

The background features a dark blue gradient with a faint, glowing network of interconnected nodes and lines, primarily concentrated on the left side. In the center, the word "TALPA" is displayed in a bold, white, sans-serif font. Behind the letters "T" and "A" are large, semi-transparent, dark blue versions of the same letters, creating a layered effect.

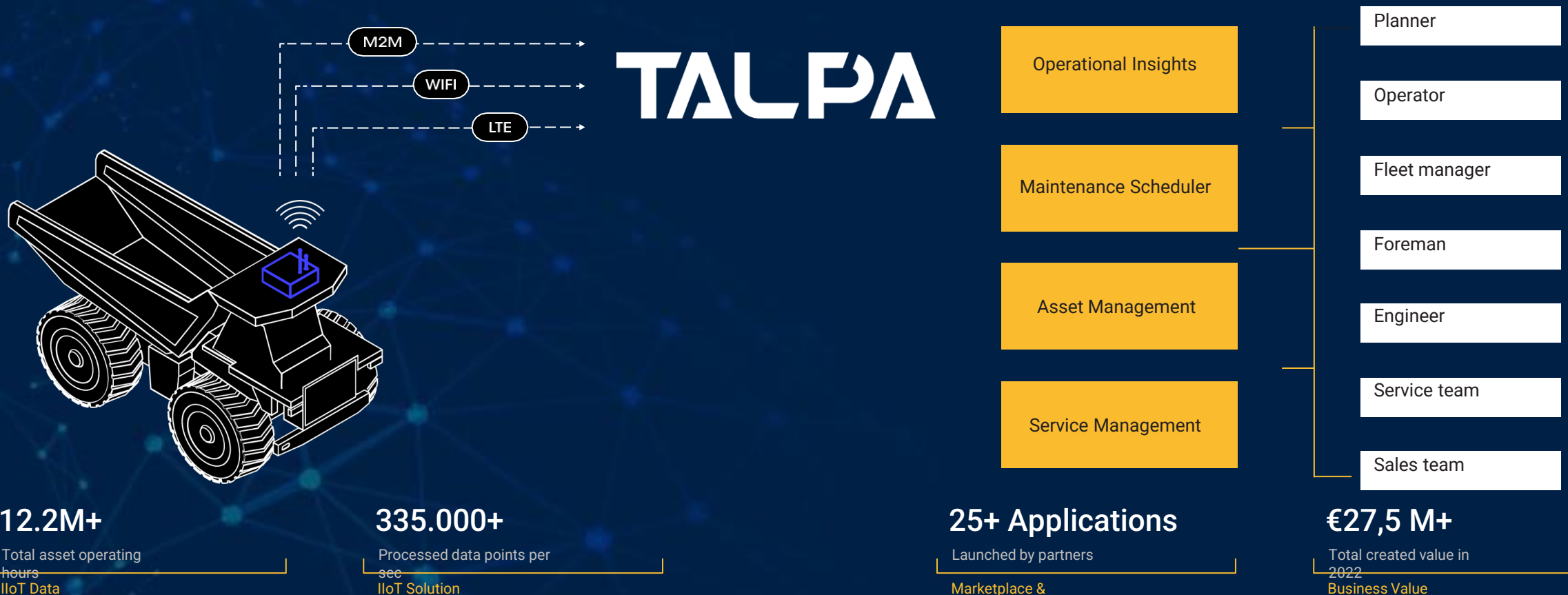
# TALPA

**Platform features presentation**



**We believe in the transformative  
power of people, machines, and data.**

## The industrial AI platform with a data science-first approach to guarantee business value along the data value chain.



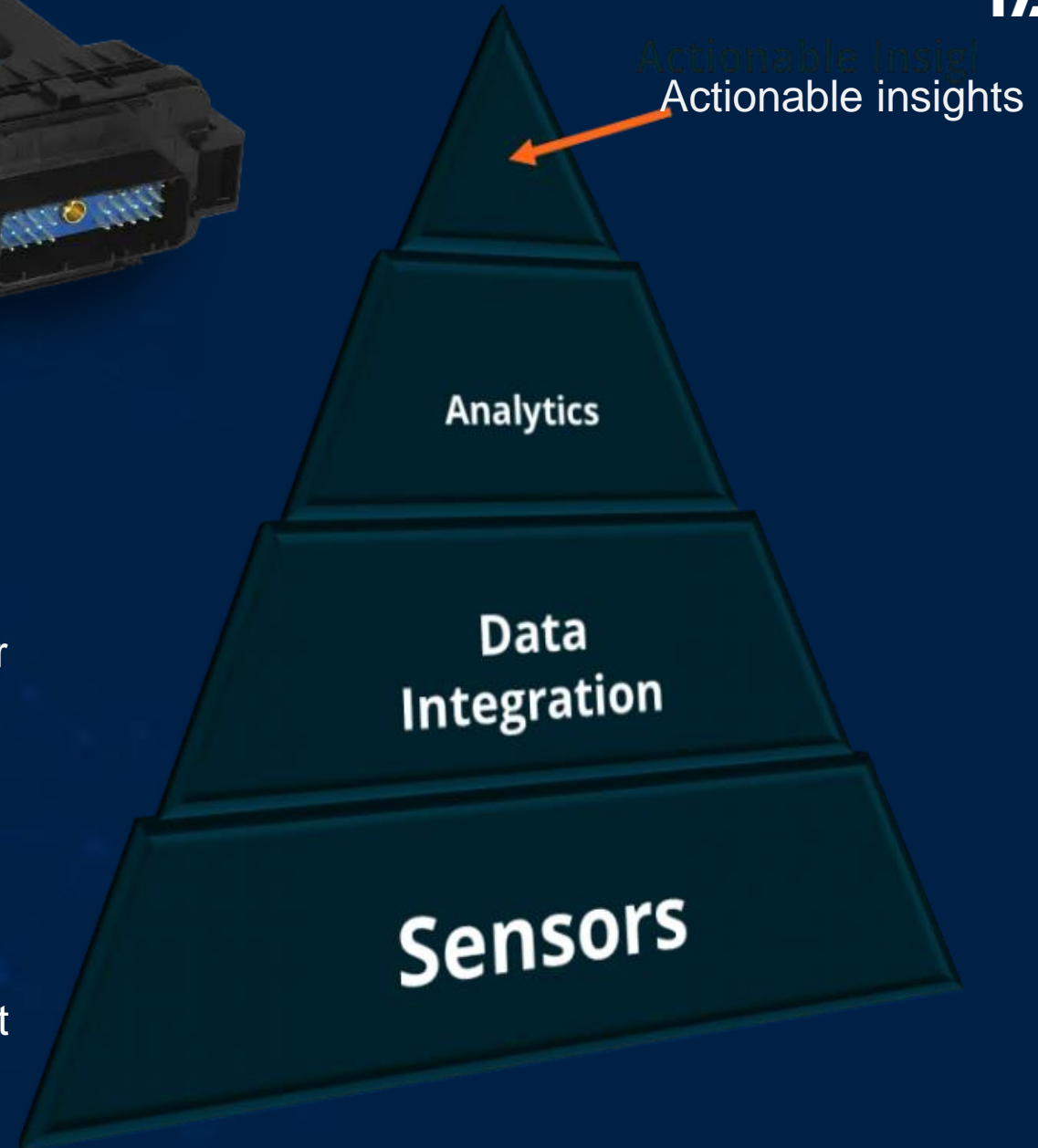
## Technology

## Access to data



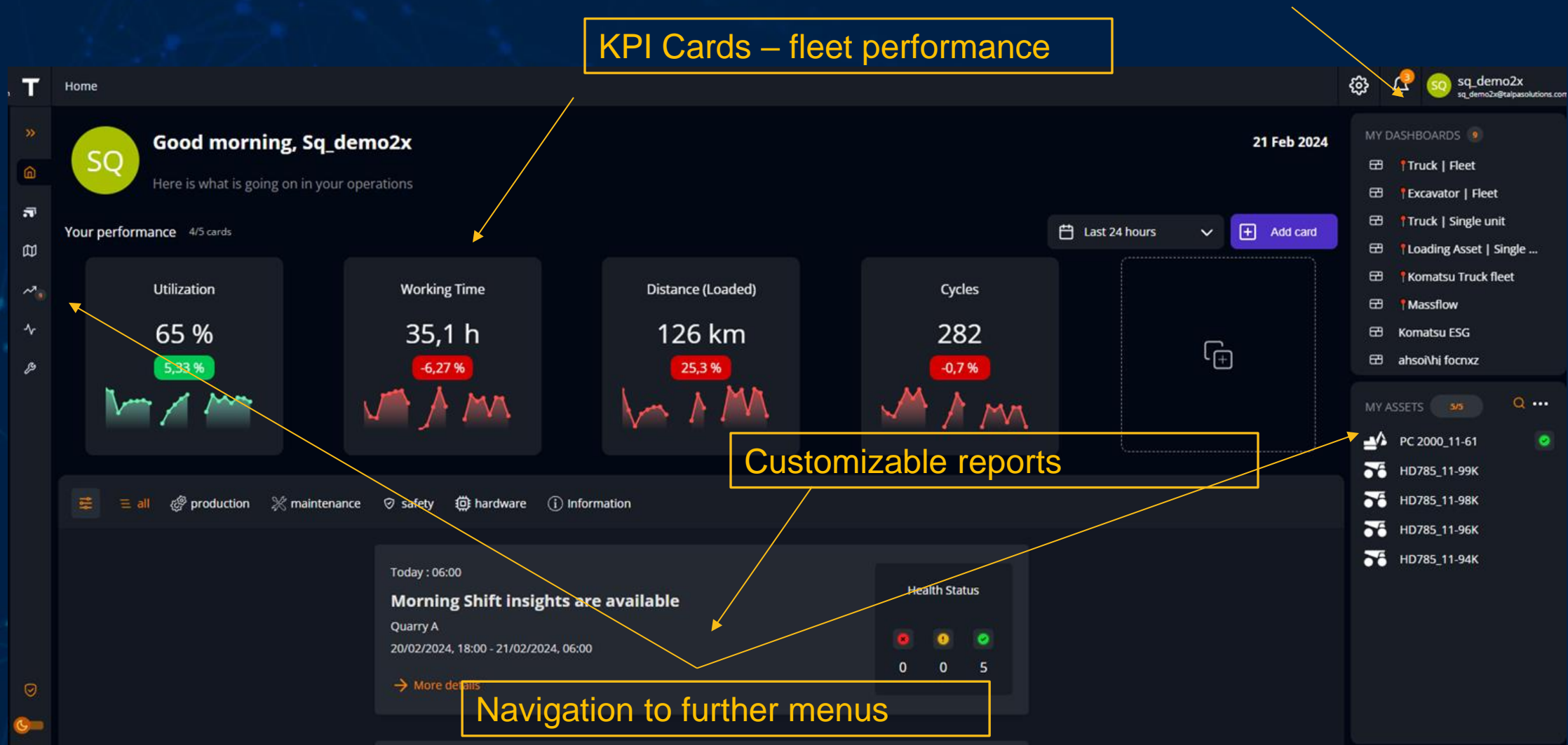
### Main features:

- A powerful data logging device captures data from embedded and retrofit sensors on the machine.
