

NCSIMUL: Benefits and Return On Investment

Example No.2. Aeronautic Company

In this case, the company is working on long programs on high cost rough stocks (ie. subcontractor for an aeronautic company with 5 axes and mill-turn machines).

	USD
NC programmer / CAM user - hourly rate	90
Hourly cost of running the machine (CNC & Operator)	154
	per year
Number of new NC programs per year	40

	Program validation	Program correction	Test on the CNC machine	CNC Rework	Workshop downtime	Machine setup	Tool breaks	Scrapped parts
Related to	NC Programmer		Machinist				Other	
Average hours spent per NC program	4	6	20	30	6	1		
Average instance/occurrence per program	100%	20%	100%	5%	5%	5%		
Average cost per program in USD	360	108	3080	231	46.2	7.7		
Annual cost in USD	14,400	4,320	123,200	9,240	1,848	308	4,200	10,600
Expected gain % with simulation	60%	30%	75%	75%	30%	60%	95%	95%

Total annual cost for proving out program without simulation	\$ 168,116
Expected savings with NCSIMUL	\$ 124,065
Project Simulation cost (Including software, maintenance, training & services)	\$ 50,000

Return On Investment (in months)	5
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