Autotype Film Systems

Film Systems for Membrane Switches, Keyboards, Fascia Panels, Touch Screens and Optical Displays
MacDermid Autotype is at the forefront of film coating technology for the electronics industry and has established itself as a market leader with its film range for the Membrane Touch Switch (MTS) and Electronic Display market. The unique properties of MacDermid Autotype films enable MTS keypads to operate with total reliability in even the most hazardous or demanding environments, providing durable and effective solutions for a diverse range of industrial and domestic applications.

The product range comprises speciality films with antimicrobial protection, resistance to UV light and humidity, anti-reflection, antiglare, textured and gloss finishes. Most films can easily integrate windows and embossed switches and are available with a variety of primers for screen printing, ink jet and digital printing.

**Autotex Film Range**

Autotex is a range of screen printable, textured polyester films designed to offer a tough and durable but tactile surface for use on MTS overlays, fascia panels and product nameplates. Autotex films offer the MTS designer complete flexibility. They are extremely durable offering resistance to scratching, scuffing, chemicals and solvents and can be embossed providing extensive switch life performance. To give total design flexibility Autotex can be selectively printed with Windotex lacquer to provide transparent gloss or antiglare windows.

**Autotex**

Autotex is available in Fine and Velvet finishes in a range of thicknesses and with solvent and UV ink primer options for screen printing.

**Autotex AM**

Autotex AM offers the additional benefit of proven Microban® antimicrobial technology developed to improve hygiene and reduce the risk of spreading infections. Microban® protection is a trusted system that inhibits the growth of potentially harmful bacteria, mould and mildew over the life of the film.

**Autotex XE**

Autotex XE has been specifically developed for outdoor use. It is capable of withstanding high temperatures and high humidity conditions as well as UV light.

**Autotex Ink Jet**

Autotex Ink Jet can be digitally printed with a wide range of ink jet inks offering the printer design flexibility for short and medium print runs, proofing capability and extending the use of Autotex into the digital print market.

**Windotex**

Windotex is a screen printable UV curable window printing lacquer available in gloss and antiglare finishes. Windotex is designed for use with Autotex and produces clear, attractive display windows that are both scratch and chemical resistant.
**Autoflex Film Range**

Autoflex is a range of hard coated polyester and polycarbonate films available in gloss and antiglare finishes. Both film types are screen printable and receptive to Fototex, the Autotype texturing lacquers. Autoflex films are used in a wide range of products including flat panel display units, touch screens, mobile phone lens applications, smart cards, electro luminescent lamp displays and MTS. These applications require the film to be tough, durable but offer exceptional clarity and cosmetic quality. Autoflex films meet these requirements.

**Autoflex EB**

Autoflex EB is a hard coated polyester film range developed to offer a combination of high abrasion, chemical and solvent resistance, together with excellent optical properties and flexibility. These films can be embossed whilst offering extended switch life. Available in gloss and antiglare finishes and with solvent and UV ink primer options for screen printing.

**Autoflex PC**

Autoflex PC is a hard coated polycarbonate film range providing a high level of scratch resistance, outstanding clarity, low haze and low yellowness even in films with a thickness in excess of 500 micron. Autoflex PC is available with a gloss or antiglare finish.

**Fototex**

Fototex is a UV curable texturing lacquer designed for use with all Autoflex films or uncoated polycarbonate. Fototex offers a simple and cost effective method for producing a range of surface textures. When printed on automotive dials Fototex can be used to produce flat matt, non reflective finishes. Fototex is available in a range of finishes for conventional UV curing units or Linde type/Nitrogen curing units.

**Print & Peel**

Print & Peel is a water based, screen printable lacquer designed to be selectively printed onto a wide range of surface finishes to act as an easily removable protective mask. Print & Peel is the alternative solution to expensive and difficult to position over laminates. It protects surfaces from scratches and scuffs during production processes and shipment.

**Heat Stabilised Films**

**Autostat**

Autostat is a heat stabilized polyester film used for the circuitry layers in membrane touch switches, keyboards, keypads and diagnostic test strips. Heat stabilization allows the circuit printer to cure conductive inks at high temperatures with minimal effect on the registration or the lay-flat characteristics of the film. Autostat is available in a wide range of base films, offering excellent stability and flatness with an absence of surface imperfections.

**Key Applications**

- Membrane touch switches
- Fascia panels
- Electronic displays
- Circuitry
- Automotive instrument panels
- Diagnostic test strips
- Smart cards
- Mobile phone lenses
- Nameplates and decals

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AUTOTYPE
## Autotype Film Systems

### Product Range

<table>
<thead>
<tr>
<th>Product</th>
<th>Surface Finish</th>
<th>Gauge</th>
<th>Available Ink Primers</th>
</tr>
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<tbody>
<tr>
<td>Autotex</td>
<td>Fine, Velvet</td>
<td>150µ, 200µ, 280µ</td>
<td>Solvent, UV</td>
</tr>
<tr>
<td>Autotex AM</td>
<td>Fine</td>
<td>150µ, 200µ</td>
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<td>Autotex XE</td>
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<tr>
<td>Autotex Ink Jet</td>
<td>Fine</td>
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<td>Ink Jet</td>
</tr>
<tr>
<td>Windotex</td>
<td>Gloss, Antiglare</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Autoflex EB</td>
<td>Gloss, Antiglare</td>
<td>130µ, 180µ, 250µ</td>
<td>Solvent, UV</td>
</tr>
<tr>
<td>Autoflex PC</td>
<td>Gloss, Antiglare</td>
<td>180µ, 250µ, 380µ, 480µ, 640µ, 750µ</td>
<td>Solvent</td>
</tr>
<tr>
<td>Fototex</td>
<td>UV Matt, N Matt, N Supermatt</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Autostat</td>
<td>Clear, Hazy, White</td>
<td>75µ, 100µ, 125µ, 175µ, 250µ, 350µ, 500µ</td>
<td>Silver, Dielectric, Carbon</td>
</tr>
<tr>
<td>Print &amp; Peel</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Individual Technical PDF data sheets are available on request.

MacDermid Autotype is a global company with its headquarters in the UK. It also operate facilities in the USA, Singapore and China all providing local customer support and technical staff to respond to specific customer needs around the world.

MacDermid Autotype is committed to a programme of continuous improvement and development; in 1989 accreditation to BS EN ISO 9001 was achieved. In 1994 and again in 2005, the company was conferred with the Queen’s Award for Technology and in 1996 MacDermid Autotype became one of the first companies in its field to achieve ISO14001, the environmental management standard.