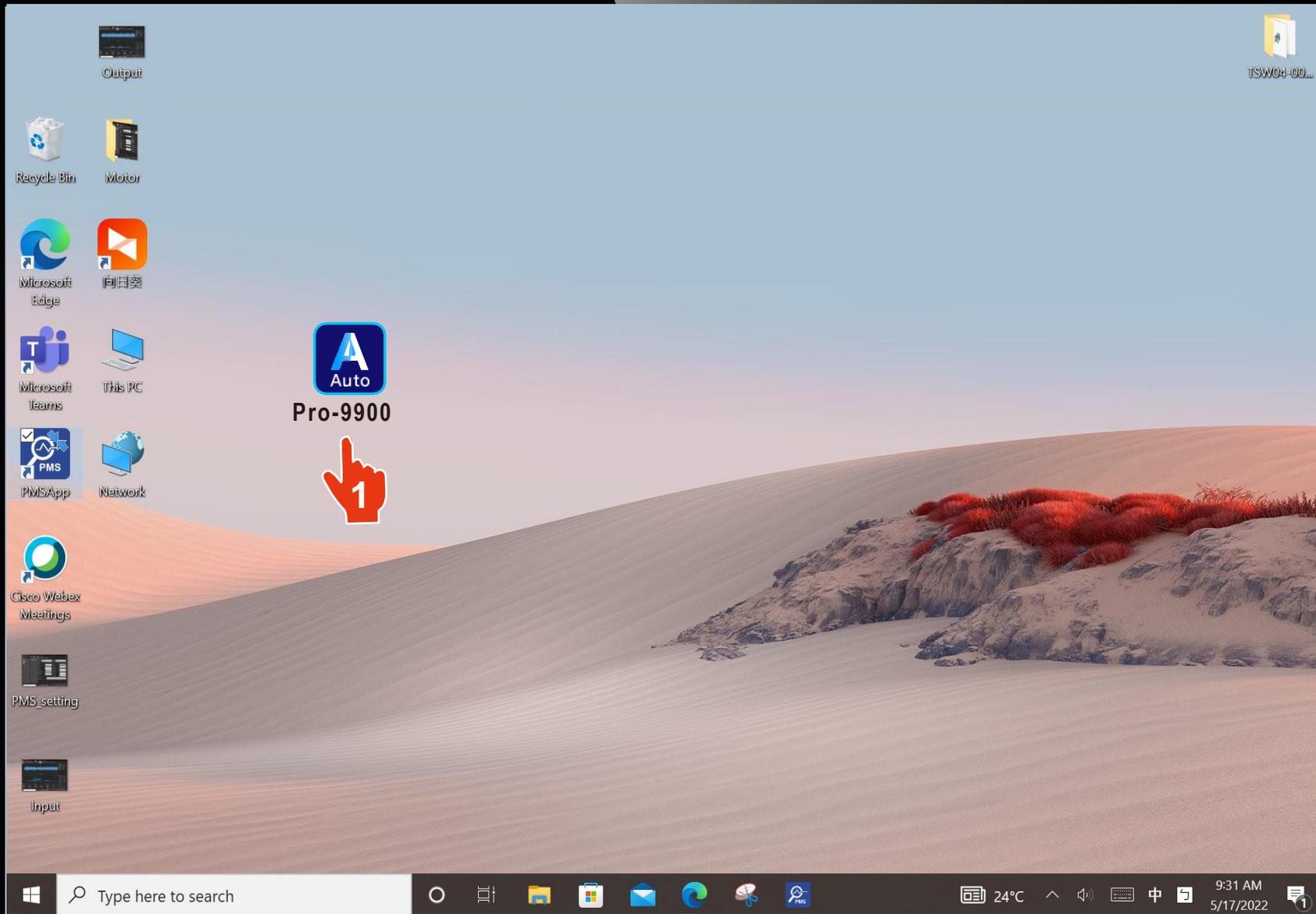


Pro-9900 Intelligent Portable
High Resolution Vibration
Acceptance Instrument

Vibration **Acceptance** Software Operation Guide



Direction :

Click according to the sequence

1. Click  Pro-9900

Open Pro-9900 Automatic Acceptance Software

Go to next page

Attention :
Pro-9900 needs to wait for the rotating motor speed to stabilize before performing the vibration measurement.

Open PMSApp

Pro-9900

English

Select health data CVLog file

Heat [] Select File

Press the 「Select File」 button, and select the desired date in the pop-up data file window.

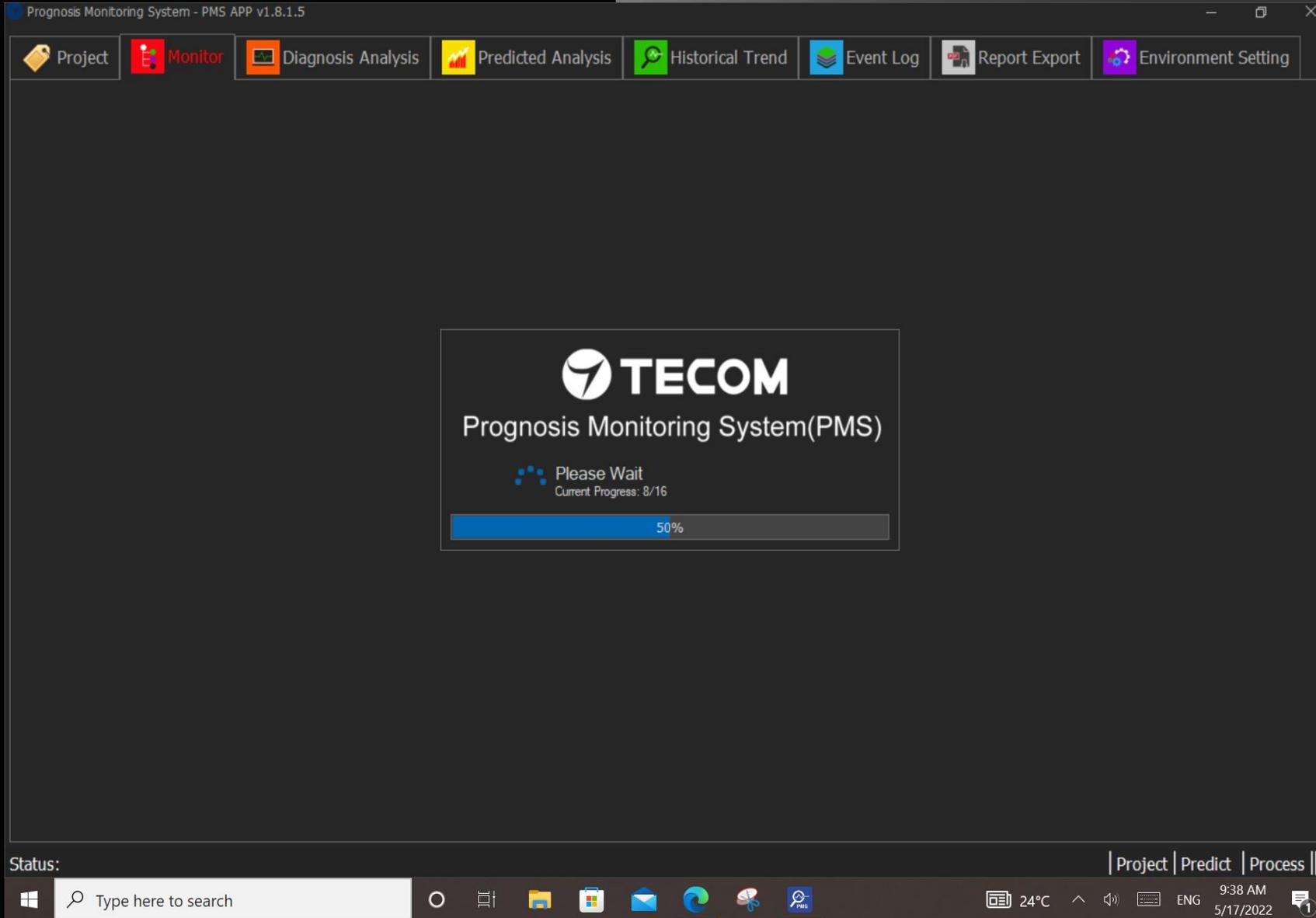
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Direction :

Click according to the sequence

1. Click **Open PMSApp** to open the Automatic Measurement software.

Go to next page.



Description :

Automatic
Measurement
software

Opening...

