

Abstract

Technology development in products design and construction has been progressing rapidly. Manual construction of the products is abandoned. Recent construction involves CAD software (Computer Aided Design). Creo Parametric 2.0. software, which has many features, is mostly applied in the products construction. One of the features of Creo Parametric 2.0 is sheetmetal design.

Sheetmetal design can be applied to design sheetmetal components through manufacturing process sheetmetal part such as Unattached Walls, Additional Walls, Bends, Cut Round Chamfer Hole, Extend and Merge Walls. This research aimed at constructing sheetmetal design by redrawing computer unit. The redrawing involves Mr. Sunu Sardi Nugroho's computer unit in cooperation with PT. Dempo Laser Metalindo, Mock Instructure. The redrawing process is done through making part design based on the available 2D image, assembling the design and make the detail drawing.

After doing redrawing Mock Instructure, produced from the model part file format: prt, assembly models with the file format: asm, and the detail drawings with file formats: DWG. Features that are widely used in the manufacture of Mock instructors using software creo parametric 2.0 particular the design of sheetmetal are Plannar, Flat Wall, Extrude, Corner Relief, Hole, Round, Pattern, Mirror, Conversion, Edge Rip, Rip Connect, Edge Bend and Corner Relief, shell, Plane, Unbend, Bend Back, and Sketch.

Keywords: *Creo Parametric 2.0, redrawing, sheetmetal.*

ABSTRAK

Perkembangan teknologi dalam proses desain dan konstruksi produk sudah sangat maju, desain produk tidak lagi dibuat dengan teknik manual tetapi melibatkan penggunaan *software CAD (Computer Aided Design)* yang canggih. *Software* desain yang sering digunakan dan memiliki banyak fitur adalah *Creo Parametric 2.0*. Salah satu fitur *Creo Parametric 2.0* adalah desain *sheetmetal*.

Desain *sheetmetal* dapat digunakan untuk membuat desain komponen *sheetmetal* sesuai dengan *manufacturing process sheetmetal part* seperti *Unattached Walls, Additional Walls, Bends, Cut Round Chamfer Hole, Extend and Merge Walls*. Sebagai bahan penelitian dalam pembuatan desain *sheetmetal*, penulis melakukan *redrawing* unit perangkat komputer milik Bapak Sunu Sardi Nugroho yang bekerjasama dengan PT. Dempo Laser Metalindo, yaitu *Mock Instruktur*. Tahapan *redrawing* yang dilakukan adalah membuat desain *part* dengan melihat gambar 2D (*two dimension*) yang sudah ada, melakukan proses *assembly*, dan terakhir membuat *detail drawing*

Setelah dilakukan *redrawing Mock Instruktur*, dihasilkan model *part* dengan format file: prt, *assembly model* dengan format file: asm, serta *detail drawing* dengan format file: dwg. Fitur yang banyak digunakan pada pembuatan *Mock Instruktur* dengan menggunakan *software Creo Parametric 2.0* khususnya desain *sheetmetal* yaitu *Plannar, Flat Wall, Extrude, Corner Relief, Hole, Round, Pattern, Mirror, Conversion, Edge Rip, Rip Connect, Edge Bend Dan Corner Relief, Shell, Plane, Unbend, Bend Back, Sketch*.

Kata kunci : *Creo Parametric 2.0, redrawing, sheetmetal*.