- All raw data is logged at a resolution of 10 Hz (or higher, if required).
- Proprietary EDGE-compression technology allows for versatile delivery to the platform and low-cost data transfer.
- WiFi, LTE, and M2M communication for various applications
- High-quality GPS module and inertial motion unit (IMU)



# WEB INTERFACE: START PAGE

TALPA





- Start by reviewing main KPIs (choice of five depending on the user preferences) for 24H, 7 and 30 days. Result compared to the previous period
- Set customizable (shift, day, etc. reports automatically formed based on the incoming data)
- Get notification about important events (engine or machine critical errors, over speeding, excess idling, etc. in the notification menu\*)
- Navigate to further menus or favourite dashboard with one click

\* - custom function, to be discussed at the deployment stage

# WEB INTERFACE: ASSET LIST

TALPA

The screenshot displays the TALPA Solutions web interface for the Asset List. The interface is divided into a sidebar and a main content area. The sidebar contains navigation links: Home, Assets (selected), Map, Dashboards, Signals, and Maintenance. The main content area features a search bar and a filter bar with tabs for Asset Types, OEMs, Sites, Models, Locations, and Health. Below the filter bar is a table of assets with columns: TYPE, ASSET, HEALTH, LAST ANALYSIS, ENGINE HOURS (h), LAST POSITION, SITE, and OEM. The table lists five assets, with the fourth asset, PC 2000\_11-6, showing a green checkmark and 'OK' in the Health column. Annotations highlight the filter tabs and the asset health status.

