

Healthcare contract coaters;
taking your concept or design
from lab bench to full production.

The Raleigh Process

Step-by-step



YOUR IDEA



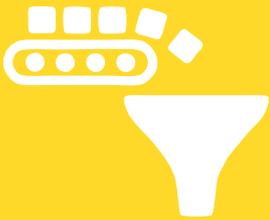
SAMPLES & TESTING

SHORT RUNS OF SAMPLES FOR YOU TO APPROVE THE QUALITY



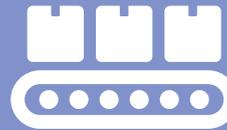
BESPOKE PLAN

TAILORED TO YOUR TIMEFRAMES AND SPECIFICATIONS



PILOT LINE TRIALS

SMALL ROLL PILOT PRODUCTION FOR YOUR APPROVAL



TRIAL PRODUCTION RUNS

TRIALS ON THE MAIN COATING LINE



FULL PRODUCTION

PRODUCT IS MANUFACTURED AS A FULL PRODUCTION RUN TO THE AGREED QUALITY SPECIFICATION



PRODUCTION VALIDATION PROCESS

QUALITY OF PRODUCT APPROVED BY YOU BEFORE FULL-RUN PRODUCTION



SLITTING AND CONVERTING

ROLLS ARE CONVERTED AT RALEIGH OR AT OUR CONVERSION PARTNERS



PACKAGING AND DISTRIBUTION

PACKED AND DISTRIBUTED IN ACCORDANCE WITH YOUR SPECIFICATION

Custom Design

Working closely with you on your custom construction, we are able to assist you in realising your design, through our experience in developing bespoke products for a range of marketplaces and through our innovative approach to all development projects.

We understand that your design may need to evolve through experimenting with a range of different constructions before it meets the final design parameter; that is why our experienced technical team is there on hand to guide you through the process of producing A4 sample sheets, pilot line rolls and then machine trial production quantities. With a flexible approach to production and a focus on rapid response times, Raleigh have the capabilities to turn your spark of an idea into reality.

Product Development

Providing us with detailed specifications of your requirements, we work in partnership with you to your brief.

A development timeline will be tailor-made to your requirements, the structure of which will be adhered to by our skilled technical and business development teams as they take your concept from the initial idea to full production, offering full technical backup and testing support throughout the process.

Fully supporting our customers in the development of innovative ideas or in the improvement of existing products, we are here to provide you with a fast and flexible route to market. Through constant conversation and engagement with you throughout the process, we guide you through prototyping and advise you on adaptations to make a product better suited to your requirements.

Product Trials

Raleigh's pilot-line offers clients a test facility for new product development, comprising of a 300mm wide coating head and a 2-zone dryer.

The pilot-line has its own self-contained area with a laboratory and meeting room attached. The facility can be hired by customers, with the full support of our experienced technologists.

As part of our quality control process, we perform a series of rigorous tests to ensure that there is complete customer satisfaction with the final product, all performed in a humidity & temperature controlled environment.

Typical tests include:

- Peels from steel, glass and polycarbonate (other surfaces can also be used as requested)
- Liner stripping force
- Loop tack
- Release value
- Sheer
- MVTR testing

Coating

Raleigh has extensive experience in coating both solvent acrylic PSA and silicone gel products, for the medical and non-medical sectors. Manufactured to ISO 9001 standards and to your detailed specifications, we coat in ISO 14644 Class 7 clean room environments with support from our highly skilled technical team.

Coating Methods

Direct coating: Coating adhesive directly onto carrier/substrate.

Transfer coating: Coating adhesive onto release liner, then transferring onto heat sensitive or delicate substrates.

Flood coating: Fully coating across the web.

Stripe coating: Zone coating of adhesives.

Roll Dimensions

Raleigh has the capabilities to produce single-side, double-sided and self-wound constructions in a variety of sizes; from wide-width jumbo rolls, to narrow-width short length rolls. Our facilities also enable us to coat a wide range of widths and coatweights:

- Widths – 600mm to 1550mm
- Coatweights for solvent acrylic PSA – 10gsm to 100gsm.
- Coatweights for silicone gel – 50gsm to 250gsm (please discuss if you need a higher coatweight).

Materials

For the industrial industry, we coat onto an extensive list of materials, including films, woven & non-woven fabrics, papers and vinyls.

For the medical industry we coat onto PU films & foams, polyester films, polypropylene and non-woven substrates.

Slitting and Converting

Our range of slitting and converting capabilities, fulfilled by our highly skilled operative team, enable us to handle your requirements.

We can also assist your slitting and converting needs through working with our partner convertors to discuss further conversion requirements. Working with them, we are able to offer the following additional services:

- Narrow width slitting
- Die cutting
- Kiss cutting
- Perforation
- Back slitting
- Multi-layer lamination
- Printing
- Embossing
- Island placement

Raw Materials Used At Raleigh Coatings

- **Adhesives:** Silicone gel or acrylic PSA
- **Liners:** Paper, filmic (polyester, polypropylene, LDPE) or textured filmic liners (available for gel products).
- **Carriers:** PU film, polyester, non-woven fabrics or foams.

Adhesive type	CW Range (gsm)	Sterilisation *	MVTR *	Adhesion Performance	Bio - Compatibility (ISO10993-10)*	Removal Force
Silicone Gel	50 - 300	ETO	<500	Low Peel	Yes	Low
Acrylic PSA low tack	0 - 100	ETO & Gamma	>500	Low Peel	Yes	Medium
Acrylic PSA medium tack	0 - 100	ETO & Gamma	>500	Med Peel	Yes	Medium
Acrylic PSA high tack	0 - 100	ETO & Gamma	>500	High Peel	Yes	Medium

*MVTR

Moisture vapour transmission rate (MVTR) is a measure of the passage of water vapour through a substance; it is an incredibly important factor to be considered in order to control moisture levels in a wound dressing. The higher the MVTR reading, the more moisture that can pass through the adhesive.

*Gamma Sterilisation Stable

The substance is exposed to gamma rays as a method of sterilisation or decontamination. The gamma rays are a form of electromagnetic radiation of very short-wave lengths; these rays act as a source of ionising energy that destroys bacteria and pests.

*Bio-Compatibility

A series of tests designed to provide assurance that the materials used in the manufacture of a medical device are appropriate and safe for use. The type of testing performed on the material/adhesive is determined by the intended use, duration of contact on the skin and the condition of the intended patient. The ISO guidance documents for biocompatibility ISO 10993 offer the direction needed to determine which test methods are most appropriate.

*EtO Sterilisation Stable

Ethylene oxide (EtO) is a gas that acts as a powerful alkylating agent. The sterilisation process disrupts the DNA of microorganisms, preventing them from reproducing, therefore destroying all known viruses, bacteria and fungi and insuring safe, sterile products.