Project Monitor Diagnosis Analysis Predicted Analysis Report Export Environment Setting

UI Load Test Collection Start Collection Stop Collection Dashboard Chart

1

Tecom_00_CH1 Tecom_00_CH2 All Chl Vrms

Device Operation Health Trends and Predictions

Health Value	Count
0.0 - 0.2	0.0 - 1.0
0.2 - 0.4	0.0 - 1.0
0.4 - 0.6	0.0 - 1.0
0.6 - 0.8	0.0 - 1.0
0.8 - 1.0	0.0 - 1.0

Vibration State Trend

Count	(mm/s)
0.0	0.0
0.1	0.0
0.2	0.0
0.3	0.0
0.4	0.0
0.5	0.0
0.6	0.0
0.7	0.0
0.8	0.0
0.9	0.0
1.0	0.0

Device Information

Device Project	pro001	Device SN	Null
Running State	Stop	Spindle Speed	0
Device Status	Null	Life Prediction	Null

Vibration Information

Parameter	Tecom_00_CH1	Tecom_00_CH2
Health	0.0000	0.0000
RMS	0.0000	0.0000
Vrms	0.0000	0.0000

Abnormal Event

All Clear

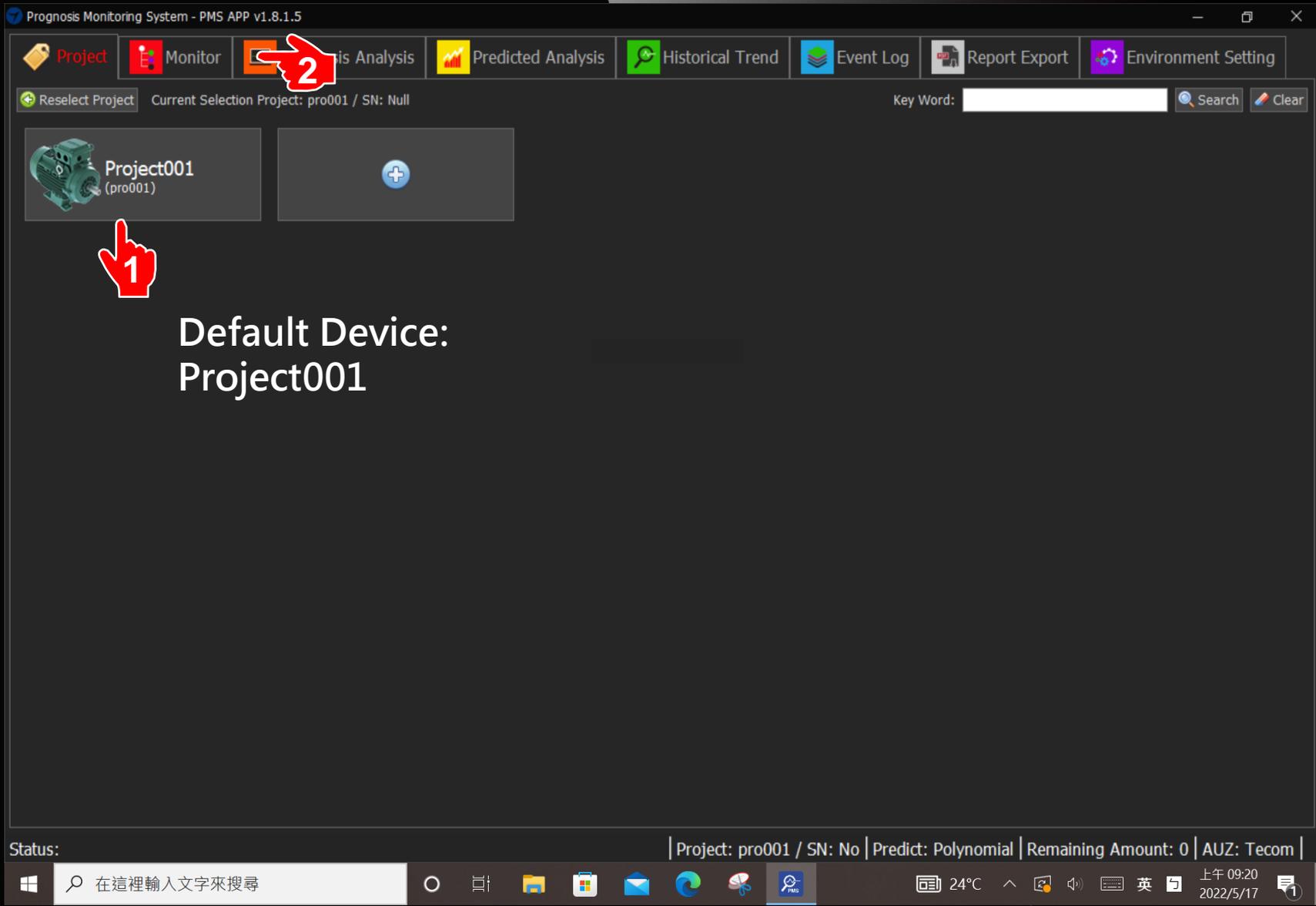
Status: Project: pro001 / SN: No | Diagnosis: G400_S | Predict: Polynomial | Remaining Amount: 0 | AUZ: Tecom

Direction :

Click according to the sequence

1. Click **Project**

Go to next page.



Default Device:
Project001

Direction :

Click according to the sequence

1. Click **Project001**
2. Click **Monitor**

Go to next page

Prognosis Monitoring System - PMS APP v1.8.1.5

Project Monitor Diagnosis Analysis Predicted Analysis Historical Trend Event Log Report Export Environment Setting

UI Reload Test Collection Start Collection Stop Collection Dashboard **Status** Chart Trend

Dashboard

Tecom_00_CH1 Tecom_00_CH2 All Chl Vrms

Device Operation Health Trends and Predictions

Health Value

Count

- Tecom_00_CH1(CV)
- Tecom_00_CH1(Pred)
- Health
- Remind
- Warning
- Danger

Vibration State Trend

(mm/s)

Count

Tecom_00_CH1(Vrms)

Device Information

Device Project	pro001	Device SN	Null
Running State	Stop	Spindle Speed	0
Device Status	Null	Life Prediction	Null

Vibration Information

	Tecom_00_CH1	Tecom_00_CH2
Health	0.0000	0.0000
RMS	0.0000	0.0000
Vrms	0.0000	0.0000

Abnormal Event

All Clear

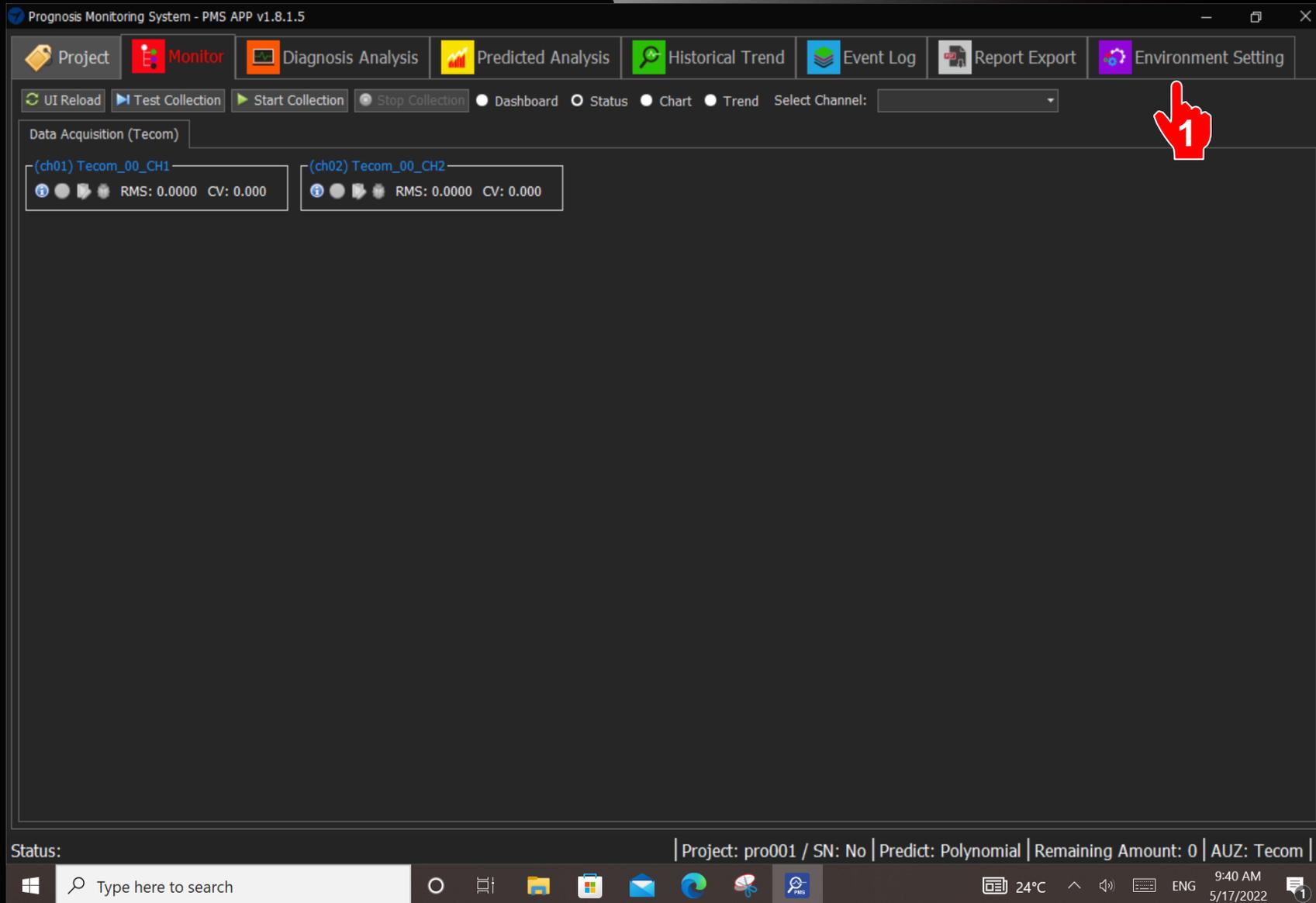
Status: Project: pro001 / SN: No | Predict: Polynomial | Remaining Amount: 0 | AUZ: Tecom