**Assets** 5/5

filter: 0 Asset Types OEMs Sites Models Locations Health

> TYPE	> ASSET	> HEALTH	> LAST ANALYSIS new to old	> ENGINE HOURS (h)	> LAST POSITION	> SITE	> OEM
	HD785_11-99K	-	4 minutes ago	-	Mine_Pit	CertainTeed Gypsum - Saint Gobain	Kom
	HD785_11-94K	-	4 minutes ago	-	unknown	CertainTeed Gypsum - Saint Gobain	Kom
	HD785_11-98K	-	5 minutes ago	-	Mine_Pit	CertainTeed Gypsum - Saint Gobain	Kom
	PC 2000_11-6	OK	11 hours ago	-	Mine_Pit	CertainTeed Gypsum - Saint Gobain	Kom
	HD785_11-96K	-	13 hours ago	-	Stockpile	CertainTeed Gypsum - Saint Gobain	Kom

Multiple filters

Access to machine signals and asset health overview

- View the entire integrated fleet on one page
- Use filters to see machines of particular site, (in case multiple are integrated), type, model, manufacturer. Convenient for multi-site deployment.
- In case engine data is available\* Health state (no alerts, warnings or errors) is displayed. Investigate errors and warnings in two clicks

\* - normally available for the machines younger than 10 years, to be investigated before the integration



# WEB INTERFACE: MAP VIEW

TALPA

Time picker



Heatmap builder with various filters

- Detect asset location at the time of last data transfer
- Detect hotspots and dimensions of different activities (driving loaded/unloaded, idling loaded/unloaded, etc.) for better analysis of the bottlenecks
- Choose any time of analysis from 1 shift to several months with the time picker
- Integrate satellite or drone\* pictures

\* - custom function, to be discussed at the deployment stage

# WEB INTERFACE: BI TOOL

TALPA

The screenshot displays the TALPA SOLUTIONS web interface. On the left is a dark sidebar with navigation links: Home, Assets, Map, Dashboards (highlighted with a '7' badge), Signals, and Maintenance. At the bottom of the sidebar are links for Privacy Policy and a dark mode toggle. The main content area is titled 'Dashboards' and features a 'My Dashboards' section with filters for 'All' (7), 'Shared by you' (0), and 'Shared by others' (6). Below the filters is a grid of dashboard tiles. The first six tiles are 'Pre-configured dashboards', each featuring the TALPA SOLUTIONS logo and a title: 'Truck | Fleet', 'Excavator | Fleet', 'Truck | Single unit', 'Loading Asset | Single unit', 'Komatsu Truck fleet', and 'Massflow'. The seventh tile is a 'User-created dashboard' titled 'Komatsu ESG', which is highlighted by a yellow box and an arrow. A yellow box labeled 'User-created dashboards' is positioned above the 'Komatsu ESG' tile. A yellow box labeled 'Pre-configured dashboards' is positioned below the first six tiles. A yellow box labeled 'Dashboard configuration tool' is positioned to the right of the grid, with an arrow pointing to a plus icon in a yellow circle at the bottom right of the dashboard area.

TALPA SOLUTIONS

Dashboards

My Dashboards

All 7 Shared by you 0 Shared by others 6

Truck | Fleet Excavator | Fleet Truck | Single unit Loading Asset | Single unit Komatsu Truck fleet Massflow Komatsu ESG

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Dashboard configuration tool

Pre-configured dashboards

User-created dashboards

Privacy Policy

Dashboard configuration tool

- Get a set of pre-configured dashboards for your project
- Fleet view and single view dashboards are available for the entire fleet of certain asset types
- Configure your own dashboards within several clicks; just choose from available asset dimensions and widgets
- Share dashboards with your colleagues, contractors, etc. for the transparency of analytics



