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Sommario/riassunto	In this monograph the author presents a thorough computational geometry approach to handling theoretical and practical problems arising from numerically controlled pocket machining. The approach unifies two scientific disciplines: computational geometry and mechanical engineering. Topics of practical importance that are dealt with include the selection of tool sizes, the determination of tool paths, and the optimization of tool paths. Full details of the algorithms are given from a practical point of view, including information on implementation issues. This practice-minded approach is embedded in a rigorous theoretical framework enabling concise statement of definitions and proof of the correctness and efficiency of the algorithms. In particular, the construction of Voronoi diagrams and their use for offset calculations are investigated in great detail. Based on Voronoi diagrams, a graph-like structure is introduced that serves as a high-level abstraction of the pocket geometry and provides the basis for algorithmically performing shape interrogation and path planning tasks. Finally, the efficiency and robustness of the approach is illustrated with figures showing pocketing examples that have been

processed by the author's own implementation.