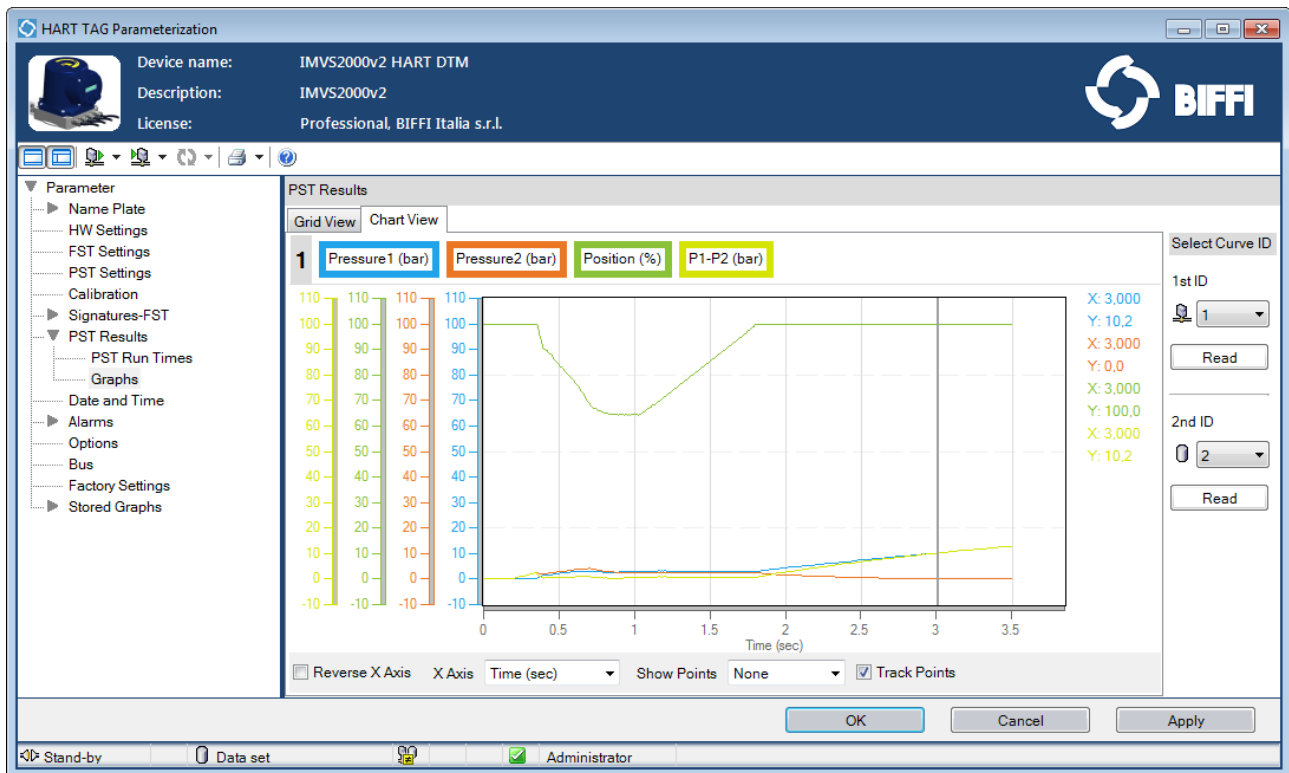


MDE 237



IMVS2000v2 DTM/HART User Manual

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BIFFI ITALIA has taken every care in collecting and verifying the documentation contained in this Installation and User Manual.

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1 Reference Documents

- [1]: MAN 720 – IMVS2000v2 Installation Operating Manual
- [2]: MDE 231 – Biffi Assistant User Manual
- [3]: MDE 232 – HRT_IMVS2000v2 User Manual

2 Introduction

The DTM/HART of the IMVS2000v2 provides an useful interface for managing and configuring the IMVS2000v2 device; not all the parameters of the IMV2000v2 are available by using the DTM/HART (see Appendix B for the Details).

This document lists and describes the functionality of the all the parameters available on the DTM/HART of the IMVS2000v2.

Appendix A describes how to install the DTM/HART and to add it to the available DTMs on PACTware tool.

Appendix B shows the IMVS2000v2 parameters available through a 375/475 HART connection. A cross-reference table between DTM/HART and 375/475 parameters is reported.

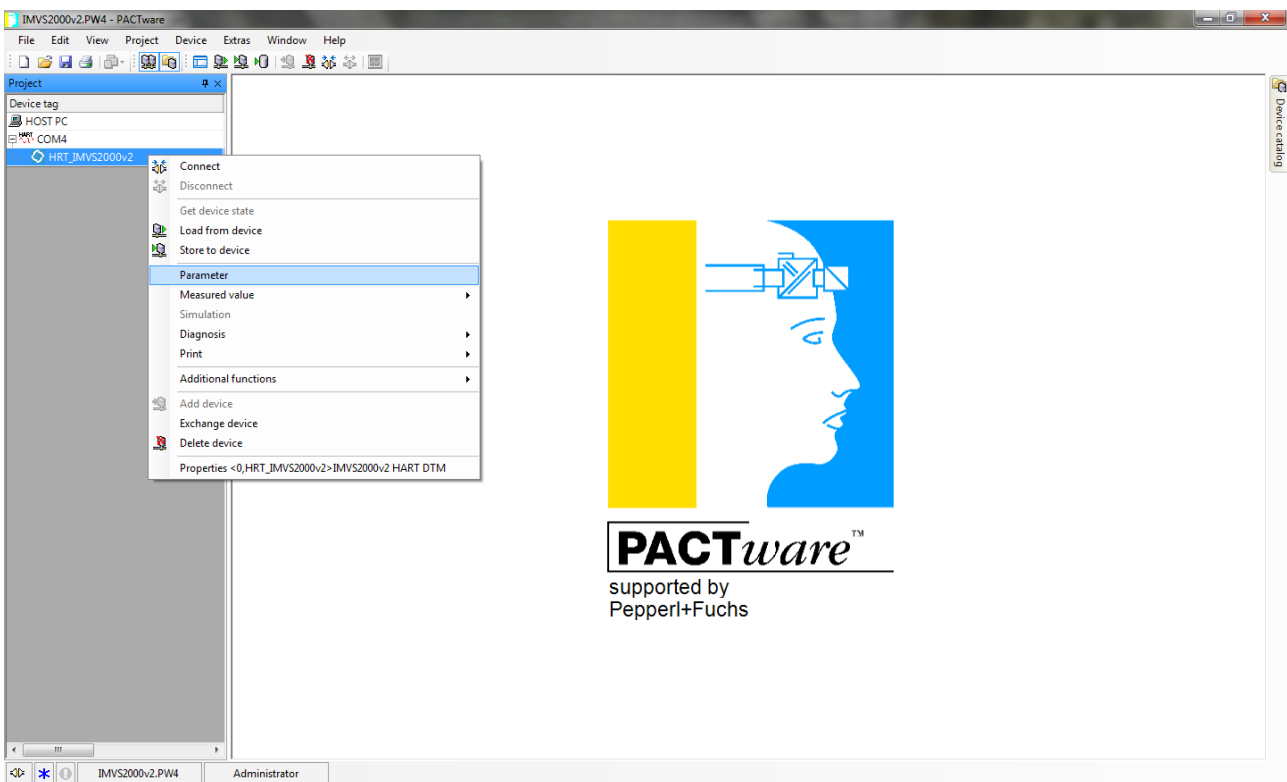
3 DTM/HART - IMVS2000v2

The print screens of this paragraph are obtained by using the PACTware tool and also the “position” of the parameters, the names of the Menus and the names of the commands refer to the PACTware tool.

See Appendix A for details about Installation of the DTM.

3.1 Device Menu

Right mouse click on the device to access to the Device menu



The “Connect” command establishes the connection with the device.

The “Disconnect” command breaks the connection with the device.

The “Get device state” command reads the status of the HRT_IMVS2000v2 device.

The “Load from device” command updates all the parameters (except graphs) to the ones stored into the IMVS2000v2 device.

If the “Load from device” command has not used yet, the default values or the latest saved values are shown.

The “Store to device” command sends all the values of the Parameter Menu.

Pay attention to use the “Store to device” command because if the “Load from device” command has not used yet, the data are not updated and the default values or the latest saved value are sent to the IMVS2000v2 device and all the previous values are lost.

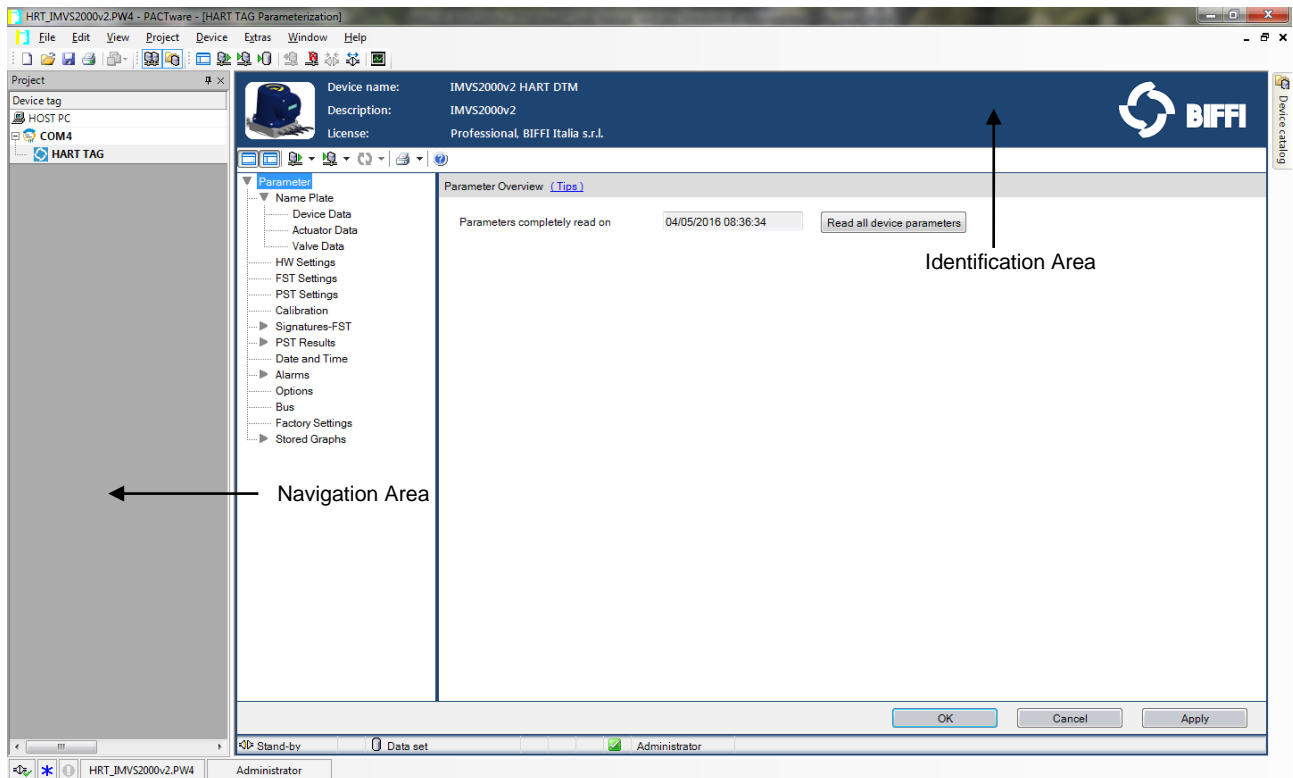
Refer to 3.3 for details about “Measure Value” Menu.

Refer to 3.4 for details about “Diagnosis” Menu.

Refer to 3.5 for details about “Print” Menu.

Refer to 3.6 for details about “Additional Functions” Menu.