# WEB INTERFACE: BI TOOL – DASHBOARDS (FLEET VIEW)

TALPA



Comparison of performance in various dimensions

Cycle analysis in various dimensions

Material flows between geofences

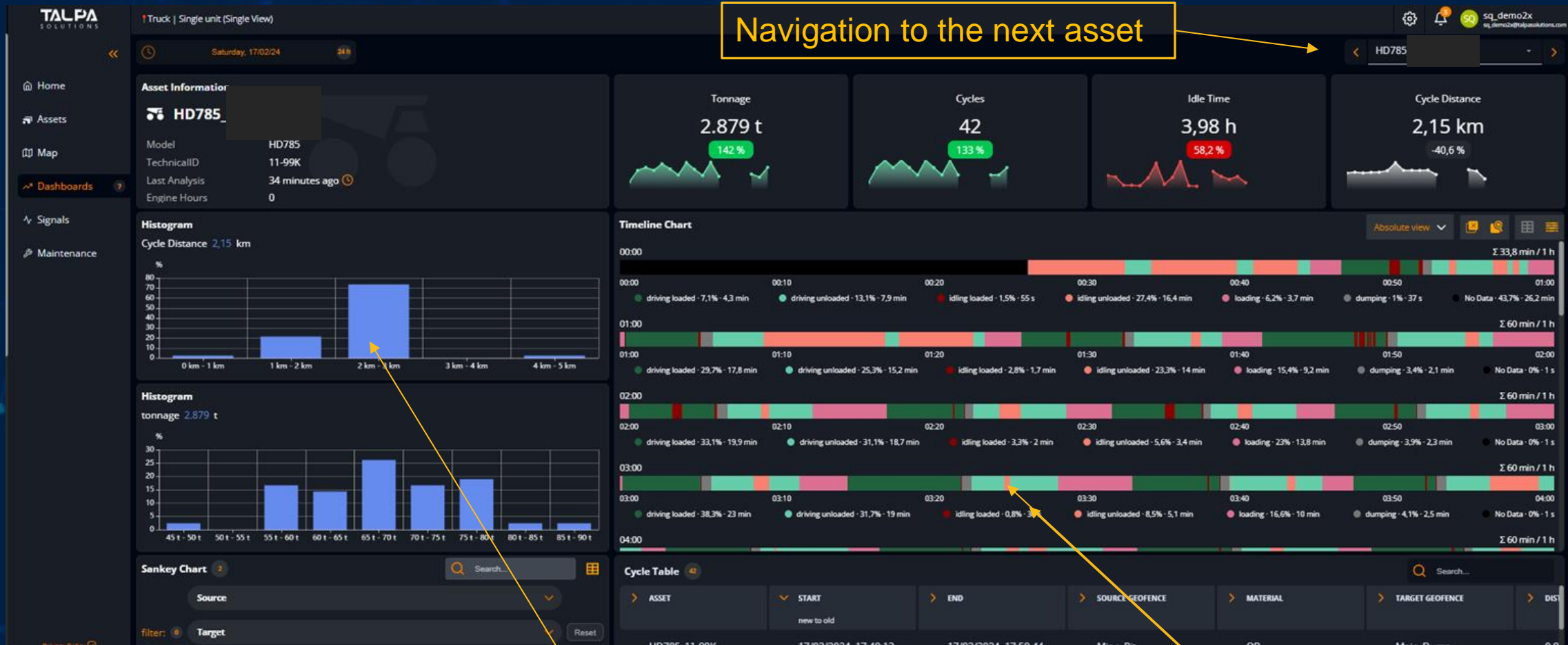


- All machines of certain type on one screen
- Comparison of performance for any time period for all assets
- Cycle average information for selected period
- Main KPI's
- Material flows between geofences

.....and much more (fully customizable based on available data)

# WEB INTERFACE: BI TOOL – DASHBOARDS (SINGLE UNIT VIEW)

TALPA



Cycle analysis in various dimensions

Detailed activity analysis

- Get detailed distribution of cycle duration, distance, etc.
- Get minute-by-minute or summary of activities per day or per hour within one day
- Define main KPI's to track and get instant access to them
- Navigate to the next asset in one click

.....and much more (fully customizable based on available data)

# WEB INTERFACE: BI TOOL – SIGNAL EXPLORER

TALPA



Signal picker

- View any of the available raw signals
- Combine as many signals as required together on one screen
- Choose a period of one hour and then zoom to a 1 second resolution on demand
- Used normally for root cause analysis, incident investigation, warranty cases, engineering studies, etc.



# WEB INTERFACE: BI TOOL – MAINTENANCE TOOL

TALPA

**TALPA SOLUTIONS** Maintenance

Settings Notification Demo Account (demoaccount@talpa-solutions.com)

**Maintenance** **E&W indicator** **Period picker**

Fleet: Demo Fleet Area: - Shift plan: Morning Shift Time: 21 Feb 2024, 04:00

**Assets** 11 all **Assets** 0 Priority **Assets** 0 Error **Assets** 2 Warning **Assets** 2 Malfunction **Assets** 0 Protection

