

Products

Precision meets connectivity: The new ROTALIGN touch >

ROTALIGN touch: The only cloud-enabled laser alignment system with touchscreen technology and integrated mobile connectivity, and the first alignment system for smart factories.

ROTALIGN touch Webinar



PRÜFTECHNIK

Precision meets Connectivity

ROTALIGN touch

Cloud-enabled laser shaft alignment system



Precision Meets Connectivity

- Tablet-like capacitive touchscreen with 3D display
- Extremely durable with strengthened glass screen and tough housing
- High measurement quality with intelliSWEEP
- Live Move with acoustic assistant
- Voice recognition for hands-free operation
- Inbuilt mobile connectivity: RFID, Wi-Fi, Bluetooth and integrated camera
- Free cloud space and alignment software*

* both included in the 'connectivity' and 'fully featured' versions

Firmware version 1.1 – What's new

ROTALIGN touch

What's new in ROTALIGN touch firmware version 1.1?

- Live trend
- 14 Machine train
- intelliPOINT measurement mode
- intelliPASS measurement mode
- Full measurement table, including alignment job concept
- Additional Coupling formats
- Tolerance screen
- Quality parameters screen
- Pictures within the report
- Vibration Check

Please note: ROTALIGN touch Version 1.1 strictly requires ARC 4.0 Version 1.1 to communicate

How to Upgrade computer firmware:

ROTALIGN touch - ALI 50.200 computer upgrade procedure

1. Please ensure ROTALIGN touch computer is charged or has at least 50% battery capacity.
2. Extract executable file to empty PRÜFTECHNIK USB memory stick. Firmware is stored in "ROTALIGNtouch" folder.
3. Switch on ROTALIGN touch computer. Wait for Home screen to appear.
4. Connect USB memory stick to ROTALIGN touch computer USB port. New firmware copied from USB memory stick to ROTALIGN touch computer.
5. After approximately 1 minute on-screen message box appears stating new upgrade firmware found. Tap green tick button to start upgrade. Remove USB memory stick from ROTALIGN touch computer.
6. ROTALIGN touch computer restarts and firmware upgrade begins.
7. After completion of firmware upgrade ROTALIGN touch computer restarts and finishes in Home screen.

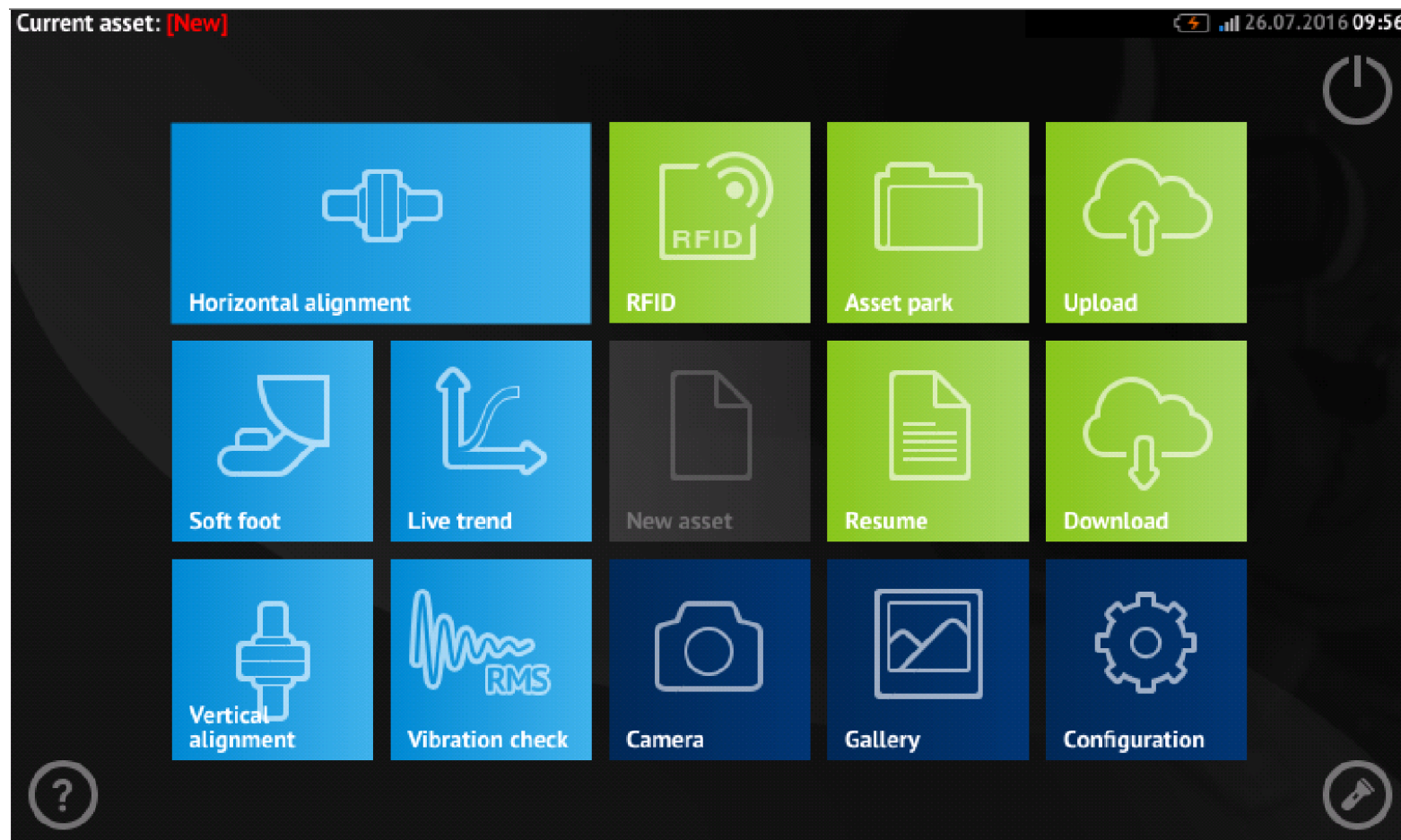
Downloads

[ROTALIGN touch Firmware 1.1](#)

