

PHYSICAL PARAMETERS MEASUREMENT OF SEED WITH IMAGE ANALYSIS

SUNANDA V. NIKAM & M. N. KAKATKAR

Sinhgad College of Engineering, Pune, Maharashtra, India

ABSTRACT

In this project the setup is used with two cameras one for top view and another for side view. The 3d image is built from these images using image processing algorithms and the parameters like seed length, width, surface area, volume, shape factor, roundness are computed. To analyze various seed properties, the seed image analyzer system uses the 2 CCD cameras.

One camera captures the top view of the seeds and another CCD camera is used to capture the seed side view. 3D image of the seed is constructed from these two images. The parameters are computed for each seed. To get the proper images the backlight is used. Backlight, is the constant light source which is required for proper seed identification. Overall system is placed in mechanical assembly. The entire system is called as seed analyzer setup.

KEYWORDS: CCD Camera, Backlight, 3D