

## **PARAMETER DETERMINATION IN MANUFACTURING PROGRESS CURVE WITH THREE POINTS OF DATA**

Hennie Husniah and Asep K. Supriatna

*Department of Industrial Engineering, Langlangbuana University, Jl. Karapitan No 116, Bandung 40261 INDONESIA*

*Department of Mathematics, Padjadjaran University, Km 21 Jatinangor, fax 022-7794696, Sumedang 45363 INDONESIA*

In this paper we discuss a method to find the values of parameters in a manufacturing progress curve based on three points of data. In general to find better parameter estimation we need a lot of data. However, in some circumstances, the numbers of data are limited or even scarce, especially in the beginning of a manufacturing process. For this reason, we develop a simple method to determine the values of parameters if only three data are available. The curve we are dealing with is an inverse-like sigmoid that can describe a learning process in the beginning phase and has a lower bound in the long-term phase, hence a reasonably realistic curve.

Keywords: Manufacturing progress curve, curve fitting, sigmoid curve.