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Nota di contenuto	Front cover; Practical design, construction and operation of food facilities; Copyright page; Contents; Chapter 1. Introduction; How to use this book; Chapter 2. Context for new or expanded facility; Typical corporate structure; Food industry overview; Reasons for new or expanded facilities; Typical procedures for initiating a project; Discussion questions or assignments; Chapter 3. Economic evaluation; Measures of worth; Estimating costs and benefits; Discussion questions or assignments; Chapter 4. Design of a new facility; Site selection; Size; Capability; Overall layout; Sanitary design SecuritySupport facilities; Welfare facilities; Discussion questions or assignments; Chapter 5. Expansions and conversions; Advantages of expansion; Challenges of expansion; Overcoming the challenges; Getting more out of an existing line; Discussion questions or assignments; Chapter 6. Process and equipment selection; Process development and design; Aseptic processing/pasteurization; Orange juice; Dairy; Cereal; Categories of food processes; Thermal treatment; Forming and cooking; Mixing and formulating; Good manufacturing practices; Personnel practices; Regulatory issues

Discussion questions or assignments Chapter 7. Equipment selection; Relatively standard equipment; Proprietary equipment; Selecting and buying equipment; Buying new equipment; Used equipment can be a good value; Other factors in evaluating equipment; Discussion questions or assignments; Chapter 8. Project management and execution; The typical phases of a project; Feasibility; Appropriation request; Funds granted; Detailed design; Construction; Commissioning; Close out and production; Roles and responsibilities during design and construction; Issues; Tools of project management

Discussion questions or assignments Chapter 9. Plant operations; Leadership and organization; Troubleshooting; Discussion questions or assignments; Appendix I. Basic heat transfer; Appendix II. Residence time in hold tubes; Appendix III. Flow chart symbols; Appendix IV. Glossary of some terms used; A; B; C; D; E; F; G; H; I; M; P; R; S; T; V; Appendix V. Short Discussions of Various Topics, based on the Processing Column in Food Technology, published by the Institute of Food Technologists 2002-2006; References; Index; A; B; C; D; E; F; G; H; I; J; K; L; M; N; O; P; Q; R; S; T; U; V; W; X; Y; Z

Sommario/riassunto

Around the world concerns about cost, efficiency, and safety - employee, product, process and consumer -- have led to changes in the way food plants are planned, constructed and evaluated. From initiation of major capital requests to legal design requirements to project management and plant operations, food engineers and scientists must understand the myriad of requirements and responsibilities of successful food facilities. J. Peter Clark provides that guidance in this complete volume. Included are:--A summary of lessons on understanding how management evaluates potential investm