Direction :

Click according to the sequence

1. Click **Status**

Go to next page



Direction :

Click according to the sequence

1. Click **Environment Setting**

Go to next page

Prognosis Monitoring System - PMS APP v1.8.1.5

Project Monitor Diagnosis Analysis Predicted Analysis Historical Trend Event Log Report Export Environment Setting

Channel List

- (ch01) Tecom_00_CH1
- (ch02) Tecom_00_CH2

Database Mapping

Physical Device Name: Tecom_00 Database Device Name: dev001

Physical Channel Name: Tecom_00_CH1 Database Channel Name: ch01

Diagnosis Parameter

PMS Type

Vibration Standard: Class I (<15kW)

Model Type: A

Diagnosis

Threshold(Diagnosis): 1

Threshold(Vrms): 0.00

Sample Rate: 16000

Sample Length: 8192

Cutoff Frequency

Low Frequency: 1000

High Frequency: 5120

Mechanical Properties

Fa(Spindle) in RPM: 1800.00

Rotor

Number of Rotors: 0

Gear

Reduction Ratio: 0.00

Number of Input Shaft Gears: 0.00

Fp in RPM: 0.00

Bearing

Bearing Information (mm or inch): Bearing Frequency

Contact Angle: 0.000

Pitch Diameter: 0.001

Number of Balls: 0

Ball Diameter: 0.000

Status: Project: pro001 / SN: No | Predict: Polynomial | Remaining Amount: 0 | AUZ: Tecom | 24°C | 9:42 AM 5/17/2022

Direction :

Click according to the sequence

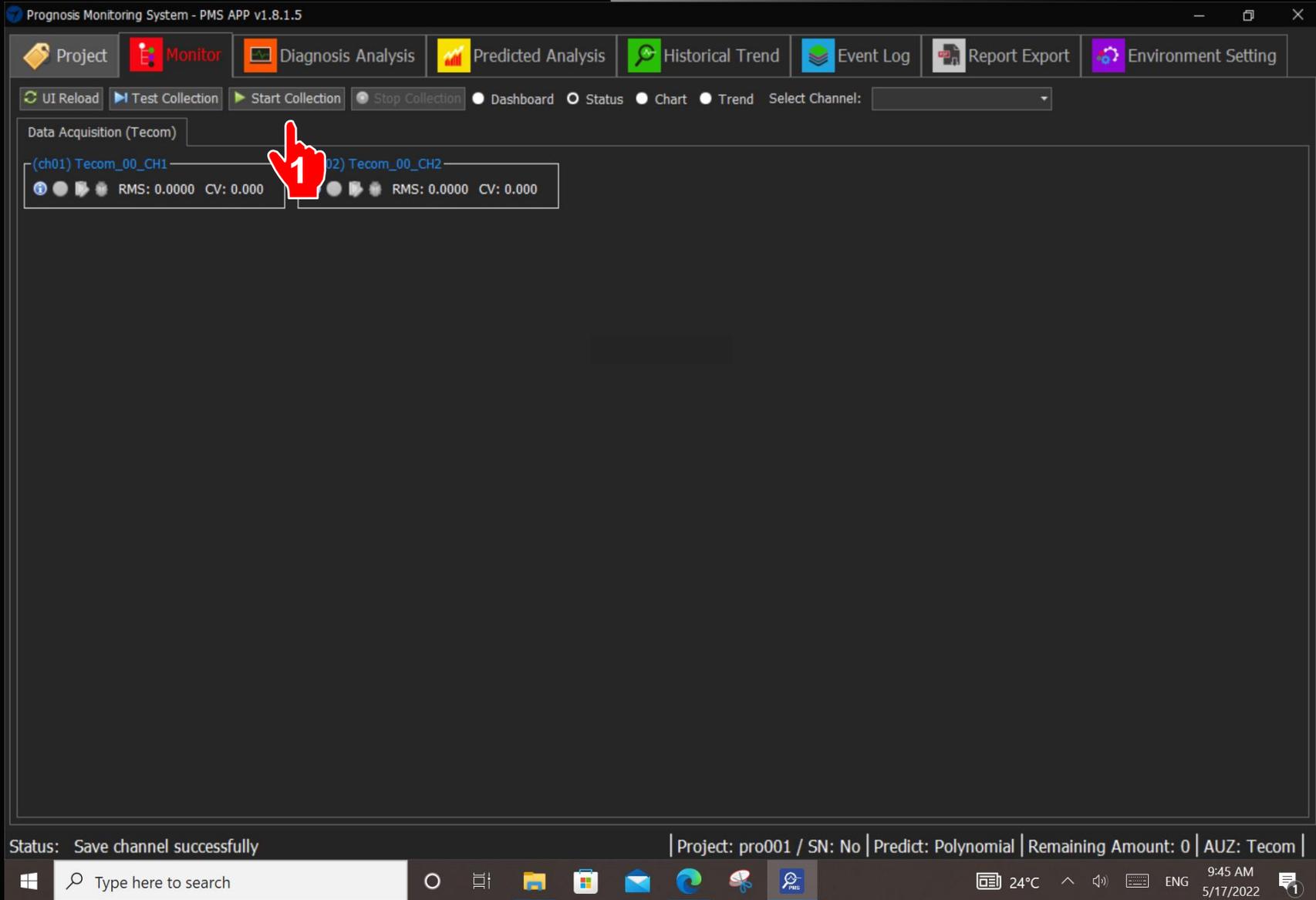
1. Click **Channel**
2. Click **(ch01)...**
3. Select **Vibration Standard**
(Motor kW Pull-down Menu) Information can be obtained from Motor Nameplate.
4. Fill in the Motor **Fa (Spindle)**
(Obtained from Motor Nameplate)
5. Check **Bearing Library**. Fill in the bearing number in the pop-up window
(Obtained from Motor Nameplate)
6. Click **Monitor**

Go to next page

Attention :

If the acceptance equipment is a **Gear Motor**, there are three parameters that need to be filled in the column of the gear. These three parameters need to be obtained from the original gear manufacturer before acceptance.

