ABSTRACT

PT. Shima Prima Utama operate with Job Shop System. Job Shop scheduling for this company is a scheduling which use a lot of machines and a lot of operation with production type make to order. this scheduling in PT Shima Prima Utama until now is using fastest due date. It makes completion time for all production (makespan) becomes longer. This is because there are a lot of number of work stations (machine) is idle. Base on that situation in this project try to give alternative scheduling method Genetic Algorithm for makespan decreasing. This algorithm is implemented in visual basic encoding by represent sequencing of job into the string and arrange it according genetic simulations. Scheduling with Genetic Algorithm implementation can decrease the makespan as 14.23% from the method before with the sequencing 3553334443444435456554536-4666563632162162311441113556125252626121112223 2

Key words : *Scheduling, Genetic Algorithm, Makespan, Job Shop*