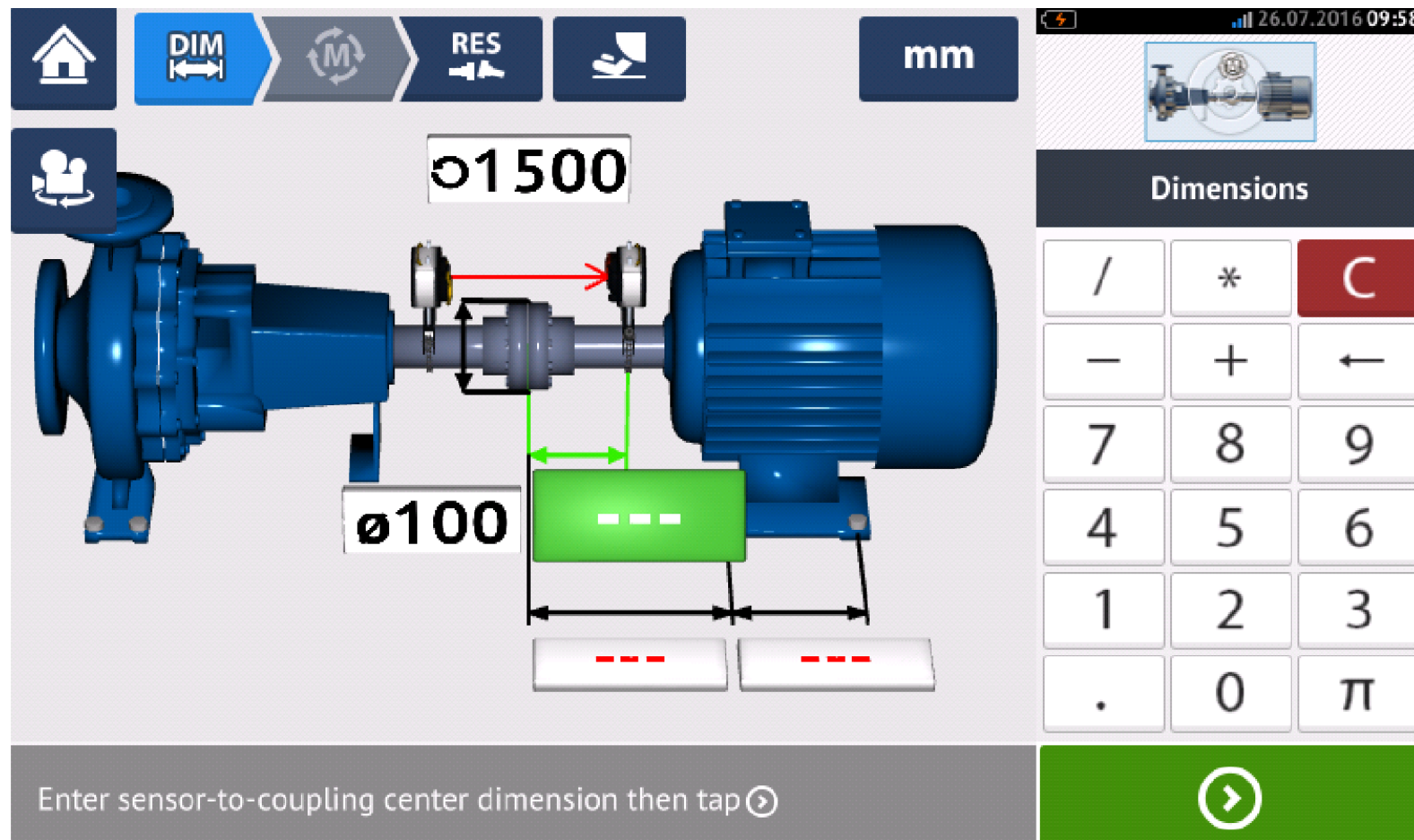
Home Screen



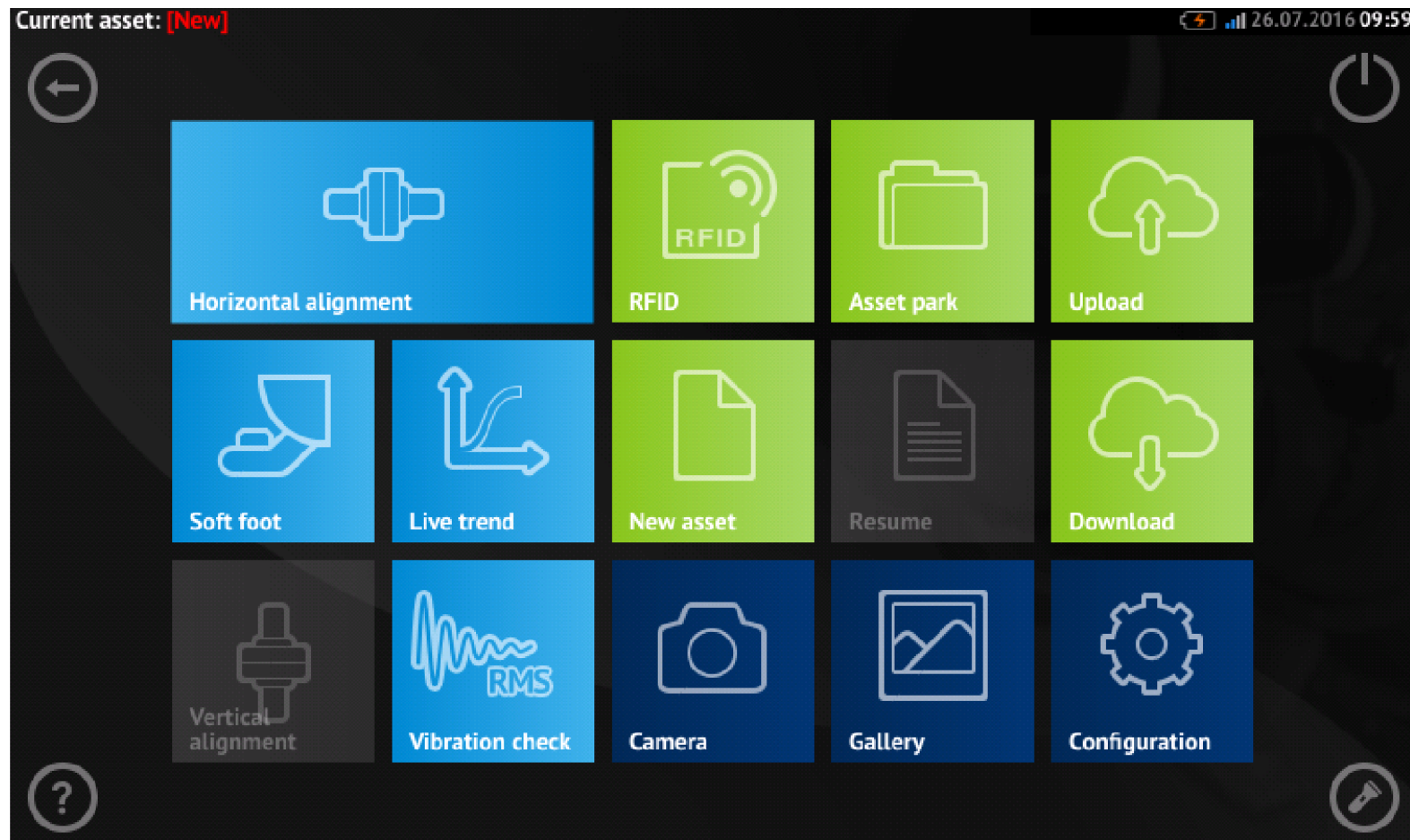
Home Screen



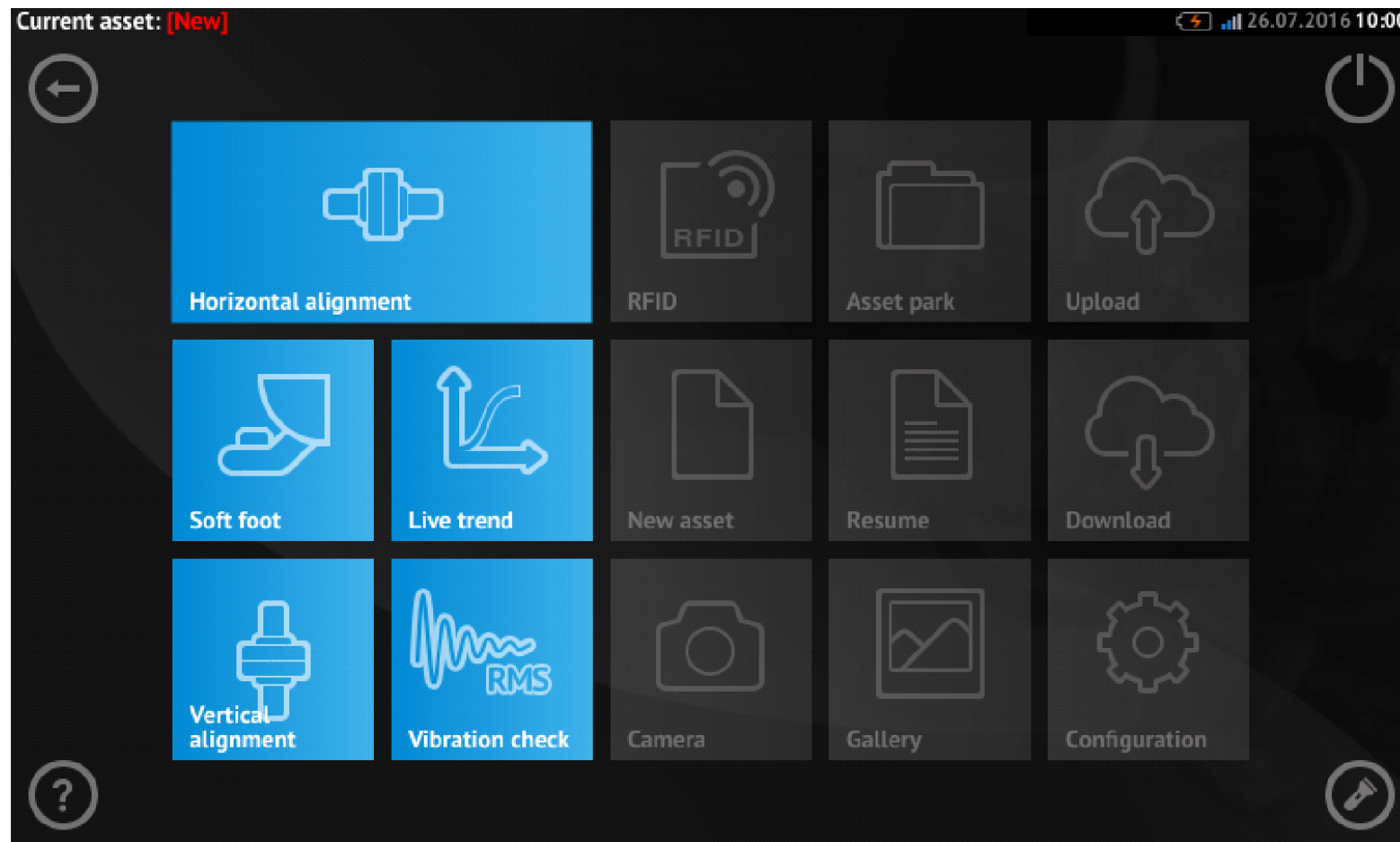
Home Screen



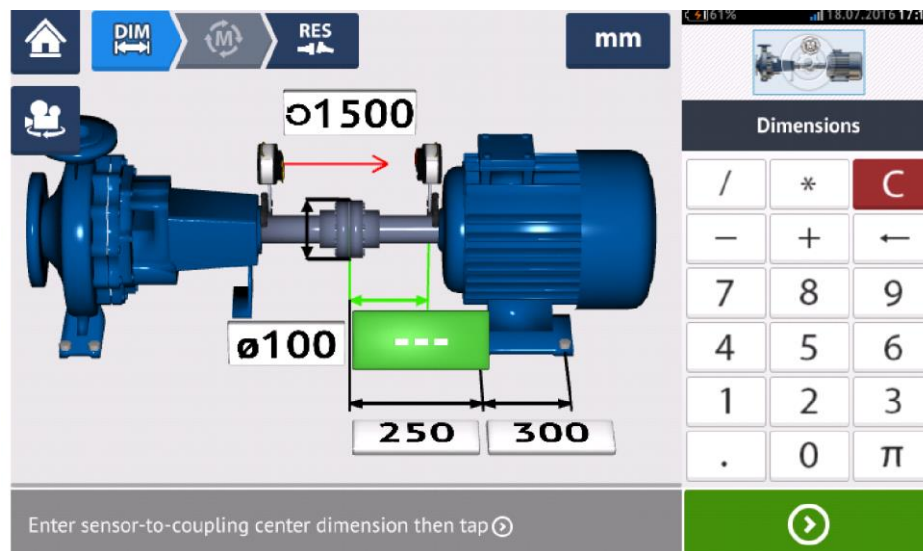
Home Screen



Home Screen



Live Trend



Measurement setup at coupling 1

Cold to hot Hot to cold

Free storage space for minimum 5 hours of measurement