Gear	
Reduction Ratio	0.00
Number of Input Shaft Gears	0.00
Fp in RPM	0.00

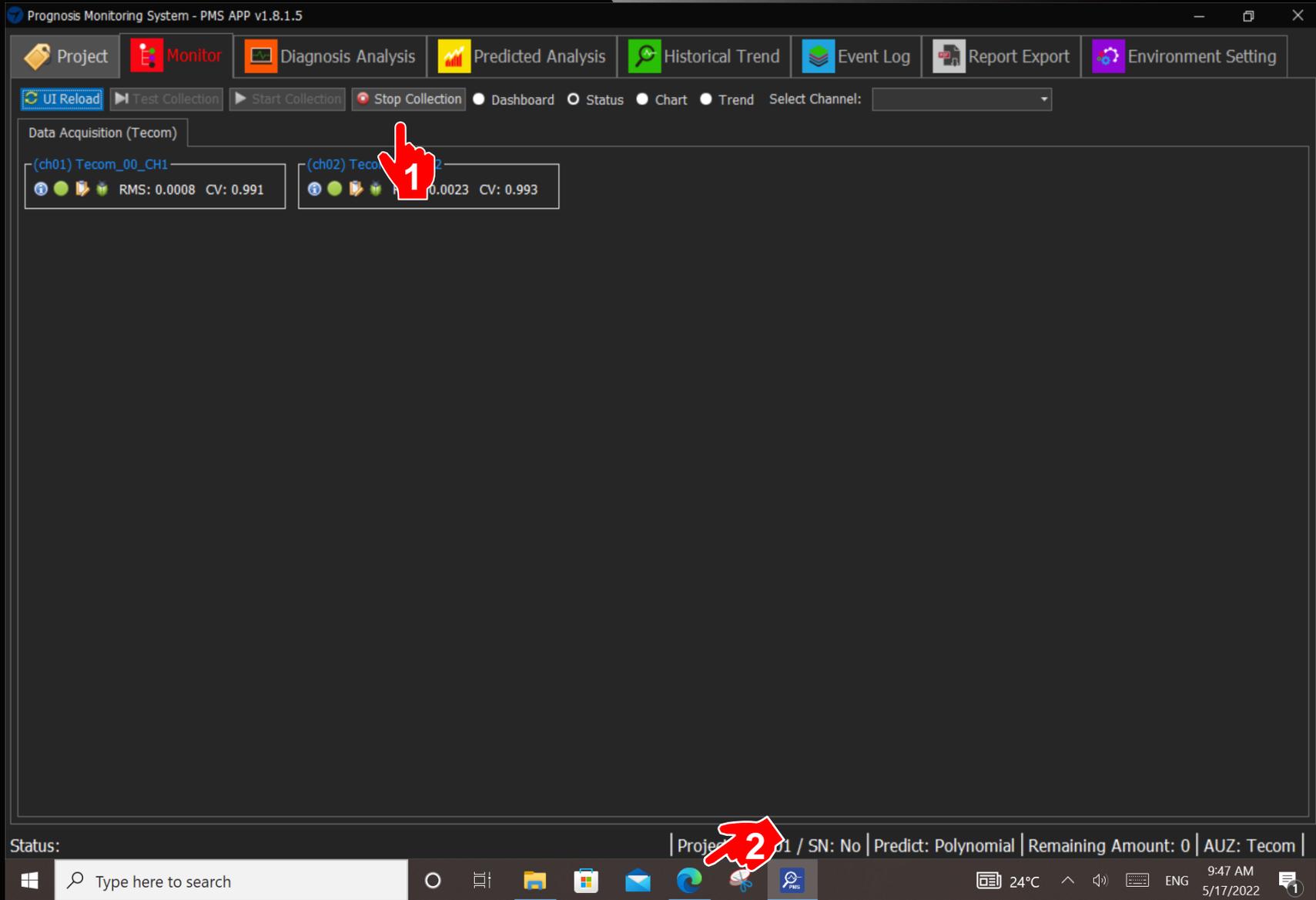


Direction :

Click according to the sequence

1. Click **Start Collection**

Go to next page



Direction :

Click according to the sequence

1. Click **Stop Collection** after 1 minute.
2. Click the **Web Browser** at the bottom. 

Go back to Homepage

Open PMSApp **Pro-9900** English

Subject: Obtain health data CVLog file

Health (CV): C:\PMS\CVLog\pro001\ch01\ Tecom_00_CH1\20220517.csv **1** Select File

1. Check the date of the selected file, if it is correct, please click 「Next」

2. To reselect the selection, please click 「Select File」

4 Next

Choose CV Data

Look In: (ch01) Tecom_00_CH1

20220322.csv	20220504.csv
20220323.csv	20220510.csv
20220324.csv	20220511.csv
20220426.csv	20220512.csv
20220427.csv	20220513.csv
20220503.csv	20220517.csv

File Name: **2**

Files of Type: csv文件

3 Choose CV Data Cancel

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Direction :

Click according to the sequence

1. Click **Select File**. Another window will be popped up.
2. Click **Today's csv file**
3. Click **Choose CV Data**. Window will be closed.
4. Click **Next**

Go to next page

Pro-9900

Open PMSApp

English

Obtain 17 measurement data DiagnosisLog files

Measurement Data: C:\PMS\DiagnosisLog\pro001\ch01\ Tecom_00_CH1\20220517.csv Select File

1.Check the date of the selected file, if it is correct, please click 「Next」

2.To redo the selection, click 「Select File」 or click 「Previous」 to redo select

Previous Next

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Direction :

Click according to the sequence

1. Click **Next**

Go to next page



Browser window showing the Tecom PMSApp interface for Pro-9900. The page displays equipment health and measurement results. A red arrow and the number '1' point to the scroll bar on the right side of the page, with the text "Scroll Down" below it.

Open PMSApp **Pro-9900** English

Obtain equipment health and 17 measurement results

Data Amount: 83 Compute Mode 2022-05-17 09:47:25.039

Device Health: **0.99428** **H9 Normal** Equipment is healthy and can be used with peace of mind, regular inspection

Vibration Vrms: 0.01308mm/s

Measurement Score:

Motor Spindle Project	
Unbalance : 0.000	Normal
Misalignment : 0.000	Normal
Looseness : 0.000	Normal
Bent Shaft : 0.000	Normal
Bearing Project	
Inner Race : 0.007	Normal
Outer Race : 0.006	Normal
Roller : 0.007	Normal
Oil Whirl : 0.000	Normal
Oil Whip : 0.000	Normal
Gear Project	
Gear Eccentricity : 0.000	Normal
Gear Misalignment : 0.000	Normal
Gear Broken Tooth : 0.000	Normal

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Direction :

Click according to the sequence

1. Scroll down the screen.

Direction :

Click according to the sequence

- 1. Click **Output Acceptance Report.**

Go to next page

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Looseness : 0.000	Normal
Bent Shaft : 0.000	Normal
Bearing Project	
Inner Race : 0.007	Normal
Outer Race : 0.006	Normal
Roller : 0.007	Normal
Oil Whirl : 0.000	Normal
Oil Whip : 0.000	Normal
Gear Project	
Gear Eccentricity : 0.000	Normal
Gear Misalignment : 0.000	Normal
Gear Broken Tooth : 0.000	Normal
Gear Bent Shaft : 0.000	Normal
Gear Tooth Wear : 0.000	Normal
Electrical Project	
Air Gap Eccentricity : 0.006	Normal
Broken Rotor Bar : 0.000	Normal
Phasing Fault : 0.000	Normal

Press to output the measurement report **Output Measurement Report** Press to output the acceptance report **Output Acceptance Report** **Previous**

Open PMSApp

Pro-9900

English

[Export acceptance report](#)

1. Please fill in the basic information of the device or skip it

Device Name:	Motor1
Device Number:	R02
Install Location:	5F

2. Please click 「Export」 to select the output archive path and file name

Acceptance Report Output:

Previous End Export

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Direction :

Click according to the sequence

1. Click and Input **Device Name, Device Number and Location.**
2. Click **Export**

Go to next page

Description :

Acceptance Report

Acceptance data time : 2022-05-17 09:47

Device Name : Motor1 Device Number : R02 Install Location : 5F

Test result : Acceptance Rejected

Vibration Vrms	Health (CV)	Health Index	Description
0.01308mm/s	0.99428	H9	Normal health

Acceptance item Measurement data Test result

Motor Spindle Project	Unbalance	0.000	Qualified
	Misalignment	0.000	Qualified
	Looseness	0.000	Qualified
	Bent Shaft	0.000	Qualified

Scroll Down

Acceptance Report will be popped up. Scroll down to the bottom to view all the information.

Tecom localhost:8090

Gear Project	Gear Misalignment	0.000	Qualified
	Gear Broken Tooth	0.000	Qualified
	Gear Bent Shaft	0.000	Qualified
	Gear Tooth Wear	0.000	Qualified
Electrical Project	Air Gap Eccentricity	0.006	Qualified
	Broken Rotor Bar	0.000	Qualified
	Phasing Fault	0.000	Qualified

Downloads

- Motor1_R02_2022-05-17 09_47_25Acceptance Report (...)
[Open file](#)
- Motor1_R02_2022-05-17 09_47_25Acceptance Report (...)
[Open file](#)
- Motor1_R02_2022-05-17 09_47_25Acceptance Report (...)
[Open file](#)
- Motor1_R02_2022-05-17 09_47_25Acceptance Report.pdf
[Open file](#)

Acceptor : _____ Supervisor's : _____
Report Time : 2022/5/

1 Export **2** Close **3**

Confirm the output report, please click 「Export」, when finished, please click 回首頁 to return to the home page

Direction :

Click according to the sequence

1. Click **Export PDF**
2. Window popup.
Either **Open file** or **Save as....**
3. Click **Close**

The Acceptance of the motor has been done. Go back to Homepage and ready for next motor.

