

MatManager™



PAVING QUALITY SYSTEM

MatManager™

Monitor key quality parameters of your paving job with the MatManager™ paving quality system.

The MatManager™ enables you to keep track of material consumption with real-time measurements to ensure you are on target and eliminate material overruns. Document how many kg you have put down per m² paved and register instances of stop, start and loading to document your work flow. Paving speed, paved distance and material temperature are also presented on the 7" graphical display.

Export and save all logged data at the end of the paving job for data processing and analysis. Deliver a printed report of key data to validate that road specifications have been met.

How it works

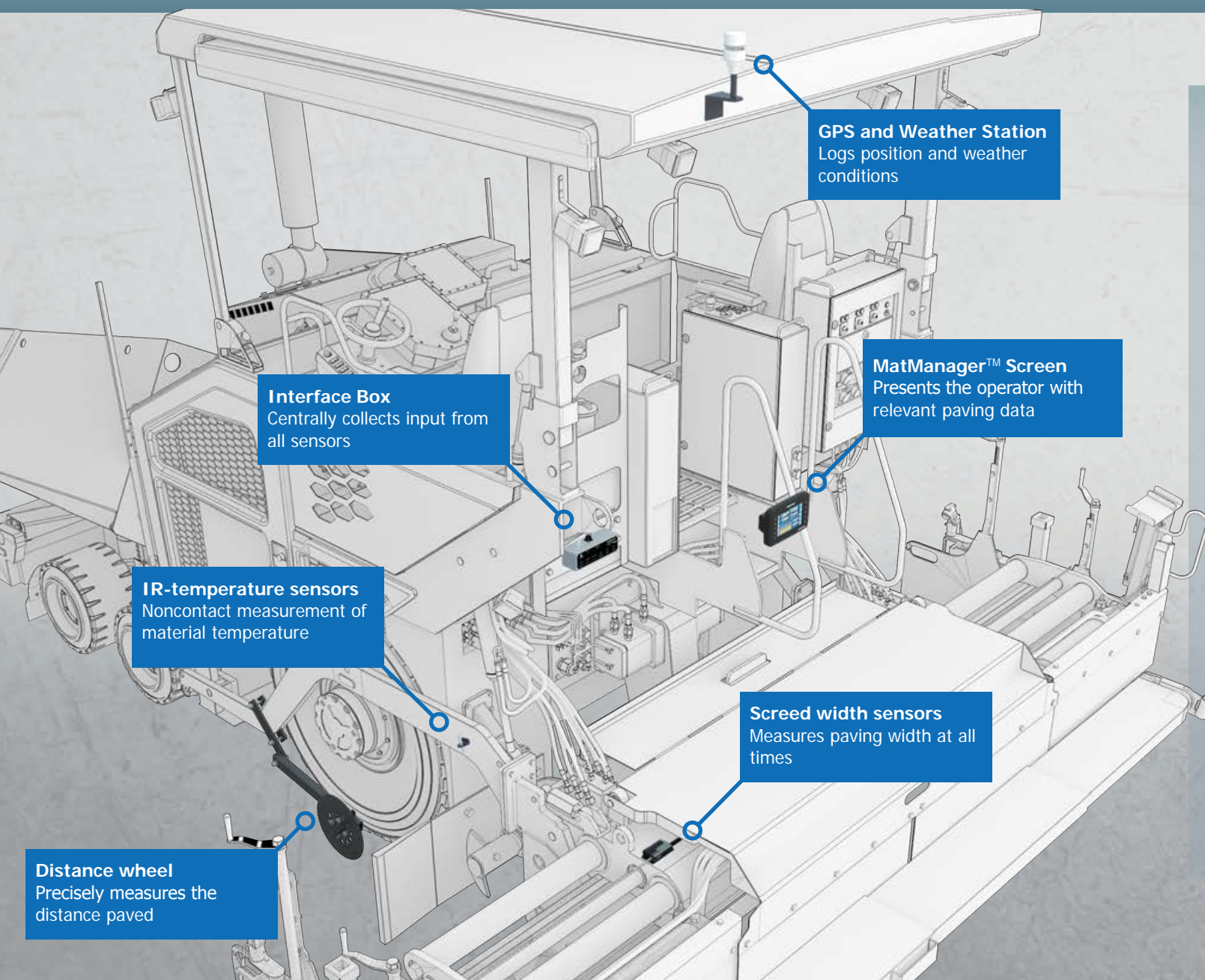
The MatManager™ uses a range of different input sensors mounted on the asphalt paver to measure and calculate the key paving parameters. The data is collected via the MatManager™ Interface Box.

