

introducing **ABOUT ME**

IoT 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

EXPERIENCE

IOT ENGINEER & IOT DASHBOARD DEVELOPER

Denso Innovative Manufacturing Solution Asia

June 2022 - Present

DATA ANALYST (INTERNSHIP)

Denso International Asia Co.,Ltd

2021 (Internship 4 months)



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

2015 - 2018
Secondary School

Sang Arun School

2018 - 2022
Bachelor Degree

Thai-nichi Institute of Technology
Graduated in Industrial Engineering
(GPA: 3.23)

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)

04

Example

Data analysis service report

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

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

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

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

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

14 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,

15 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,

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

17 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,

18 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

19 FROM delivery_machining t1

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

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

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

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

24 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)

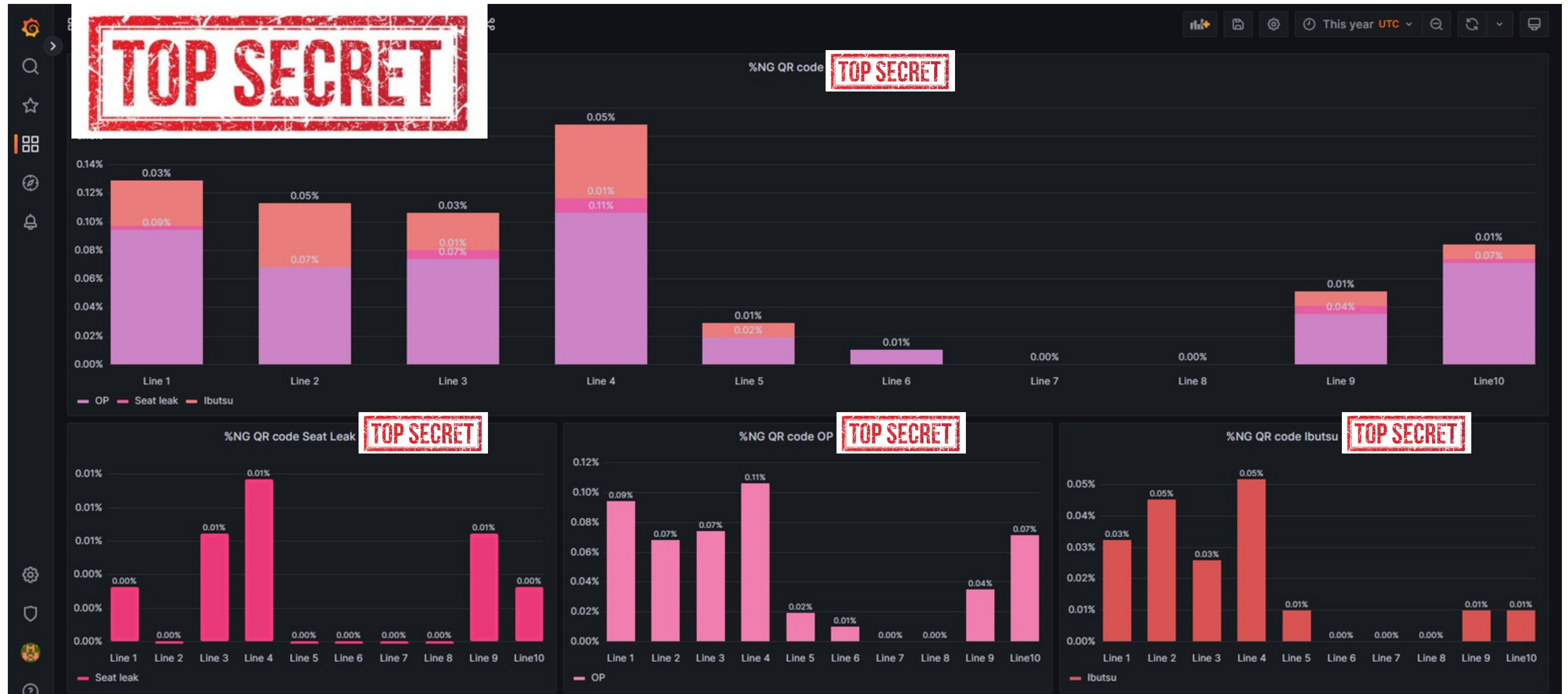
25)

