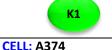


# **Set-Up Change over Time Reduction Kaizen**

**P14** 



**TPM CIRCLE NO: 2** 

**TPM CIRCLE NAME: Joshile DEPT:** Manufacturing Engineering **CELL NAME: Oil Pump** 

LOSS NO. / STEP **RESULT AREA MACHINE / STAGE: VMC/Machining** 

**ACTIVITY** 

Q

Р

QM

DEF :- A

D C

OT

SHE

S

DM

М

**F/IMS/05 OPERATION:** Face Milling & Reaming

BENEFITS: 1. Reduce set-up changeover time

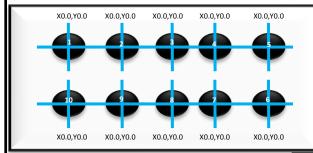
**KAIZEN SUSTENANCE** 

WHAT TO DO: WPC to be take from 1 hole

KAIZEN THEME: To Reduce the Set-up Change Over Time of A374 Oil pump body.

### WIDELY/DEEPLY:

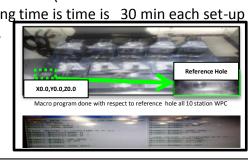
PRESENT STATUS: Present set-up change over time is 480 min for change over of machining fixture from one model to another model



**BEFORE** 

**IDEA:** One hole reference point provision to be provide in fixture for all 10 station WPC **COUNTERMEASURE:** Provided the One Hole

reference point provision in fixture for & macro program done with respect to reference hole all 10 station WPC (w.r.t reference hole & Now Fixture Setting time is time is 30 min each set-up change over.



**AFTER** 

**KAIZEN START** 15.12.2016 **KAIZEN FINISH** 23.12.2016 **TEAM MEMBERS:** 

480 Min.

410 Min.

N.S.Pujari

**BENCHMARK** 

**TARGET** 

Mr. Ambarish

from 480 Min to 410 Min 2. Setter Friendly.

3. Availability increase by reducing

Set-up Change over time

#### WHY - WHY ANALYSIS :-Why1: Present set-up change over time is 480 min

for change over of machining fixture from one model to another model Why2: Fixture setting time is more

Why3: No of station is 10 Nos for WPC.

Why4: No one hole reference point provision in fixture for all 10 station WPC

**ROOT CAUSE:-** No one hole reference point provision in fixture for all 10 station WPC

**REGISTRATION NO. & DATE: #1404, 30.12.2016** 

**REGISTERED BY: Mr. Guru Bassappa** 

400 300

**RESULT:-**Set-up Change Over Time w 480 500 410 **Before After Fixture Setting Time** 

100

reference point **HOW TO DO:** Manually

**FREQUENCY:** while set-up changing

**COST INCURRED FOR MAKING KAIZEN** MATERIAL COST LABOUR COST

**IN RS** 

**TOTAL COST** 

**IN RS** 

Open

**SCOPE & PLAN FOR HORIZONTAL DEPLOYMENT STATUS** 

**IN RS** 

**CELL TARGET** RESP. 1 A177 25.01.17 N.S.Pujari

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

**Before** 

0

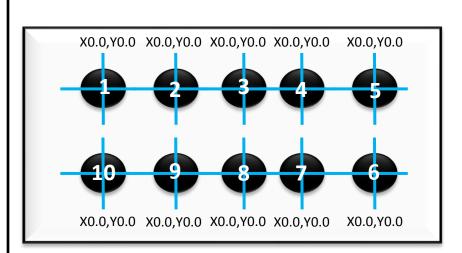
200

**After** 

30



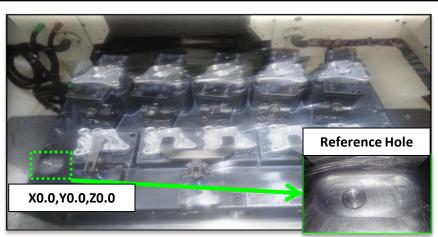
## Before



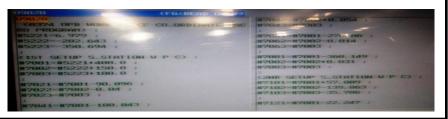
No one hole reference point provision in fixture for all 10 station WPC

WPC to take all 10 station Individually (X0.0,Y0.0)

## **After**



Macro program done with respect to reference hole all 10 station WPC



Provided the one Hole reference point provision in fixture for all 10 station WPC

WPC to take 1-Hole for reference for all 10 station (X0.0,Y0.0)