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Nota di contenuto	PAPER AND PAPERBOARD PACKAGING TECHNOLOGY; Contents; Contributors; Preface; Acknowledgements; 1 Paper and paperboard - raw materials, processing and properties; 1.1 Introduction - quantities, pack types and uses; 1.2 Choice of raw materials and manufacture of paper and paperboard; 1.2.1 Introduction to raw materials and processing; 1.2.2 Sources of fibre; 1.2.3 Fibre separation from wood (pulping); 1.2.4 Whitening (bleaching); 1.2.5 Recovered fibre; 1.2.6 Other raw materials; 1.2.7 Processing of fibre at the paper mill; 1.2.8 Manufacture on the paper or paperboard machine; 1.2.9 Finishing 1.3 Packaging papers and paperboards1.3.1 Introduction; 1.3.2 Tissues; 1.3.3 Greaseproof; 1.3.4 Glassine; 1.3.5 Vegetable parchment; 1.3.6 Label paper; 1.3.7 Bag papers; 1.3.8 Sack kraft; 1.3.9 Impregnated papers; 1.3.10 Laminating papers; 1.3.11 Solid bleached board (SBB); 1.3.12 Solid unbleached board (SUB); 1.3.13 Folding boxboard (FBB); 1.3.14 White lined chipboard (WLC); 1.4 Packaging

requirements; 1.5 Technical requirements of paper and paperboard for packaging; 1.5.1 Requirements of appearance and performance; 1.5.2 Appearance properties; 1.5.2.1 Colour; 1.5.2.2 Surface smoothness 1.5.2.3 Surface structure 1.5.2.4 Gloss; 1.5.2.5 Opacity; 1.5.2.6 Printability and varnishability; 1.5.2.7 Surface strength; 1.5.2.8 Ink and varnish absorption and drying; 1.5.2.9 Surface pH; 1.5.2.10 Surface tension; 1.5.2.11 Rub resistance; 1.5.2.12 Surface cleanliness; 1.5.3 Performance properties; 1.5.3.1 Introduction; 1.5.3.2 Basis weight (substance or grammage); 1.5.3.3 Thickness (caliper); 1.5.3.4 Moisture content; 1.5.3.5 Tensile strength; 1.5.3.6 Stretch or elongation; 1.5.3.7 Tearing resistance; 1.5.3.8 Burst resistance; 1.5.3.9 Stiffness; 1.5.3.10 Compression strength 1.5.3.11 Creasability and foldability 1.5.3.12 Ply bond (interlayer) strength; 1.5.3.13 Flatness and dimensional stability; 1.5.3.14 Porosity; 1.5.3.15 Water absorbency; 1.5.3.16 Gluability/Adhesion/Sealing; 1.5.3.17 Taint and odour neutrality; 1.5.3.18 Product safety; 1.6 Specifications and quality standards; 1.7 Conversion factors for substance (basis weight) and thickness measurements; References; 2 Environmental and waste management issues; 2.1 Introduction; 2.2 Sustainable development; 2.3 Forestry; 2.4 Environmental impact of manufacture and use of paper and paperboard 2.4.1 Issues giving rise to environmental concern 2.4.2 Energy; 2.4.3 Water; 2.4.4 Chemicals; 2.4.5 Transport; 2.4.6 Manufacturing emissions to air, water and solid waste; 2.4.6.1 Emissions to air; 2.4.6.2 Emissions to water; 2.4.6.3 Solid waste residues in paper industry; 2.5 Used packaging in the environment; 2.5.1 Introduction; 2.5.2 Waste minimisation; 2.5.3 Waste management options; 2.5.3.1 Recovery; 2.5.3.2 Recycling; 2.5.3.3 Energy recovery; 2.5.3.4 Landfill; 2.6 Life cycle assessment; 2.7 Conclusion; References; 3 Paper-based flexible packaging; 3.1 Introduction 3.2 Packaging needs which are met by paper-based flexible packaging

Sommario/riassunto

This book discusses all the main types of packaging based on paper and paperboard. It considers the raw materials and manufacture of paper and paperboard, and the basic properties and features on which packaging made from these materials depends for its appearance and performance. The manufacture of twelve types of paper- and paperboard-based packaging is described, together with their end-use applications and the packaging machinery involved. The importance of pack design is stressed, and how these materials offer packaging designers opportunities for imaginative and innovative design solutio