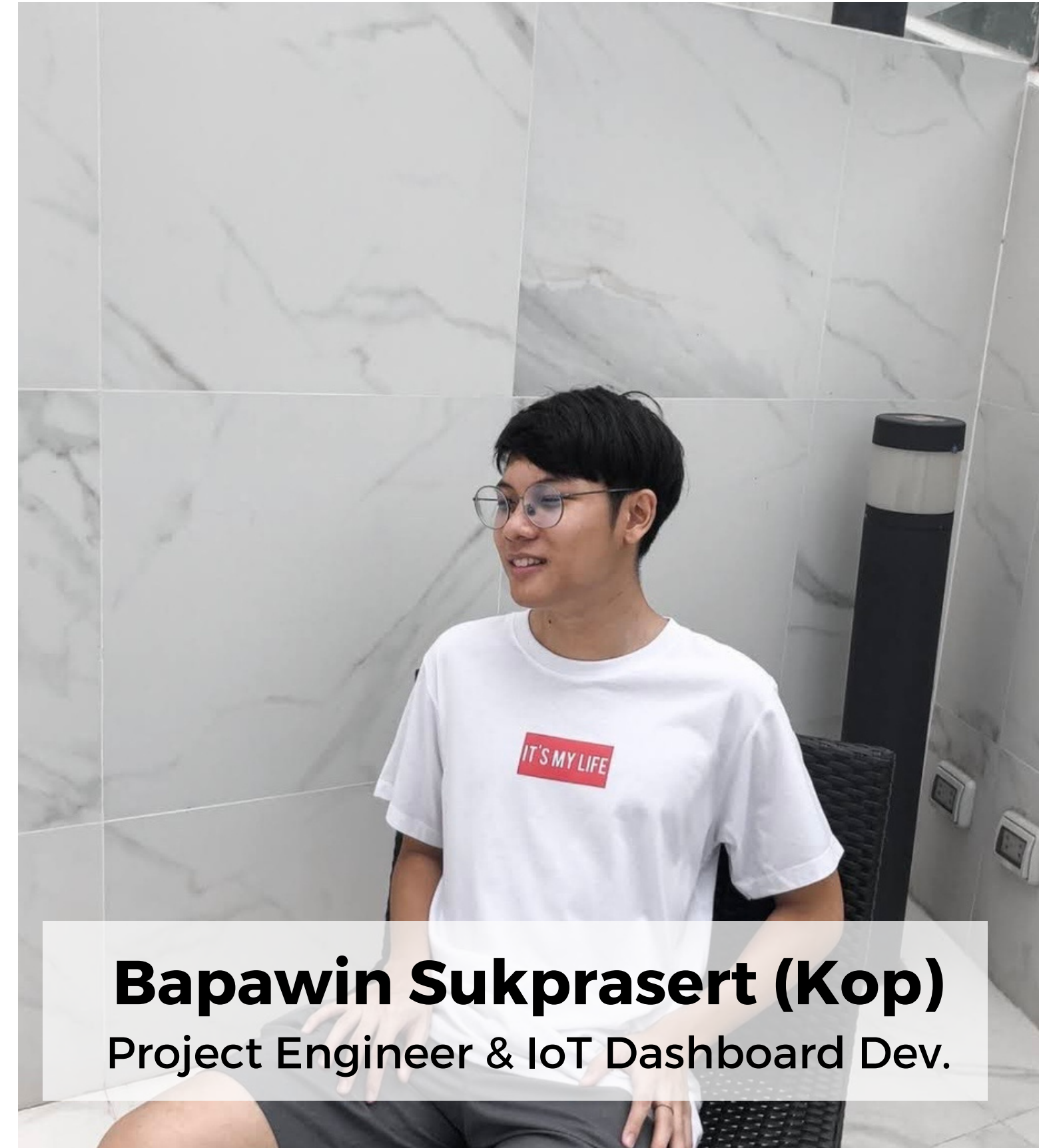


introducing **ABOUT ME**

Project engineer at DENSO INNOVATIVE MANUFACTURING SOLUTION ASIA Co.,Ltd who experienced with SQL query, Python, Javascript skill programming also data visualization dashboard as Grafana and Power BI want to fully changed to Data analyst / BI developer career path.

personal **SKILLS**

- (Basic) HTML5, Python
- (Intermediate) Javascript, SQL query, DAX, Excel
- Database: PostgreSQL
- Data visualization: Grafana, Power BI
- Familiar with Slack, Agile & Scrum



Bapawin Sukprasert (Kop)
Project Engineer & IoT Dashboard Dev.

EXPERIENCE

PROJECT ENGINEER & IOT DASHBOARD DEVELOPER

Denso Innovative Manufacturing Solution Asia

June 2022 - Present

- Project engineer of IoT solution for improving efficiency in production line in customer factory.
- In charge of IoT dashboard custom development to create and query data visualization from machine in Grafana and Power BI using SQL, Plotly JS and PostgreSQL database refer to customer requirement.
- User story map making co-operate with Software team and Sales team to choose MVP function for new IoT solution product

DATA ANALYST (INTERNSHIP)

Denso International Asia Co.,Ltd

2021 (Internship 4 months)

- Statistic data or graph making using Excel (VBA, Pivot) from machine data (csv) to make data report to customer.
- Automating data report preparation using Python from Excel -> PPT

EDUCATION

2015 - 2018

Secondary School

Sang Arun School

2018 - 2022

Bachelor Degree

Thai-nichi Institute of Technology

Graduated in Industrial

Engineering (GPA: 3.23)

PROJECT ENGINEER

Project engineer of IoT solution for improving efficiency in production line in customer factory.