Advantages

- Monitor material consumption to assure right amount is laid and ordered from plant
- Get load history for better timing of incoming loads
- Calculates the distance and area paved
- Monitor and report quality parameters such as material temperature, start/stops, tamper frequency and consistency of speed
- Export logged data for analysis and reporting



Coming soon!
The system is continually upgraded with new features. Existing systems can be upgraded as new features are released. Next planned upgrade is GSM data transfer



SCREENSHOT EXAMPLES



Four of the six main displays of key paving parameters for use while paving your job

MatWiser™

MatManager™ continuously collects paving data to a log file that can be used for further analysis using the MatWiser™ reporting system.

MatWiser™ is a web-based graphical reporting system, offering full access and visual overview of all jobs and machines, enabling the user to create custom reports, for the perfect overview of all the paving jobs done. Use data internally in your organization or as documentation to your customer. Data can be presented either as printed reports or by sharing access to the MatWiser™.

Each individual job can be reviewed to validate that the specifications of the job such as location, area and material consumption, have been met. The system will also keep track of the loads received, the temperature of the material and where it has been laid down.

Further more, MatWiser™ is an excellent tool to optimize good paving praxis such as keeping consistent speed, reducing the number of start/stops and adjusting the tamper RPM to achieve the best, enduring and most economical paving.

Advantages

- Compare job results to specifications
- Provide full job documentation to customers
- Optimize performance on key paving quality parameters
- Store job data for future analysis of problem areas in the road
- Correlate job data to geographical positions
- Create printed job reports

TF NOVO 1

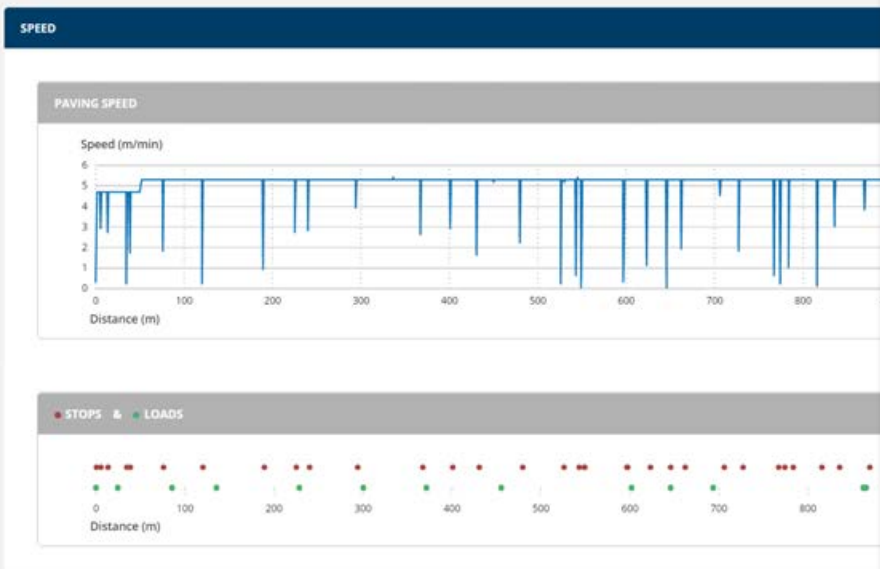
Summary

| Basic Info | Process Info | Material Info | Material Target |
|-------------------------|-----------------------------------|------------------------------|-----------------------------|
| Job TF NOVO 1 | Length 1.089 m | Material Type 16 | Specification 95,0 kg/m³ |
| Date 03-05-2017 | Average Paving Speed 5,2 m/min | Material Density — | Consumption 99,6 kg/m² |
| Paver Vögele 1803-3i | Area 4.417 m² | Material 439,8 ton | Deviation 4,8% |
| Crew Team TF | Manually Paved Area — | Scrapped Material 1,0 ton | Deviation Total 20,2 ton |