3.2 Parameter Menu



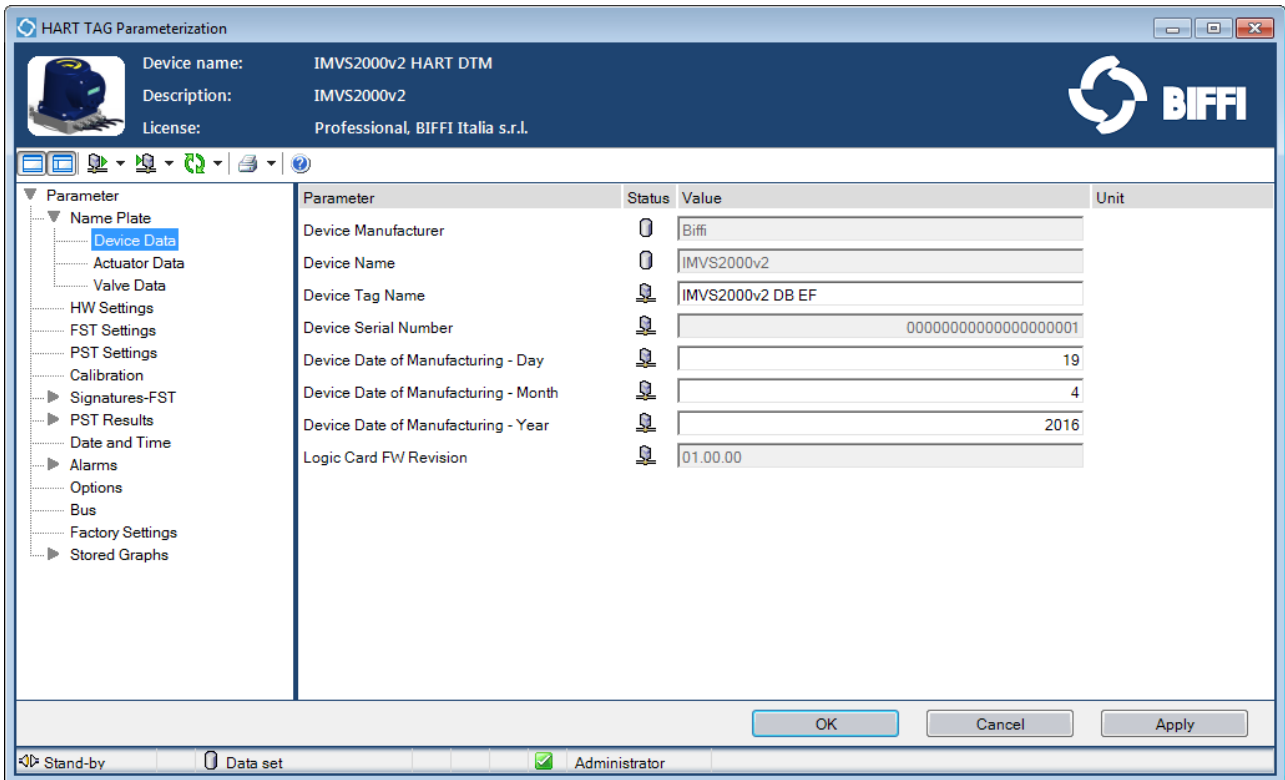
3.2.1 The toolbar



Button	Description
	Show/hide the Identification area
	Show/hide the Navigation area
	Send parameter to the device. It's available only if the connection is established.
	Read parameters from the device.
	Enable the cyclical reading function (more polling values can be selected: 1, 2, 4, 5, 10, 20, 50 sec)
	Print the displayed parameters
	Open the IMVS2000v2 DTM User Manual

3.2.2 Name Plate – Device Data

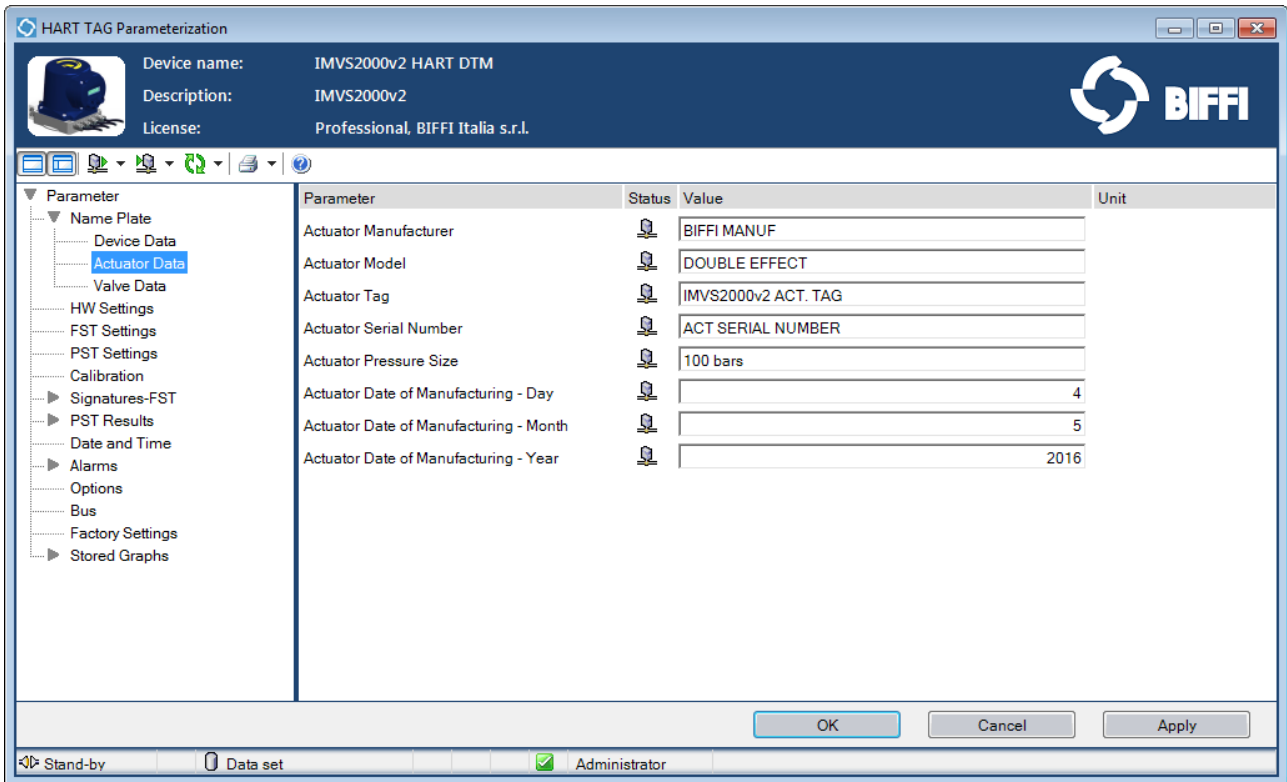
Path: Parameter -> Name Plate -> Device Data



DTM Parameter	R/W	Biffi Assistant Path	Description
Device Manufacturer	R	Device -> Name Plate -> Device Data	See [1] for details.
Device Name	R	Device -> Name Plate -> Device Data	See [1] for details.
Device Tag Name	R/W	Device -> Name Plate -> Device Data	It's a string. Max length = 16 characters. See [1] for details.
Device Serial Number	R	Device -> Name Plate -> Device Data	See [1] for details.
Device Date of Manufacturing – Day	R/W	Device -> Name Plate -> Device Data	Range 1 – 31. See [1] for details.
Device Date of Manufacturing – Month	R/W	Device -> Name Plate -> Device Data	Range 1 – 12. See [1] for details.
Device Deate of Manufacturing – Year	R/W	Device -> Name Plate -> Device Data	Range 2014 – 2099. See [1] for details.
Logic Card FW Revision	R	Device -> Name Plate -> Device Data	See [1] for details.

3.2.3 Name Plate – Actuator Data

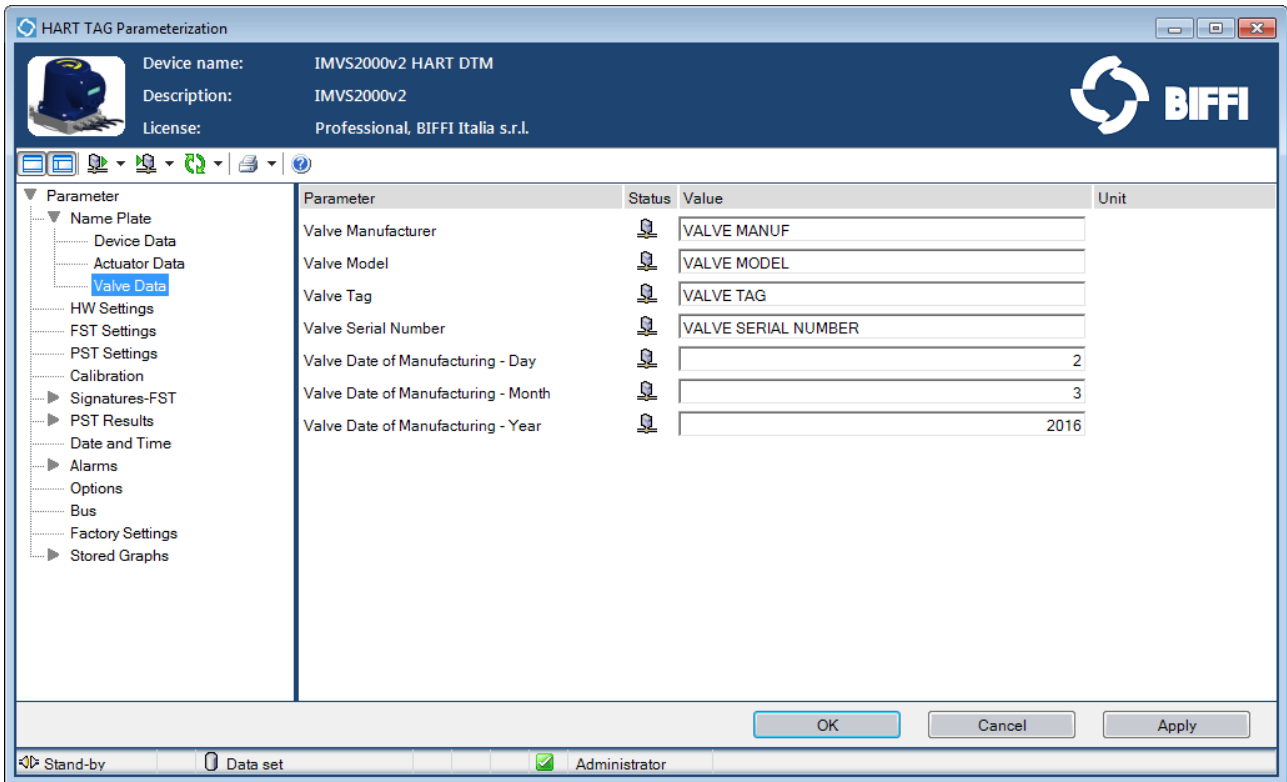
Path: Parameter -> Name Plate -> Actuator Data



DTM Parameter	R/W	Biffi Assistant Path	Description
Actuator Manufacturer	R/W	Device -> Name Plate -> Actuator Data	It's a string. Max length = 12 characters. See [1] for details.
Actuator Model	R/W	Device -> Name Plate -> Actuator Data	It's a string. Max length = 20 characters. See [1] for details.
Actuator Tag	R/W	Device -> Name Plate -> Actuator Data	It's a string. Max length = 20 characters. See [1] for details.
Actuator Serial Number	R/W	Device -> Name Plate -> Actuator Data	It's a string. Max length = 20 characters. See [1] for details.
Actuator Pressure Size	R/W	Device -> Name Plate -> Actuator Data	It's a string. Max length = 10 characters. See [1] for details.
Actuator Date of Manufacturing - Day	R/W	Device -> Name Plate -> Actuator Data	Range 1 – 31. See [1] for details.
Actuator Date of Manufacturing – Month	R/W	Device -> Name Plate -> Actuator Data	Range 1 – 12. See [1] for details.
Actuator Date of Manufacturing – year	R/W	Device -> Name Plate -> Actuator Data	Range 2014 – 2099. See [1] for details.

