

Productivity Report

Electronica Tungsten Ltd.

Project	Hard Part Turning
Component	Shaft
Test ID	ADMIN-19325145113
Created by	Vaikunth Panchal
Date created	21-11-2019
Your reference	Mr.Bhise

Approved by



Test data

Component - Shaft

Component	Shaft
CMC code	
MC Code	
No. of components per set-up	1
no.of components ()	200
No. of components per year	2400
Current situation	
Recommendation	

Machine - Jyoti

Machine brand	Jyoti
Machine ID	
Machine cost per hour	Rs 200
Tool room cost per hour	Rs 0

Analysis per component

	Reference	Recommended
Machine cost	Rs 3.89 (+1.31)	Rs 2.58
Tool change cost	Rs 0.00 (+0)	Rs 0.00
Tool cost	Rs 7.00 (+5.25)	Rs 1.75
Insert cost	Rs 30.00 (+11.75)	Rs 18.25
Indexing/Replacement cost	Rs 3.33 (+2.5)	Rs 0.83
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
Total cost	Rs 44.23 (+20.81)	Rs 23.42
Total cycle time per set-up	2.17 (+0.39)	1.02

-47%

cost per component

-53%

total cycle time per
component



Productivity result

Recommendation

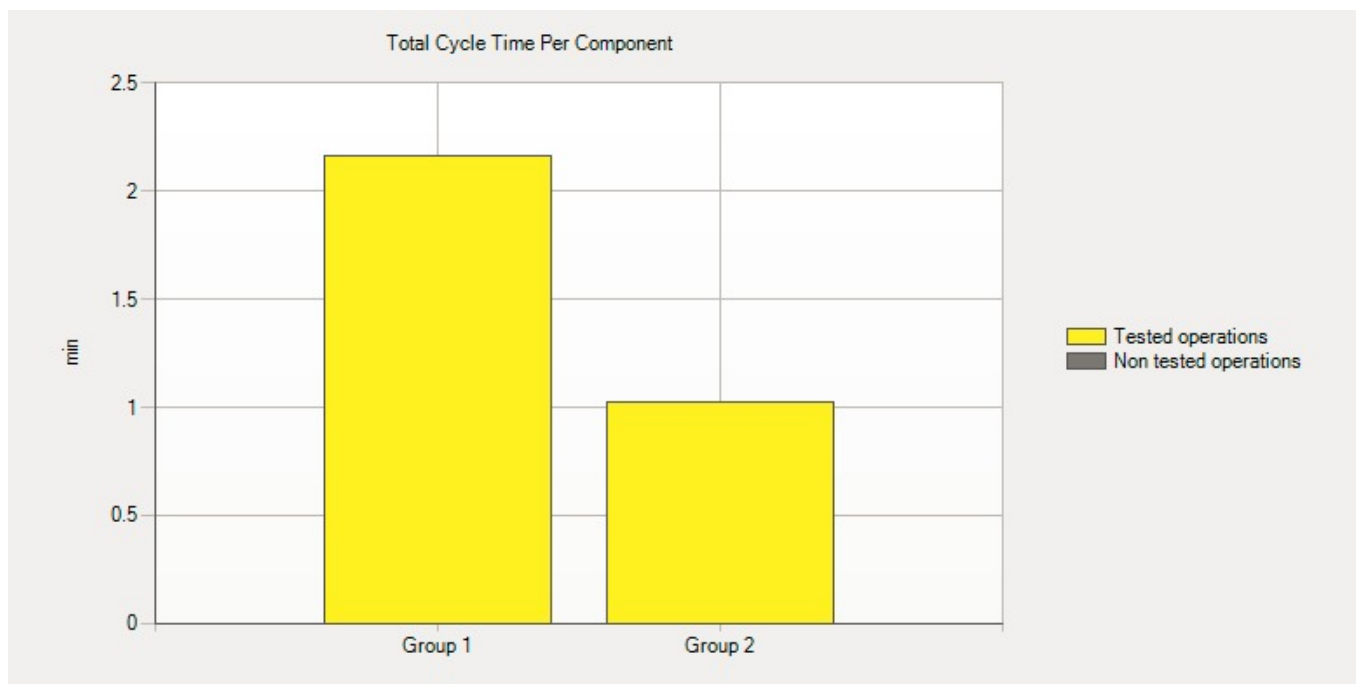
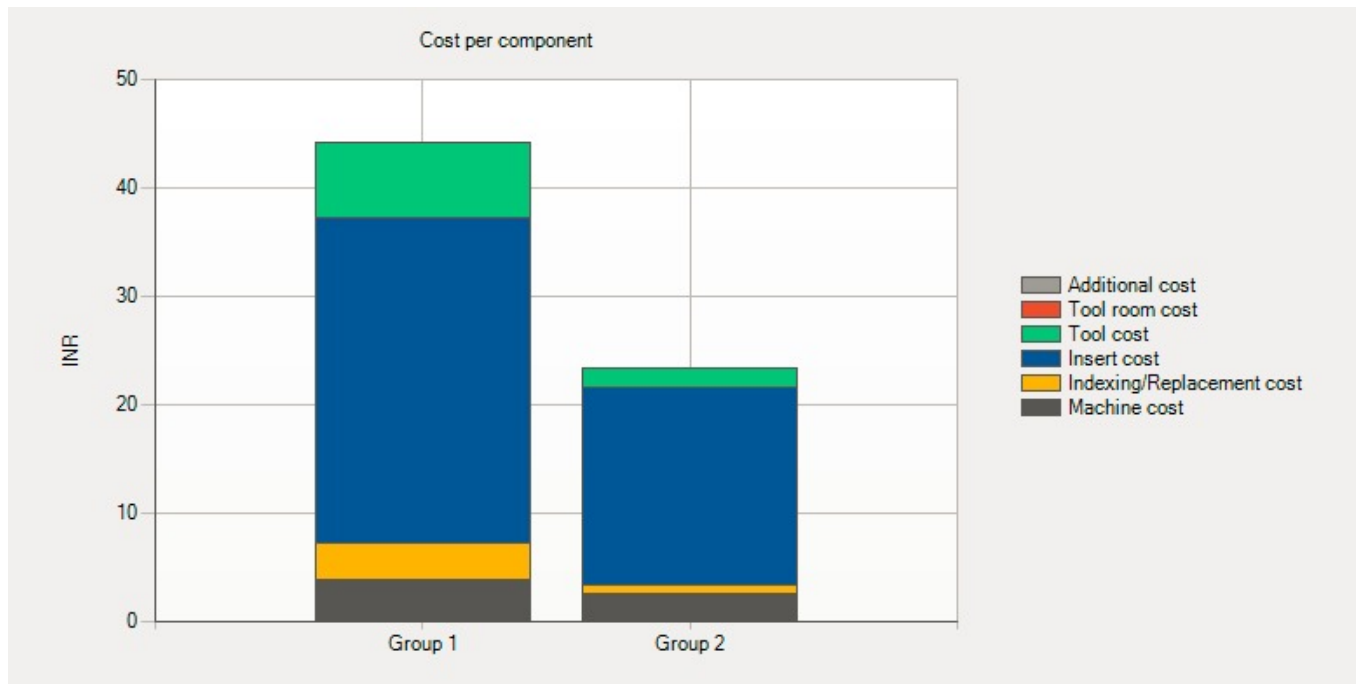
Productivity increase for recommended tools	112%
Productivity increase for total cycle time	112%
Savings in production time per year (h)	46
Savings per component	Rs 20.81
Savings per unit	Rs 4,162.14
Savings per year	Rs 49,946





