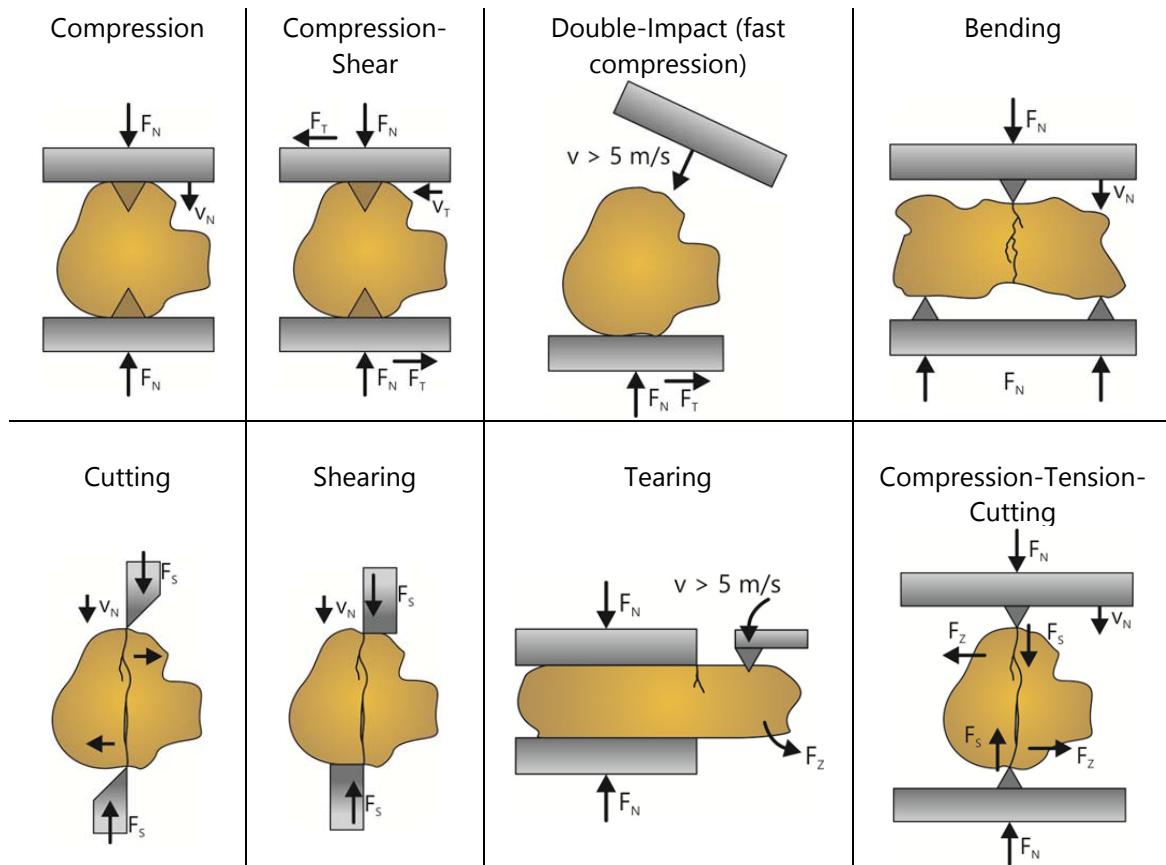
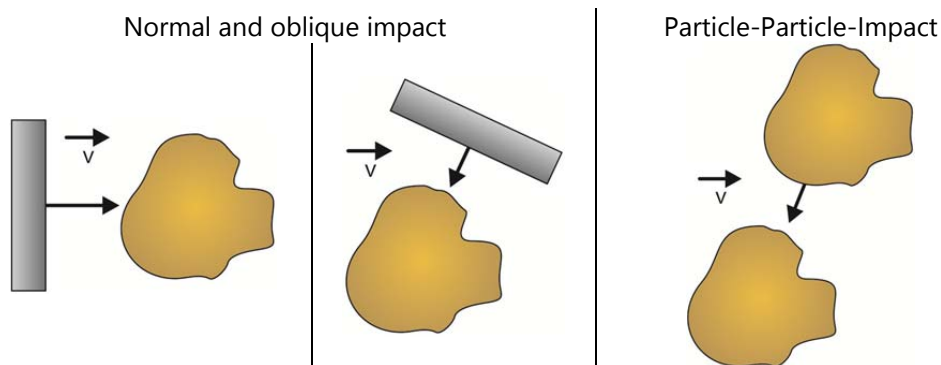


Essential Micro-Processes at Comminution at Single Particle Stressing

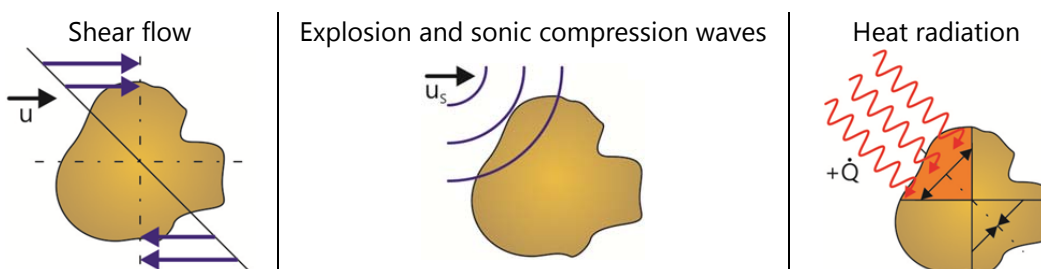
- Single particle stressing between two rigid, smooth or profiled surfaces (under constraint due to stressing tools)



- Single particle stressing at single rigid, smooth or profiled surface



- Single particle stressing by surrounding fluid or radiation (without direct contact to rigid surfaces)



F_N, F_T, F_S, F_Z – normal, tangential, shear, tension force; v, u – loading, fluid velocity; \dot{Q} – heat flow

In extension of: K. Schönert, Bruchvorgänge und Mikroprozesse des Zerkleinerns, p. 185, H. Schubert (Ed.) Handbuch der Mechanischen Verfahrenstechnik, Wiley-VCH Weinheim 2003