Start from visit customer site to design spec&cost estimation of IoT system and present to the customer.

Then there will be purchasing, hiring a maker to install, and then installing the company's existing software. The product is the company's IoT Dashboard.

IOT DASHBOARD DEV.

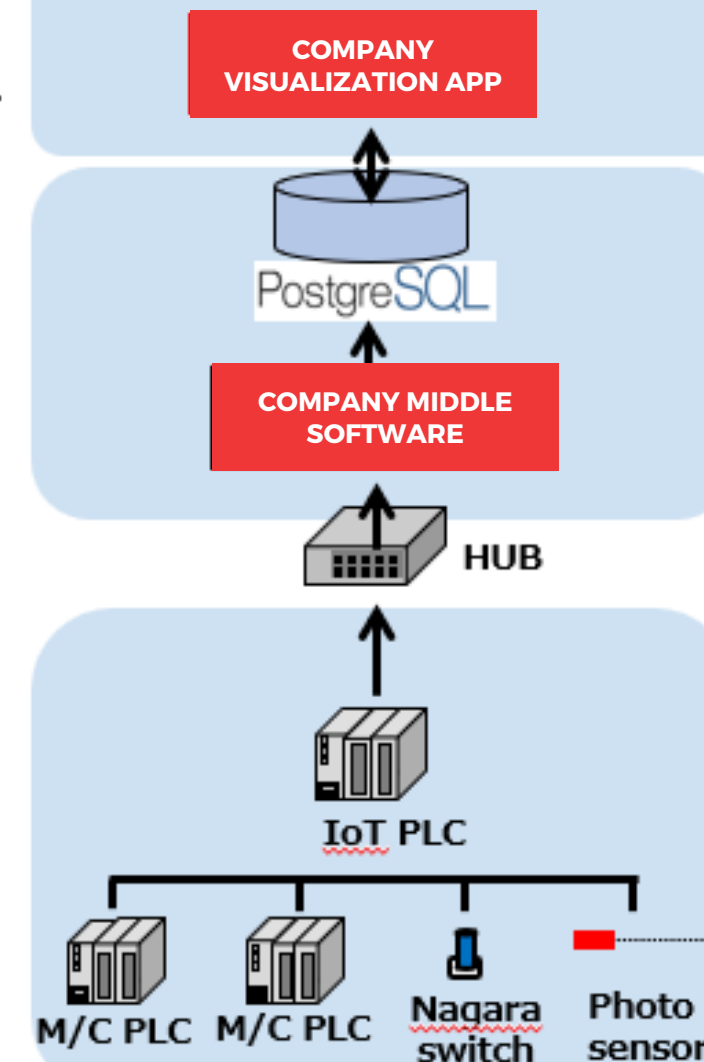
Moreover, if company visualization app do not meet customer requirement so need to do the custom dashboard

In charge of IoT dashboard custom development to create and query data visualization from machine in Grafana and Power BI using SQL, Plotly JS and PostgreSQL database refer to customer requirement.

Data Visualization

Data Transfer

Data collection



project **PORTFOLIO**

Consist of 2 Grafana project and 1 Power BI project

01

Project

Traceability Dashboard
(Grafana)

02

Project

Energy Visualization Dashboard
(Grafana)

03

Project

Tool Life Monitoring
Dashboard (Power BI)

PROJECT 01

PURPOSE

Making custom dashboard for traceability not good product from machines to traceback where is the root cause of not good product
(Have 5 Machine to join data in 1 line production)

Query

Query History

1

CREATE TABLE "230413_sample" AS

2

3

WITH delivery_machining AS

4 (Select * from gdp_machining where mctype = '2'),

5 relief_machining AS

6 (Select * from gdp_machining where mctype = '1')

7 (

8 SELECT

9 t1.ts AS delivery_timestamp,t1.qrcode AS u_qr_code,

10 t1.line AS delivery_line, t1.runningpart AS delivery_running_pn, t1.pallet AS delivery_pallet_no, t1.partno AS delivery_part_number,

11 t2.ts AS relief_timestamp, t2.line AS relief_line,

12 t2.runningpart AS relief_running_pn, t2.pallet AS relief_pallet_no, t2.partno AS relief_part_number,

13 t3.lot_no_rfid AS u_lot_no, t3.rfid_serial, t3.id_serial AS u_serial_no, t3.ts AS assy_timestamp, t3.digit_no AS assy_digit_no,

14 t4.ts AS op_timestamp, t4.judge AS v_op_leak_judge, t4.pressure AS v_op_leak_data, CAST(t4.line AS text) AS op_line,

15 t5.d_station_no as ibutsu_station_no, t5.d_model_no as ibutsu_model_no, t5.ts AS ibutsu_timestamp,

16 CAST(t5.std_judge AS INT) AS v_ibutsu_judge, t5.leak_value AS v_ibutsu_leak, CAST(t5.line_no AS text) AS d_ibutsu_line,

17 t6.judge AS v_seat_leak_judge, t6.seat_value AS v_seat_leak_data, t6.ts AS seat_timestamp, CAST(t6.line AS text) AS seat_line