3.2.4 Name Plate – Valve Data

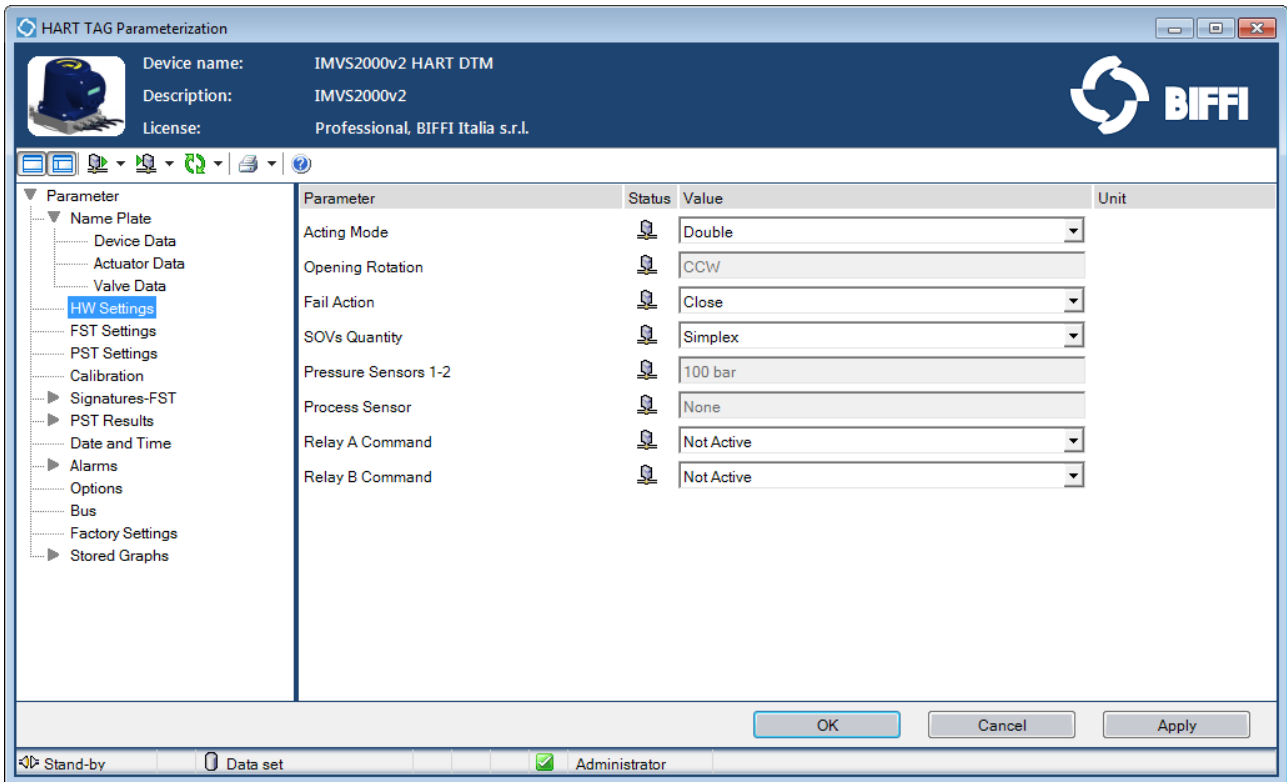
Path: Parameter -> Name Plate -> Valve Data



DTM Parameter	R/W	Bi ffi Assistant Path	Description
Valve Manufacturer	R/W	Device -> Name Plate -> Valve Data	It's a string. Max length = 12 characters. See [1] for details.
Valve Model	R/W	Device -> Name Plate -> Valve Data	It's a string. Max length = 20 characters. See [1] for details.
Valve Tag	R/W	Device -> Name Plate -> Valve Data	It's a string. Max length = 20 characters. See [1] for details.
Valve Serial Number	R/W	Device -> Name Plate -> Valve Data	It's a string. Max length = 20 characters. See [1] for details.
Valve Date of Manufacturing - Day	R/W	Device -> Name Plate -> Valve Data	Range 1 – 31. See [1] for details.
Valve Date of Manufacturing – Month	R/W	Device -> Name Plate -> Valve Data	Range 1 – 12. See [1] for details.
Valve Date of Manufacturing – year	R/W	Device -> Name Plate -> Valve Data	Range 2014 – 2099. See [1] for details.

3.2.5 HW Settings

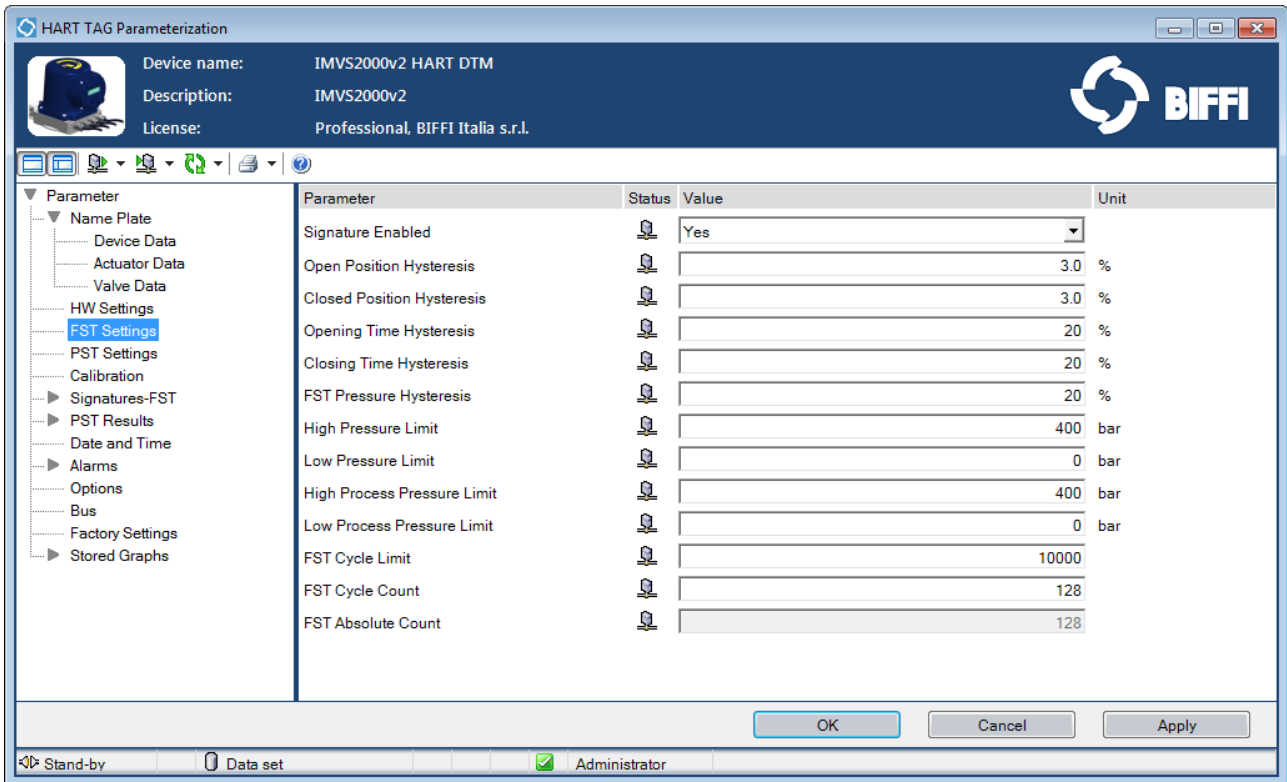
Path: Parameter -> HW Settings



DTM Parameter	R/W	Biffi Assistant Path	Description
Acting Mode	R/W	Device -> HW Settings -> HW Setting	“Single”, “Double” or “Double-S” can be set. See [1] for details.
Opening Rotation	R	Device -> HW Settings -> HW Setting	See [1] for details.
Fail Action	R/W	Device -> HW Settings -> HW Setting	“Close” or “Open” can be set. See [1] for details.
SOVs Quantity	R/W	Device -> HW Settings -> HW Setting	“Simplex”, “Series” or “Parallel” can be set. See [1] for details.
Pressure Sensor 1-2	R	Device -> HW Settings -> HW Setting	See [1] for details.
Process Sensor	R	Device -> HW Settings -> HW Setting	See [1] for details.
Relay A Command	R/W	Device -> HW Settings -> HW Setting	“Not Active” or “Active” can be set. See [1] for details.
Relay B Command	R/W	Device -> HW Settings -> HW Setting	“Not Active” or “Active” can be set. See [1] for details.

3.2.6 FST Settings

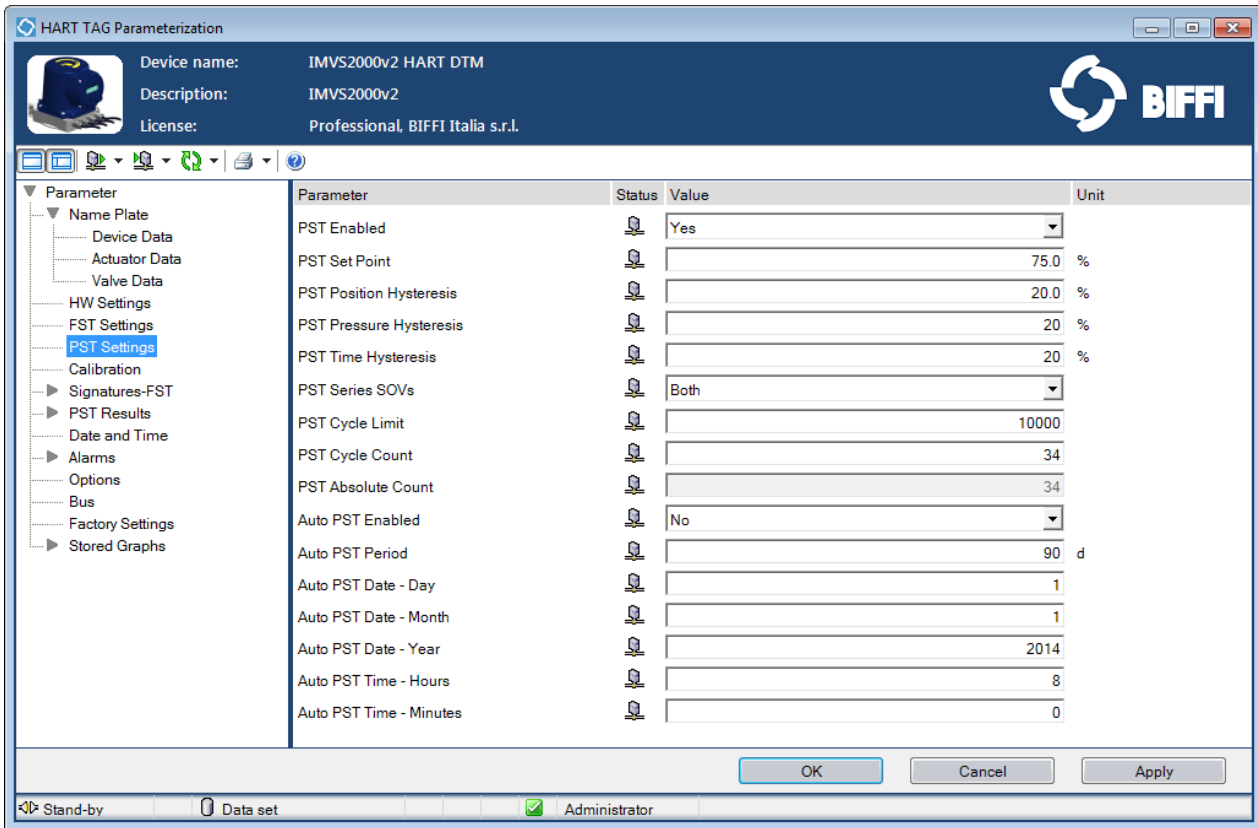
Path: Parameter -> FST Settings



DTM Parameter	R/W	Biffi Assistant Path	Description
Signatures Enabled	R/W	Device -> FST Settings -> FST Setting	“Yes” or “No” can be set. See [1] for details.
Open Position Hysteresis	R/W	Device -> FST Settings -> FST Setting	Range 0,0 – 90,0%. See [1] for details.
Closed Position Hysteresis	R/W	Device -> FST Settings -> FST Setting	Range 0,0 – 90,0%. See [1] for details.
Opening Time Hysteresis	R/W	Device -> FST Settings -> FST Setting	Range 0 – 200%. See [1] for details.
Closing Time Hysteresis	R/W	Device -> FST Settings -> FST Setting	Range 0 – 200%. See [1] for details.
FST Pressure Hysteresis	R/W	Device -> FST Settings -> FST Setting	range 0 – 100%. See [1] for details.
High Pressure Limit	R/W	Device -> FST Settings -> FST Setting	Range 0 – 5800. See [1] for details.
Low Pressure Limit	R/W	Device -> FST Settings -> FST Setting	Range 0 – 5800. See [1] for details.
High Process Pressure Limit	R/W	Device -> FST Settings -> FST Setting	Range 0 – 5800. See [1] for details.
Low Process Pressure Limit	R/W	Device -> FST Settings -> FST Setting	Range 0 – 5800. See [1] for details.
FST Cycle Limit	R/W	Device -> FST Settings -> FST Setting	Range 1 – 100000. See [1] for details.
FST Cycle Count	R/W	Device -> FST Settings -> FST Setting	Range 0 – 100000. See [1] for details.
FST Absolute Count	R	Device -> FST Settings -> FST Setting	Range 0 – 1000000. See [1] for details.

