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Nota di contenuto 

Purpose-Built Agitator Drive -- Isolate Loads Option 1: Hollow Quill Integrated Drive with Flexibly Coupled Extension Shaft -- Isolate Loads Option 2: Outboard Support Bearing Module -- Bearing Life Considerations -- Noise Considerations -- Torsional Natural Frequency -- Important or Useful Mechanical Design Features -- Summary of Chapter -- List of Symbols -- Greek Letters -- References -- Chapter 18 Sanitary Design -- Introduction -- Definitions -- Construction Principles -- Wetted Parts Construction Methods -- Welded Construction -- In-Tank Couplings.
Mounting Flange Area.

Sommario/riassunto

"As in all kinds of process equipment, agitators must be correctly sized to deliver the process function, while maximizing return on investment and minimizing total energy cost. In a bioreactor, agitators are one of the prime drivers for promoting the development of gas/liquid interfacial area, which has a direct impact on mass transfer and hence production rate. Power consumption is a significant cost, which can be minimized by proper design of the agitation and air delivery systems. Finally, downtime is very expensive, so mechanically reliable agitators are essential. This book is an invaluable guide to the initiation, installation, and maintenance of agitators in fermenters and bioreactors"--