ABSTRAK

Kebijakan perencanaan produksi adalah kegiatan yang berperan penting dalam keberlangsungan suatu perusahaan. Dalam perencanaan produksi di PT Ispat Panca Putera terdapat kendala-kendala yang membatasi perusahaan, kendala tersebut berupa kapasitas mesin dan waktu kerja. Oleh karena itu, penelitian ini bertujuan untuk mengaplikasikan model goal progamming untuk membuat perencanaan produksi Round Bars dan Deformed Bars yang optimal dan menentukan keuntungan yang optimal di PT Ispat Panca Putera.

Model Goal Programming merupakan suatu perluasan dari linear programming yang mempunyai multitujuan, sehingga seluruh asumsi, notasi, formulasi model matematis, prosedur perumusan model dan penyelesaiannya tidak jauh berbeda. Perbedaannya terletak pada variabel deviasional yang akan muncul di fungsi tujuan dan fungsi-fungsi kendala.

Dari hasil penelitian memperoleh beberapa solusi optimal yaitu, dengan menggunakan model Goal programming prioritas tujuan dengan alat bantu software POM QM 3.0 menghasilkan output jumlah produksi Periode April 2018 Deformed Bars D13, D16 dan D19 sebanyak 323.665 pcs. Mei 2018 Deformed Bars D13, D16 dan D19 sebanyak 335.295 pcs. Juni 2018 Deformed Bars D13, D16 dan D19 sebanyak 332.005 pcs. Juli 2018 Deformed Bars D13, D16 dan D19 sebanyak 335.850. Agustus 2018 Deformed Bars D13, D16 dan D19 sebanyak 334.378 pcs. September 2018 Deformed Bars D13, D16 dan D19 sebanyak 331.047 pcs. Pendapatan perusahaan Periode April 2018 Deformed Bars D13, D16 dan D19 sebesar Rp.13.899.722.000. Periode Mei 2018 Deformed Bars D13, D16 dan D19 sebesar Rp.14.620.453.000. Periode Juni 2018 Deformed Bars D13, D16 dan D19 sebesar Rp.14.472.896.000. Periode Juli 2018 Deformed Bars D13, D16 dan D19 sebesar Rp.14.660.438.000. Periode Agustus 2018 Deformed Bars D13, D16 dan D19 sebesar Rp.14.490.411.100. Periode September 2018 Deformed Bars D13, D16 dan D19 sebesar Rp.14.342.935.000.

Kata kunci: Perencanaan Produksi, Goal Programming, Software POM QM 3.0

ABSTRACT

Production planning policy is an activity that plays an important role in the sustainability of a company. In production planning in PT Ispat Panca Putera there are constraints limiting the company, such constraints in the form of machine capacity and working time. Therefore, this study aims to apply the goal progamming model to make optimal Round Bars and Deformed Bars production planning and to determine optimal profit in PT Ispat Panca Putera.

The Goal Programming model is an extension of linear programming that has multitudes, so that all assumptions, notations, mathematical model formulations, model formulation procedures and solutions are not much different. The difference lies in the deviational variables that will appear in the objective function and constraint functions.

From the research results obtained some optimal solution that is, by using Goal programming model of destination priority with software tool POM QM 3.0 produce output production amount Period April 2018 Deformed Bars D13, D16 and D19 as much as 323.665 pcs. May 2018 Deformed Bars D13, D16 and D19 as much as 335,295 pcs. June 2018 Deformed Bars D13, D16 and D19 as much as 332.005 pcs. July 2018 Deformed Bars D13, D16 and D19 as much as 335,850. August 2018 Deformed Bars D13, D16 and D19 as much as 334,378 pcs. September 2018 Deformed Bars D13, D16 and D19 as much as 331,047 pcs. Company revenue Period April 2018 Deformed Bars D13, D16 and D19 for Rp.13.899.722.000. Period May 2018 Deformed Bars D13, D16 and D19 amounting to Rp.14.620.453.000. Period June 2018 Deformed Bars D13, D16 and D19 for Rp.14.472.896.000. The July 2018 period of Deformed Bars D13, D16 and D19 amounted to Rp.14.660.438.000. Period August 2018 Deformed Bars D13, D16 and D19 for Rp.14.490.411.100. Period September 2018 Deformed Bars D13, D16 and D19 for Rp.14.342.935.000.

Keywords: Production Planning, Goal Programming, POM QM 3.0 Software