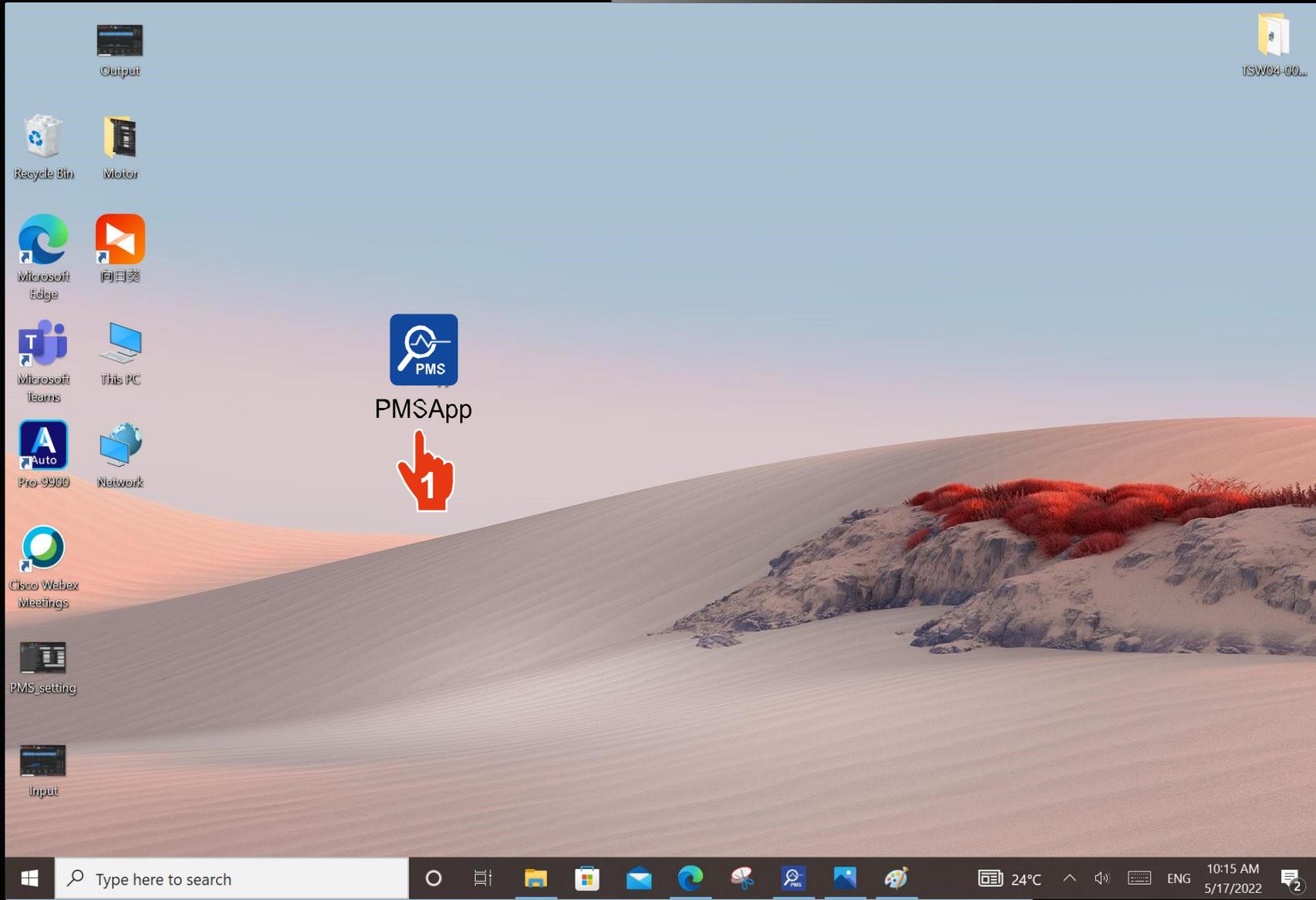
Attention :
The Acceptance Report can be copied from Tablet to USB Flash.

Description :

1. For each motor returned for repair, the acceptance report can be obtained within about 5 to 10 minutes under normal operation.
2. As long as the factory has motor acceptance work, Pro-9900 is a must-have tool.
3. Everyone can use it. Everyone can understand it. Pro-9900 brings huge benefits to factory motor acceptance.

Pro-9900

Expert Mode



Direction :

Click according to the sequence

1.Click 
PMSApp

Open Pro-9900
Expert Mode
Software.

Go to next page

Attention :
Pro-9900 needs to wait for the rotating motor speed to stabilize before performing the vibration measurement.

Prognosis Monitoring System - PMS APP v1.8.1.5

Project Monitor Diagnosis Analysis Predicted Analysis Historical Trend Event Log Report Export Environment Setting

UI Reload Test Collection Start Collection Stop Collection Dashboard Status Chart Trend

Dashboard

Tecom_00_CH1 Tecom_00_CH2 All Chl Vrms

Device Operation Health Trends and Predictions

Health Value

Count

— Tecom_00_CH1(CV)
- - - Tecom_00_CH1(Pred)
Health
Remind
Warning
Danger

Vibration Information

Tecom_00_CH1		Tecom_00_CH2	
Health	0.0000	Health	0.0000
RMS	0.0000	RMS	0.0000
Vrms	0.0000	Vrms	0.0000

Vibration State Trend

(mm/s)

Count

— Tecom_00_CH1(Vrms)

Abnormal Event

All Clear

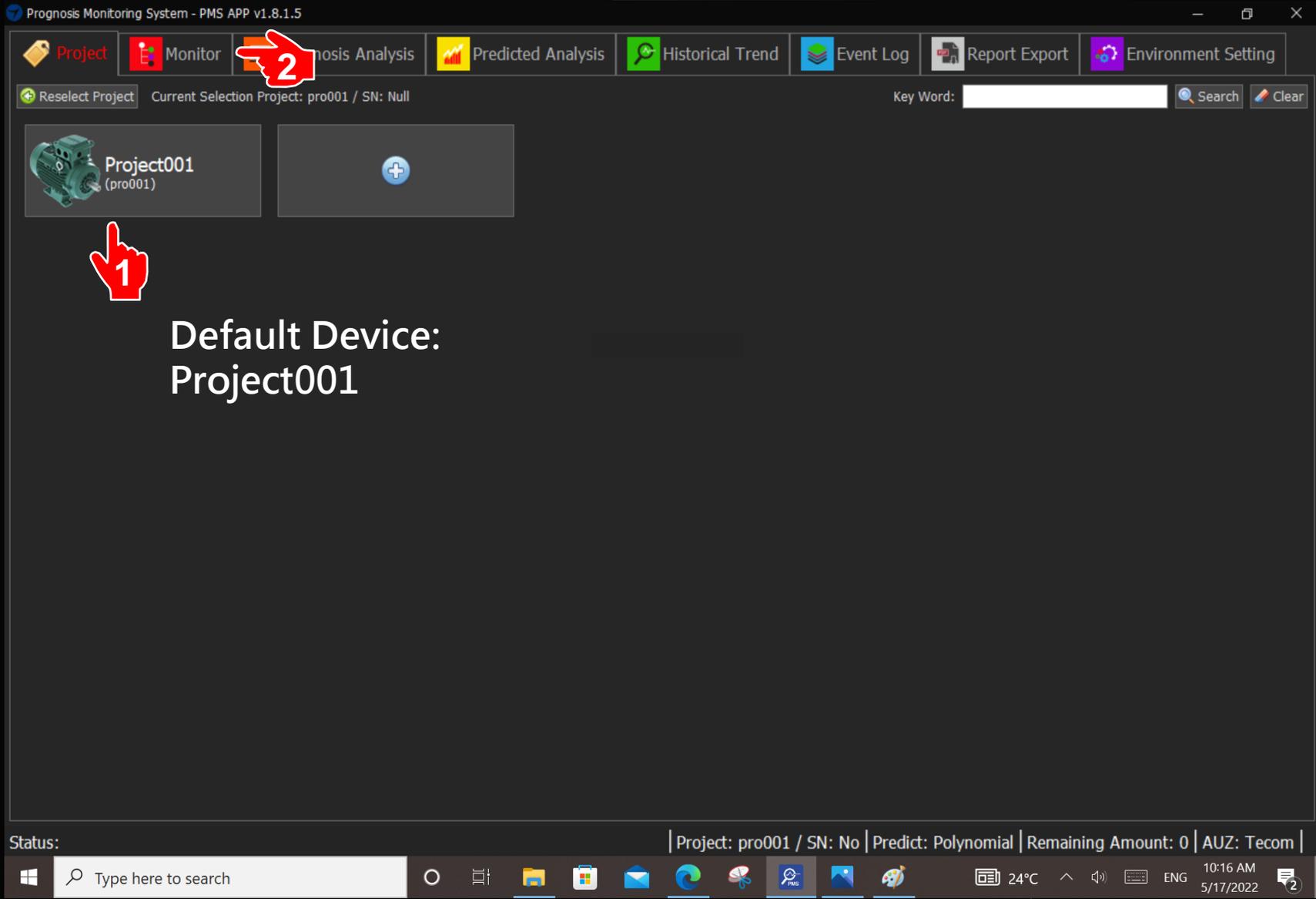
Status: Project: pro001 / SN: No Predict: Polynomial Remaining Amount: 0 AUZ: Tecom

Direction :

Click according to the sequence

1. Click **Project**

Go to next page.