18 FROM delivery_machining t1

19 INNER JOIN relief_machining t2 ON t1.qrcode = t2.qrcode

20 INNER JOIN gdp_assy_raw t3 ON t1.qrcode = t3.qrcode

21 INNER JOIN openining_pressure_new t4 ON t3.lot_no_rfid = concat(t4.lot,t4.year) AND t3.id_serial = CAST(t4.serial_no AS text)

22 INNER JOIN ibutsu_leak t5 ON concat(t4.lot,t4.year) = t5.lot_no AND CAST(t4.serial_no AS text) = t5.serial_no

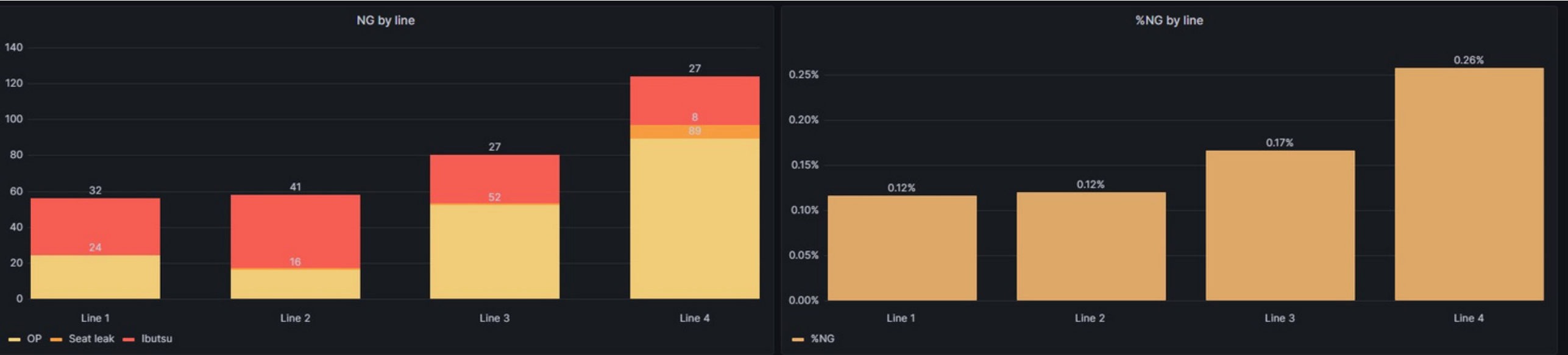
23 INNER JOIN seat_oil_leakage_new t6 ON concat(t4.lot,t4.year) = concat(t6.lot,t6.year) AND CAST(t4.serial_no AS text) = CAST(t6.serial_no AS text)

24)

CREATE MASTER TABLE



PROJECT 01



Monitor Total NG of each line

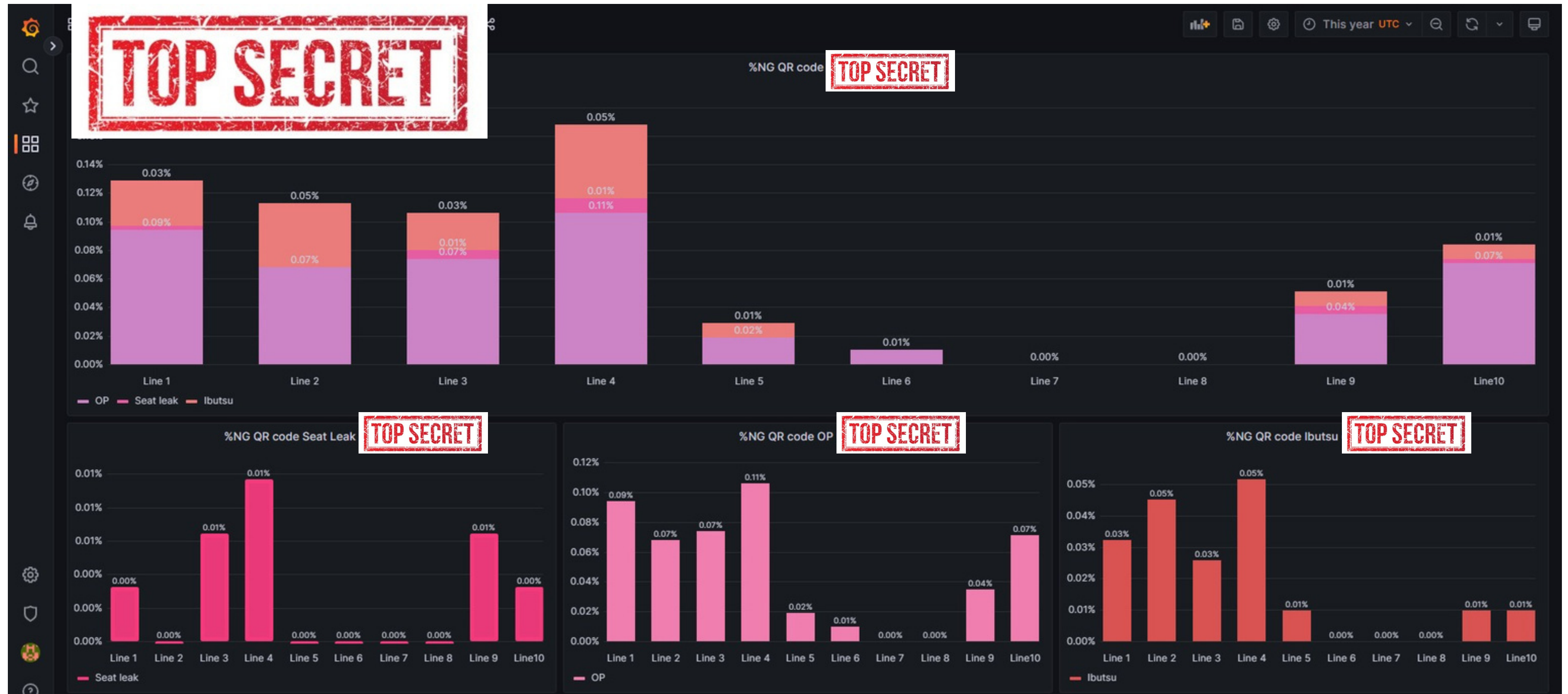
NG Type (pcs.)					
NG Type	Line 1	Line 2	Line 3	Line 4	Total
NG Seat Leak	0	1	1	8	10
NG Ibautsu	32				
NG PL	24				
Total	56				

