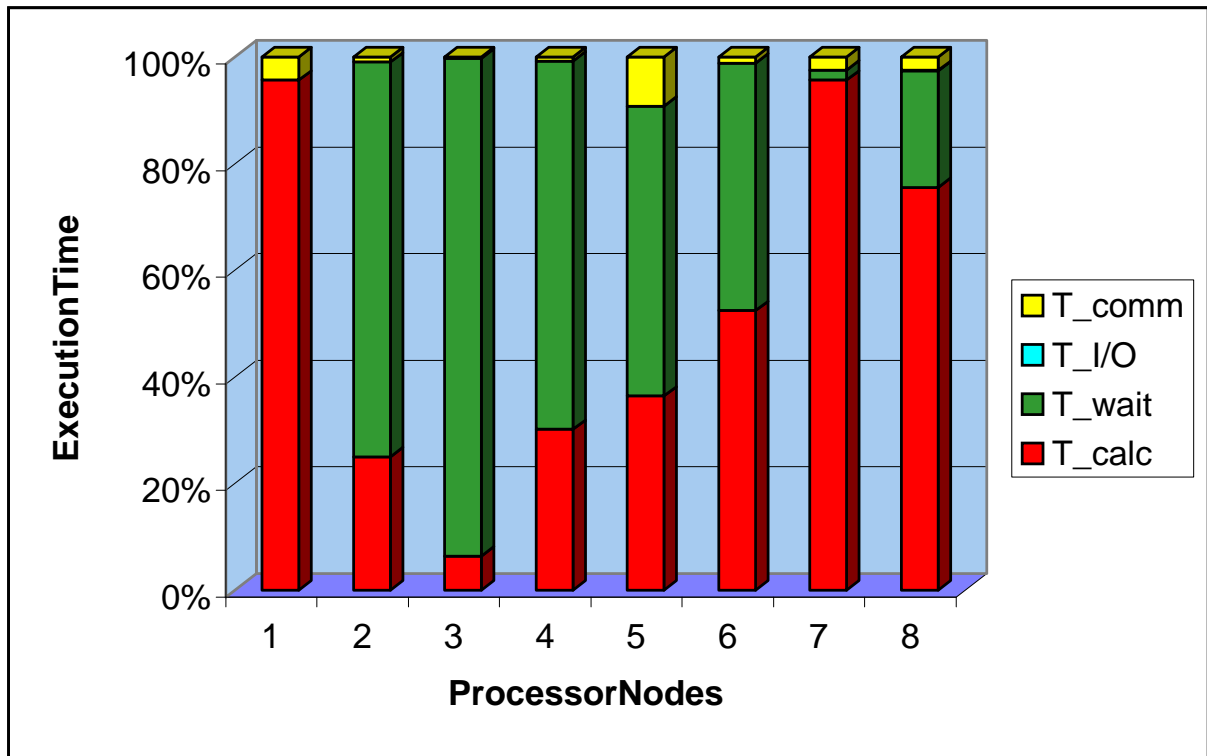# Parallel computation of gas–particle flow in cyclone separators

- computation on a S.U.S.E.–Linux 6.1 workstation cluster of 4 Siemens Celsius 630 (Dual Intel Pentium III Xeon, 550 MHz)

- parallelization standard : MPI 1.1

- parallelization method : static domain decomposition with multiple grid blocks on single processor node

- execution time of PartFlow–3D for the calculation of 10.000 particles; total execution time : 61,47 h

- diagram shows the performance bottleneck due to non uniform particle concentration distribution over the flow domain which leeds to unequal numerical effort and therefor to very different load on processors of the parallel system

Investigation of Particle Separation in Symmetrical Double Cyclone Separators

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