TUGAS AKHIR

PENGARUH VARIASI PARAMETER PROSES PEMESINAN TERHADAP KEKASARAN PERMUKAAN MATERIAL KOMPOSIT HASIL PROSES PEMBUBUTAN DENGAN PENDEKATAN *TAGUCHI*

Oleh:

Imam Alhadi Putra
NBP : 121 091 3007

Pembimbing:

Ir. Adam Malik, M.Eng

NIP. 19660320 1993021 001

JURUSAN TEKNIK MESIN

FAKULTAS TEKNIK UNIVERSITAS ANDALAS

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ABSTRAK

Machining process is a process that has been chosen in the manufacturing industry, especially for engine components that demands accuracy and precision of geometric (dimensions, shape and surface smoothness is high). Materials of this type of metal is widely used because it is worth noting new materials such as composite materials, composite materials for PMC is often used for the rotor on the helicopter. One of the geometric accuracy of the product is produced by the surface roughness lathing process. The quality of the surface roughness is strongly influenced by a variety of process variables. In this study examined the effect of process variables on meal motion, depth of cut and coolant where to see the value of rudeness and roughness arimatik total. Taguchi approach used to see the effect of the three variables influence the process of the surface roughness produced. The results showed that the three variables of the processes that contribute the largest to the smallest motion, depth of cut and coolant meal to changes in surface roughness

From the analysis results obtained optimum machining parameters to produce fine quality products both for the rudeness and roughness arimatik total namely meal motion 0.05 mm / rev, cutting depth of 0.8 and using water blow. In general, normal grade surface quality results (N8).

***Keywords** : process of machining, composites, Taguchi method, surface roughness.*