Traceability not good product by JIG



PROJECT 01

Traceback from QR to check where NG come from
what supplier and NG from which line



PROJECT 02

PURPOSE OF ENERGY VISUALIZATION

For safety action of Laser Welding machine to check
flow rate, temperature, water level, pressure

HISTORY MONITOR PAGE



PROJECT 02

For monitor last value in 1 machine cycle time by extract data from last json array row in database

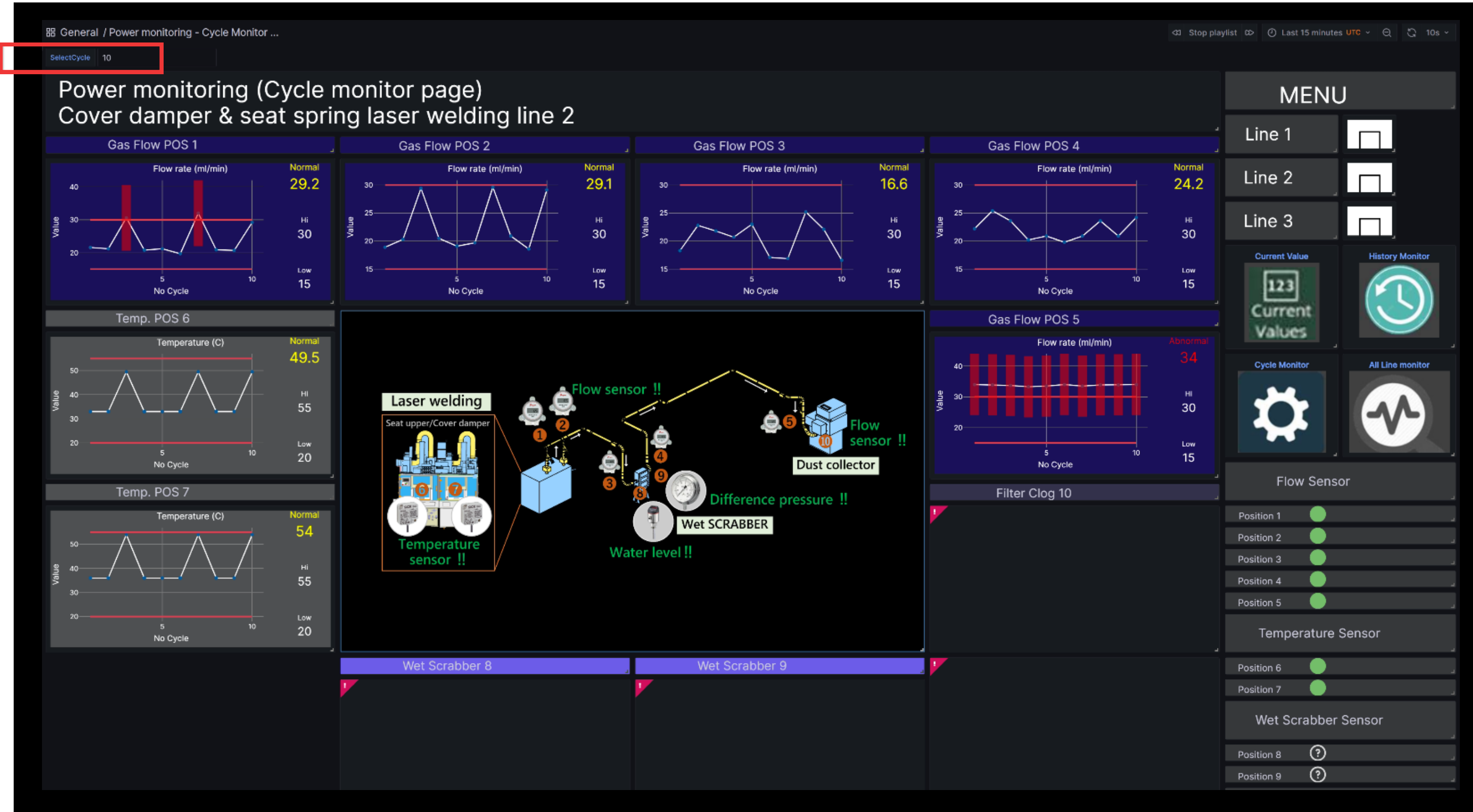
CURRENT VALUE PAGE



PROJECT 02

To monitor number of last cycle
we selected

CYCLE MONITOR PAGE



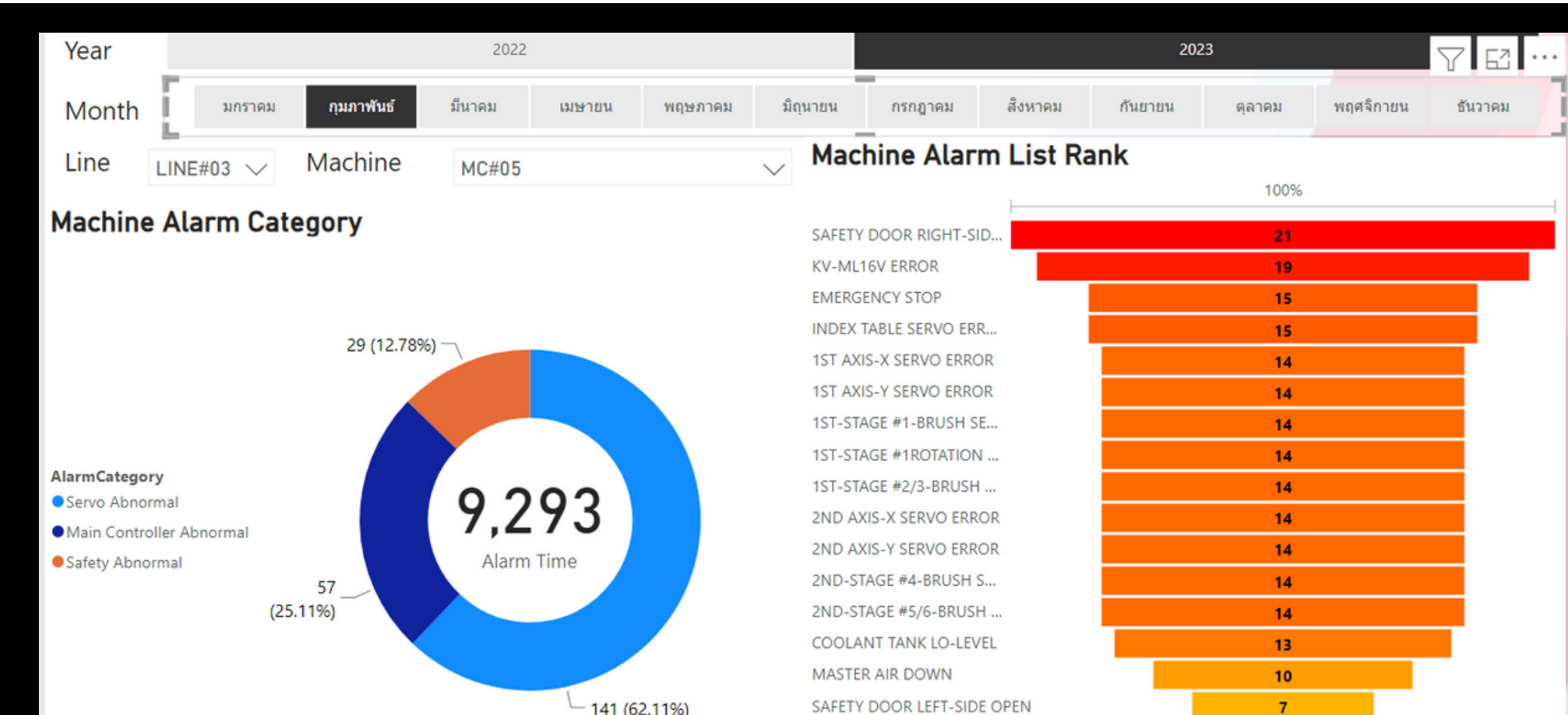


PROJECT 03