CREATE MASTER TABLE



PROJECT 01

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

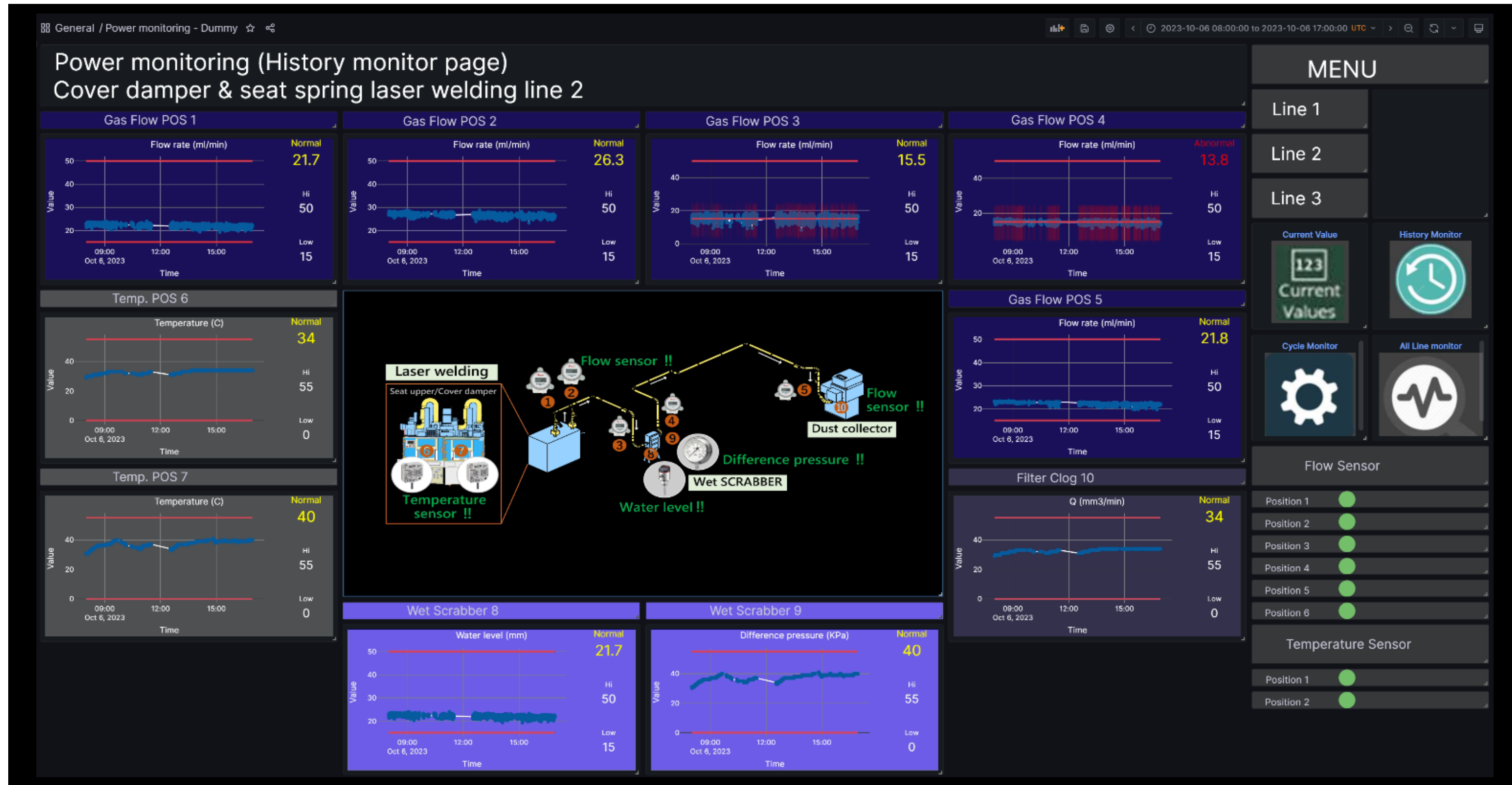


PROJECT 02

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