Interval 0.2 secs Data reduction ☒

Duration 4 hours Start from last alignment ☐

Measurement not started

Measurement setup at coupling 1

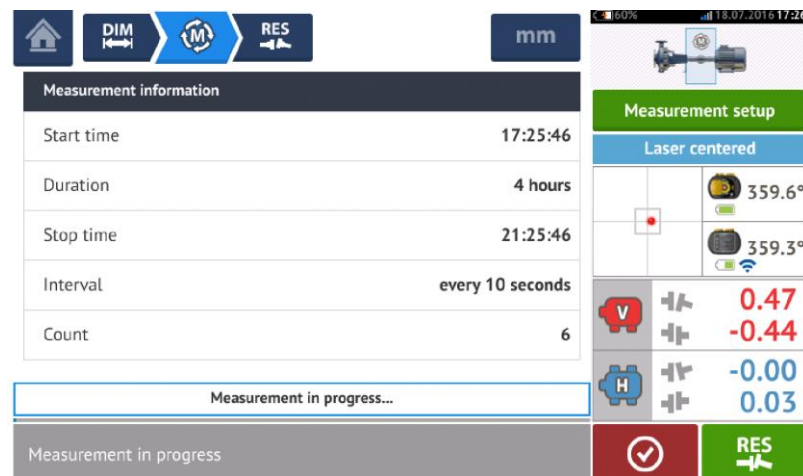
Cold to hot Hot to cold

Free storage space for minimum 69 days of measurement

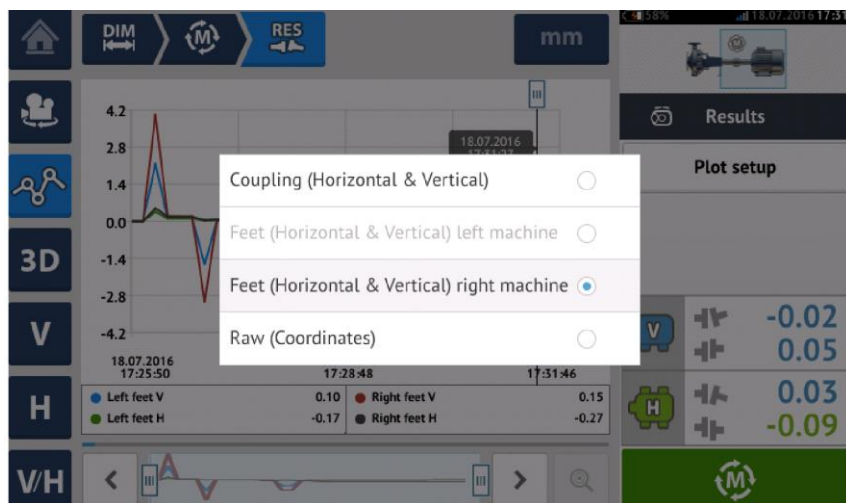
Interval 60 secs Data reduction ☒

