

REINFORCED PLASTICS & COMPOSITES
PRODUCTION ENGINEERS

LIMITED

These membranes are for autoclave or general vacuum applications where a contoured vacuum bag or re-usable system is required. They can be manufactured from reinforced or unreinforced elastomeric sheet material, incorporating silicone or non-silicone formulations. Materials can be supplied in either cured or uncured condition for you to manufacture your own envelopes, or alternatively we can produce the tailored vacuum bags for you.

TAILORED VACUUM BAGS

Where precision mouldings & contours are required it is always best to tailor the vacuum bag in order to eliminate, as far as possible, the creasing of the moulded part. Generally, uncured material is recommended for this application, where a solvent wipe on the scarfed rubber is usually sufficient to give a good smooth joint, which should be as strong as the parent rubber after curing. The curing operation is usually carried out at the required temperature for moulding the part, generally in the order of 120-180°C. Both cured and uncured rubber bags are suitable for operating temperatures in excess of 200°C, using selected elastomers.

Regarding recommended jointing solvents and procedures, please discuss these with us, as each application may require a slightly different technique.

| Scarf or butt uncured rubber & cure under pressure. Solvent wipe faces to be joined. | Butt & strap cured rubber after abrading. Coat all faces to be joined with adhesive. |
|---|--|
| | |
| | |

RUBBER VACUUM BAGGING MATERIALS

Silicone available cured or uncured, elongation 400 - 600%, various colours, widths up to 1.5m wide, shore hardness 40-60, S.G. 1.20.

NON-SILICONE RUBBER

For temperatures up to 170°C, up to 800% elongation, shore hardness 40-60, up to 1500 p.s.i. break strength, S.G. 1.45, general thickness 1.5 mm. Available in uncured condition, can also be used for intensifiers.



REINFORCED MEMBRANES

These are coated fabrics pre-shaped to the component. The fabric carrier will generally have up to 150% elongation, this allows a wide selection of different elastomers both silicone and other alternatives to be applied, eg. our translucent reusable elastomeric vacuum membrane E370/612S (single side coated), reinforced silicone, available off the roll, 1.10 metres wide & E680/612S (double side coated).

All necessary seals & framing can be incorporated at the time of manufacture.

