

# Productivity Report

## MICROTECH TOOLS

Project	Face Milling
Component	FA 4
Test ID	ADMIN-1936233029
Created by	Vaikunth Panchal
Date created	28-12-2019
Your reference	Mr.Nilesh Kankrej

Approved by



## Test data

### Component - FA 4

Component	FA 4
-----------	------

CMC code

MC Code

No. of components per set-up	1
------------------------------	---

no.of components (month)	3000
--------------------------	------

No. of components per year	36000
----------------------------	-------

Current situation

Recommendation

### Machine - Hass

Machine brand	Hass
---------------	------

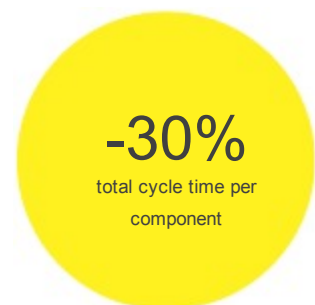
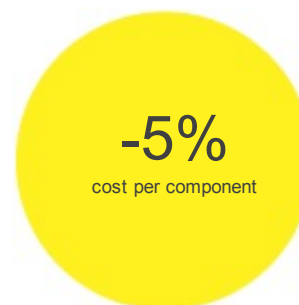
Machine ID

Machine cost per hour	Rs 400
-----------------------	--------

Tool room cost per hour	Rs 0
-------------------------	------

## Analysis per component

	Reference	Recommended
Machine cost	Rs 12.19 (+3.85)	Rs 8.33
Tool change cost	Rs 0.00 (+0)	Rs 0.00
Tool cost	Rs 7.50 (+1.5)	Rs 6.00
Insert cost	Rs 12.50 (-4.43)	Rs 16.93
Indexing/Replacement cost	Rs 2.78 (+0.69)	Rs 2.08
Tool room cost	Rs 0.00 (+0)	Rs 0.00
Scrap cost	Rs 0.00 (+0)	Rs 0.00
Rework cost	Rs 0.00 (+0)	Rs 0.00
Additional cost	Rs 0.00 (+0)	Rs 0.00
<b>Total cost</b>	<b>Rs 34.96 (+1.62)</b>	<b>Rs 33.35</b>
<b>Total cycle time per set-up</b>	<b>2.24 (+0.58)</b>	<b>1.56</b>