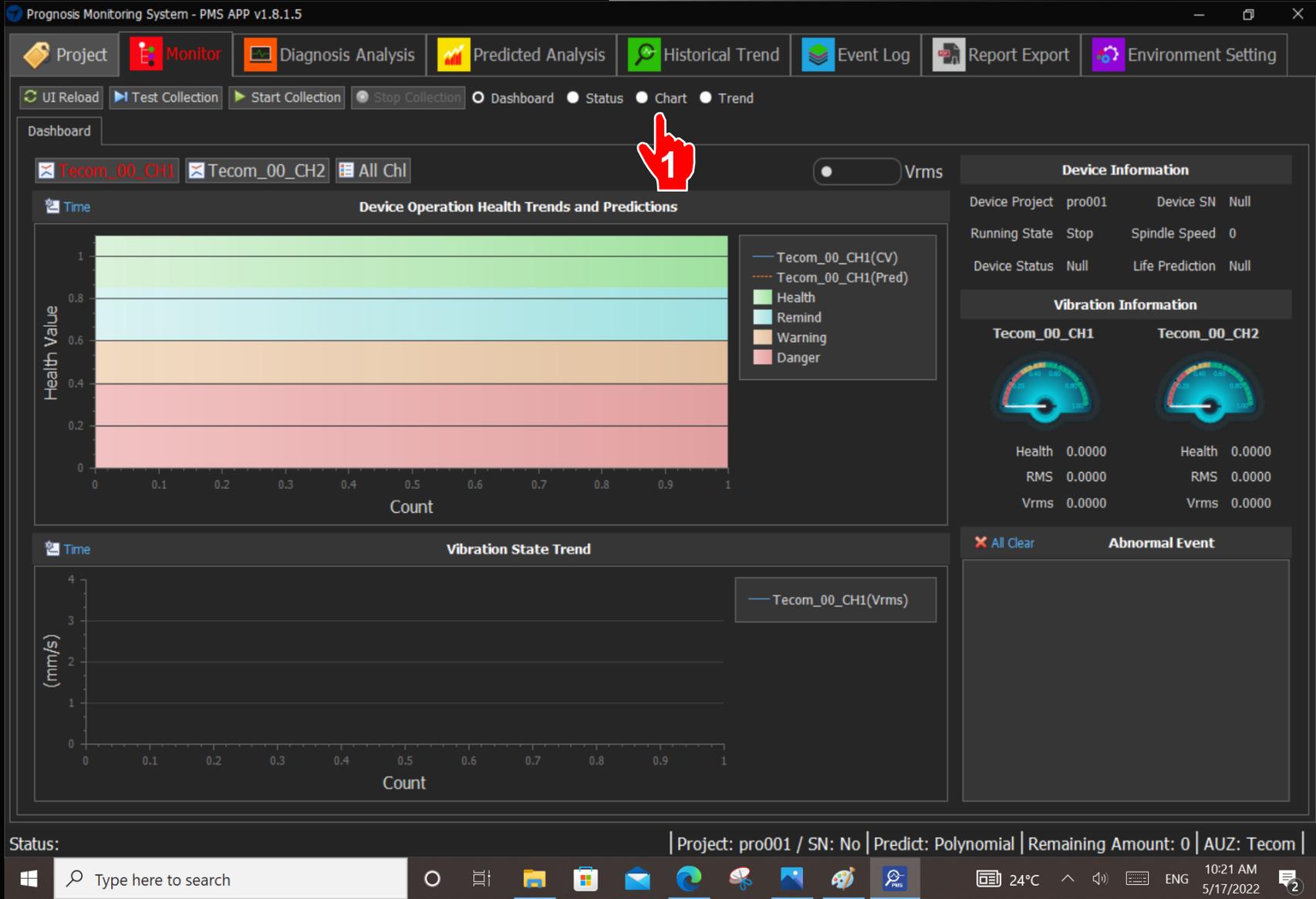
Default Device:
Project001

Direction :

Click according to the sequence

1. Click **Project001**
2. Click **Monitor**

Go to next page



Direction :

Click according to the sequence

1. Click **Chart**

Go to next page

Prognosis Monitoring System - PMS APP v1.8.1.5

Project Monitor Diagnosis Analysis Predicted Analysis Historical Trend Event Log Report Export Environment Setting

UI Reload Test Collection Start Collection Stop Collection Dashboard Status Chart Trend Select Channel: [Dropdown]

Data Acquisition (Tecom)

0001-01-01 00:00:00 (ch01) Tecom_00_CH1 Time Domain

DAQ

Sample Rate	16000
Sample Length	8192
Spectrum Lines	4096
Bandwidth	1.95 Hz
Sensitivity	100 mV/G

Time Domain Feature

Peak to Peak	0.00000 (g)
Mean Absolute	0.00000 (g)
Skewness	0.00000
Kurtosis	0.00000
Waveform Factor	0.00000
Crest Factor	0.00000
Impulse Factor	0.00000
Standard Deviation	0.00000 (g)

Acceleration Velocity Envelope XLine Max Point: (Hz:0.000, g:0.000) (ch01) Tecom_00_CH1 Spectrum(Acceleration)

RPM Gear Bearing

RPM Frequency		
1X	0.00 Hz	0.00000
2X	0.00 Hz	0.00000
3X	0.00 Hz	0.00000
4X	0.00 Hz	0.00000
5X	0.00 Hz	0.00000
6X	0.00 Hz	0.00000
7X	0.00 Hz	0.00000
8X	0.00 Hz	0.00000

Health Indicator

Update Time: 0001-01-01 00:00:00

CV: 0.000	RMS: 0.00000 (g)	Vrms: 0.00000 (mm/s)	RPM: 0.000
Fa: 0.000 (Hz)	Fp: 0.000 (Hz)	Vib Standard: Class I	Threshold: 1 / 0

Diagnosis Information

Unbalance	Bent Shaft	Misalignment	Looseness	Oil Whirl	Oil Whip
Inner Race	Outer Race	Roller	Air Gap Eccentricity	Broken Rotor Bar	Phasing Fault
Gear Eccentricity	Gear Misalignment	Gear Bad Mesh or Broken	Gear Tooth Wear	Gear Bent Shaft	

Diagnosis Feature

Fa	Outer
Inner	Roller

Status: Project: pro001 / SN: No Predict: Polynomial Remaining Amount: 0 AUZ: Tecom

Windows taskbar: Type here to search, 24°C, 10:22 AM 5/17/2022



Direction :

Click according to the sequence

1. Click Environment Setting

Go to next page

Prognosis Monitoring System - PMS APP v1.8.1.5

Project Monitor Diagnosis Analysis Predicted Analysis Historical Trend Event Log Report Export Environment Setting

Channel List

- (ch01) Tecom_00_CH1
- (ch02) Tecom_00_CH2

Database Mapping

Physical Device Name: Tecom_00 Database Device Name: dev001

Physical Channel Name: Tecom_00_CH1 Database Channel Name: ch01

Diagnosis Parameter

PMS Type

Vibration Standard: Class I (<15kW)

Model Type: A

Diagnosis

Threshold(Diagnosis): 1

Threshold(Vrms): 0.00

Sample Rate: 16000

Sample Length: 8192

Cutoff Frequency

Low Frequency: 1000

High Frequency: 5120

Mechanical Properties

Fa(Spindle) in RPM: 1800.00

Rotor

Number of Rotors: 0

Gear

Reduction Ratio: 0.00

Number of Input Shaft Gears: 0.00

Fp in RPM: 0.00

Bearing

Bearing Information (mm or inch): Bearing Library

Contact Angle: 0.000

Pitch Diameter: 0.001

Number of Balls: 0

Ball Diameter: 0.000

Status: Project: pro001 / SN: No | Predict: Polynomial | Remaining Amount: 0 | AUZ: Tecom

Direction :

Click according to the sequence

1. Click **Channel**
2. Click **(ch01)...**
3. Select **Vibration Standard**

(Motor kW Pull-down Menu) Information can be obtained from Motor Nameplate.

4. Fill in the Motor **Fa (Spindle)**

(Obtained from Motor Nameplate)

5. Check **Bearing Library**. Fill in the bearing number in the pop-up window

(Obtained from Motor Nameplate)

6. Click **Monitor**

Go to next page

Attention :

If the acceptance equipment is a **Gear Motor**, there are three parameters that need to be filled in the column of the gear. These three parameters need to be obtained from the original gear manufacturer before acceptance.

