

TOOL WEAR ON PARALLEL TURNING OF CARBON STEEL BAR

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**BORANG PENGESAHAN STATUS TESIS**

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BAR**

**SESI PENGAJIAN: 2011/2012**

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**LIST OF SYMBOLS**

$f$	Feed Rate, mm/rev
$d$	Depth of Cut, mm
$V_C$	Cutting Speed, m/min
CS	Cutting Speed,mm/min
$D_o$	Original diameter of workpiece, mm
$D_f$	Final diameter of workpiece, mm
$D_{avg}$	Average diameter of workpiece, mm
$N$	Rotational speed of the work piece, rpm
$L$	Length of cut, mm
$t$	Cutting time, s
$V_B$	Flank wear, $\mu\text{m}$
$R_a$	Surface Roughness, $\mu\text{m}$
$r$	Cutting Ratio
$\phi$	Shear angle
$\alpha$	Rake angle
$P$	Probability
$R^2$	coefficient of determination

**LIST OF ABBREVIATIONS**

DOE	Design of experiment
TiN	Titanium Nitride
SEM	Scanning Electron Microscope
AISI	American iron and steel institute
ANOVA	Analysis of variance
P	Probability value
SS	Sum of Square
MS	Mean of Square
L	Linear
Q	Quadratic