## Productivity result

### Recommendation

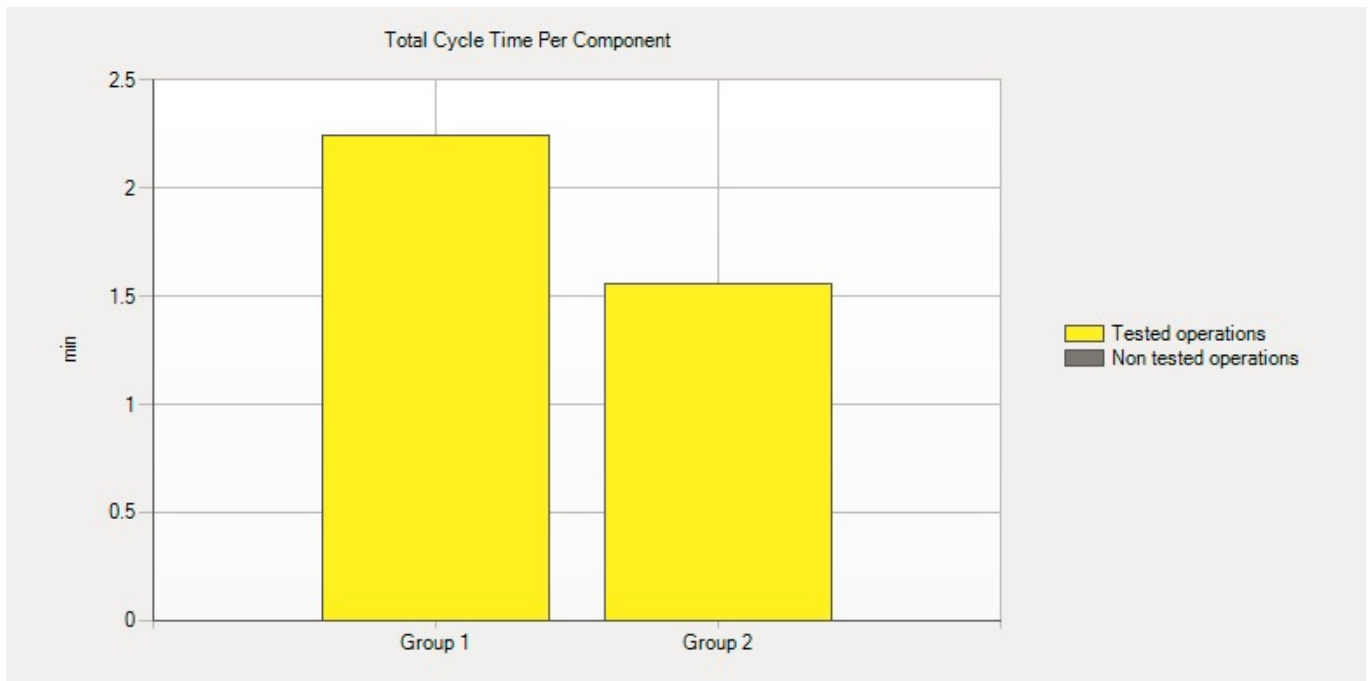
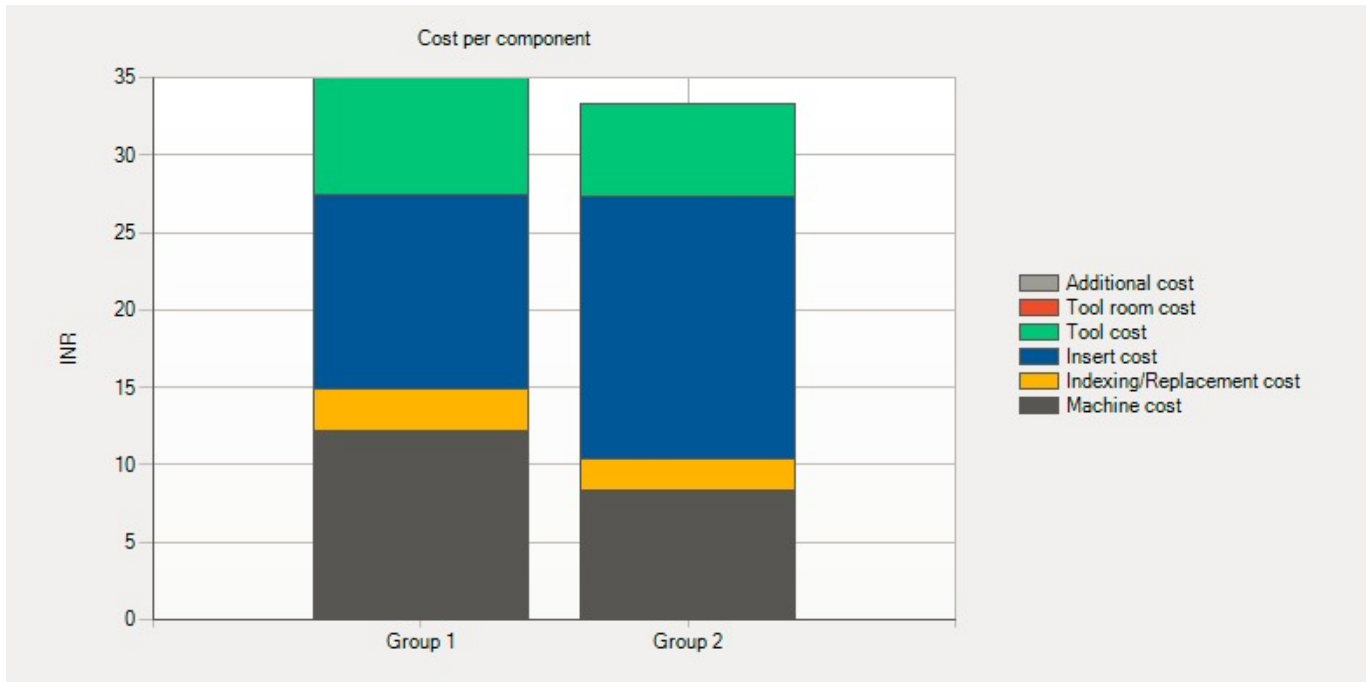
Productivity increase for recommended tools	44%
Productivity increase for total cycle time	44%
<b>Savings in production time per year (h)</b>	<b>409</b>
Savings per component	Rs 1.62
Savings per unit	Rs 4,852.77
<b>Savings per year</b>	<b>Rs 58,233</b>