Duration 4 hours Start from last alignment ☐

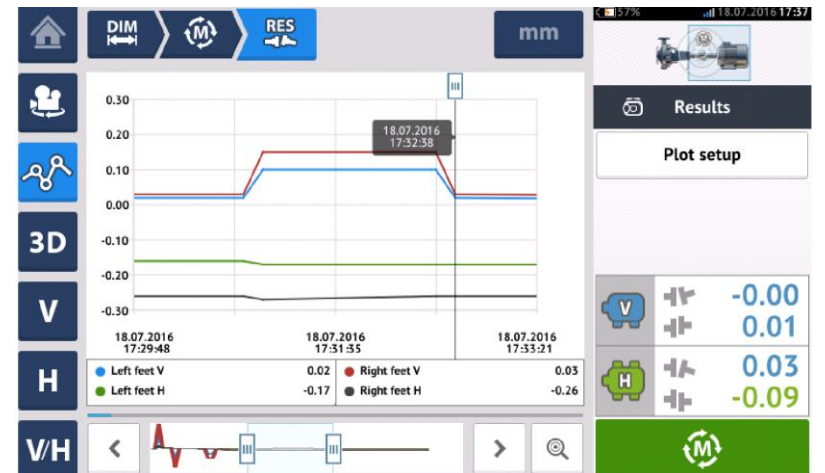
Measurement not started



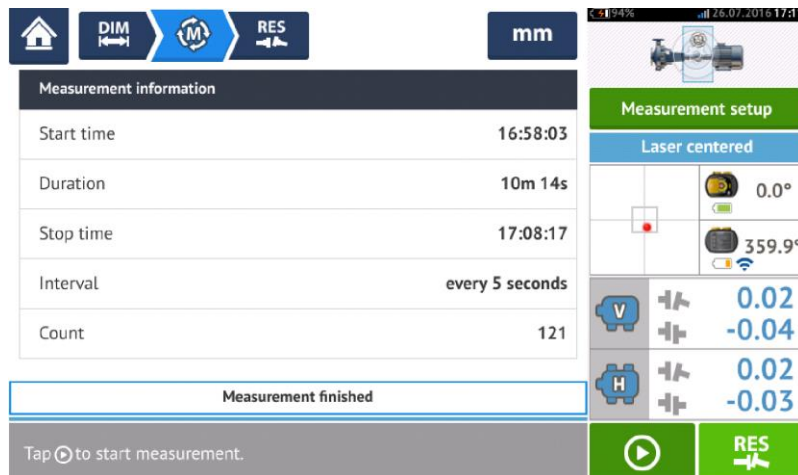
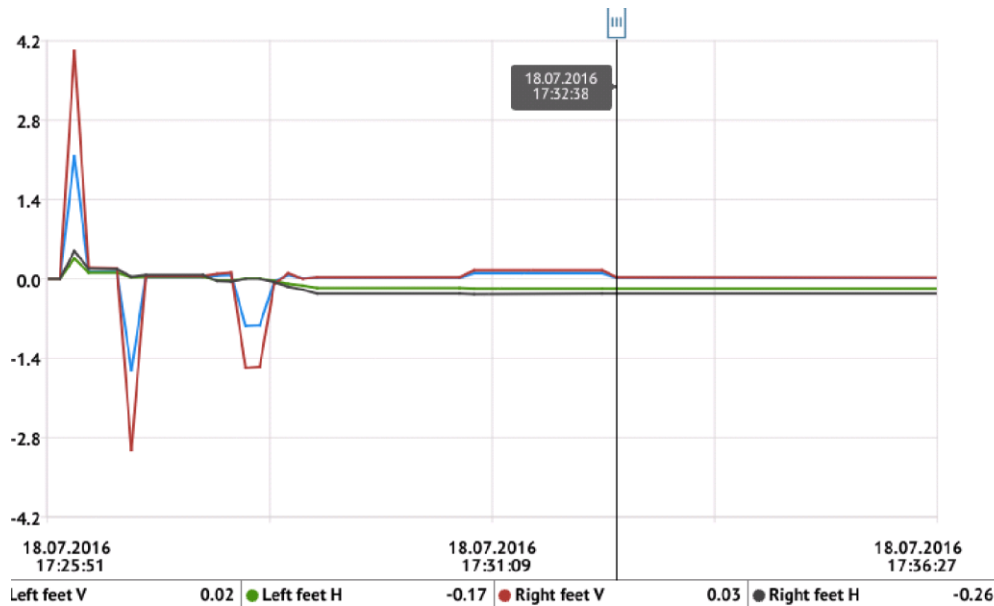
Live Trend



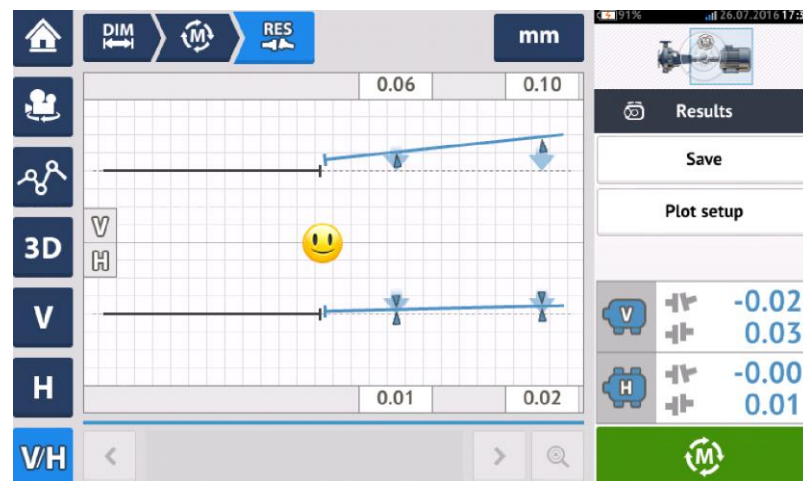
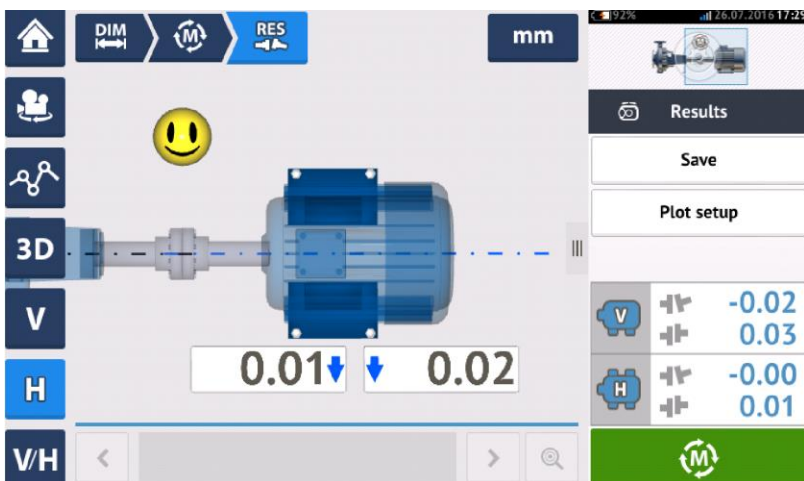
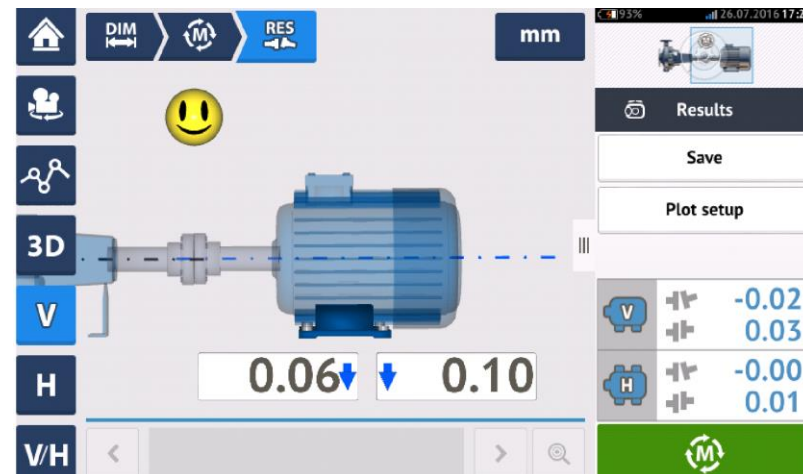
Live Trend