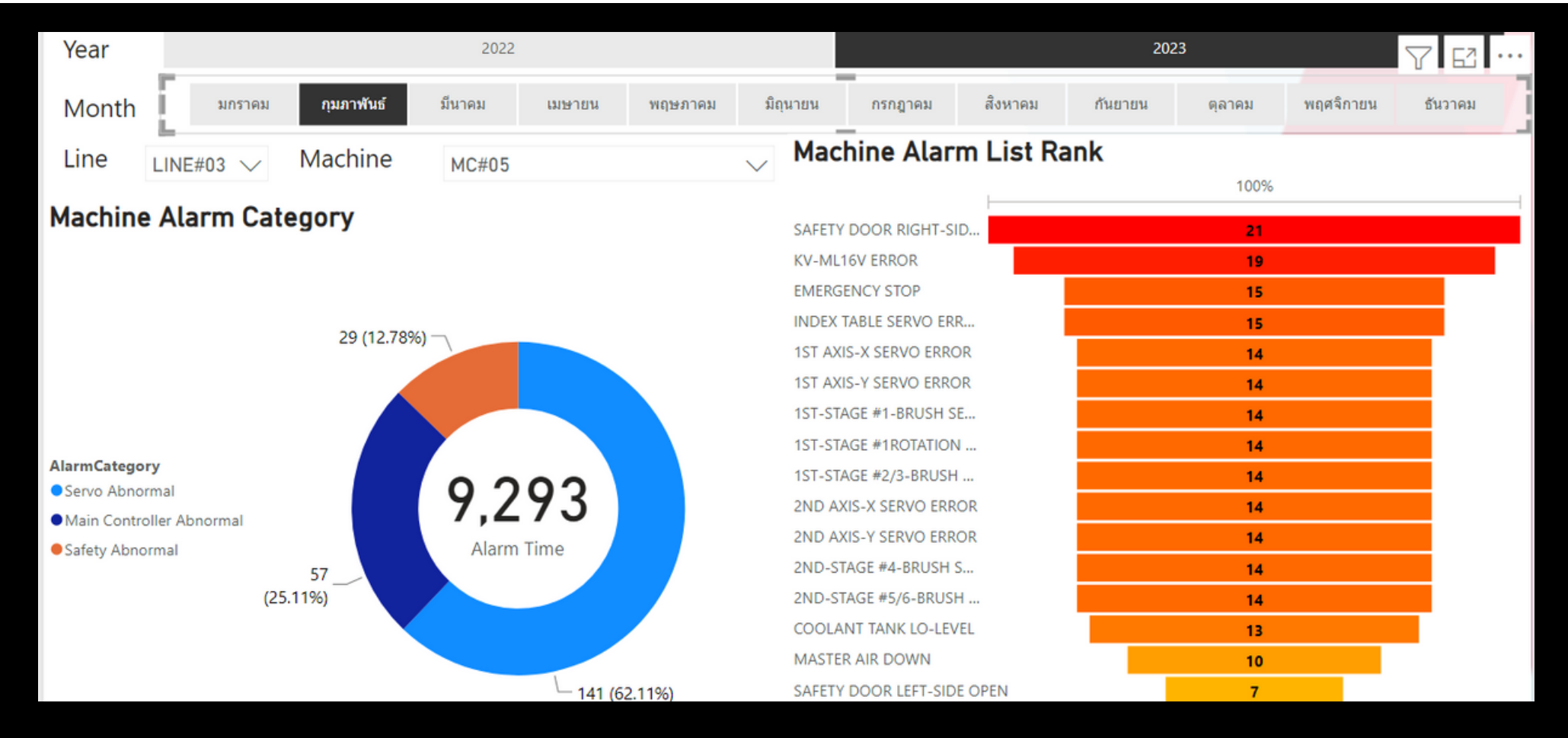


PROJECT 03

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 to Reduce loss time changing tool