TOOL LIFE MONITORING (POWER BI)

PURPOSE

- 1) Reduce rework process due to tool is already over tool life and effect to efficiency of process part
- 2) Preventive Maintenance
- 2) Reduce loss time changing tool



PROJECT 03

TOP SECRET

[Line 3] MC No.6 Burr off Tool

Date : 27/01/2023

Time : 14:59:48

Shift : Day

HOME PAGE



Model : P3SH

CT : PLAN : 13 ACTUAL : 13.49 Sec.

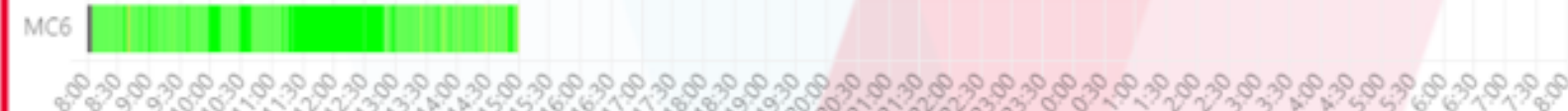
OK : 1272 Pcs. NG : 0 Pcs. %NG 0%

CYCLE TIME

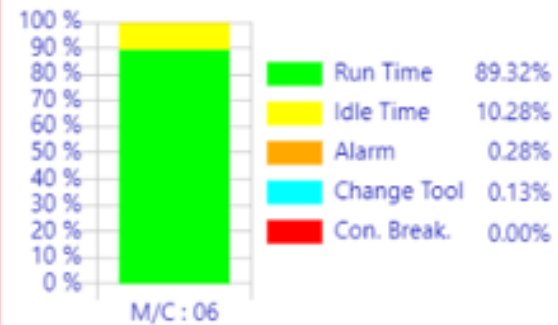
Machine Status



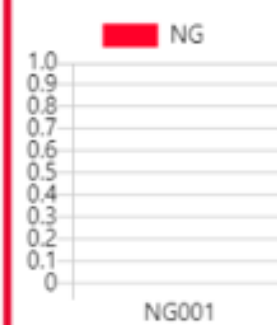
Run Idle Alarm Change Tool Controller Breakdown