3.2.7 PST Settings

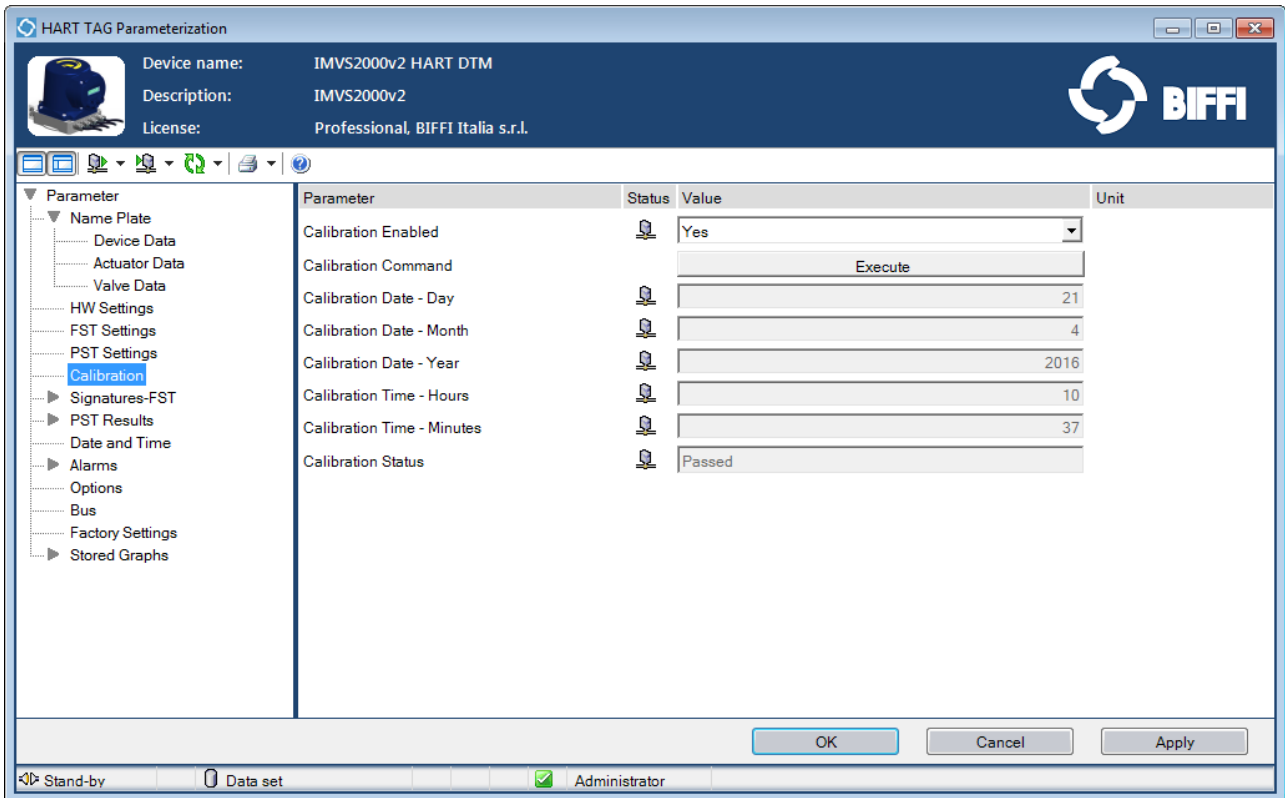
Path: Parameter -> PST Settings



DTM Parameter	R/W	Biffi Assistant Path	Description
PST Enabled	R/W	Device -> PST Settings -> PST Setting	“Yes” or “No” can be set. See [1] for details.
PST Set Point	R/W	Device -> PST Settings -> PST Setting	Range 5.0 – 95.0 %. See [1] for details.
PST Position Hysteresis	R/W	Device -> PST Settings -> PST Setting	Range 0.0 – 100.0%. See [1] for details.
PST Pressure Hysteresis	R/W	Device -> PST Settings -> PST Setting	Range 0 – 100%. See [1] for details.
PST Time Hysteresis	R/W	Device -> PST Settings -> PST Setting	Range 0 – 200%. See [1] for details.
PST Series SOVs	R/W	Device -> PST Settings -> PST Setting	“One” or “Both” can be set. See [1] for details.
PST Cycle Limit	R/W	Device -> PST Settings -> PST Setting	Range 1 – 100000. See [1] for details.
PST Cycle Count	R/W	Device -> PST Settings -> PST Setting	Range 0 – 100000. See [1] for details.
PST Absolute Count	R	Device -> PST Settings -> PST Setting	Range 0 – 1000000. See [1] for details.
Auto PST Enabled	R/W	Device -> PST Settings -> PST Setting	“No” or “Yes” can be set. See [1] for details.
Auto PST Period	R/W	Device -> PST Settings -> PST Setting	Range 1 – 365. See [1] for details.
Auto PST Date – Day	R/W	Device -> PST Settings -> PST Setting	Range 1 – 31. See [1] for details.
Auto PST Date – Month	R/W	Device -> PST Settings -> PST Setting	Range 1 – 12. See [1] for details.
Auto PST Date – Year	R/W	Device -> PST Settings -> PST Setting	Range 2014 – 2099. See [1] for details.
Auto PST Time – Hours	R/W	Device -> PST Settings -> PST Setting	Range 0 – 23. See [1] for details.
Auto PST Time – Minutes	R/W	Device -> PST Settings -> PST Setting	Range 0 – 59. See [1] for details.

3.2.8 Calibration

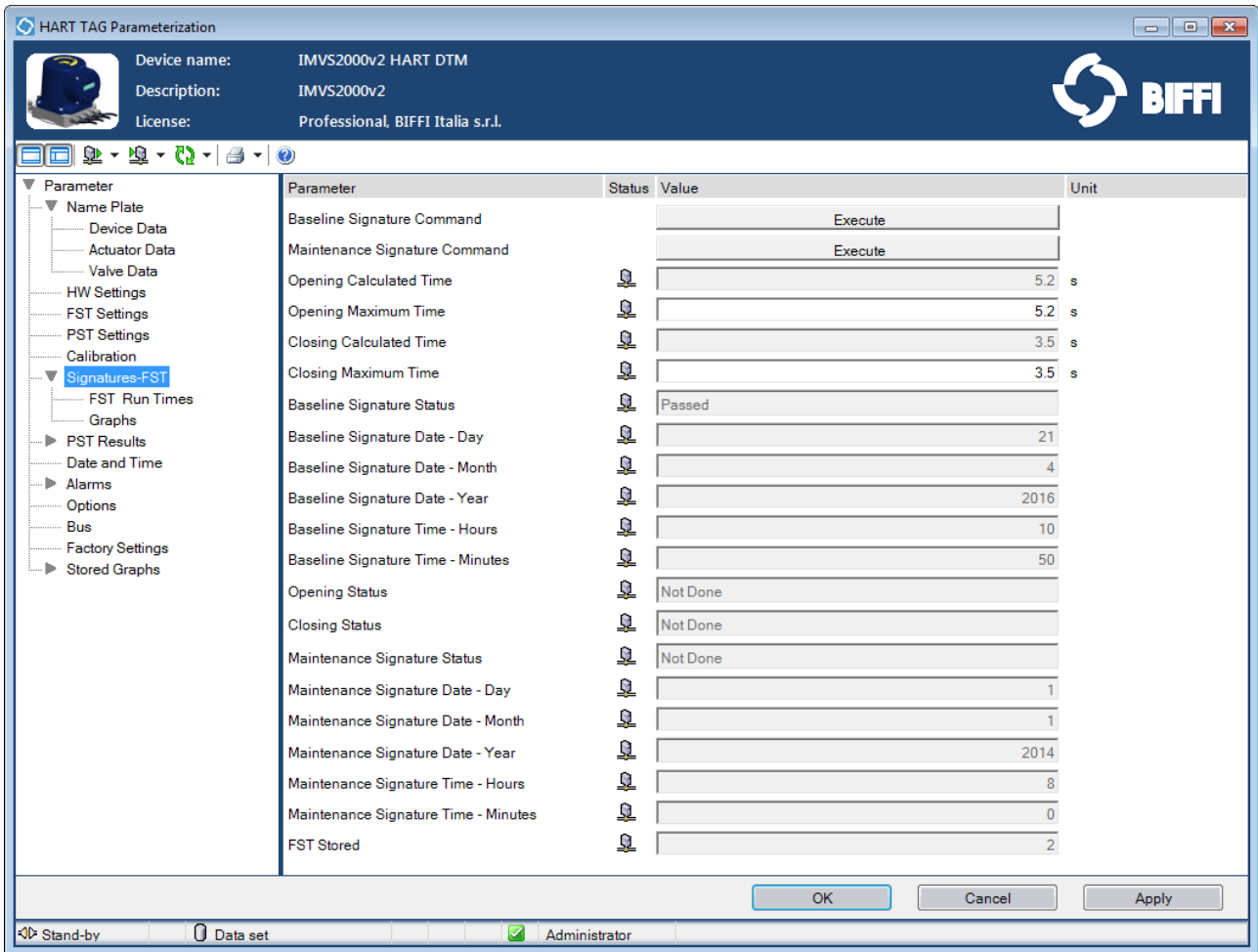
Path: Parameter -> Calibration



DTM Parameter	R/W	Biffi Assistant Path	Description
Calibration Enabled	R/W	Device -> Calibration -> Calibration	“Yes” or “No” can be set. See [1] for details.
Calibration Command	W	Device -> Calibration -> Calibration	Press the button to execute a Calibration command. See [1] for details.
Calibration Date – Day	R	Device -> Calibration -> Calibration	See [1] for details.
Calibration Date – Month	R	Device -> Calibration -> Calibration	See [1] for details.
Calibration Date – Year	R	Device -> Calibration -> Calibration	See [1] for details.
Calibration Time – Hours	R	Device -> Calibration -> Calibration	See [1] for details.
Calibration Time – Minutes	R	Device -> Calibration -> Calibration	See [1] for details.
Calibration Status	R	Device -> Calibration -> Calibration	See [1] for details.

