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7.3 REQUIREMENTS FOR MOLECULAR DYNAMICS SIMULATIONS OF ABRASIVE PROCESSES 7.4 APPLICATION EXAMPLES FOR MOLECULAR DYNAMICS SIMULATION OF ABRASIVE PROCESSES; 7.5 SUMMARY AND OUTLOOK; REFERENCES; Chapter 8. Fluid Delivery; 8.1 THE ROLE OF PROCESS FLUIDS; 8.2 OVERCOMING THE AIR BARRIER IN HIGH SPEED GRINDING; 8.3 NOZZLES FOR HIGH SPEED GRINDING; 8.4 ENERGY AND MOMENTUM REQUIREMENTS OF THE PROCESS FLUID; 8.5 USEFUL FLOWRATE THROUGH THE GRINDING CONTACT; 8.6 MECHANICS OF COOLING IN CREEP GRINDING; 8.7 SUMMARY OF CONCLUSIONS; REFERENCES

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### Sommario/riassunto

Recent and radically improved machining processes, from high wheel speeds to nanotechnology, have turned a spotlight on abrasive machining processes as a fertile area for further advancements. Written for researchers, students, engineers and technicians in manufacturing, this book presents a fundamental rethinking of important tribological elements of abrasive machining processes and their effects on process efficiency and product quality. Newer processes such as chemical mechanical polishing (CMP) and silicon wafer dicing can be better understood as tribological processes. Understanding the t