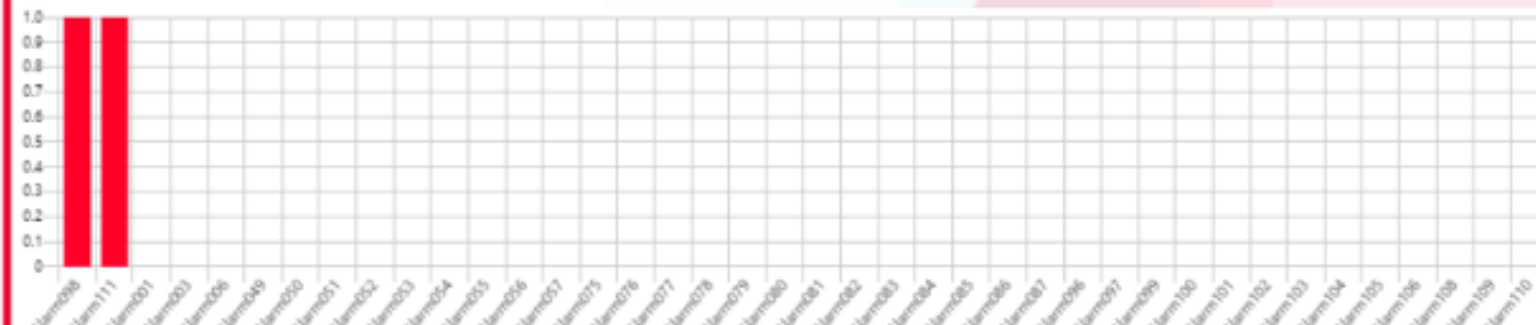
Machine Efficiency



NG List



Alarm List



ALARM HISTORY

Alarm Content

Tool Life Time

REAL-TIME

HISTORICAL



ST1
Brush



CLEAR



ST2
Brush



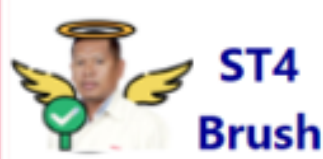
CLEAR



ST3
Brush



CLEAR



ST4
Brush

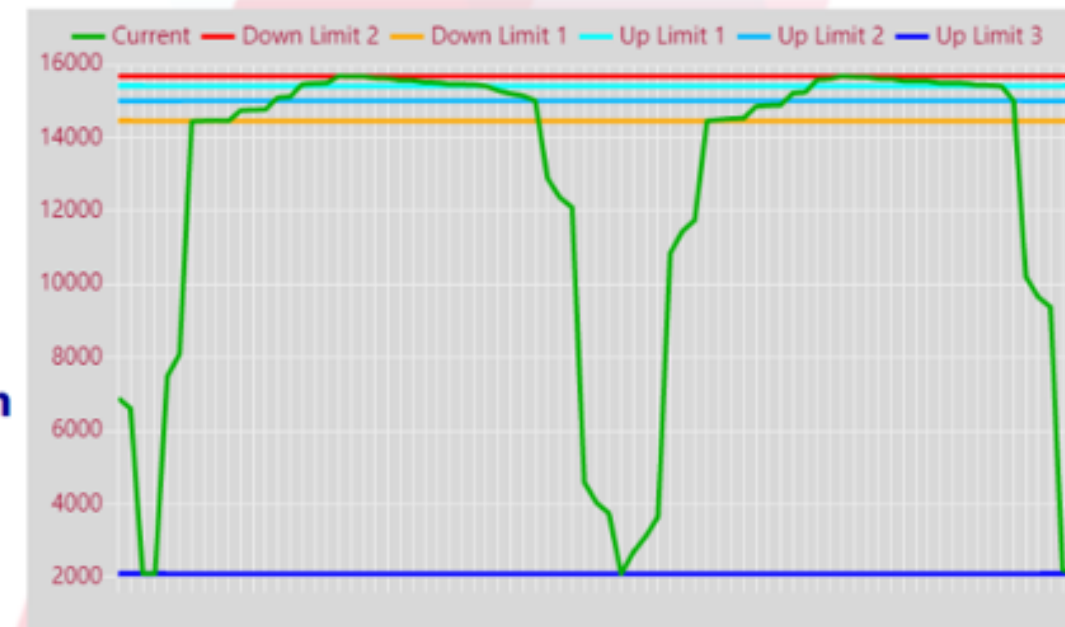


CLEAR

Servo Motor Position



ST1
Brush



CLEAR

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Current Position	6881	6602	2090	2087	7479	8080	14439	14454	14465	14453	14738	14750	14763	15087	15110	15448	15470	15482	15674	15665

