1. Record Nr. UNINA9910450181503321 Autore Harms A. A. **Titolo** Engineering in time [[electronic resource]]: the systematics of engineering history and its contemporary context / / A.A. Harms, B.W. Baetz, R.R. Volti London,: Imperial College Press, c2004 Pubbl/distr/stampa **ISBN** 1-281-34745-0 9786611347451 1-86094-598-8 Descrizione fisica 1 online resource (348 p.) Altri autori (Persone) BaetzB. W (Brian W.) VoltiRudi Disciplina 620 Soggetti Engineering Engineering - History Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Preface; Acknowledgment; Contents; 1. About Engineering Identifying a Framework; 2. Prehistoric Engineering (~106 BP~104 BP) Primal Discovery of Devices: 3. Ancient Engineering (~8000 BCE~500 CE) Societal Interest in Devices; 4. Medieval Engineering (~500 CE~1400) Societal Promotion of Devices; 5. Renascent Engineering (~1400~1800) Organizing for Device Production; 6. Expansive Engineering (~1800~1940) Environmental Impact of Devices; 7. Modern Engineering (~1940~1990) Expanding Reach of Devices; 8. Contemporary Engineering (~1990~2000+) Prospects for Closure 9. Nature: Emergence and Implications N(t) . E(t). · · · 10. Engineering: Patterns and Specializations N(t). E(t). D(t). \cdots ; 11. Devices: Properties and Functions · · · · E(t) . D(t) . S(t) . · · ·; 12. Society: Involvement and Ramifications · · · · D(t) . S(t) . R(t); 13. Repository: Inventory and Projections · · · · S(t) . R(t); Appendices; Appendix A Symbolic Notation; Appendix B Time Coordinates; Appendix C Ancient Inventions;

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About the Authors

Sommario/riassunto

Engineering represents an ordered activity of creative design andinventive manufacture of ingenious devices. Its practitioners havethereby stimulated individuals, enlivened communities, enrichedcivilizations, and contributed to the shaping of cultures. The authors of this innovative text develop a systematic framework forengineering in time, making extensive use of adaptive heterogeneousprogressions. When combined with considerations of feedback,feedforward, recursion, and branching, an evolving and comprehensivecharacterization of engineering becomes evident. It is in thisblending of chronolo