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

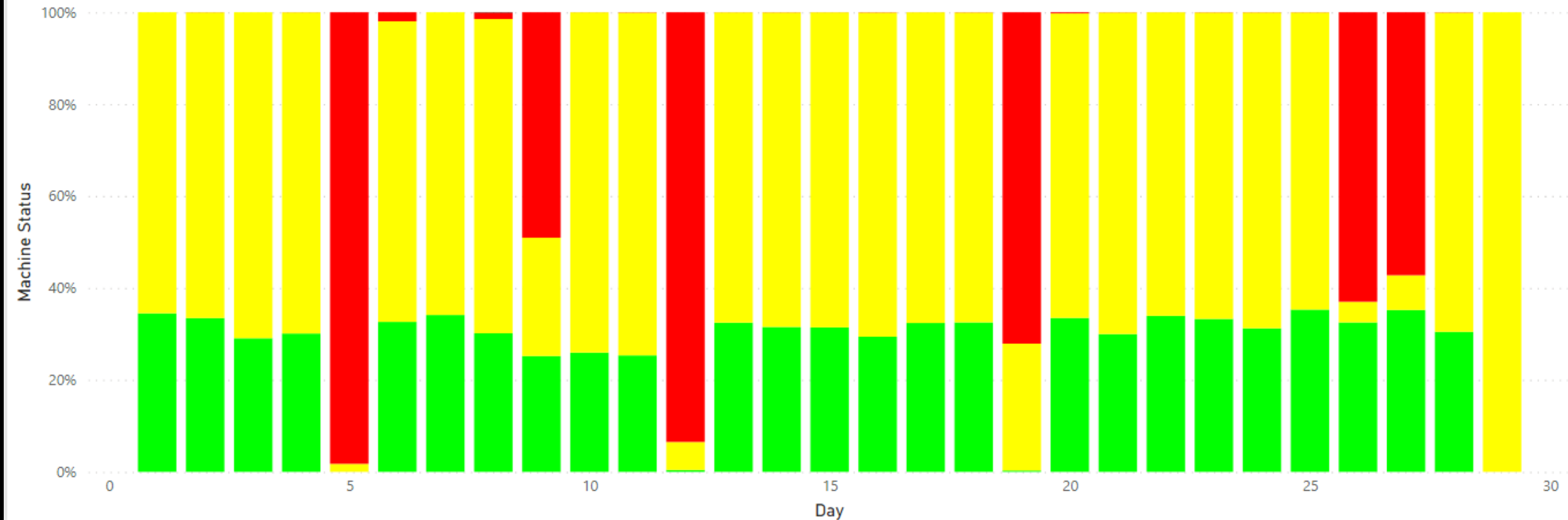
Machine

MC#05

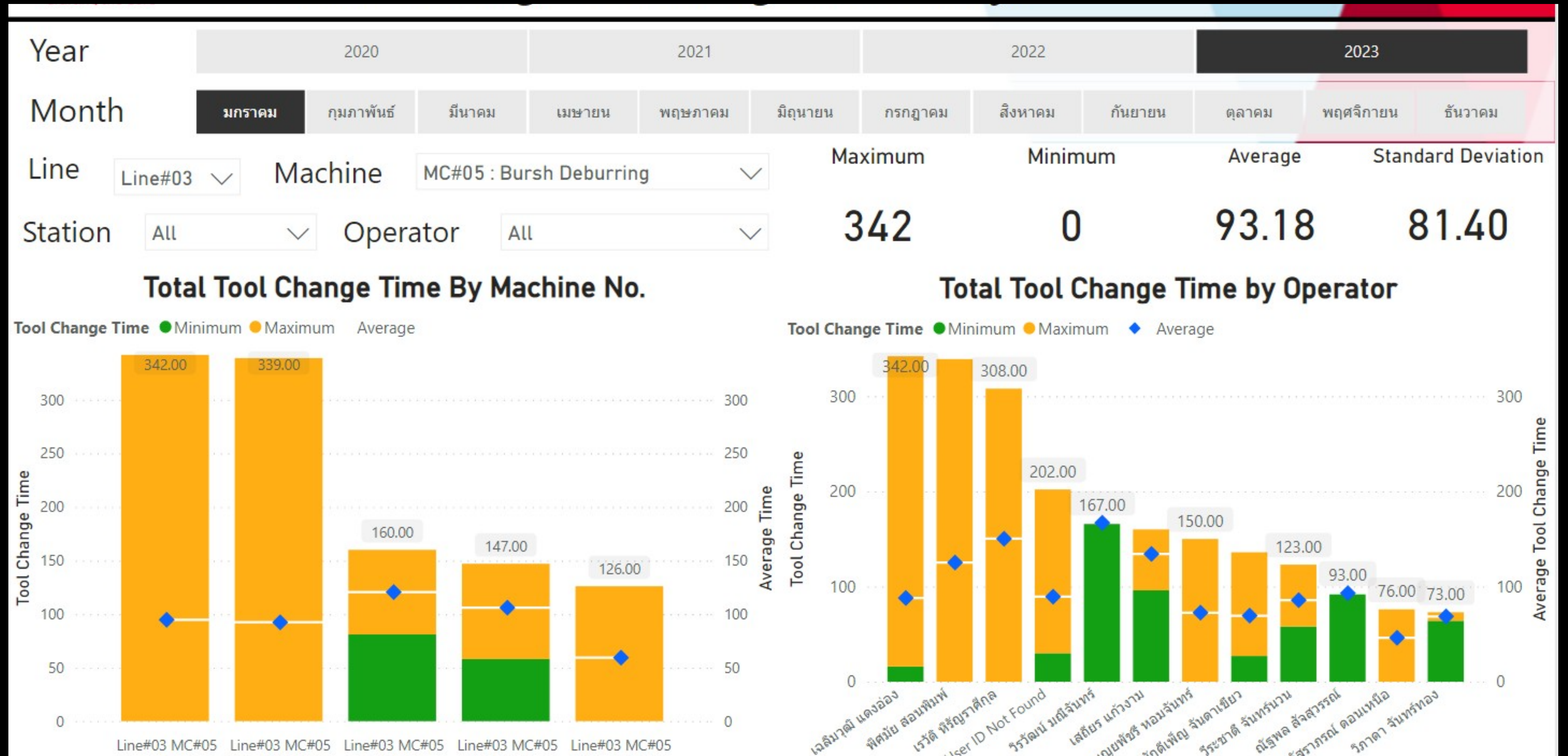
MC#06

Machine Operation Ratio

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