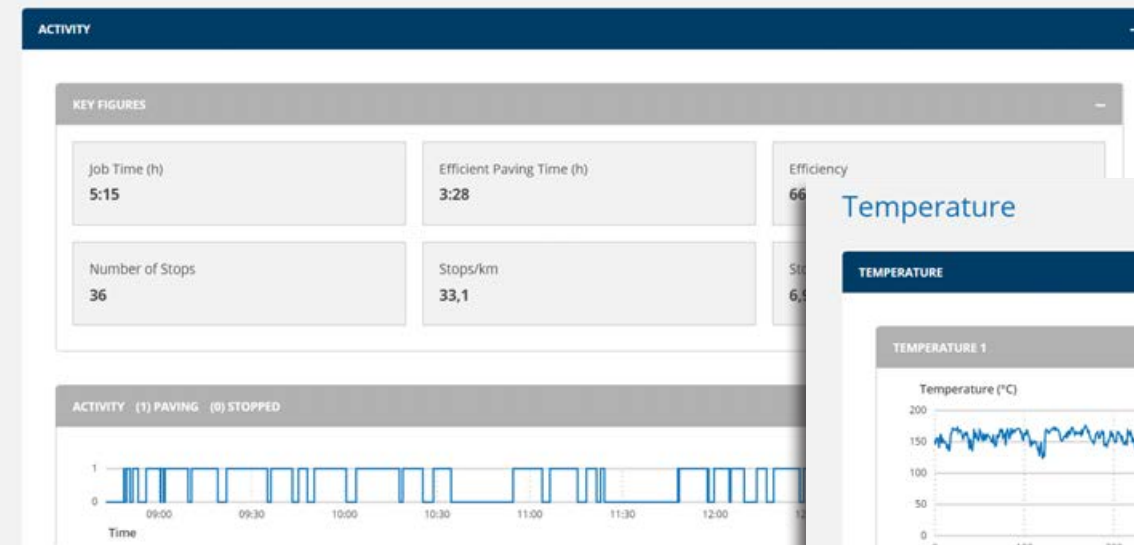
Loads

| Distance (m) | Load # | Time | Average Speed (m/min) | Load (kg) | Area (m²) | Consumption (kg/m²) |
|--------------|--------|---------------------|-----------------------|-----------|-----------|---------------------|
| 0,0 | 1 | 03-05-2017 08:42:47 | 4,6 | 8.700 | 103,0 | 8,4 |
| 24,4 | 2 | 03-05-2017 08:58:09 | 4,9 | 30.820 | 257,0 | 11,9 |
| 85,4 | 3 | 03-05-2017 09:12:17 | 5,2 | 32.620 | 210,0 | 15,5 |
| 135,3 | 4 | 03-05-2017 09:24:43 | 5,2 | 29.380 | 392,0 | 7,5 |
| 228,5 | 5 | 03-05-2017 09:45:45 | 5,2 | 30.180 | 305,0 | 9,9 |
| 300,4 | 6 | 03-05-2017 10:05:01 | 5,2 | 31.540 | 300,0 | 10,5 |
| 371,3 | 7 | 03-05-2017 10:19:39 | 5,2 | 29.660 | 357,0 | 8,3 |
| 455,3 | 8 | 03-05-2017 10:59:20 | 5,1 | 33.260 | 598,0 | 5,5 |
| 601,8 | 9 | 03-05-2017 12:00:28 | 5,2 | 28.300 | 153,0 | 18,2 |

