Automotive Quality Management compliant (UK)
- ✓ FDA Registered (UK)

Internal practices

- Continuous improvement (including 5S, SMED and 5Y root cause analysis)
- ✓ Quality procedures (including batch traceability, inspection, testing and measurement)
- ✓ Dedicated QA team offering FMEA, ISIR, PPAP, CpK analysis and FAIR
- Key Performance Indicator (KPI) system
- ✓ Inline vision camera systems







Customer service

- Dedicated customer service team
- Full logistical support
 - Automated order acknowledgement
 - Kan-ban supply
 - Schedule management
 - Vendor managed inventory
- >95% on time delivery
- Customer relationship management
- Online resources and advanced product selector tool







Why partner with us?

- 50+ years experience
- Knowledge and understanding of many applications and markets
- Extensive product knowledge
- Unique relationships with World leading material manufacturers
- First class manufacturing facilities in two countries UK and Hungary
- Internal and external quality validation, including ISO accreditation
- Continuous capability development
- Extensive reach we export to 50+ countries