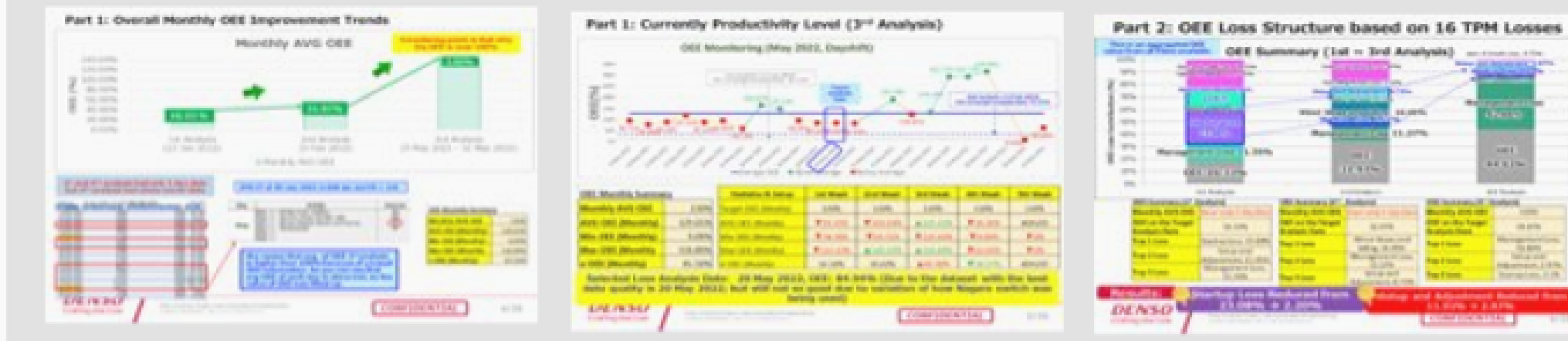


PROJECT 03

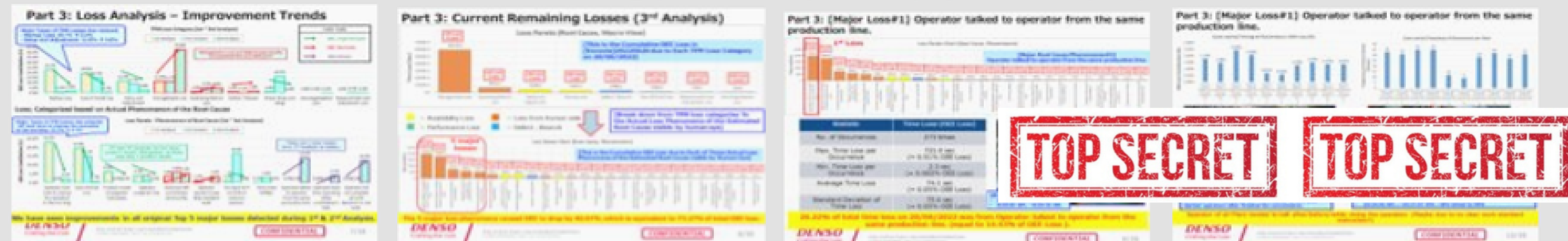


EXAMPLE DATA REPORT

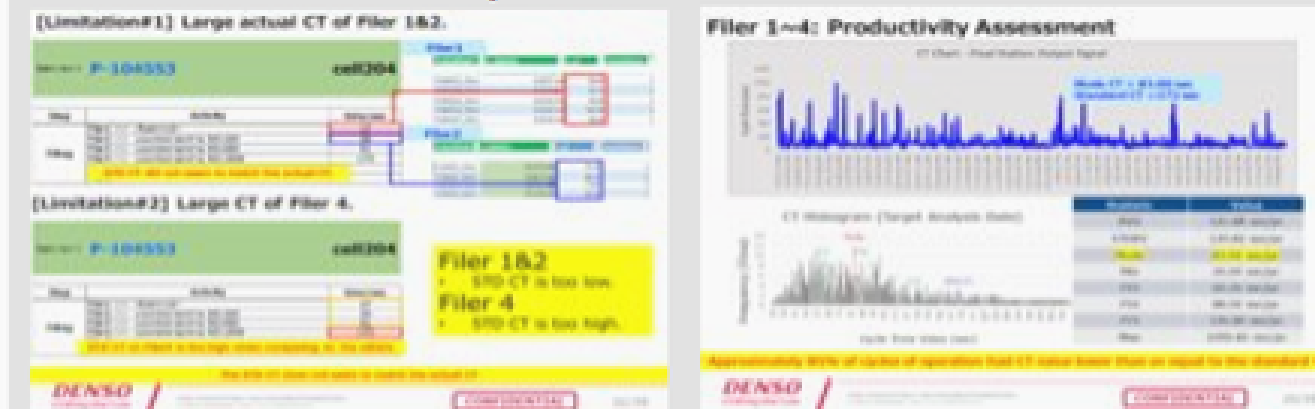
Summary productivity status (OEE Analysis)



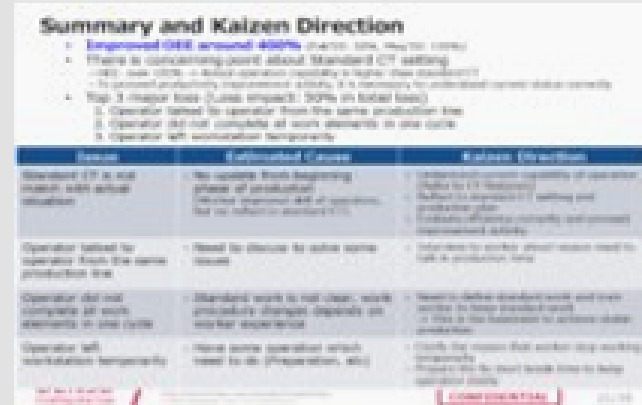
Problems causing productivity to drop (Loss Analysis)



Cycle time statistics



Root causes and kaizen ideas



**THANKS
FOR
WATCHING**

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