1. Record Nr. UNINA9910484853103321

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Titolo	Essay on Machines in General (1786) : Text, Translations and Commentaries. Lazare Carnot's Mechanics - Volume 1 / / by Raffaele Pisano, Jennifer Coopersmith, Murray Peake
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-44385-X
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (364 pages)
Collana	Logic, Epistemology, and the Unity of Science, , 2214-9783 ; ; 47
Disciplina	531
Soggetti	Logic Physics - Philosophy Machinery Science - History Knowledge, Theory of Philosophical Foundations of Physics and Astronomy Machinery and Machine Elements History of Science Epistemology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Chapter 1. A Critical Translation -- Chapter 2. End Notes -- Chapter 3. Lazare Carnot’s Manuscripts and Documents -- References -- Analytical Index. .
Sommario/riassunto	This book offers insights relevant to modern history and epistemology of physics, mathematics and, indeed, to all the sciences and engineering disciplines emerging of 19th century. This research volume is the first of a set of three Springer books on Lazare Nicolas Marguérite Carnot’s (1753–1823) remarkable work: Essay on Machines in General (Essai sur les machines en général [1783] 1786). The other two forthcoming volumes are: Principes fondamentaux de l’équilibre et du mouvement (1803) and Géométrie de position (1803). Lazare Carnot – l'organisateur de la victoire – in Essai sur le machine en général (1786) assumed that the generalization of machines was a necessity for

society and its economic development. Subsequently, his new coming science applied to machines attracted considerable interest for technician, as well, already in the 1780's. With no lack in rigour, Carnot used geometric and trigonometric rather than algebraic arguments, and usually went on to explain in words what the formulae contained. His main physical– mathematical concepts were the Geometric motion and Moment of activity–concept of Work . In particular, he found the invariants of the transmission of motion (by stating the principle of the moment of the quantity of motion) and theorized the condition of the maximum efficiency of mechanical machines (i.e., principle of continuity in the transmission of power). While the core theme remains the theories and historical studies of the text, the book contains an extensive Introduction and an accurate critical English Translation – including the parallel text edition and substantive critical/explicative notes – of Essai sur les machines en général (1786). The authors offer much-needed insight into the relation between mechanics, mathematics and engineering from a conceptual, empirical and methodological, and universalis point of view. As a cutting–edge writing by leading authorities on the history of physics and mathematics, and epistemological aspects, it appeals to historians, epistemologist–philosophers and scientists (physicists, mathematicians and applied sciences and technology).