

ABSTRACT

Stone aggregates are used as a major construction material in bound (say, asphalt mix or cement concrete etc.) or unbound form (say granular fill, pavement base/sub base etc.). Shape of the aggregates has a significant influence on the mechanical properties of the mix (used in bound and unbound form). Traditional shape characterization of aggregates involves study of geometrical parameters in two dimensions (2-D); but, aggregates are essentially three dimensional (3-D) objects. Thus, in the present work, a simple approach is proposed to characterize the shape of an aggregate using its surface area and volume.

Keywords: Image processing, Shape, Surface area, Volume, Aggregates.