Gear	
Reduction Ratio	0.00
Number of Input Shaft Gears	0.00
Fp in RPM	0.00

Prognosis Monitoring System - PMS APP v1.8.1.5

Project Monitor Diagnosis Analysis Predicted Analysis Historical Trend Event Log Report Export Environment Setting

UI Reload Test Collection **Start Collection** Stop Collection Dashboard Status Chart Trend Select Channel:

Data Acquisition (Tecom)

0001-01-01 00:00:00 (ch01) Tecom_00_CH1 Time Domain

DAQ

Sample Rate	16000
Sample Length	8192
Spectrum Lines	4096
Bandwidth	1.95 Hz
Sensitivity	100 mV/G

Time Domain Feature

Peak to Peak	0.00000 (g)
Mean Absolute	0.00000 (g)
Skewness	0.00000
Kurtosis	0.00000
Waveform Factor	0.00000
Crest Factor	0.00000
Impulse Factor	0.00000
Standard Deviation	0.00000 (g)

Acceleration Velocity Envelope xLine Max Point: (Hz0.000, g:0.000) (ch01) Tecom_00_CH1 Spectrum(Acceleration) RPM Gear Bearing

RPM Frequency

1X	0.00 Hz	0.00000
2X	0.00 Hz	0.00000
3X	0.00 Hz	0.00000
4X	0.00 Hz	0.00000
5X	0.00 Hz	0.00000
6X	0.00 Hz	0.00000
7X	0.00 Hz	0.00000
8X	0.00 Hz	0.00000

Health Indicator

Update Time: 0001-01-01 00:00:00

CV: 0.000	RMS: 0.00000 (g)	Vrms: 0.00000 (mm/s)	RPM: 0.000
Fa: 0.000 (Hz)	Fp: 0.000 (Hz)	Vib Standard: Class I	Threshold: 1 / 0

Diagnosis Information

Unbalance	Bent Shaft	Misalignment	Looseness	Oil Whirl	Oil Whip
Inner Race	Outer Race	Roller	Air Gap Eccentricity	Broken Rotor Bar	Phasing Fault
Gear Eccentricity	Gear Misalignment	Gear Bad Mesh or Broken	Gear Tooth Wear	Gear Bent Shaft	

Diagnosis Feature

Fa	Outer
Inner	Roller

Status: Save channel successfully | Project: pro001 / SN: No | Predict: Polynomial | Remaining Amount: 0 | AUZ: Tecom

Windows taskbar: Type here to search, 24°C, 10:25 AM 5/17/2022

Direction :

Click according to the sequence

1. Click **Start Collection**.

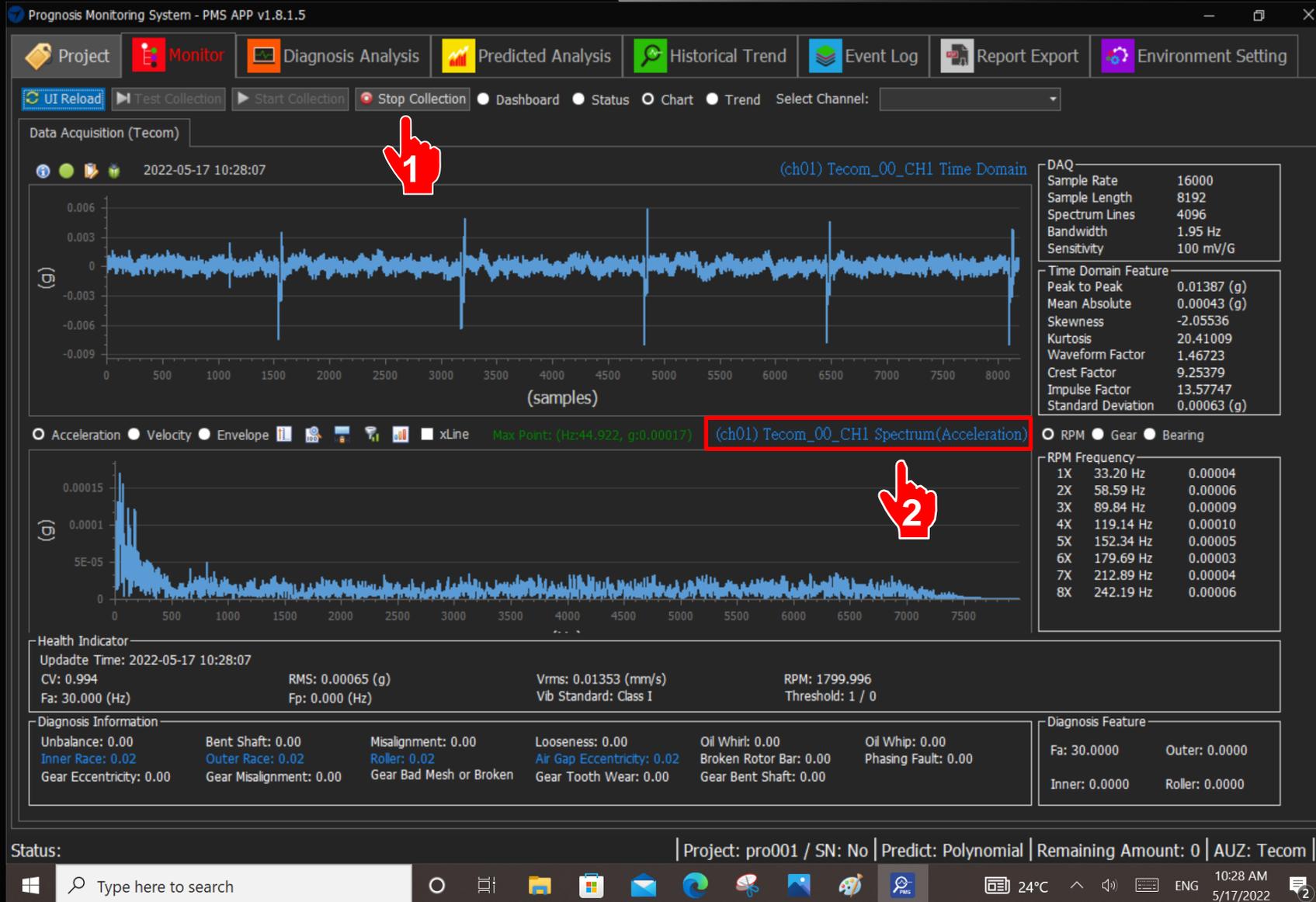
Go to next page

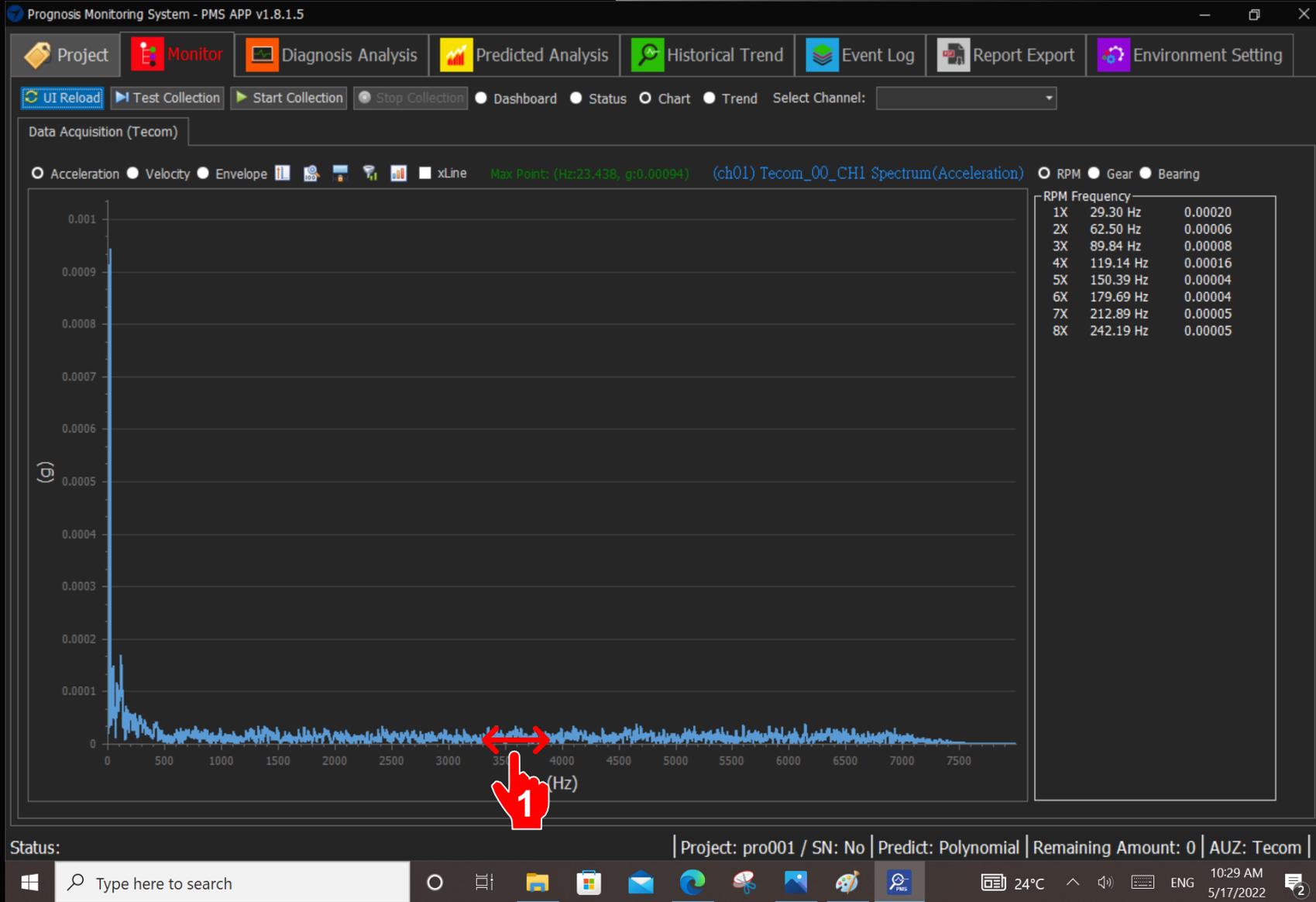
Direction :

Click according to the sequence

1. Click **Stop** Collection after 1 minute.
PS: Click 2 times.
 2. Click Spectrum (Acceleration)
- Screen will be popped up.