Charts

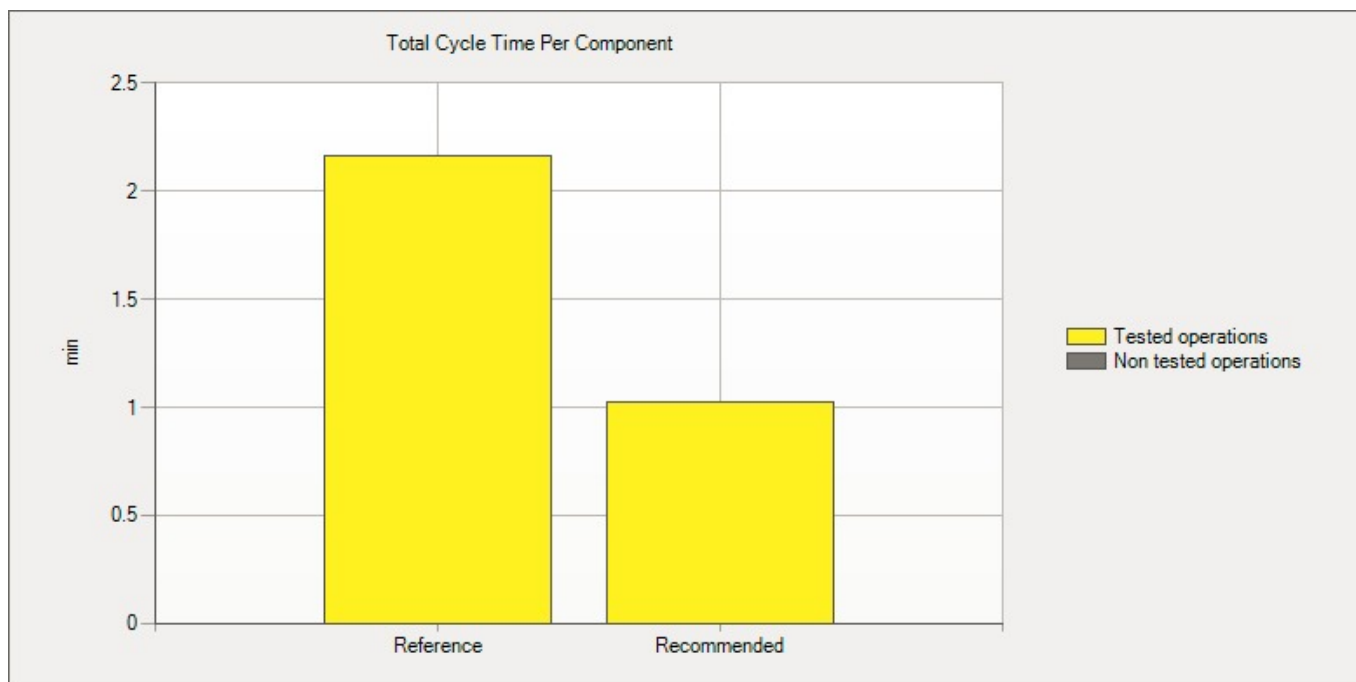
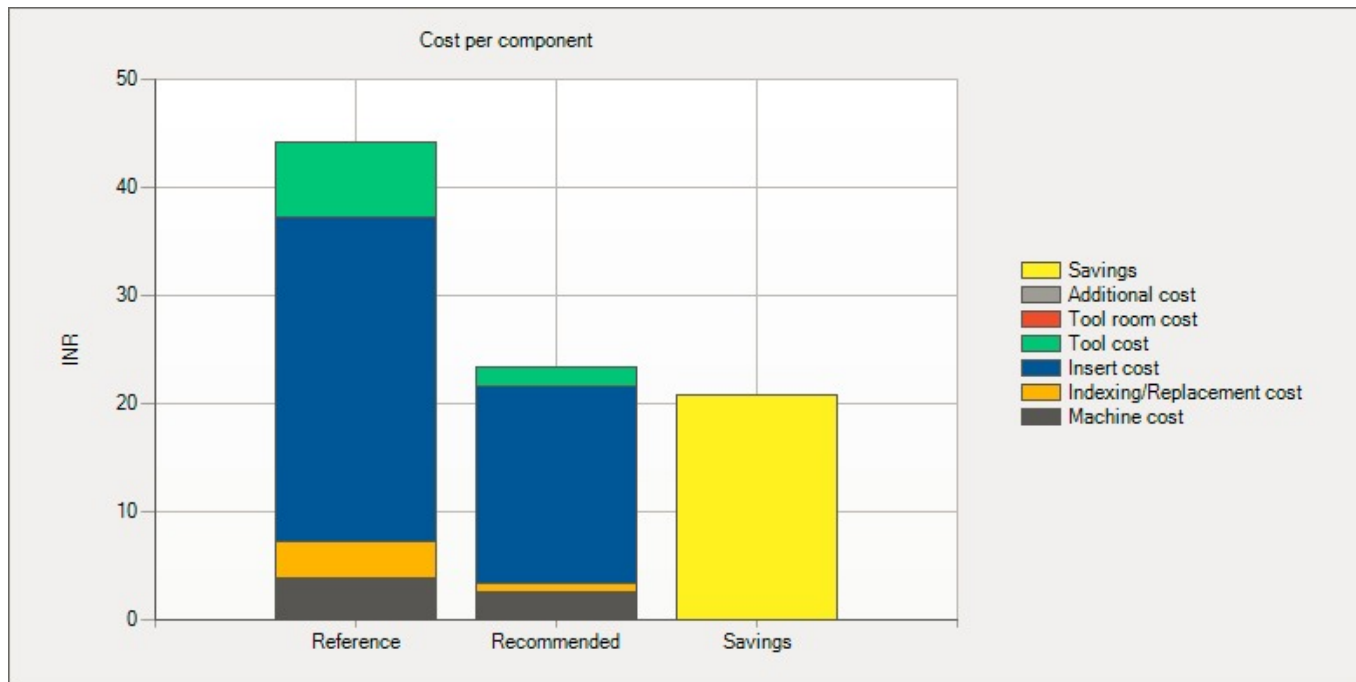
Group data





Charts

Recommendation





Reference



Recommended

Sub-test name	Sub-test 1	Sub-test 1
Tool		
Manufacturer	Kyocera	Kyocera
Code	PDJNL 2525M 15	PDJNL 2525M 15
Code (customer denomination)	PDJNL 2525M 15	PDJNL 2525M 15
Cost	Rs 3,500.00	Rs 3,500.00
No. of insert indexes	100	100
Insert indexing time (min)	5	5
Insert		
Manufacturer	Kyocera	Coromant
Code	DNGA150608S01525	DNGA150608S01525
Code (customer denomination)	DNGA150608S01525	DNGA150608S01525
Grade	A66N	6050
No. of edges per insert	4	4
Cost per insert	Rs 600.00	Rs 1,460.00
No. of inserts	1	1
Cutting data		
Cut	Medium	Medium

	Reference	Recommended
Spindle speed (n) (rev/min)	1671	2100
Diameter (Dm) (mm)	14	14
Cutting speed (vc) (m/min)	74	92
Feed (fn) (mm/rev)	0.1	0.12
Cutting depth (ap) (mm)	0.2	0.2
Length of cut (mm)	99	99
No. of passes	2	2
Time in cut per component (min)	1.17	0.77
Block time per set-up (min)	1.17	0.77
Tool life (no.of components)	5	20
Tool life (minutes)	5.84	15.49
Tool life (meter)	0.98	3.9
Tool change criteria	(13) Burr or spalling of workpiece	(24) Poor chipbreaking