Asset	0	0	1	1	0	0	Operating Time	Engine Hours
> Large Hole Auger - 251	0	0	1	1	0	✓	1,33 h	5.053 h
> Roof Bolter - 256	0	0	1	1	0	✓	0,15 h	4.994 h
> Roof Bolter - 227	0	0	0	0	0	✓	3,12 h	3.467 h
> LHD LH514 - 258	0	0	0	0	0	✓	0,04 h	24.267 h
> LHD ST1030 - 254	0	0	0	0	0	✓	-	25.288 h
> Large Hole Auger - 260	0	0	0	0	0	✓	-	864 h
> LHD ST1530 - 242	0	0	0	0	0	✓	-	27.968 h

Privacy Policy



# WEB INTERFACE: BI TOOL – MAINTENANCE TOOL

TALPA

TALPA SOLUTIONS

<<

Home

Assets

Dashboards 17

Signals

Planning

Maintenance

Privacy Policy

Maintenance > Asset Health: Roof Bolter - 256 > Overview

TALPA SOLUTIONS

DE demoaccount demo@talpa-solutions.com

ROOF BOLTER - 256

Severity

Insights 26 Last 24h

Overview Insights Statistics

Manufacturers: SMAG

Asset Type: ROOF BOLTER

TechnicalID: 256

Integrated Since: 29/05/2018

Last Analysis: 21/02/2024, 08:02

Hour Meter: 4.994

Current Location: LÄÄNE TRANSPORDISTREKK

Engine

Severity

Insights 26 Last 24h

Model: -

Hour Meter: 4.994

Fuel Type: -

Make: -

serial number: -

Unit Number: -

FILLING/LOAD LEVELS LAST 24H

Engine Coolant 99.6 %

Soot Load 53 %

Ash Load 56 %

COUNTERS LAST 24H

Engine Hours 4994.45

Total Revolutions 352641980

Total Fuel Used 32159.5

Diesel Particulate Filter Time Since Last Active Regeneration 5.82

TEMPERATURES LAST 24H MIN/AVG/MAX

Intake Manifold 16 56 75 °C

Engine Exhaust 1 175 176 176 °C

Engine Coolant 21 75 86 °C

Diesel Oxidation Catalyst Intake 29 147 253 °C

PRESSURES LAST 24H MIN/AVG/MAX

Intake Manifold 98.0 125.4 260.0 kPa

Air Filter Differential 12.5 12.5 12.5 kPa

Fuel Delivery 0.0 247.7 652.0 kPa

Oil 0.0 208.21 696.0 kPa

Overview of main parameters

# WEB INTERFACE: BI TOOL – MAINTENANCE TOOL

TALPA

TALPA  
SOLUTIONS

Maintenance > Asset Health: Roof Bolter - 256 > Statistics

demoaccount  
demo@talpa-solutions.com

Home

Assets

Dashboards

Signals

Planning

Maintenance

Privacy Policy

ROOF BOLTER - 256

Severity

Insights 26 Last 24h

Overview Insights Statistics

Manufacturer: SMAG  
Asset Type: ROOF BOLTER  
TechnicalID: 256

Integrated Since: 29/05/2018  
Last Analysis: 21/02/2024, 08:02

Hour Meter: 4.994  
Current Location: LÄÄNE TRANSPORDISTREKK

Insights by Count 3 Last 7 Days

Search...

CODE	LABEL	TYPE	SEVERITY	COUNT	CHANGE
97 - 12	Water In Fuel Indicator 1	J1939		84	0 since 14/02/202
524024 - 11	Manufacturer Assignable SPN	J1939		2	0 since 14/02/202
94 - 1	Engine Fuel Delivery Pressure	J1939		1	0 since 14/02/202

Insights by Duration 3 Last 7 Days

Search...

CODE	LABEL	TYPE	SEVERITY	DURATION	CHANGE
97 - 12	Water In Fuel Indicator 1	J1939		35,8 h	0 since 14/02/202
524024 - 11	Manufacturer Assignable SPN	J1939		0,45 h	0 since 14/02/202
94 - 1	Engine Fuel Delivery Pressure	J1939		0,01 h	0 since 14/02/202

Errors & warnings statistics

- View the conditions of your fleet at the end of each shift
- Deep dive into errors and warnings, investigate together with other peers
- See asset health conditions at any time once the asset is integrated
- Track statistics of registered events up to 30 days – be prepared for next maintenance



**HAVE MORE QUESTIONS?**  
**BOOK A DEMO!**

# TALPA

Let's build  
something together!

# TA

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