3.2.9 Signatures-FST

Path: Parameter -> Signatures-FST

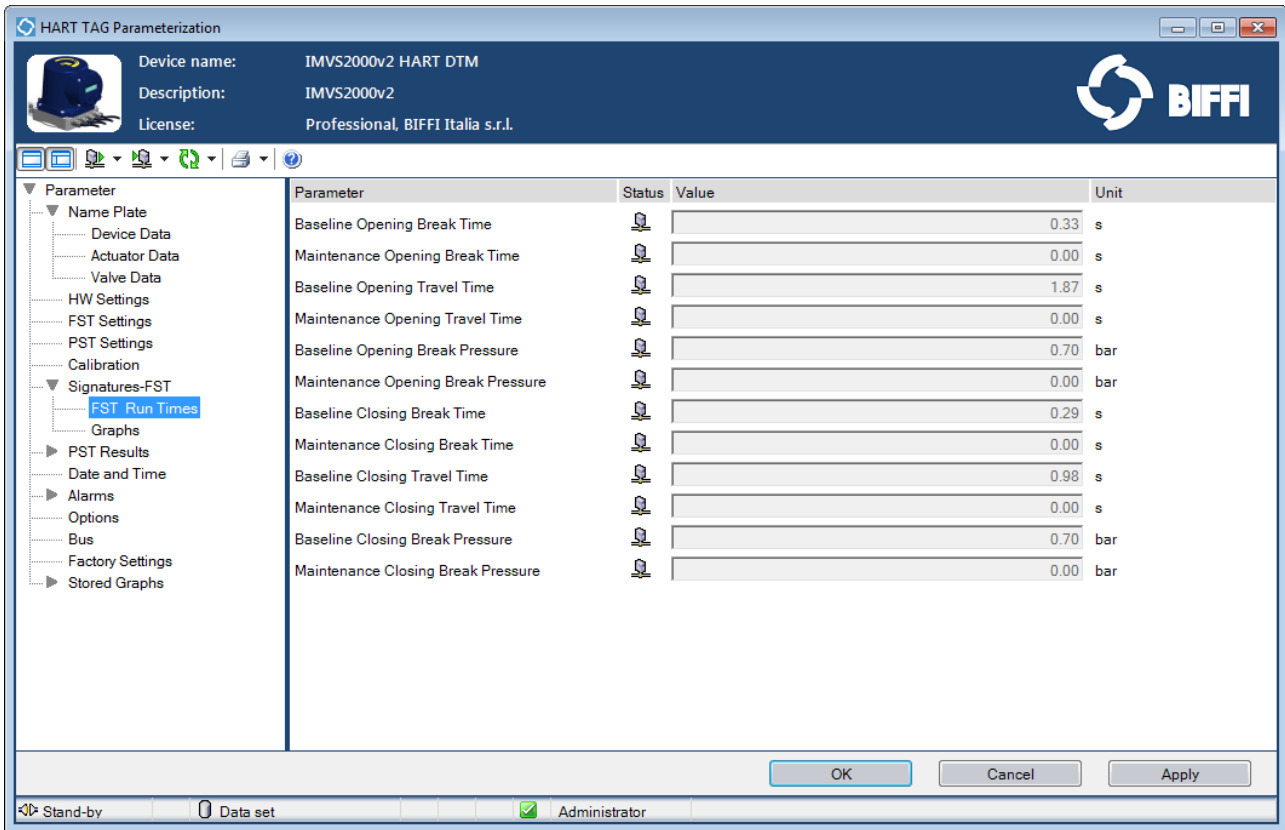


DTM Parameter	R/W	Biffi Assistant Path	Description
Baseline Signature Command	W	Device -> Signatures-FST -> Signatures-FST	Press the button to execute a Baseline Signature command. See [1] for details.
Maintenance Signature Command	W	Device -> Signatures-FST -> Signatures-FST	Press the button to execute a Maintenance Signature command. See [1] for details.
Opening Calculated Time	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
Opening Maximum Time	R/W	Device -> Signatures-FST -> Signatures-FST	Range 0 – 2000. See [1] for details.
Closing Calculated Time	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
Closing Maximum Time	R/W	Device -> Signatures-FST -> Signatures-FST	Range 0 – 2000. See [1] for details.
Baseline Signature Status	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
Baseline Signature Date – Day	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
Baseline Signature Date – Month	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
Baseline Signature Date – Year	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
Baseline Signature Time – Hours	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
Baseline Signature Time – Minutes	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
Opening Status	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.

Closing Status	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
Maintenance Signature Status	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
Maintenance Signature Date – Day	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
Maintenance Signature Date – Month	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
Maintenance Signature Date – Year	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
Maintenance Signature Time – Hours	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
Maintenance Signature Time – Minutes	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.
FST Stored	R	Device -> Signatures-FST -> Signatures-FST	See [1] for details.

3.2.10 Signatures-FST – FST Run Time

Path: Parameter -> Signatures-FST -> FST Run Times



DTM Parameter	R/W	Bi ffi Assistant Path	Description
Baseline Opening Break Time	R	Device -> Signatures-FST -> FST Run Times	See [1] for details.
Maintenance Opening Break Time	R	Device -> Signatures-FST -> FST Run Times	See [1] for details.
Baseline Opening Travel Time	R	Device -> Signatures-FST -> FST Run Times	See [1] for details.
Maintenance Opening Travel Time	R	Device -> Signatures-FST -> FST Run Times	See [1] for details.
Baseline Opening Break Pressure	R	Device -> Signatures-FST -> FST Run Times	See [1] for details.
Maintenance Opening Break Pressure	R	Device -> Signatures-FST -> FST Run Times	See [1] for details.
Baseline Closing Break Time	R	Device -> Signatures-FST -> FST Run Times	See [1] for details.
Maintenance Closing Break Time	R	Device -> Signatures-FST -> FST Run Times	See [1] for details.
Baseline Closing Travel Time	R	Device -> Signatures-FST -> FST Run Times	See [1] for details.
Maintenance Closing Travel Time	R	Device -> Signatures-FST -> FST Run Times	See [1] for details.
Baseline Closing Break Pressure	R	Device -> Signatures-FST -> FST Run Times	See [1] for details.
Maintenance Closing Break Pressure	R	Device -> Signatures-FST -> FST Run Times	See [1] for details.

3.2.11 Signatures-FST – Graphs

Path: Parameter -> Signatures-FST -> Graphs

This menu is available only if the connection is established and almost 2 FST are stored inside the device. For details about graphs operations, see section 4.

The screenshot shows the 'HART TAG Parameterization' window for device 'IMVS2000v2 HART DTM'. The 'Signatures-FST' section is active, displaying a table in 'Grid View'. The table has columns for ID, Time [sec], Pressure1 [bar], Pressure2 [bar], Process Press..., Position [%], and P1-P2 [bar]. The data rows show a sequence of 14 FST events with increasing time and pressure values.

ID	Time [sec]	Pressure1 [bar]	Pressure2 [bar]	Process Press...	Position [%]	P1-P2 [bar]
0	0,000	0,0	-0,1	*	0,0	0,1
1	0,015	0,0	-0,1	*	0,0	0,1
2	0,030	0,0	-0,1	*	0,0	0,1
3	0,045	0,0	-0,1	*	0,0	0,1
4	0,060	0,0	-0,1	*	0,0	0,1
5	0,075	0,0	-0,1	*	0,0	0,1
6	0,090	0,0	-0,1	*	0,0	0,1
7	0,105	0,0	-0,1	*	0,0	0,1
8	0,120	0,0	-0,1	*	0,0	0,1
9	0,135	0,0	-0,1	*	0,0	0,1
10	0,150	0,0	-0,1	*	0,0	0,1
11	0,165	0,0	-0,1	*	0,0	0,1
12	0,180	0,4	-0,1	*	0,0	0,5
13	0,195	0,8	-0,1	*	0,0	0,9
14	0,210	0,7	-0,1	*	0,0	0,8

The screenshot shows the 'Signatures-FST' section in 'Chart View'. A graph plots four variables over time (0 to 5 seconds): Pressure1 (blue), Pressure2 (orange), Position (green), and P1-P2 (yellow). The Position variable shows a sharp increase from 0% to 100% between 2 and 3 seconds. The other variables remain near zero or show a slight upward trend.

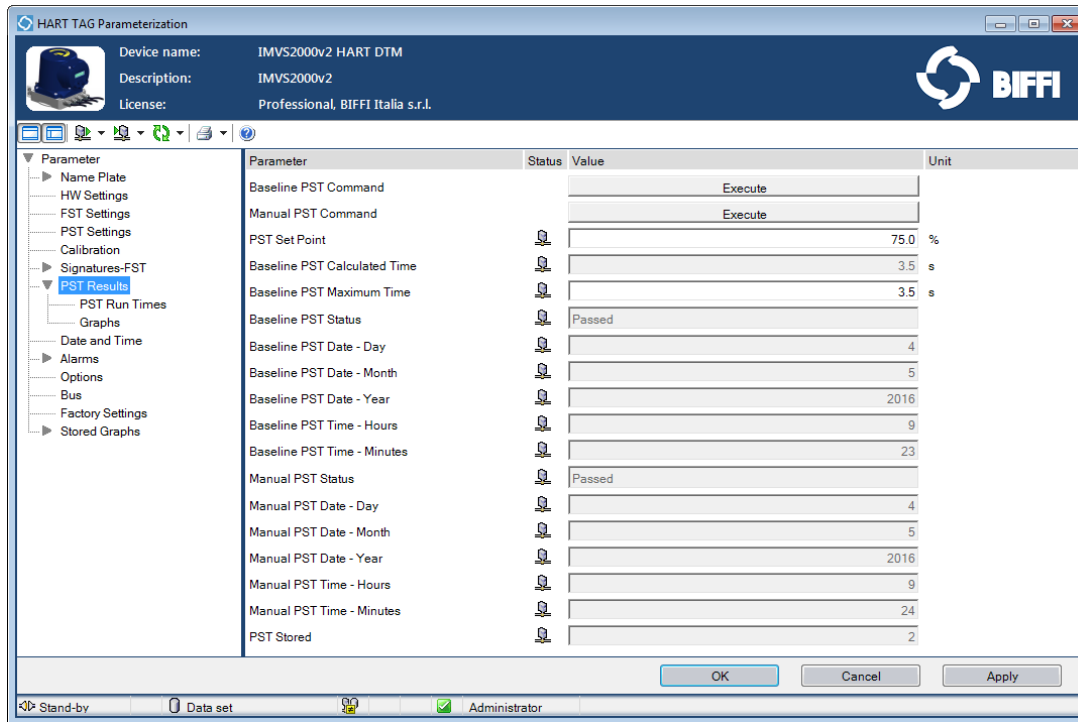
Legend for the graph:

- Pressure1 (bar): Blue line
- Pressure2 (bar): Orange line
- Position (%): Green line
- P1-P2 (bar): Yellow line

Graph settings: Reverse X Axis (unchecked), X Axis: Time (sec), Show Points: None, Track Points (checked).