Live Trend







Live Trend



Live trend

#	Vertical		Horizontal		Markers	Time	S
	↕	↕	↕	↕			
8	0.11	-0.26	0.04	-0.09		26.07.2016 16:58:41	
9	0.15	-0.32	0.04	-0.10		26.07.2016 16:58:46	
10	0.13	-0.31	0.06	-0.14		26.07.2016 16:58:51	
11	0.13	-0.30	0.06	-0.14		26.07.2016 16:58:56	
12	0.16	-0.33	0.06	-0.14		26.07.2016 16:59:01	
13	0.15	-0.33	0.07	-0.17		26.07.2016 16:59:06	
14	0.15	-0.33	0.08	-0.17		26.07.2016 16:59:12	

All Markers









Status	Raw values						
	Avg [s]	X1	Y1	X2	Y2	Sensor angle	Sensor tr
Laser OK	1.50	0.433	-0.566	0.735	-3.183	359.5	
Laser OK	1.50	0.433	-0.564	0.731	-3.134	359.5	
Laser OK	1.50	0.433	-0.564	0.730	-3.134	359.5	
Laser OK	1.50	0.433	-0.564	0.729	-3.134	359.6	
Laser OK	1.50	0.433	-0.564	0.729	-3.134	359.5	
Laser OK	1.50	0.433	-0.564	0.728	-3.134	359.5	
Laser OK	1.50	0.433	-0.564	0.728	-3.134	359.6	
Laser OK	1.50	0.428	-0.573	0.730	-3.003	359.6	


All Markers









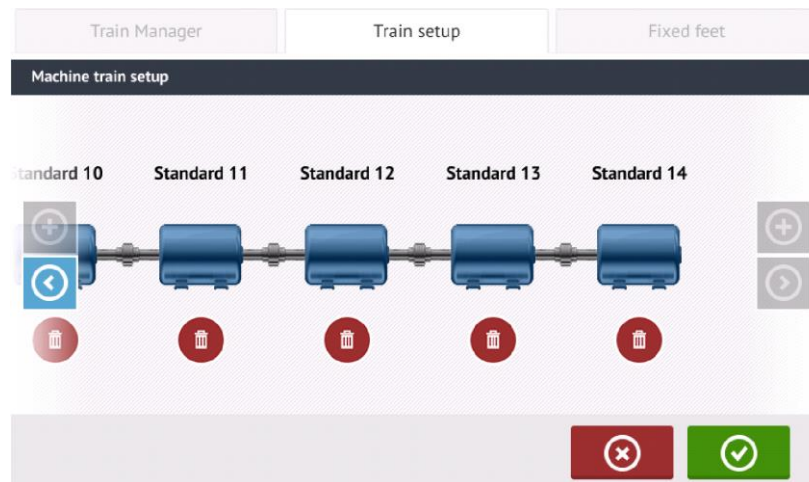
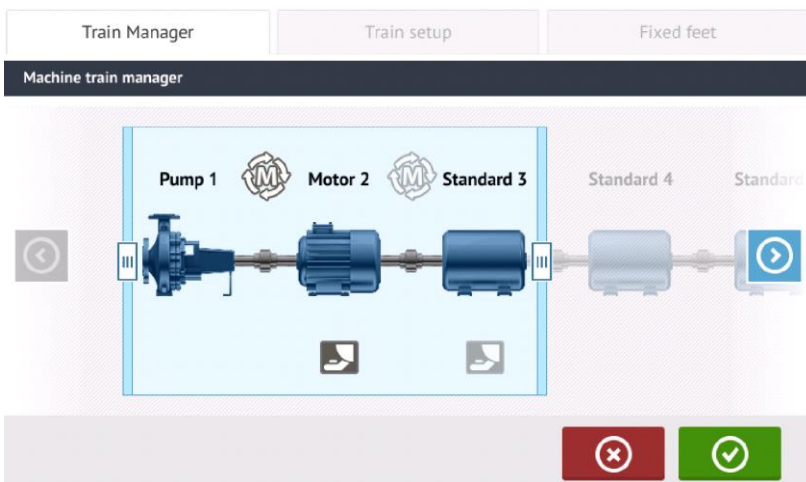
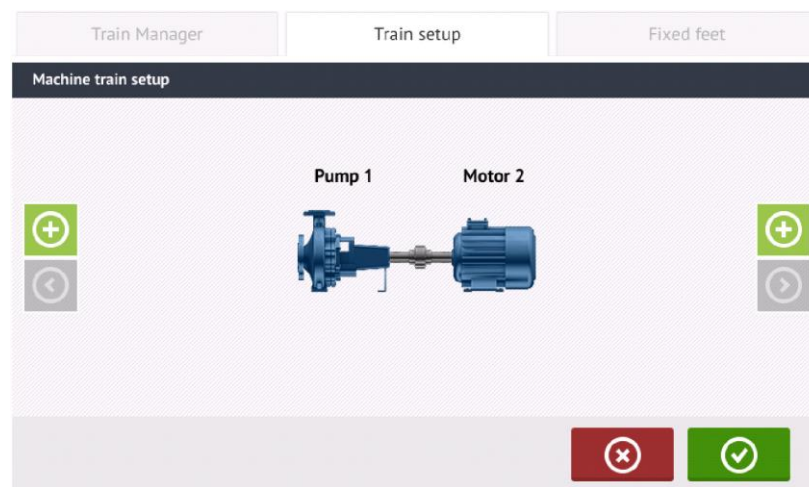
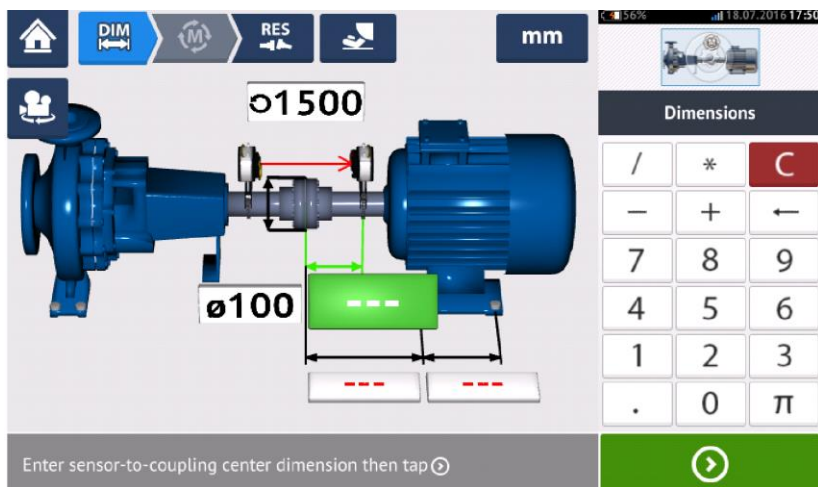
				Sensor		
[°C]	Laser angle	Laser temperature [°C]	Velocity RMS [mm/s]	Serial No.	Recalibration	Serial
24.5	359.9	24.5	0.01	49002625	10.09.2017	
24.5	359.9	24.5	0.00	49002625	10.09.2017	
24.5	359.9	24.5	0.02	49002625	10.09.2017	
24.5	0.0	24.5	0.05	49002625	10.09.2017	
24.5	359.9	24.5	0.06	49002625	10.09.2017	
24.5	359.9	24.5	0.01	49002625	10.09.2017	
24.5	359.9	24.5	0.26	49002625	10.09.2017	