# Charts

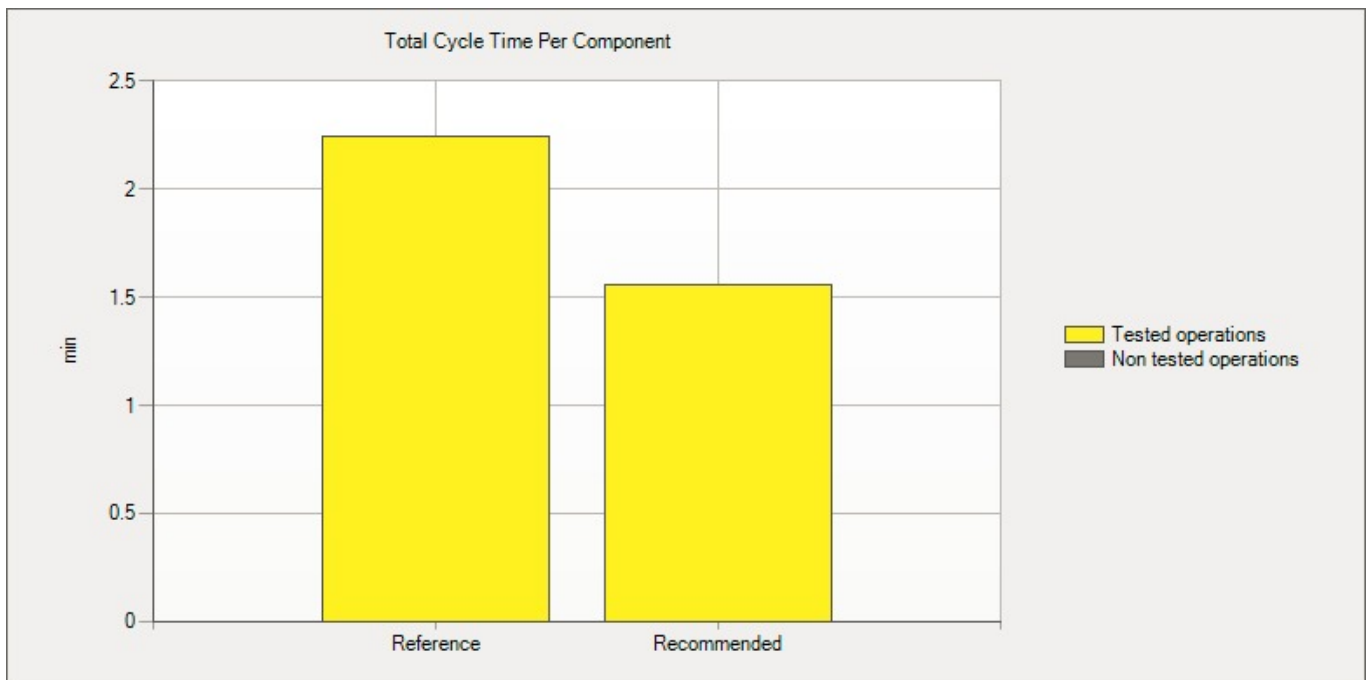
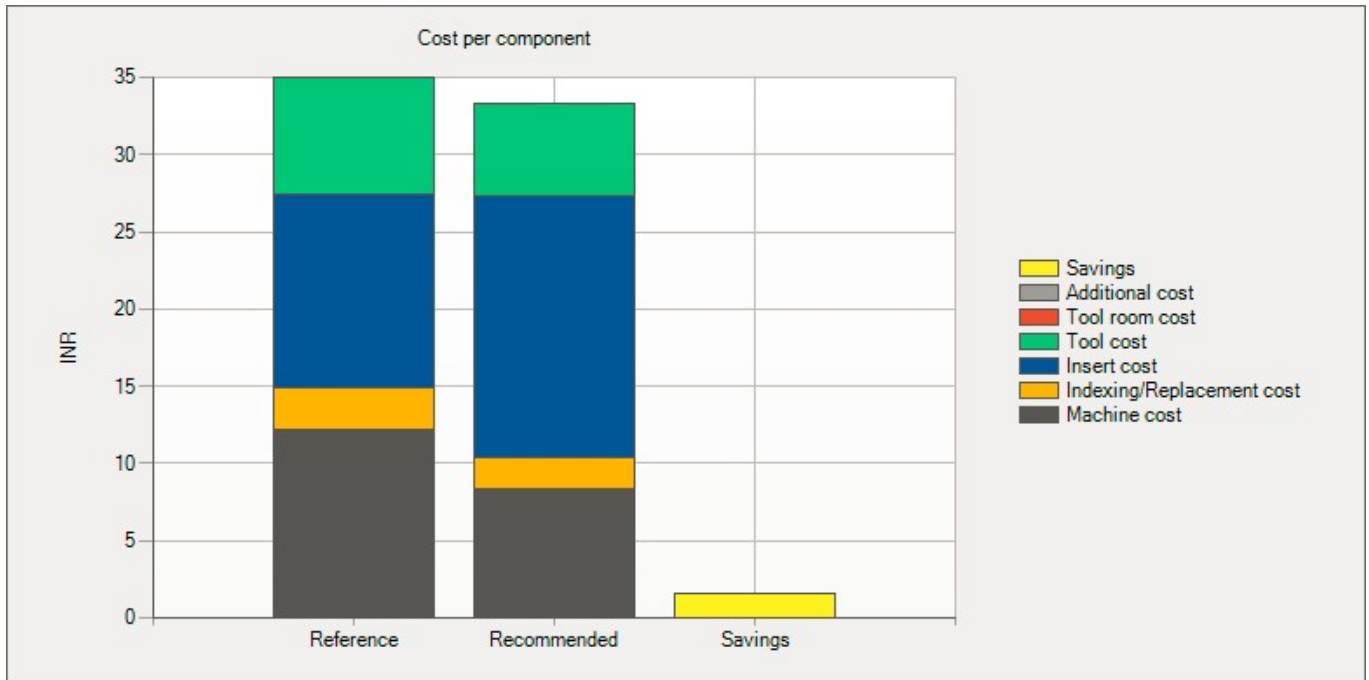
## Group data