3.2.12 PST Results

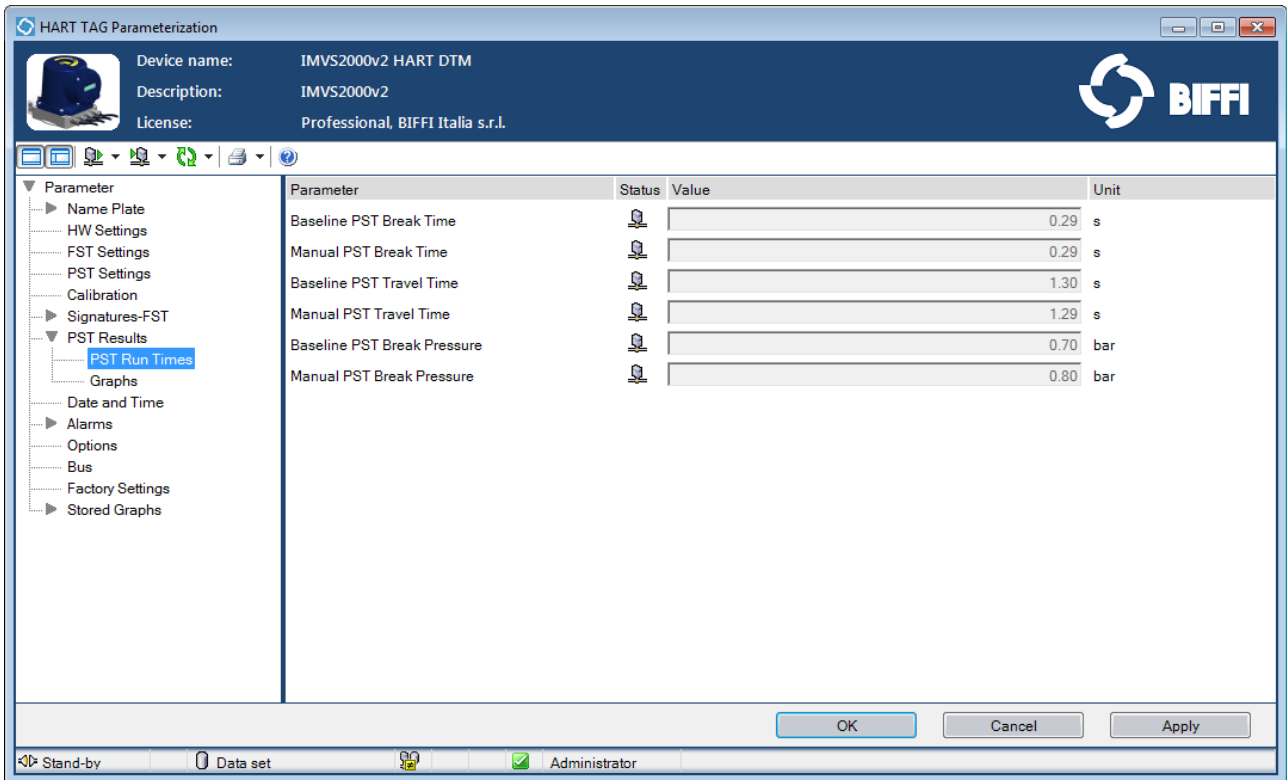
Path: Parameter -> PST Results



DTM Parameter	R/W	Biffi Assistant Path	Description
Baseline PST Command	W	Device -> PST Results -> PST Results	Press the button to execute a Baseline PST command. See [1] for details.
Manual PST Command	W	Device -> PST Results -> PST Results	Press the button to execute a Manual PST command. See [1] for details.
PST Set Point	R/W	Device -> PST Results -> PST Results	Range 5.0 – 95.0 %. See [1] for details.
Baseline PST Calculated Time	R	Device -> PST Results -> PST Results	See [1] for details.
Baseline PST Maximum Time	R/W	Device -> PST Results -> PST Results	Range 0.0 – 2000.0. See [1] for details.
Baseline PST Status	R	Device -> PST Results -> PST Results	See [1] for details.
Baseline PST Date - Day	R	Device -> PST Results -> PST Results	See [1] for details.
Baseline PST Date - Month	R	Device -> PST Results -> PST Results	See [1] for details.
Baseline PST Date - Year	R	Device -> PST Results -> PST Results	See [1] for details.
Baseline PST Time - Hours	R	Device -> PST Results -> PST Results	See [1] for details.
Baseline PST Time - Minutes	R	Device -> PST Results -> PST Results	See [1] for details.
Manual PST Status	R	Device -> PST Results -> PST Results	See [1] for details.
Manual PST Date - Day	R	Device -> PST Results -> PST Results	See [1] for details.
Manual PST Date - Month	R	Device -> PST Results -> PST Results	See [1] for details.
Manual PST Date - Year	R	Device -> PST Results -> PST Results	See [1] for details.
Manual PST Time- Hours	R	Device -> PST Results -> PST Results	See [1] for details.
Manual PST Time - Minutes	R	Device -> PST Results -> PST Results	See [1] for details.
PST Stored	R	Device -> PST Results -> PST Results	See [1] for details.

3.2.13 PST Results - PST Run Times

Path: Parameter -> PST Results -> PST Run Times



DTM Parameter	R/W	Biffi Assistant Path	Description
Baseline PST Break Time	R	Device -> PST Results -> PST Run Times	See [1] for details.
Manual PST Break Time	R	Device -> PST Results -> PST Run Times	See [1] for details.
Baseline PST Travel Time	R	Device -> PST Results -> PST Run Times	See [1] for details.
Manual PST Travel Time	R	Device -> PST Results -> PST Run Times	See [1] for details.
Baseline PST Break Pressure	R	Device -> PST Results -> PST Run Times	See [1] for details.
Manual PST Break Pressure	R	Device -> PST Results -> PST Run Times	See [1] for details.

3.2.14 PST Results – PST Graphs

Path: Parameter -> PST Results -> Graphs

This menu is available only if the connection is established and almost 1 PST is stored inside the device. For details about graphs operations, see section 4.

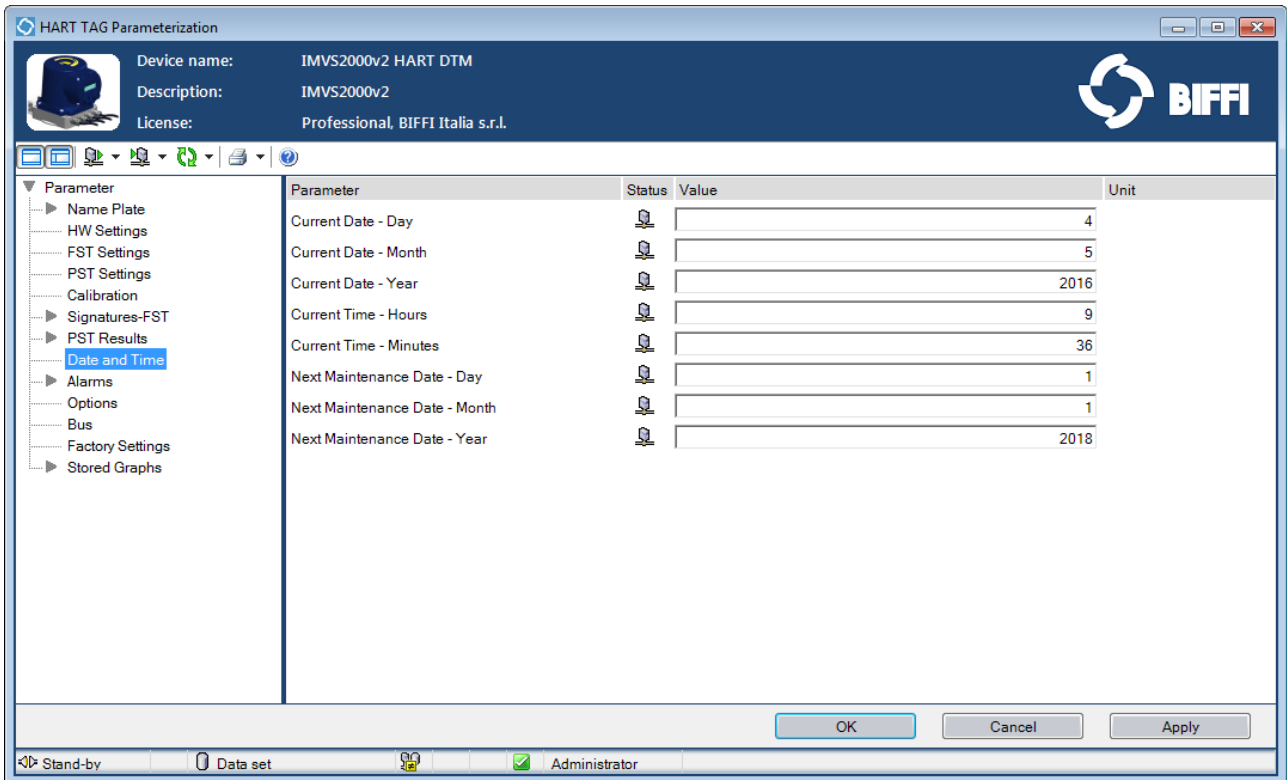
The screenshot shows the 'HART TAG Parameterization' window with the 'PST Results' section selected. The 'Grid View' tab is active, displaying a table of PST results. The table has columns for ID, Time [sec], Pressure1 [bar], Pressure2 [bar], Process Pressu..., Position [%], and P1-P2 [bar]. The data shows a sequence of 12 PST events, each with a time interval of 0.010 seconds and a position of 100.0%.

ID	Time [sec]	Pressure1 [bar]	Pressure2 [bar]	Process Pressu...	Position [%]	P1-P2 [bar]
0	0.000	0.0	0.0	*	100.0	0.0
1	0.010	0.0	0.0	*	100.0	0.0
2	0.020	0.0	0.0	*	100.0	0.0
3	0.030	0.0	0.0	*	100.0	0.0
4	0.040	0.0	0.0	*	100.0	0.0
5	0.050	0.0	0.0	*	100.0	0.0
6	0.060	0.0	0.0	*	100.0	0.0
7	0.070	0.0	0.0	*	100.0	0.0
8	0.080	0.0	0.0	*	100.0	0.0
9	0.090	0.0	0.0	*	100.0	0.0
10	0.100	0.0	0.0	*	100.0	0.0
11	0.110	0.0	0.0	*	100.0	0.0
12	0.120	0.0	0.0	*	100.0	0.0

The screenshot shows the 'HART TAG Parameterization' window with the 'PST Results' section selected. The 'Chart View' tab is active, displaying a graph of PST results over time. The X-axis is 'Time (sec)' ranging from 0 to 3.5. The Y-axis ranges from -10 to 110. Four data series are plotted: Pressure1 (bar) in blue, Pressure2 (bar) in orange, Position (%) in green, and P1-P2 (bar) in yellow. The Position (%) curve shows a significant dip from 100% to approximately 65% between 0.5 and 1.5 seconds. The other curves remain relatively flat near zero.

3.2.15 Date and Time

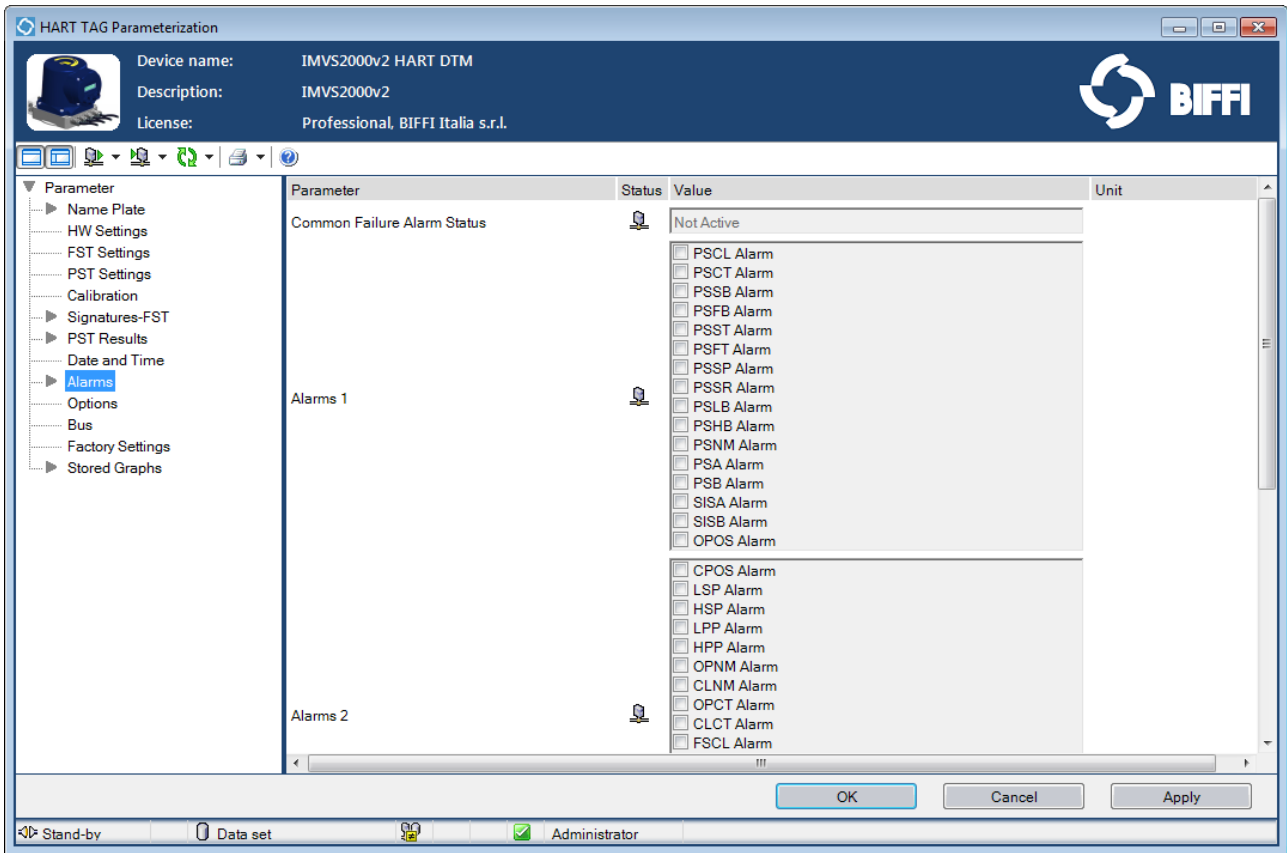
Path: Parameter -> Date and Time



DTM Parameter	R/W	Biffi Assistant Path	Description
Current Date – Day	R/W	Device -> Date and Time -> Date and Time	Range 1 – 31. See [1] for details.
Current Date – Month	R/W	Device -> Date and Time -> Date and Time	Range 1 – 12. See [1] for details.
Current Date - Year	R/W	Device -> Date and Time -> Date and Time	Range 2014 – 2099. See [1] for details.
Current Time – Hours	R/W	Device -> Date and Time -> Date and Time	Range 0 – 23. See [1] for details.
Current Time – Minutes	R/W	Device -> Date and Time -> Date and Time	Range 0 – 59. See [1] for details.
Next Maintenance Date – Day	R/W	Device -> Date and Time -> Date and Time	Range 1 – 31. See [1] for details.
Next Maintenance Date – Month	R/W	Device -> Date and Time -> Date and Time	Range 1 – 12. See [1] for details.
Next Maintenance Date – Year	R/W	Device -> Date and Time -> Date and Time	Range 2014 – 2099. See [1] for details.