Go to next page





Direction :

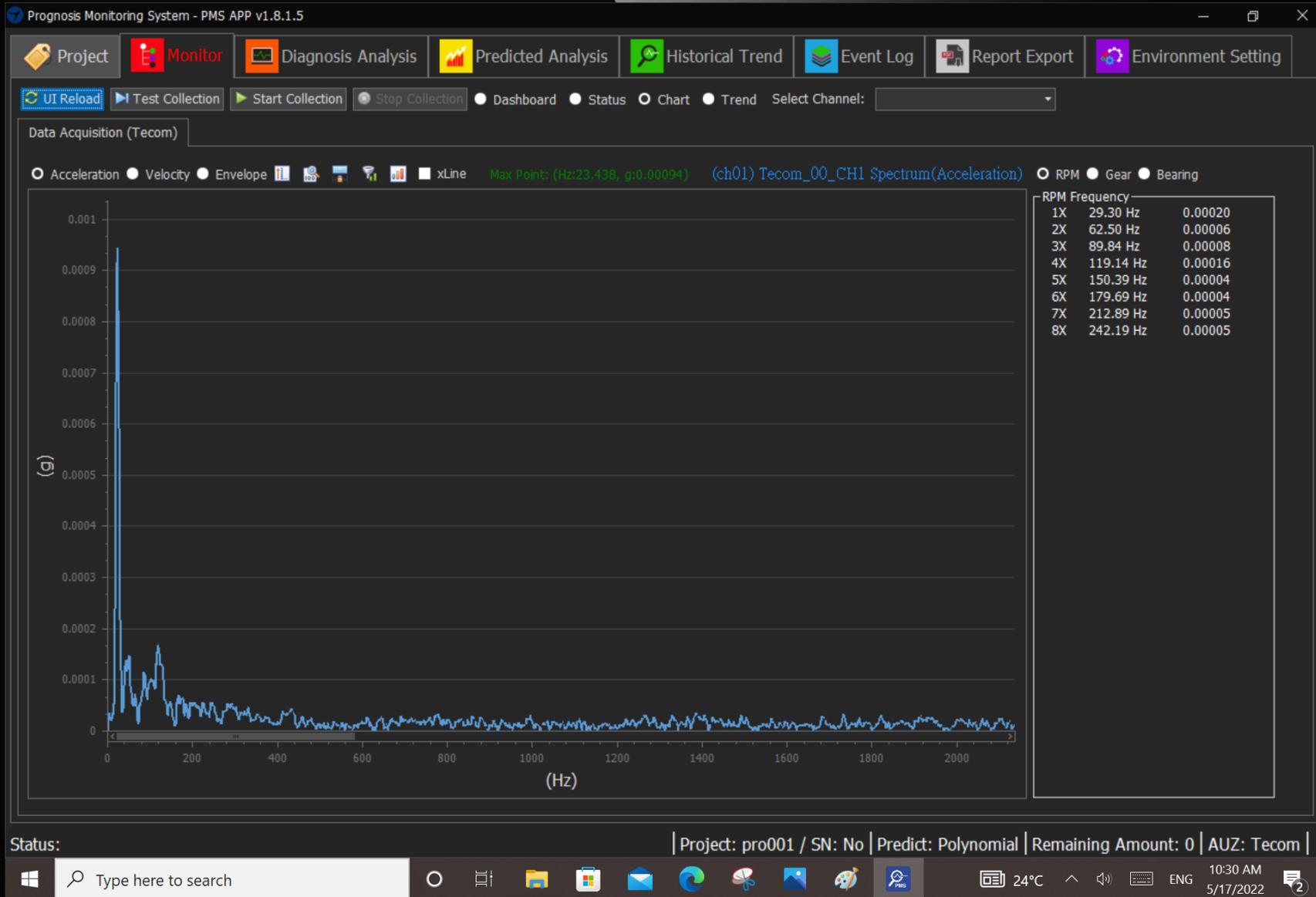
Click according to the sequence

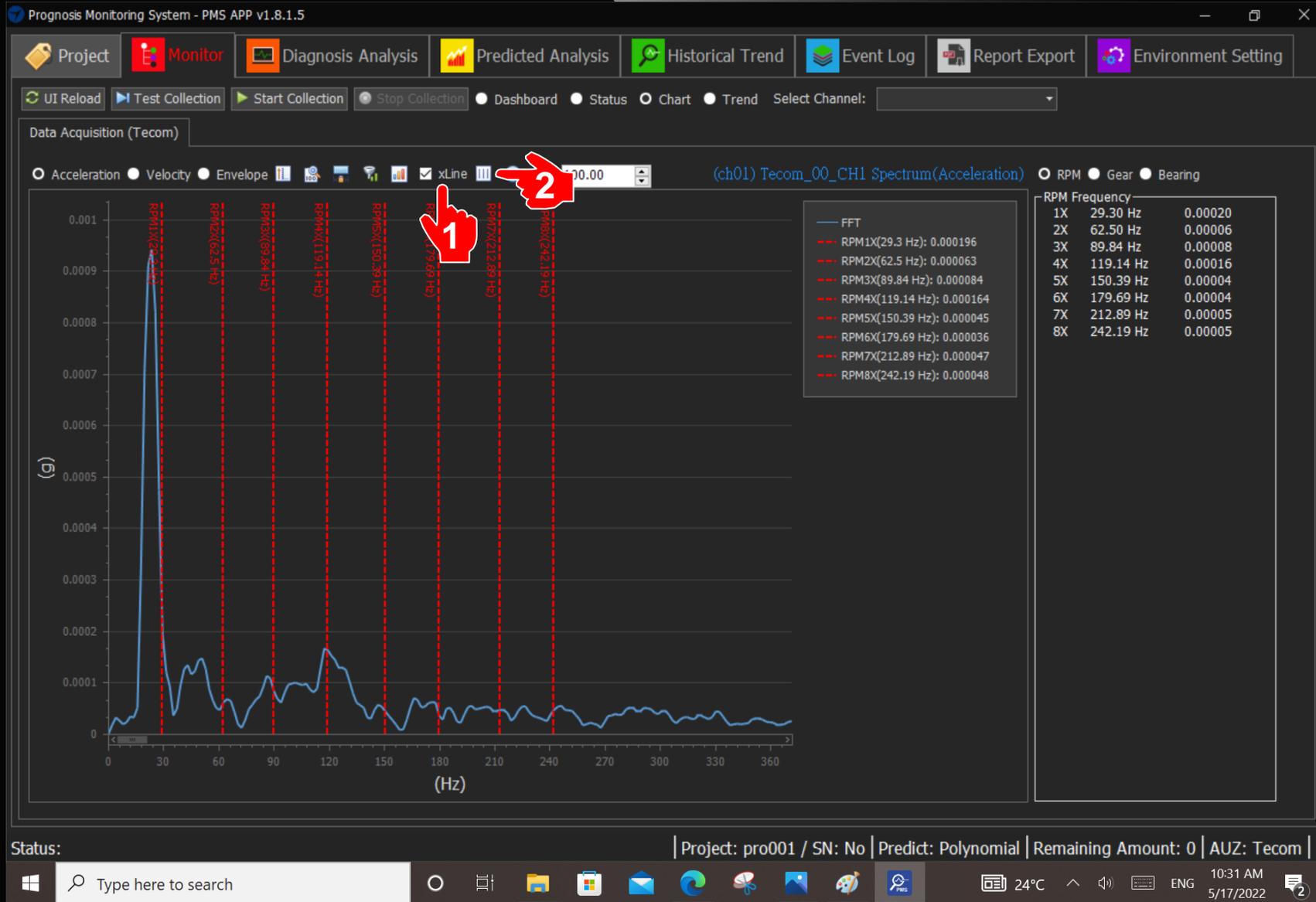
Spectrum analysis screen

1. The curve can be dragged left and right to enlarge.

Direction :

Spectrum analysis screen





Direction :

Click according to the sequence

Spectrum analysis screen

1. Check **XLine**
2. Click  Multiplier index

Description :

1. Experts should analyze and judge based on the spectrum and issue an expert report by themselves.
2. The expert report can be compared and verified with the Pro-9900 Automatic Acceptance Report.