

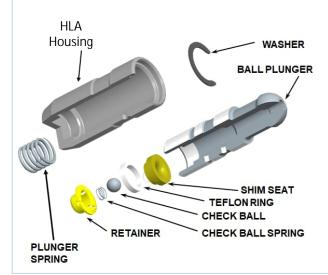
<u>Kaizen Theme</u>:- Productivity improvement by using combination tool.

Date of Implementation:- 30.02.2024

Company Introduction

Name: Schaeffler India Limited Pune Product : Hydraulic Lash Adjuster (HLA)

Product Photograph & function:



The primary function of the hydraulic lash adjuster is to maintain zero tolerance of the valve on the engine.

Productivity ~

Quality Cost

Delivery

EHS

Total Productivity Improve- 85,96,224 Pcs

Team Introduction



Name: Basavaraj Wagarale

Designation: Team

Leader

Department: CNC

Turning



Name: Dnyaneshwar Gawande

Designation: Team

Leader

Department: CNC

Turning

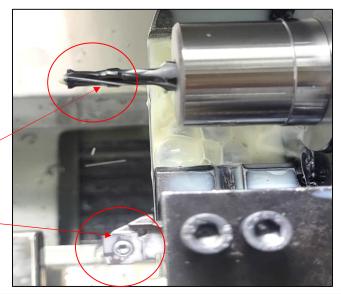


IMPROVEMENTS

BEFORE CONDITION

AFTER CONDITION

Two tools used for milling & facing operation



Two tools used for milling & facing operation Due to this following problems were occurred.

- 1. Cycle time (9 Sec) high for used two tools
- 2. Every Sunday run all turning machine due to high customer demand.
- 3. customer demand was not fulfilled.
- 4. Extra manpower for 24x7.
- 5. Extra electricity & bus transportation for Sunday working.

Combined operation in one tool used for milling & facing operation



Only one tool used for both milling & facing operation.

Due to this below points are improved

- 1. cycle time reduction by 1sec.
- 2. cost saving by eliminating facing tool.
- 3. productivity improvement by 8.8 %
- 4. Tool changing time decreased.
- 5. No Sunday working i.e., 24x6, electricity & bus transportation cost saved.

NFIDEN FIAL Fulfilled our customer demand

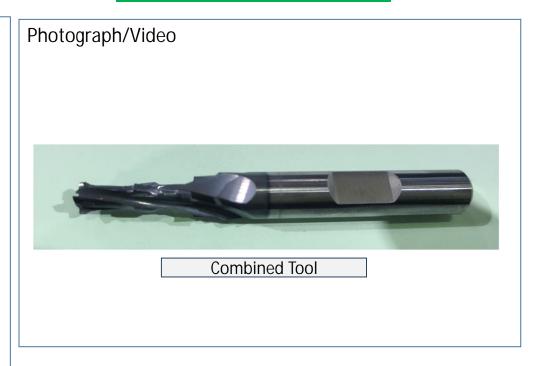


Kaizen Presentation

BEFORE KAIZEN

AFTER KAIZEN





Description = Using two tools for operation.

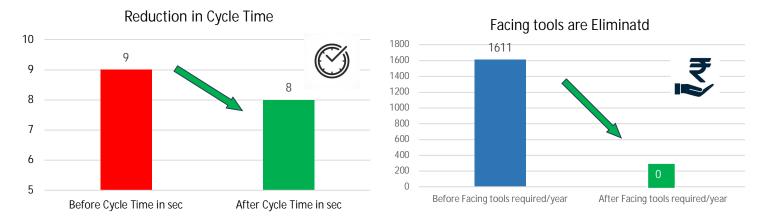
Description = Both tools are combined for operation.



Kaizen Presentation Benefits

Pls tick the benefits in below heads

Productivity up %			Quality			Cost Saving In Rs/month		Delivery		EHS					
Process	Material yield improvement	Space saving (sq. ft.)	Other	Rejection reduction (%)	Poka yoke	Others	Direct	Notional	Lead Time reduction	Customer delivery rating improvement	Others	Effect on Environment	Human Safety	Machine safety	Others
	/						/			/				/	



Cost Saving 1.58 Cr/ annum

Productivity Improve- 85,96,224 PCS /annum

Horizontal deployment on 28 turning machines.

Calculation Sheet

Sr. No.	Description	Before	After	
1	Cycle time	9	8	Sec
2	Per min prod	6.6	7.5	Pcs.
3	Per day prod/ Machine	7,872	8,856	Pcs.
4	Prod from 28 machines/day	2,20,416	2,47,968	Pcs.
5	Monthly Productiuon	57,30,816	64,47,168	Pcs.

	Production increase in pcs/month	7,16,352	Pcs
	Production increase in pcs/year	85,96,224	Pcs
	Cost/piece	4.49	INR
	Sales increase/year	3,85,97,046	INR
	One machine Production /month	2,04,672	Pcs.
	One machine Production /annum	24,56,064	Pcs.
	28 machines Production /annum	6,87,69,792	Pcs.
	No of machines saved/Annum	3.5	Nos.
	Cost of 1 machine	40 Lac	
А	Cost of 3.5 machine	1.4 Cr.	
	Cost of one facing tool	1,200	INR
	No of tools saved/year	1,611	Pcs.
В	Cost saving	19,33,200	INR
С	Tool Development Cost	42,000	INR
A+B-C	Total Saving in Annum	1,58,91,200	INR
	Productivity Improvement	85,96,224	Pcs.

THANK YOU