

# VALUE ANALYSIS FOR COMPETITIVE TOOLING

**MATERIAL INFORMATION:** HIGH PRESSURE LAMINATED CHIPCORE 1.25" X 30" X 60" DESK TOPS.

## CUTTER INFORMATION:

Tool Part Number:	<b>60-170</b>	<b>Competitive</b>
Tool Description:	SC DE Compression	CT DE Straight
CED x CEL:	1/2" x 1-3/8"	1/2" x 1-1/2"
Flutes:	1	2

## MACHINING INFORMATION:

Router Type:	<b>CNC</b>	<b>CNC</b>
Cut Direction:	Conventional	Conventional

## TOTAL PARTS FOR JOB

**500 PCS**

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## COSTS

Machine Costs / hour	100 \$ / hour	100 \$ / hour
Machine Costs / minute	1.67 \$ / minute	1.67 \$ / minute
Initial Tool Price	84.85 \$	15 \$
Regrind Price	24.50 \$	6.00 \$

## PART CYCLE TIME

Perimeter Inches Part	180 inches / part	180 inches / part
Depth Cuts Part	1 depth cuts / part	1 depth cuts / part
Cut Inches Part	180 total inches / part	180 total inches / part
Feed Rate	600 inches / minute	200 inches / minute
Time / Part	0.3 minutes / part	0.9 minutes / part

## TOOL LIFE

Avg Parts / new edge	130 parts	56 parts
Avg Parts / regrind edge	109 parts	47 parts
# of regrinds available / tool	2 regrinds	4 regrinds
Parts produced / tool	348 parts / tool	244 parts / tool

## TOOL CHANGE CYCLES

Tool Changes / Job	1 tool changes / job	2 tool changes / job
Tool Change Time	5 minutes	5 minutes
Tool Change Time / Job	5 minutes / job	10 minutes / job

## MACHINE TIME COSTS

Cutting Time / Job	150 minutes / job	450 minutes / job
Machine Time / Job	155 minutes / job	460 minutes / job
Machine Cost / Job	258.33 \$ / job	766.67 \$ / job

## TOOLING COSTS \*

New Tools / Job	2 New Tools / Job	3 New Tools / Job
Regrinds / Job	3 Regrinds / Job	8 Regrinds / Job
Tool Cost / Job	243.20 \$ / job	93.00 \$ / job

## TOTAL COST / JOB

**501.53 \$ / JOB**

**859.67 \$ / JOB**

\* NOTE: Calculations assume no residual tool life after job is complete (i.e. cutter is discarded even if it has life left on it's new or re-ground edge).