PROJECT 03

TOP SECRET

GDP Head Grinding : Status Machine Result

Year

2022

2023

Month

มกราคม

กุมภาพันธ์

มีนาคม

เมษายน

พฤษภาคม

มิถุนายน

กรกฎาคม

สิงหาคม

กันยายน

ตุลาคม

พฤศจิกายน

ธันวาคม

Line

LINE#03

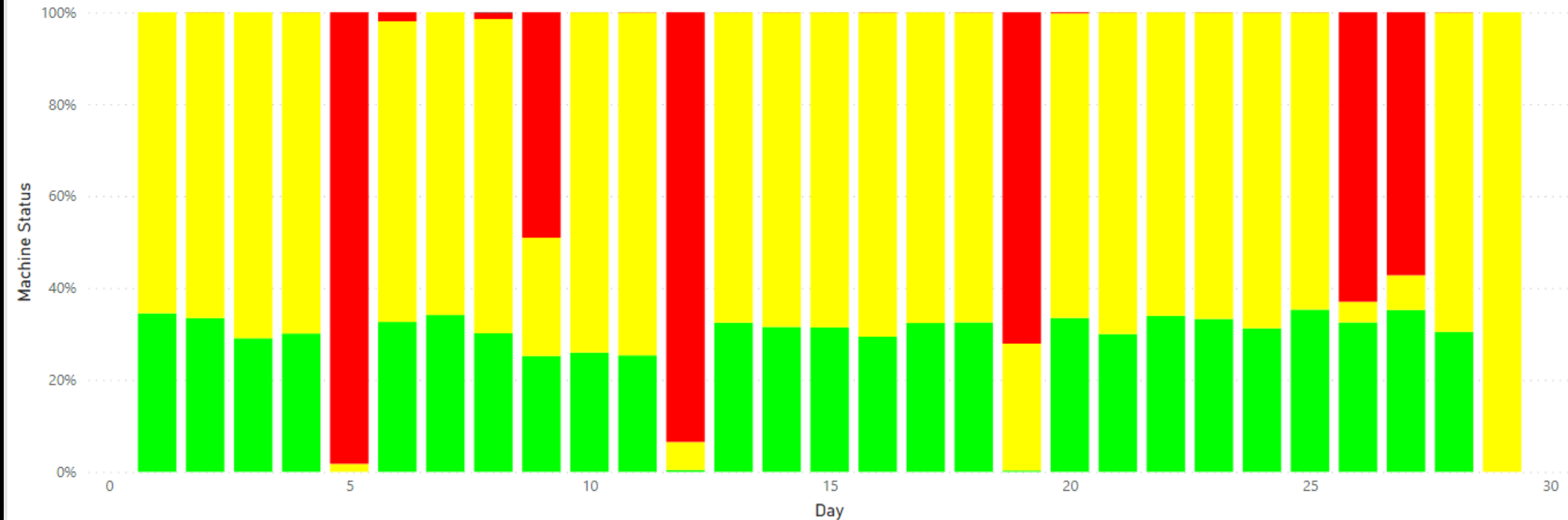
Machine

MC#05

MC#06

Machine Operation Ratio

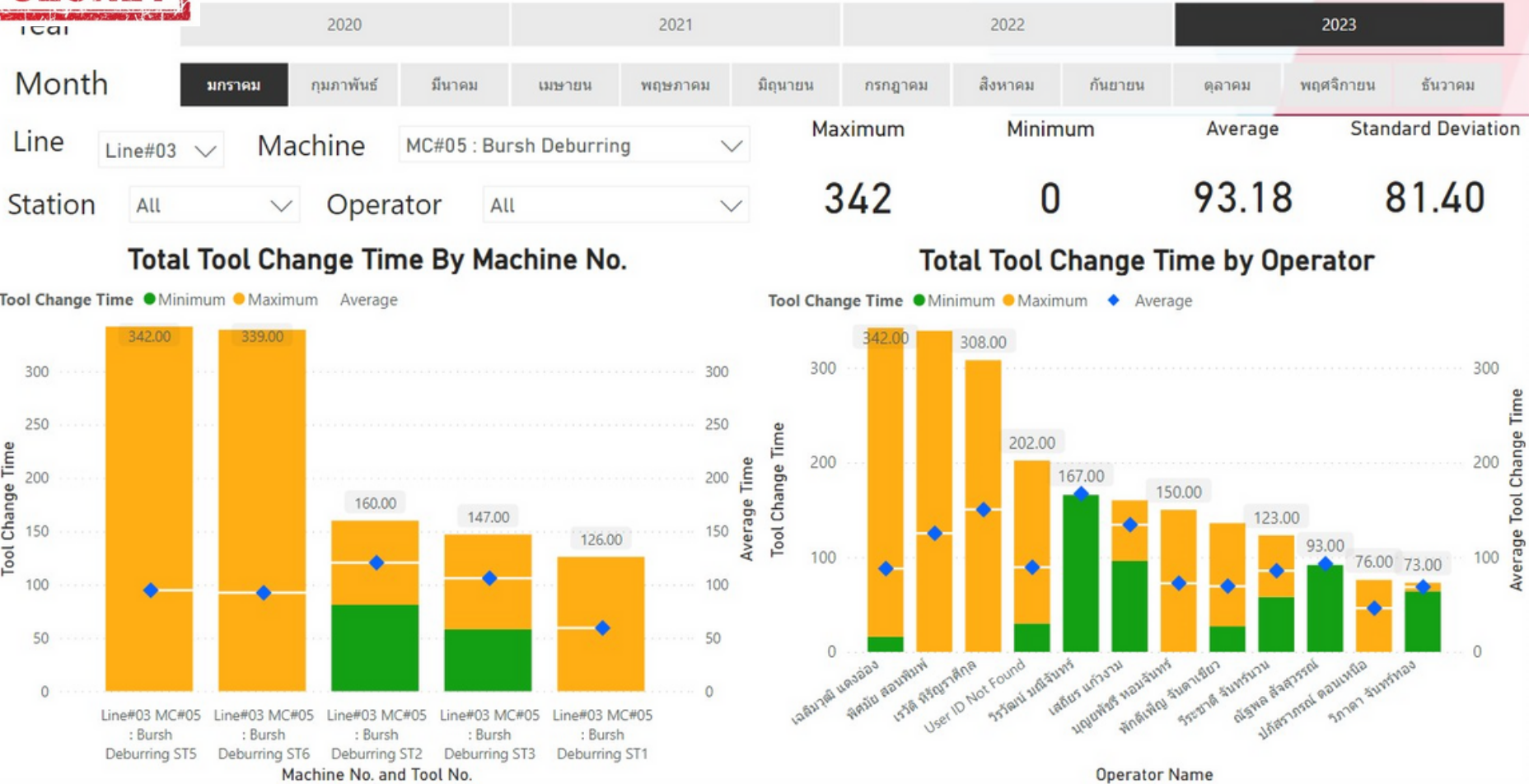
Machine Status ● Operating Time ● Idle Time ● Alarm Time ● Controller Breakdown Time