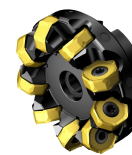




# Charts

## Recommendation





	Reference	Recommended
Sub-test name	Sub-test 1	Sub-test 1
Tool		
Manufacturer	Iscar	Coromant
Code	F45NMD125-08-40R08	745-080Q27-21M
Code (customer denomination)	F45NMD125-08-40R08	745-080Q27-21M
No. of inserts (zn)	2	2
Cost	Rs 45,000.00	Rs 48,000.00
No. of insert indexes	500	500
Insert indexing time (min)	5	5
Insert		
Manufacturer	Iscar	Coromant
Code	ONMU080608 AN-N-HP	745R-2109E-M31
Code (customer denomination)	ONMU080608 AN-N-HP	745R-2109E-M31
Grade	IC928	2040
No. of edges per insert	16	14
Cost per insert	Rs 1,200.00	Rs 1,896.00
No. of inserts	2	2
Cutting data		

	Reference	Recommended
Spindle speed (n) (rev/min)	375	618
Cutting speed (vc) (m/min)	150	160
Feed per cutting edge (fz) (mm)	0.15	0.15
Feed speed (vf) (mm/min)	112	185
Axial depth of cut (ap) (mm)	1.2	1.2
Working engagement (ae) (mm)	70	70
Time in cut per component (min)	1.83	1.25
Block time per set-up (min)	1.83	1.25
Tool life (no.of components)	12	16
Tool life (minutes)	21.93	20
Tool life (meter)	2.47	3.71
Tool change criteria	(11) Bad surface finish on workpiece	(11) Bad surface finish on workpiece