



**What is Abrasive Wear:** Abrasive wear is defined as the wearing off or detachment of residuals from a surface as a result of being interactive to passing by fluids, gases, or with the rubbing of a solid. In solids, Abrasive wear results when a rigid irregular surface rubs on a less hard surface. American Society for Testing and Materials i.e. ASTM explicates abrasive wear as the loss function of material because of rigid materials or rough prominences are pushed contrary to a given area.

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**Types of Abrasive Wear By Wear Methods:** Three generally enumerated methods of abrasive wear are:

Plowing

Cutting

Fragmentation

Plowing happens when surface particles are moved towards the side, at distal from the wear constituents, following in the materialization of grooves that do not include straight material elimination. The evacuated material shapes points nearby grooves, which may be removed by successive passing of abrasive elements.

Cutting results when particle is detached from the surface in the arrangement of chief wreckage, or chips, with minute or no particles moved towards the sides of the hollows. This type nearly looks like conservative machining.

Fragmentation results when surface particles are detached from a body by a cutting mechanism and the denting abrasive results regional breakage of the wear particles itself. These fracture in particles then easily spread regionally over the wear groove, ensuing in extra-material elimination by spalling.

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Learn about Abrasion Resistance of Materials

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**Calculation of Abrasive Wear:** It can be calculated as loss of matter by the Taber Abrasion Test which is specified in international standard 9352 and American standard D 4060.