3.2.16 Alarms

Path: Parameter -> Alarms



DTM Parameter	R/W	Biffi Assistant Path	Description
Common Failure Alarms Status	R	Device -> Alarms -> Alarms	See [1] for details.
Alarms1	R	Device -> Alarms -> Alarms	See [1] for details.
Alarms2	R	Device -> Alarms -> Alarms	See [1] for details.
Alarms3	R	Device -> Alarms -> Alarms	See [1] for details.
Active Alarms	R	Device -> Alarms -> Alarms	See [1] for details.
Clear Alarms List	W	Device -> Alarms -> Alarms	Press the button to execute the command. See [1] for details.
Reset Alarms	W	Device -> Alarms -> Alarms	Press the button to execute the command. See [1] for details.

3.2.17 Alarms – Alarms List

Path: Parameter -> Alarms -> Alarms List

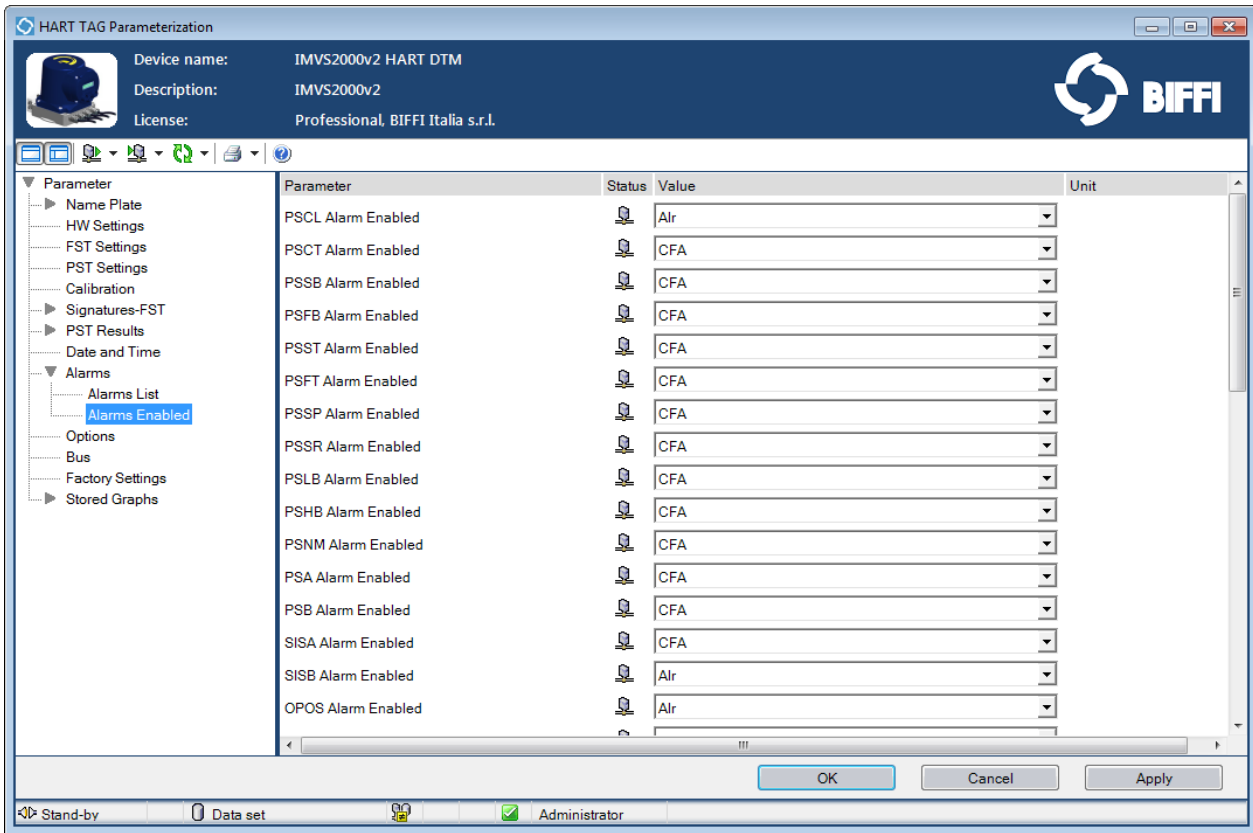
The screenshot shows the 'HART TAG Parameterization' window for a device named 'IMVS2000v2 HART DTM'. The interface includes a navigation tree on the left with 'Alarms List' selected. The main area displays a table of alarm events.

No.	Source	Type	State	Date	Time
1		Power	Cleared	04/05/2016	8:33
2		Power	Cleared	27/04/2016	10:57
3		Power	Cleared	26/04/2016	11:41
4		PSHB	Cleared	21/04/2016	10:30
5		PSHB	Activated	21/04/2016	10:28
6		Reset	Cleared	21/04/2016	9:20
7		CLBP	Cleared	21/04/2016	9:16
8		CLBP	Activated	21/04/2016	9:12
9		Reset	Cleared	21/04/2016	8:59
10		CLBP	Activated	21/04/2016	8:55
11		SISB	Cleared	21/04/2016	8:50
12		SISA	Cleared	21/04/2016	8:50
13		SISB	Activated	21/04/2016	8:49
14		SISA	Activated	21/04/2016	8:49
15		Power	Cleared	21/04/2016	8:43
16		PSHB	Cleared	19/04/2016	14:40
17		PSFB	Cleared	19/04/2016	14:40
18		OLBP	Cleared	19/04/2016	14:40
19		SOTT	Cleared	19/04/2016	14:40
20		SOBT	Cleared	19/04/2016	14:40
21		CLCT	Cleared	19/04/2016	14:40
22		CLNM	Cleared	19/04/2016	14:40
22		RSP	Cleared	19/04/2016	14:20

DTM Parameter	R/W	Biffi Assistant Path	Description
Alarms List	R	Device -> Alarms -> Alarms	See [1] for details.

3.2.18 Alarms – Alarms Enabled

Path: Parameter -> Alarms -> Alarms Enabled

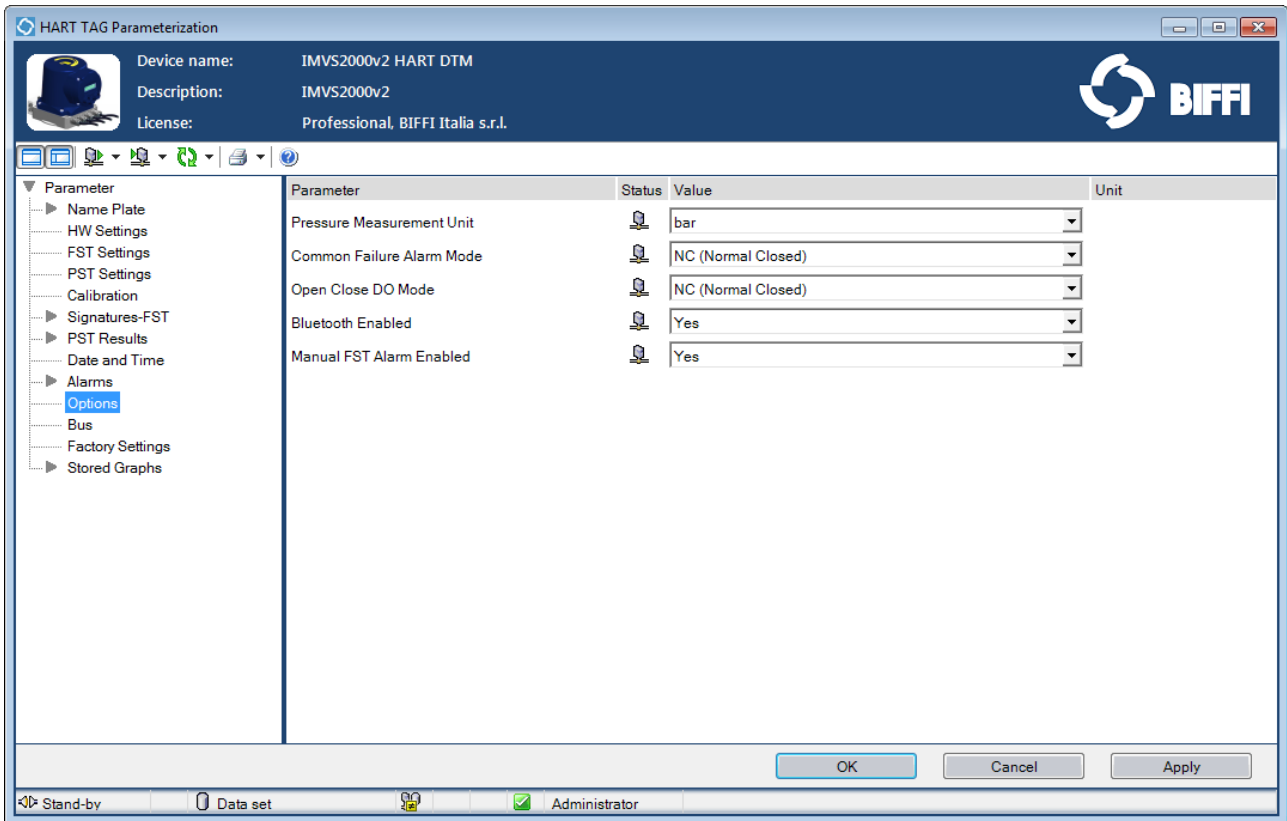


DTM Parameter	R/W	Biffi Assistant Path	Description
PSCL Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
PSCT Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
PSSB Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
PSFB Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
PSST Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
PSFT Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
PSSP Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
PSSR Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
PSLB Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
PSHB Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
PSNM Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"Alr" or "CFA" can be set. See [1] for details.
PSA Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
PSB Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
SISA Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
SISB Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
OPOS Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.

DTM Parameter	R/W	Biffi Assistant Path	Description
CPOS Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
LSP Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
HSP Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
LPP Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
HPP Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
OPNM Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"Alr" or "CFA" can be set. See [1] for details.
CLNM Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"Alr" or "CFA" can be set. See [1] for details.
OPCT Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
CLCT Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
FSCL Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
SOBT Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
FOBT Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
SOTT Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
FOTT Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
SCBT Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
FCBT Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
SCTT Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
FCTT Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
OHBP Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
OLBP Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
CHBP Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
CLBP Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
PS1 Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
PS2 Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
PPS Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
POS Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"Alr" or "CFA" can be set. See [1] for details.
BUS Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.
MNT Alarm Enabled	R/W	Device -> Alarms -> Alarms Enabled	"No", "Alr" or "CFA" can be set. See [1] for details.