All Markers





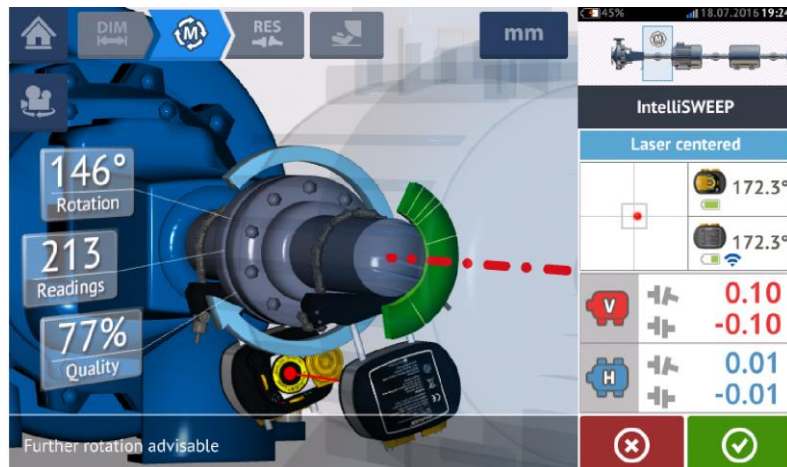
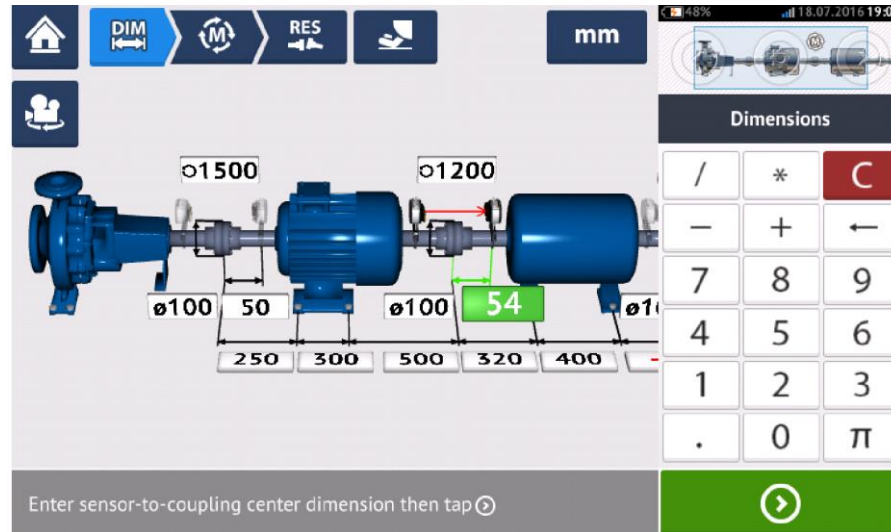
#	Vertical		Horizontal		Markers	Time	S
	↕	↕	↕	↕			
58	0.26	-0.57	0.13	-0.30		26.07.2016 17:02:56	La
59	0.26	-0.57	0.13	-0.30		26.07.2016 17:03:01	La
60	0.26	-0.57	0.13	-0.30		26.07.2016 17:03:06	La
61	0.26	-0.57	0.13	-0.30		26.07.2016 17:03:11	La
62	0.26	-0.57	0.13	-0.30		26.07.2016 17:03:17	La
63	0.26	-0.57	0.13	-0.30		26.07.2016 17:03:22	La
64	0.26	-0.57	0.13	-0.30		26.07.2016 17:03:27	La

All Markers





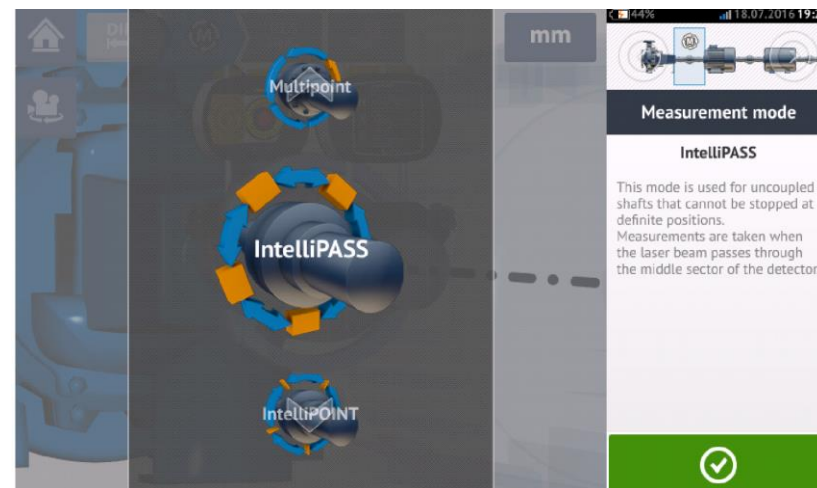
14 Machine Train












14 Machine Train





intelliPOINT & intelliPASS




Measurement table with alignment job concept

Measurement table at coupling 1								mm	
#	Meas.	Vertical	Horizontal	Quality					
		↑↓	↑↓	↑↓	↑↓	QF	SD		
JOB 26.07.2016									
<input type="radio"/>	 AS FOUND	0.016	-0.088	-0.005	0.196				
<input checked="" type="checkbox"/>	1  	0.017	-0.080	0.013	0.215	85%	0.002		
<input checked="" type="checkbox"/>	2  	0.029	-0.071	-0.040	0.164	81%	0.051		
<input checked="" type="checkbox"/>	3  	0.014	-0.095	-0.023	0.178	83%	0.046		
<input checked="" type="checkbox"/>	4  	0.036	-0.068	-0.037	0.175	79%	0.046		







Measurement table at coupling 1										mm
Measurement details					Sensor		Laser			
Time	Distance	Avg [s]	Rotation		Serial No.	Recalibration	Serial No.	Recalibration		
17:36:40	50	0.03			49002625	10.09.2017	---	---		
17:37:05	50	0.03			49002625	10.09.2017	49102658	14.09.2017		
17:37:38	50	0.03			49002625	10.09.2017	49102658	14.09.2017		
17:38:07	50	0.03			49002625	10.09.2017	49102658	14.09.2017		

Measurement table at coupling 1										mm
#	Meas.	Vertical		Horizontal		Quality				
		↑↓	↑↓	↑↓	↑↓	QF	SD			
<input checked="" type="checkbox"/>	3		0.014	-0.095	-0.023	0.178	83%	0.046		
<input checked="" type="checkbox"/>	4		0.036	-0.068	-0.037	0.175	79%	0.046		
<input type="radio"/>	MOVE	0.015	-0.023	0.011	0.067	---	---			
<input type="radio"/>	AS LEFT	0.024	-0.091	-0.021	0.188					
<input checked="" type="checkbox"/>	1		0.024	-0.091	-0.021	0.188	100%	0.040		

Measurement table at coupling 1										mm
Measurement details					Sensor		Laser			
Time	Distance	Avg [s]	Rotation		Serial No.	Recalibration	Serial No.	Recalibration		
17:37:38	50	0.03			49002625	10.09.2017	49102658	14.09.2017		
17:38:07	50	0.03			49002625	10.09.2017	49102658	14.09.2017		
17:38:41	50	0.50			49002625	10.09.2017	49102658	14.09.2017		
17:39:15	50	0.03			49002625	10.09.2017	49102658	14.09.2017		

