

sphericity

sphericity (sphe-ric'-i-ty). The relation to each other of the various diameters (length, width, thickness) of a particle; specif. the degree to which the shape of a sedimentary particle approaches that of a sphere. True sphericity, as originally defined by Wadell (1932), is the ratio of the surface area of a sphere of the same volume as the particle to the actual surface area of the particle. Due to the difficulty of determining the actual surface area and volume of irregular solids, Wadell (1934) developed an operational definition expressed as the ratio of the true nominal diameter of the particle to the diameter of a circumscribing sphere (generally the longest diameter of the particle). A perfect sphere has a sphericity of 1.0; all other objects have values less than 1.0. Many other measures of sphericity have been proposed. Not to be confused with *roundness* or *angularity*.