PROJECT 03

TOP SECRET

DP Head Grinding : Tool Change Time Analyze



DP Head Grinding : Tool usage Monitoring

Month 2022 2023

MC#06 : Burr Off Tool Station All

Line No	Machine No	Tool No	TL - Target	TL - Actual	UserID	Name	Case	Change Time
Line#03	MC#06 : Burr Off Tool	ST4	1000	1000	4673	วิภาดา จันทร์ทอง	A : Expected life / ครบอายุการใช้งาน	99
Line#03	MC#06 : Burr Off Tool	ST3	1500	1500	2675	วีระชาติ จันทร์นวน	A : Expected life / ครบอายุการใช้งาน	89
Line#03	MC#06 : Burr Off Tool	ST4	1000	1000	4673	วิภาดา จันทร์ทอง	A : Expected life / ครบอายุการใช้งาน	84
Line#03	MC#06 : Burr Off Tool	ST4	1000	1000	4673	วิภาดา จันทร์ทอง	A : Expected life / ครบอายุการใช้งาน	81
Line#03	MC#06 : Burr Off Tool	ST3	1500	1500	2675	วีระชาติ จันทร์นวน	A : Expected life / ครบอายุการใช้งาน	74
Line#03	MC#06 : Burr Off Tool	ST4	1000	1000	2675	วีระชาติ จันทร์นวน	A : Expected life / ครบอายุการใช้งาน	58
Line#03	MC#06 : Burr Off Tool	ST4	1000	1000	949	บุญพัชร หอมจันทร์	A : Expected life / ครบอายุการใช้งาน	58
Line#03	MC#06 : Burr Off Tool	ST3	1500	1500	949	บุญพัชร หอมจันทร์	A : Expected life / ครบอายุการใช้งาน	53
Line#03	MC#06 : Burr Off Tool	ST3	1500	1500	2675	วีระชาติ จันทร์นวน	A : Expected life / ครบอายุการใช้งาน	49
Line#03	MC#06 : Burr Off Tool	ST2	3500	3500	2675	วีระชาติ จันทร์นวน	A : Expected life / ครบอายุการใช้งาน	43
Line#03	MC#06 : Burr Off Tool	ST3	1500	1500	2675	วีระชาติ จันทร์นวน	A : Expected life / ครบอายุการใช้งาน	42
Line#03	MC#06 : Burr Off Tool	ST4	1000	1000	2675	วีระชาติ จันทร์นวน	A : Expected life / ครบอายุการใช้งาน	39
Line#03	MC#06 : Burr Off Tool	ST2	3500	3500	2675	วีระชาติ จันทร์นวน	A : Expected life / ครบอายุการใช้งาน	35
Line#03	MC#06 : Burr Off Tool	ST1	3500	3500	2675	วีระชาติ จันทร์นวน	A : Expected life / ครบอายุการใช้งาน	30
Line#03	MC#06 : Burr Off Tool	ST1	3500	3500	4673	วิภาดา จันทร์ทอง	A : Expected life / ครบอายุการใช้งาน	29
Line#03	MC#06 : Burr Off Tool	ST4	1000	1000	4452	วิวัฒน์ มณีจันทร์	A : Expected life / ครบอายุการใช้งาน	24
Line#03	MC#06 : Burr Off Tool	ST4	1000	998	949	บุญพัชร หอมจันทร์	A : Expected life / ครบอายุการใช้งาน	0
Line#03	MC#06 : Burr Off Tool	ST4	1000	980	2675	วีระชาติ จันทร์นวน	A : Expected life / ครบอายุการใช้งาน	0
Line#03	MC#06 : Burr Off Tool	ST3	1500	1495	2675	วีระชาติ จันทร์นวน	A : Expected life / ครบอายุการใช้งาน	0

**THANKS
FOR
WATCHING**

083-0118466

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