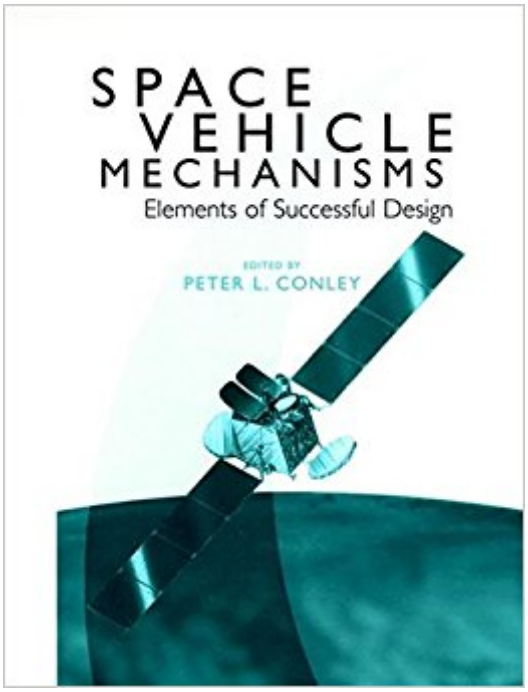
Space Vehicle Mechanisms: Elements Of Successful Design



Synopsis

The first comprehensive reference on the design, analysis, and application of space vehicle mechanisms Space Vehicle Mechanisms: Elements of Successful Design brings together accumulated industry experience in the design, analysis, and application of the mechanical systems used during space flight. More than thirty experts from a variety of related specialties and subspecialties share their insights, technical expertise, and in-depth knowledge on an enormous variety of topics, including: * Stainless steel, beryllium, and other widely used materials * Bearings * Lubricants and component lubrication * Release devices * Motors * Optical encoders * Resolvers * Signal and power transfer devices * Deployment devices * Thermal design * Radiation and survivability * Electrical interfaces * Reliability Space Vehicle Mechanisms is an indispensable resource for engineers involved in the design and analysis of mechanical assemblies used in space flight, and a valuable reference for space systems engineers, mission planners, and control systems engineers. It is also an excellent text for upper-level undergraduate and graduate-level courses in astronautical and mechanical engineering. Space Vehicle Mechanisms: Elements of Successful Design brings together accumulated industry experience in the design, analysis, and application of the mechanical systems used during space flight. More than thirty experts from a variety of related specialties and subspecialties share their insights, technical expertise, and in-depth knowledge on an enormous variety of topics, including:

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Customer Reviews

This innovative text takes a look at the steadily increasing industry of space vehicle designs. Providing a detailed understanding of the design and employment of these mechanisms.

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it’s very good to me.

This book does a very good job of presenting a wide range of mechanisms used in space-flight applications. It provides a good description to understand the basic operating principles of the various mechanisms with enough detail to figure out which type of a particular mechanism may be best suited to a particular application. I believe this book also does a good job of not getting too bogged down into abstract and esoteric details. If one wanted to find the aforementioned details, each section has with it a very good list of references; furthermore, each section was written by experts in the field of each type of mechanism presented rather then by a single author who tries to portray some knowledge in all or many areas.

This is the only reference for those designing space vehicle mechanisms. Each chapter is written by

the expert(s) of that field and provide a great overview of things to consider when buying, designing, or writing specifications.

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