Quality parameters screen



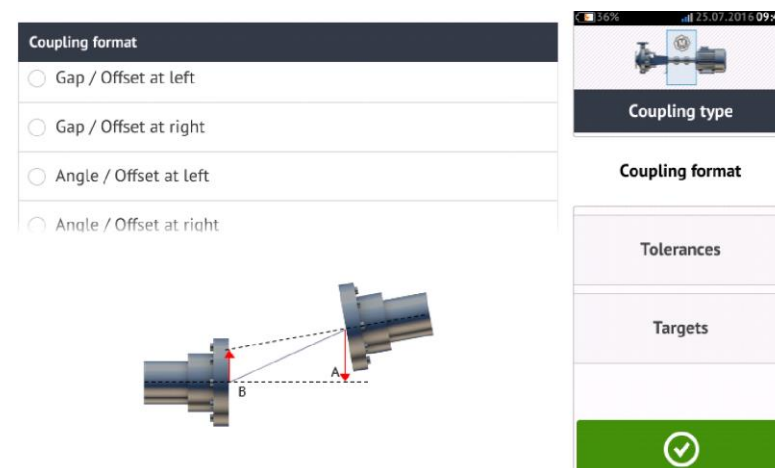
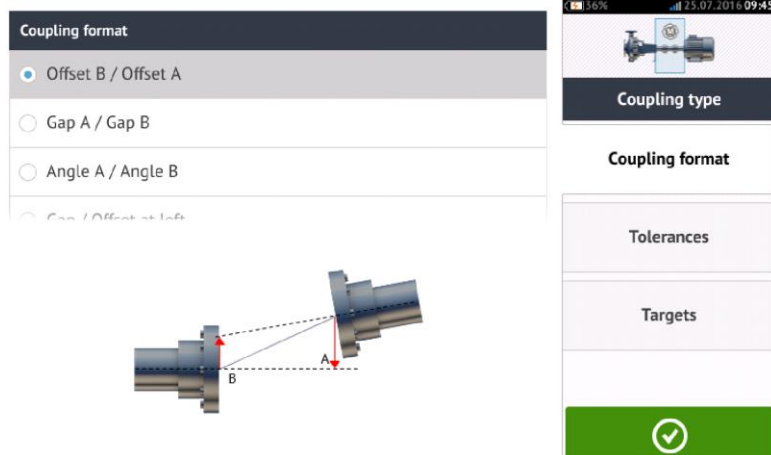
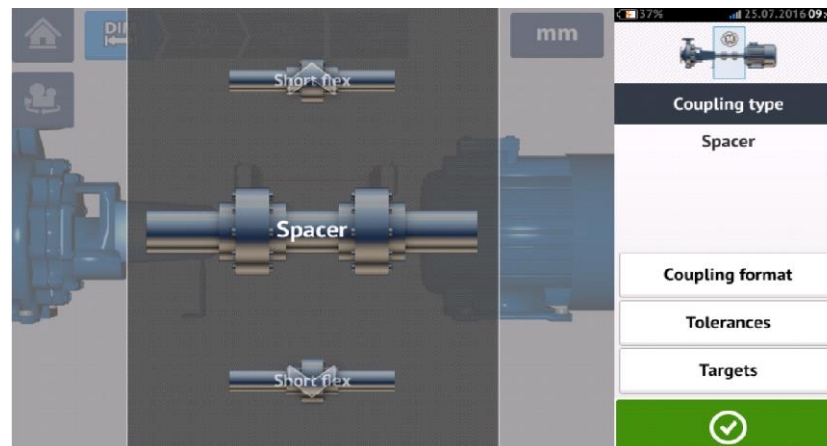
Measurement table at coupling 1 mm

#	Meas.	Vertical	Horizontal	Quality	QF	SD
JOB 25.07.2016						
1	AS FOUND	-0.050	0.055	-0.005	-0.003	
1		-0.050	0.055	-0.005	-0.003	85% 0.103

Quality parameters at coupling 1 (Measurement No.: 1 | Mode: IntelliSWEEP)

1	Rotation angle	100%	
2	Ellipse standard deviation	45%	
3	Environmental vibration	95%	
4	Rotation evenness	44%	
5	Angle rotation inertia	40%	
6	Rotation direction	100%	
7	Rotation speed	85%	
8	Filter output	95%	
Overall		85%	

Additional coupling formats



Tolerance screen

Tolerances

mm

Tolerances enabled:

✓

User defined tolerances:

✗

RPM:

1500

100

⚡	😊	⚡
0.04	0.05	

⚡	OK	⚡
0.07	0.09	

Coupling type

Coupling format

Tolerances

Targets

✓

Tolerances

mm

Tolerances enabled:

✓

User defined tolerances:

✓

Asymmetric tolerances:

✗

RPM:

1500

100

⚡	😊	⚡
0.00	0.00	

Coupling type

Coupling format

Tolerances

Targets

✓

Tolerances

mm

Tolerances enabled:

✓

User defined tolerances:

✓

Asymmetric tolerances:

✓

RPM:

1500

100

V	😊	⚡
0.00	0.00	

H	😊	⚡
0.00	0.00	

Coupling type

Coupling format

Tolerances

Targets

✓

Pictures within the report

Generating report

Machine assignment information

Tap here to enter location...

Room Istanbul



Tap here to enter operator name...

Tap here to enter notes...

Date 25.07.2016

Results as found ☐

Signature ☐

Generating report

Tap here to enter location...

Room Istanbul

Tap here to enter operator name...

Tap here to enter notes...

Date 25.07.2016

Results as found ☐

Signature ☐

Machine images ☐






 


Photo selection

25.07.2016

 Room Istanbul
25.07.2016 12:45:02

 Room Istanbul
25.07.2016 12:44:40

 Room Istanbul
25.07.2016 12:40:22



Generating report

Room Istanbul

Tap here to enter operator name...


Tap here to enter notes...



Date 25.07.2016

Results as found ☐

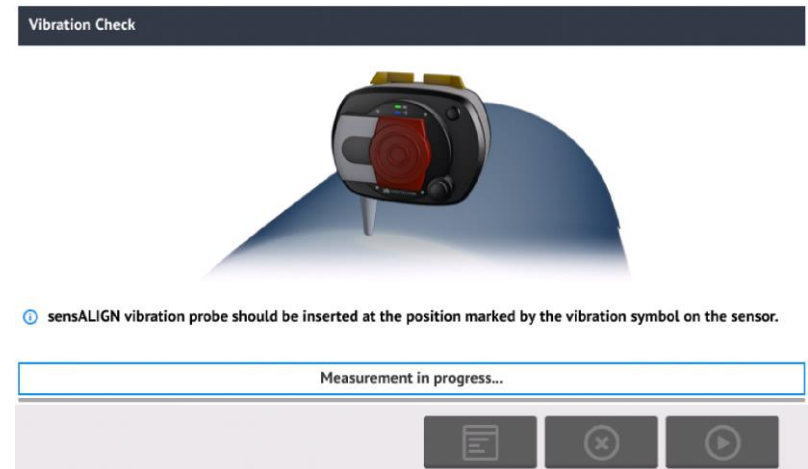
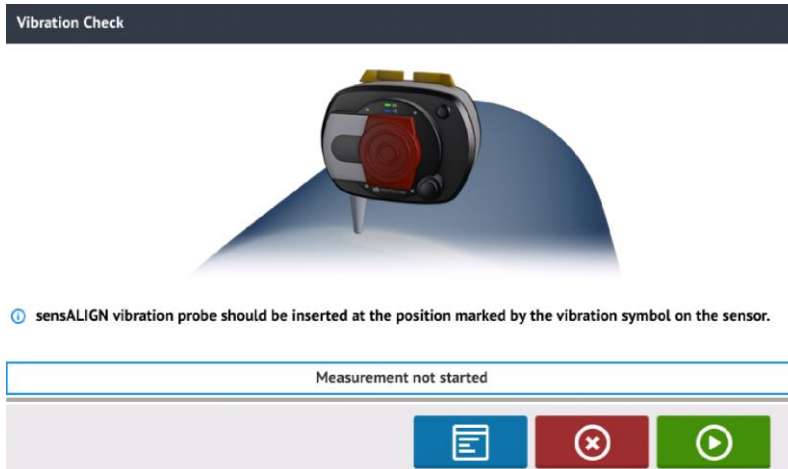
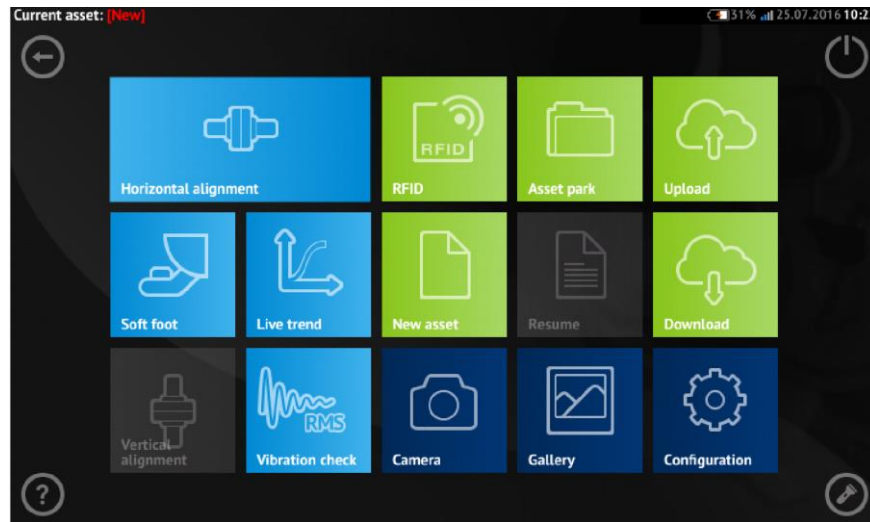
Signature ☐

