

K1

TPM CIRCLE NO: 2	ACTIVITY	KK	QM	PM	JH	SHE	OT	DM	E&T
TPM CIRCLE NAME: Joshile	LOSS NO. / STEP								
DEPT: Manufacturing Engineering	RESULT AREA	P	Q	DEF :- A	C	D	S	M	

CELL: A545 CELL NAME: Tensioner Machining MACHINE / STAGE: CNC Cub/Machining OPERATION: Facing

KAIZEN THEME: To Increase the Output per Man In A545 Tensioner Assy. @ Machining Cell

WIDELY/DEEPLY:

PRESENT STATUS : Present Output per Man is 920 Nos.



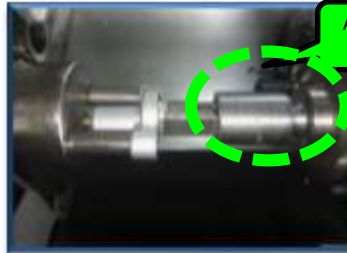
Manual clamping system by mechanical bolt

Shift Length = 460 min
Cycle Time = 30 Sec/Comp
Output per Man(460*60/30) = 920 Nos

BEFORE

IDEA: To modify the component Clamping & de-clamping System.

COUNTERMEASURE : Changed the clamping & de-clamping system of Comp. from manual to auto by utilizing current machine tail stock with addition of Face resting block considering eccentric requirement of comp., Hence now no need of manual clamping & de-clamping of comp.



Auto clamping system by Tail Stock with eccentric block

Shift Length = 460 min
Cycle Time = 15 Sec/Comp
Output per Man(460*60/15) = 1840 Nos

AFTER

BENCHMARK	920 Nos
TARGET	1840 Nos
KAIZEN START	03.11.17
KAIZEN FINISH	10.11.17

TEAM MEMBERS:

N.S.Pujari.
Mr. Mallikarjun

BENEFITS:

- 1) Output Per Man Increased from 920 to 1840 Nos
- 2) Flange Thickness Taper on account of Manual Clamping occurrence Eliminated
- 3) Machining Cost Saving 4.04 Lac/-Annum
- 4) May Happen Finger Injured Eliminated
- 5) Operator Friendly

WHY - WHY ANALYSIS :-

- Why1:** Present Output per Man is 920 Nos.
- Why2:** Cycle Time is 30 Sec/Component
- Why3:** Bottleneck Activity – Comp. Clamping & De-clamping Time – 16 sec/Component
- Why4:** Component clamping system is Manual

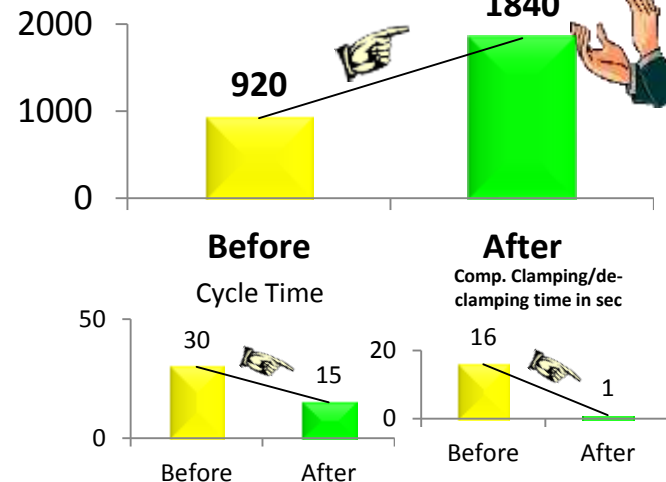
ROOT CAUSE:- Component clamping & de-clamping system .

REGISTRATION NO. & DATE: 1931 & 30.11.2017

REGISTERED BY: Mr. Manash KP

MANAGER'S SIGN: Mr. N.S.Pujari

RESULT:- Output Per Man in Nos



KAIZEN SUSTENANCE

WHAT TO DO :- Fixture & Process Design to be Updated

HOW TO DO : Through MP Sheet

FREQUENCY : One Time Action.

COST INCURRED FOR MAKING KAIZEN

MATERIAL COST IN RS	LABOUR COST IN RS	TOTAL COST IN RS
INR 250/-	0	INR 250/-

SCOPE & PLAN FOR HORIZONTAL DEPLOYMENT

SR. NO.	CELL	TARGET	RESP.	STATUS
1	A572/A663	--	N.S.Pujari	Completed

Before Implementation



Manual Clamping /de-clamping



After Implementation



Auto Clamping /de-clamping

