

Checklist for side load and impact test machines

When purchasing a test machine for side load and impact test of abrasive products, please pay attention to the following crucial points:

Technical specifications:

- Sufficient distance between wheel and chamber backside
- Sufficient space for movement of pendulum (when no wheel is mounted, the pendulum should be able to swing freely without chamber contact)
- Graphical representation (plot) of force vs. time
- Is breakage induced by automode or manual operation? The rate of pressure application should be 3 mm/s
- Sufficient load cell (1.000 N max., preciseness 1%)
- Quick adjustment of drop hammer position
- Stability of drop hammer (no deformation during testing)
- Quick and smooth functioning of wheel clamping and door lock
- Quick calibration of load cell, e.g. by weight bar
- Realization of adequate in-process speeds
- Is the machine still a prototype or well-tried and tested?
- Calibration of the machine by an external institute
- Function test at the customer's site (acceptance test)
- Dimension tolerances of roller radius, pendulum length and weight according DIN ISO 2768

Safety:

- Adequate protection of the hazardous areas of the machine against possible bruising and drawing-in
- Efficiency of guards against ejected broken wheel fragments
- Efficiency of dust extraction system