Machine images ☒

Add image 

Vibration check



Vibration check

Vibration Check results					mm/s
#	Measurement name	Velocity RMS	Date & time	Serial No.	Recalibration
1	Vibration measurement	2.90	25.07.2016 10:24:30	49002625	10.09.2017




Vibration Check results					mm/s
#	Measurement name	Velocity RMS	Date & time	Serial No.	Recalibration
1	MIV	2.90	25.07.2016 10:24:30	49002625	10.09.2017



Vibration check

Vibration Check results					mm/s
#	Measurement name	Velocity RMS	Date & time	Serial No.	Recalibration
1	MIV	2.90	25.07.2016 10:24:30	49002625	10.09.2017
2	Vibration measurement	2.00	25.07.2016 10:33:14	49002625	10.09.2017



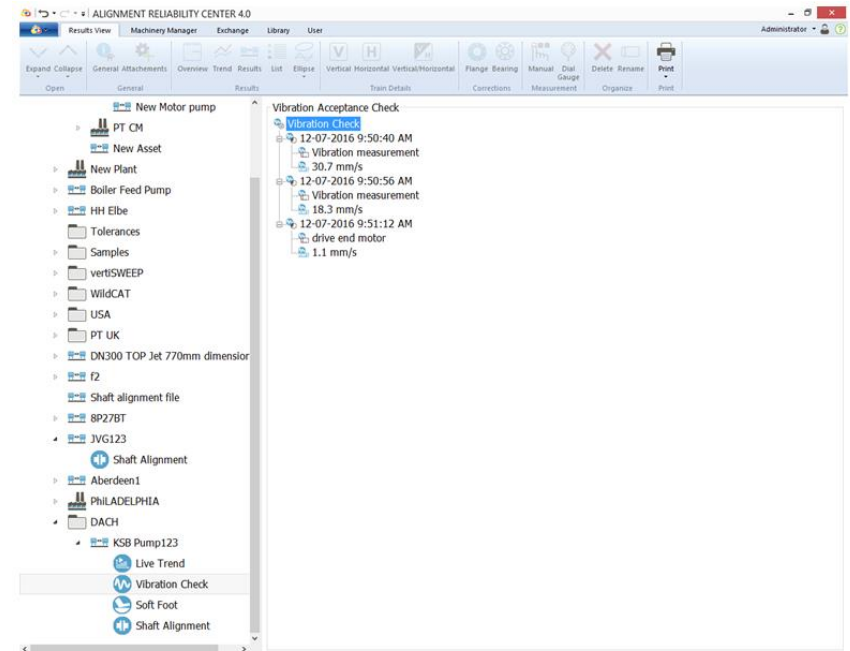
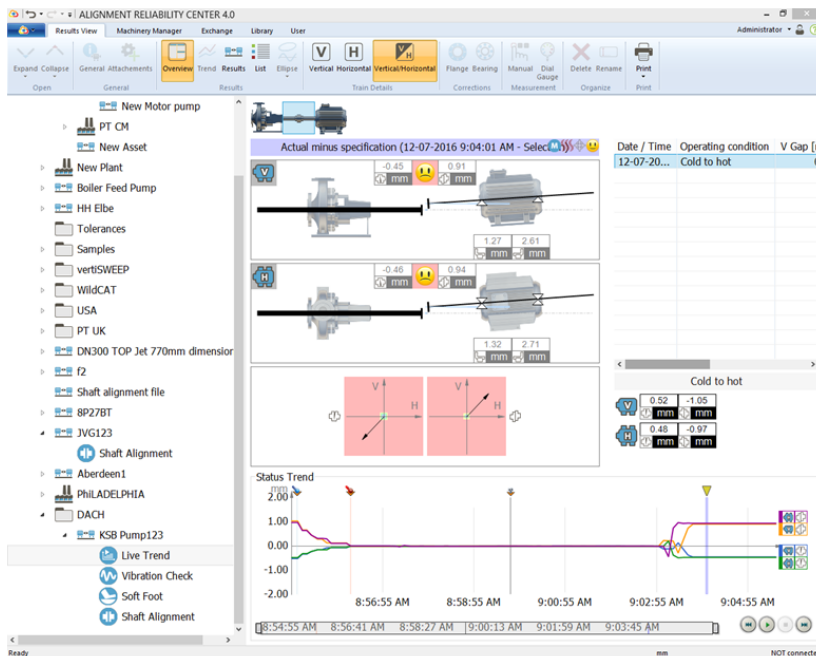
Vibration Check results					mm/s
#	Measurement name	Velocity RMS	Date & time	Serial No.	Recalibration
1	MIV	2.90	25.07.2016 10:24:30	49002625	10.09.2017
2	MOV	2.00	25.07.2016 10:33:14	49002625	10.09.2017






ALIGNMENT RELIABILITY CENTER 4.0

To communicate with the PC Software, ROTALIGN touch version 1.1 requires the ARC 4.0 version 1.1



What next...

1.2 Sprint 1

- Cardan shaft model and kinematics - apart of 3D
 - Cardan shaft model and kinematics - 3D
 - ARC 4.0, JSON schema completion
 - Thermal growth calculator
-

1.2 Sprint 2

- Cardan new mode (rotating arm)
 - Move simulator
 - ARC 4.0 communication: sync and OMTC server
-

1. 2 Sprint 3

- vertiSWEEP
 - Soft foot diagnosis
 - Multiple feet popup
-

1.2 Sprint 4

- IntelliEXTEND(including automatic intelli laser positioning)
 - Add some new machines(3-4)
 - Edit points - analyses: Visualize ellipse - only broken ellipse
 - Edit points - analyses: Edit - Select single point for multipoint, static etc.
 - Edit points - analyses: Edit - Toggle selected point(s) -> one button
 - Edit points - analyses: Edit - Reset originally loaded
 - Additional settings 1
 - Axial clearance entry
-



Thanks for participating



Intelligent solutions for modern challenges

Flexibility and customer focus make PRÜFTECHNIK unique. With innovative solutions, we help maintenance professionals address their daily challenges.