Speed



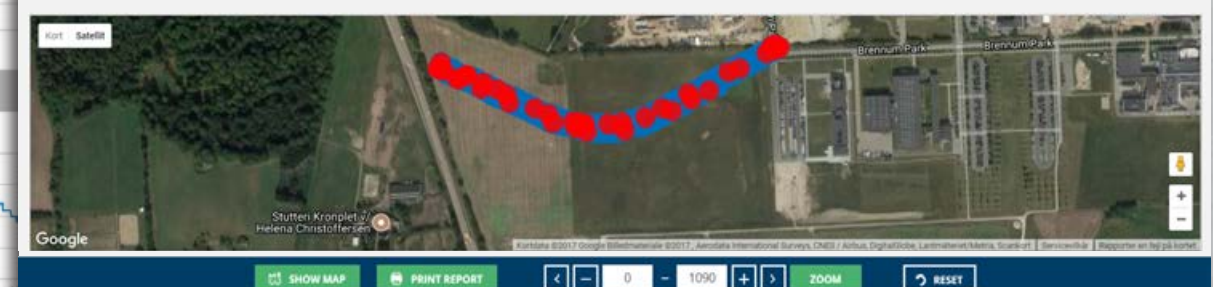
Activity



Weather



Temperature



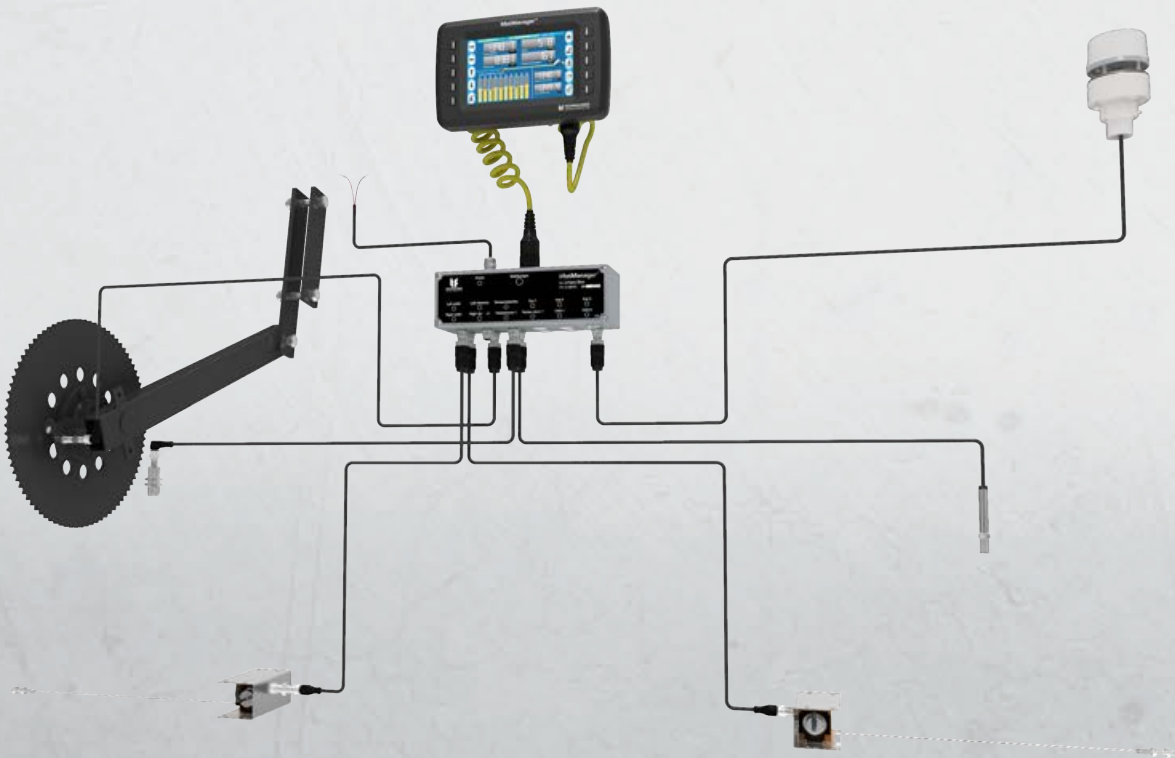
MatManager™

The MatManager™ Control Unit can easily be stored in the accompanying Carry Case between paving jobs. The MatManager™ Interface Box and all sensors are designed

for permanent mounting and should remain on the asphalt paver between paving jobs.



| MatManager™ Specifications | |
|----------------------------|--|
| Power Supply | 12/24 Volt System (10-30 VDC) |
| Power Consumption | Typical at 24VDC 200mA |
| Dimensions (DxWxH) | 75x250x155mm / 3x9.8x6.1in |
| Weight | 1.4kg / 3.1lbs |
| House | Durable plastic |
| Operating Temperature | -10°C to 70°C / 14°F to 158°F |
| Storage Temperature | -30°C to 80°C / -22°F to 176°F |
| Communication Bus | 2xCAN, USB |
| Connections | 1 Cannon Bayonet Plug, male 6 pin 1 Bayonet USB |
| Screen | 7" : 800x480mm / 31.5x19in w. capacitive touch |
| IP Class | IP66 for vital parts |



System overview of MatManager™ with Wirepull Screed Width Sensors

MatManager™ installations



MatManager™ on a CAT AP655F paver in Arlanda Airport in Sweden



MatManager™ installed on a CAT AP655F



MatManager™ Interface Box



MatManager™ on a Voegle SUPER 1900-2 paver



PAVING ACADEMY

Insecure of how it all works?
Don't worry. Our systems are
super easy to use, and our
Paving Academy shows you how

- ✓ How-to videos
- ✓ Case stories
- ✓ Manuals
- ✓ Paving tips
- ✓ ... and more



WWW.TF-TECHNOLOGIES.COM/PAVING-ACADEMY

tf TECHNOLOGIES
PAVING INNOVATION