3.2.19 Options

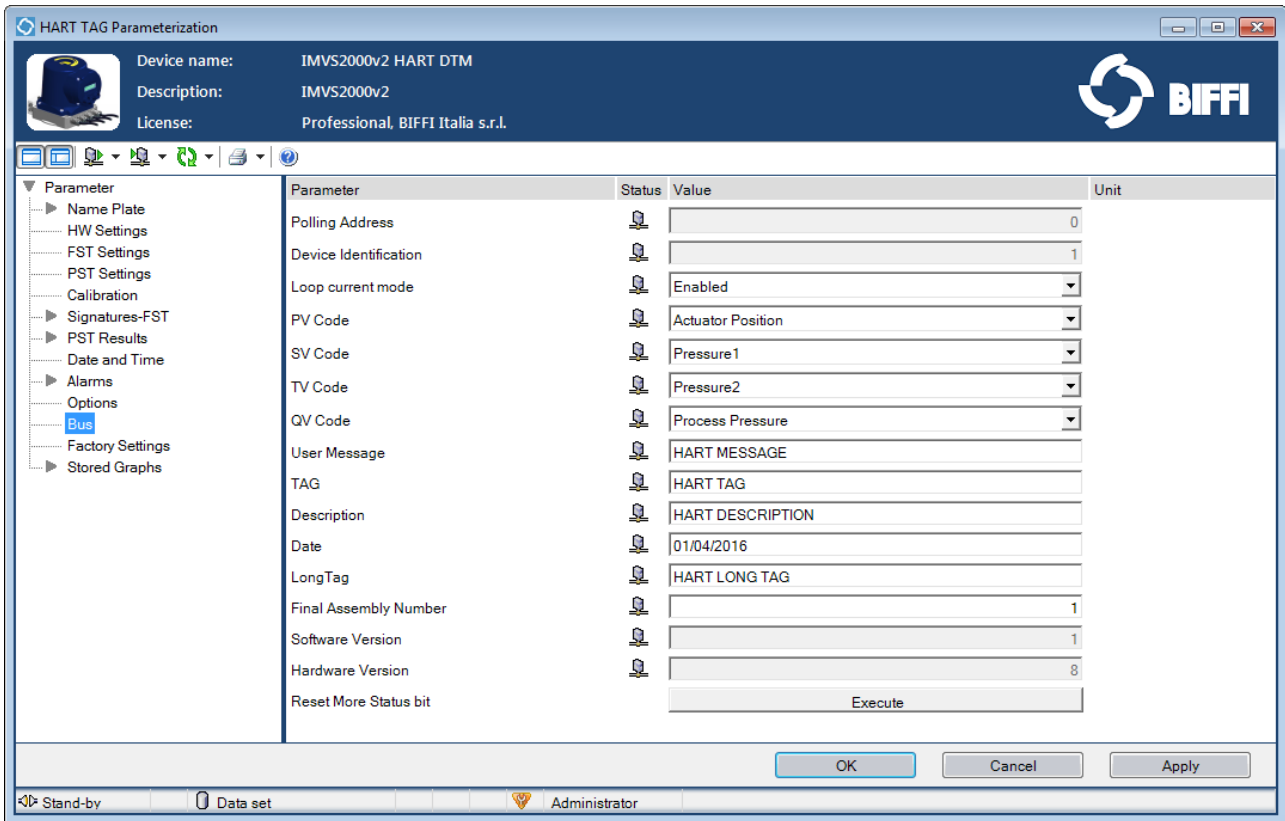
Path: Parameter -> Options



DTM Parameter	R/W	Biffi Assistant Path	Description
Pressure Measurement Unit	R/W	Device -> Options -> Options	“bar” or “psi” can be set. See [1] for details.
Common Failure Alarm Mode	R/W	Device -> Options -> Options	“NO” or “NC” can be set. See [1] for details.
Open Close DO Mode	R/W	Device -> Options -> Options	“NO” or “NC” can be set. See [1] for details.
Bluetooth Enabled	R/W	Device -> Options -> Options	“No” or “Yes” can be set. See [1] for details.
Manual FST Alarm Enabled	R/W	Device -> Options -> Options	“No” or “Yes” can be set. See [1] for details.

3.2.20 Bus

Path: Parameter -> Bus

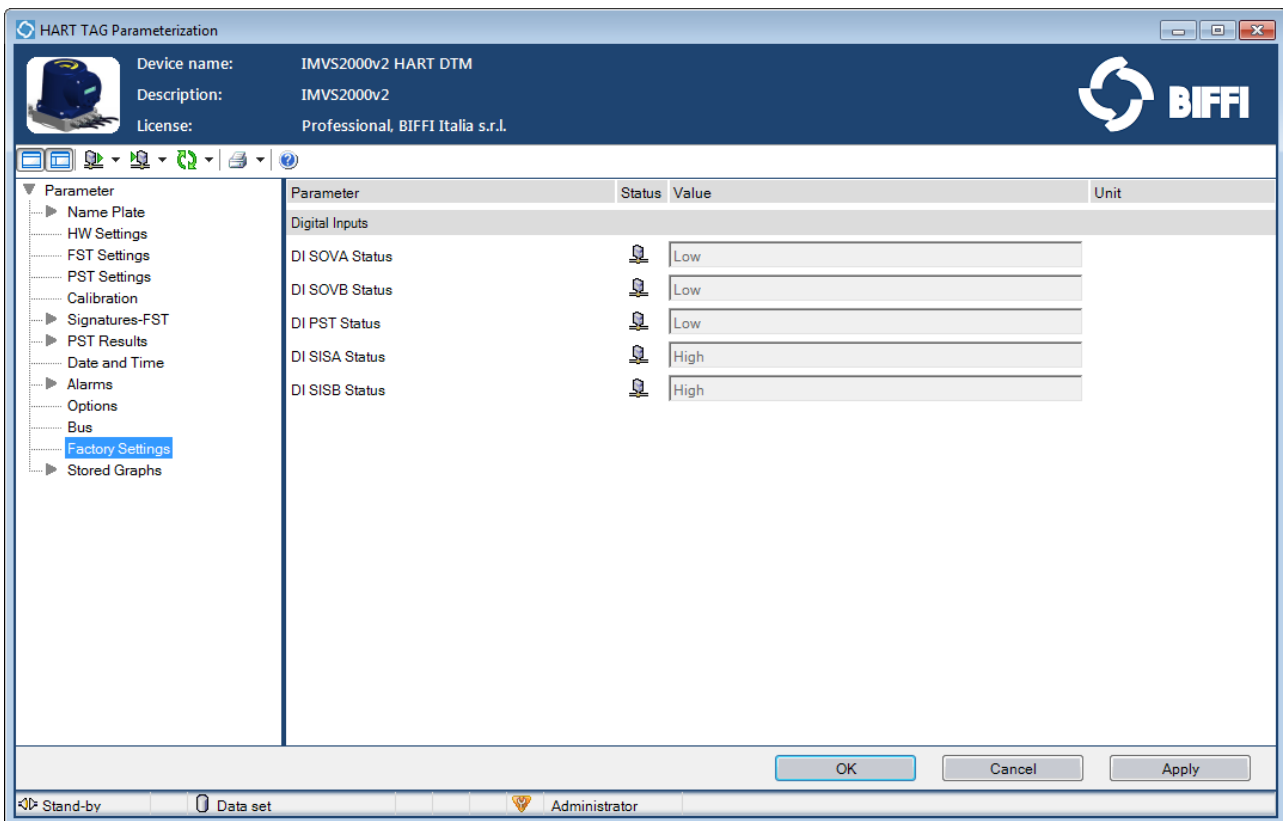


DTM Parameter	R/W	Biffi Assistant Path	Description
Polling Address	R	Device -> Bus -> HART	See [3] for details.
Device Identification	R		See [3] for details.
Loop Current Mode	R/W	Device -> Bus -> HART	"Enabled" or "Disabled" can be set. See [3] for details.
PV Code	R/W	-	"Actuator Position", "Pressure1", "Pressure2" or "Process Pressure" can be set. See [3] for details.
SV Code	R/W	-	"Actuator Position", "Position Request", "Pressure1", "Pressure2", "Process Pressure", "Alarms Active", "Calibration Status", "Baseline Signature Status", "Maintenance Signature Status", "Baseline PST Status", "Manual PST Status", "Common Failure Alarm", "Alarms1", "Alarms2" or "Alarms3" can be set. See [3] for details.
TV Code	R/W	-	"Actuator Position", "Position Request", "Pressure1", "Pressure2", "Process Pressure", "Alarms Active", "Calibration Status", "Baseline Signature Status", "Maintenance Signature Status", "Baseline PST Status", "Manual PST Status", "Common Failure Alarm", "Alarms1", "Alarms2" or "Alarms3" can be set. See [3] for details.
QV Code	R/W	-	"Actuator Position", "Position Request", "Pressure1", "Pressure2", "Process Pressure", "Alarms Active", "Calibration Status", "Baseline Signature Status", "Maintenance Signature Status", "Baseline PST Status", "Manual PST Status", "Common Failure Alarm", "Alarms1", "Alarms2" or "Alarms3" can be set. See [3] for details.
User Message	R/W	-	It's a string. Max length = 32 characters It's the HART Message. See [3] for details.
Tag	R/W	-	It's a string. Max length = 8 characters It's the HART Tag. See [3] for details.
Description	R/W	-	It's a string. Max length = 16 characters It's the HART Descriptor. See [3] for details.

Date	R/W	-	It's the HART Date. See [3] for details.
Long Tag	R/W	-	It's a string. Max length = 32 characters It's the HART Long Tag. See [3] for details.
Final Assembly Number	R/W	-	Range 0 – 16777215 It's the HART Final Assembly Number. See [3] for details.
Software Version	R		It's the HART Interface Software Revision. See [3] for details.

3.2.21 Factory Settings

Path: Parameter -> Factory Settings



DTM Parameter	R/W	Biffi Assistant Path	Description
DI SOVA Status	R	Device -> Factory Settings -> Digital Inputs	See [1] for details.
DI SOVB Status	R	Device -> Factory Settings -> Digital Inputs	See [1] for details.
DI PST Status	R	Device -> Factory Settings -> Digital Inputs	See [1] for details.
DI SISA Status	R	Device -> Factory Settings -> Digital Inputs	See [1] for details.
DI SISB Status	R	Device -> Factory Settings -> Digital Inputs	See [1] for details.

3.2.22 Stored Graphs

Path: Parameter -> Stored Graphs -> Graphs

This menu is available only if the connection is established.
For details about graphs operations, see section 4.

HART TAG Parameterization
 Device name: IMVS2000v2 HART DTM
 Description: IMVS2000v2
 License: Professional, BIFFI Italia s.r.l.

Stored Graphs
 Grid View | Chart View
 1st ID = 1 | 2nd ID = 2

Type	Source	Status	Date	Time	Break Pressure	Break Time	Travel Time	SOVs	Set Point
FST Open	Baseline	Passed	07/04/2016	17:51:04	1.00 bar	0,22 sec	0,49 sec	-	0.00 %
ID	Time [sec]	Pressure 1 [bar]	Pressure 2 [bar]	Process Pressu...	Position [%]	P1-P2 [bar]			
0	0,000	0,0	0,0	*	0,0	0,0			
1	0,010	0,0	0,0	*	0,0	0,0			
2	0,020	0,0	-0,1	*	0,0	0,1			
3	0,030	0,0	0,0	*	0,0	0,0			
4	0,040	0,0	-0,1	*	0,0	0,1			
5	0,050	0,0	-0,1	*	0,0	0,1			
6	0,060	0,0	0,0	*	0,0	0,0			
7	0,070	0,0	0,0	*	0,0	0,0			
8	0,080	0,0	0,0	*	0,0	0,0			
9	0,090	0,0	-0,1	*	0,0	0,1			
10	0,100	0,0	0,0	*	0,0	0,0			
11	0,110	0,0	0,0	*	0,0	0,0			
12	0,120	0,0	0,0	*	0,0	0,0			
13	0,130	0,0	0,0	*	0,0	0,0			
14	0,140	0,0	0,0	*	0,0	0,0			

Buttons: OK, Cancel, Apply

HART TAG Parameterization
 Device name: IMVS2000v2 HART DTM
 Description: IMVS2000v2
 License: Professional, BIFFI Italia s.r.l.

Stored Graphs
 Grid View | Chart View
 1st ID = 1 | 2nd ID = 2

Legend: Pressure1 (bar), Pressure2 (bar), Position (%), P1-P2 (bar)

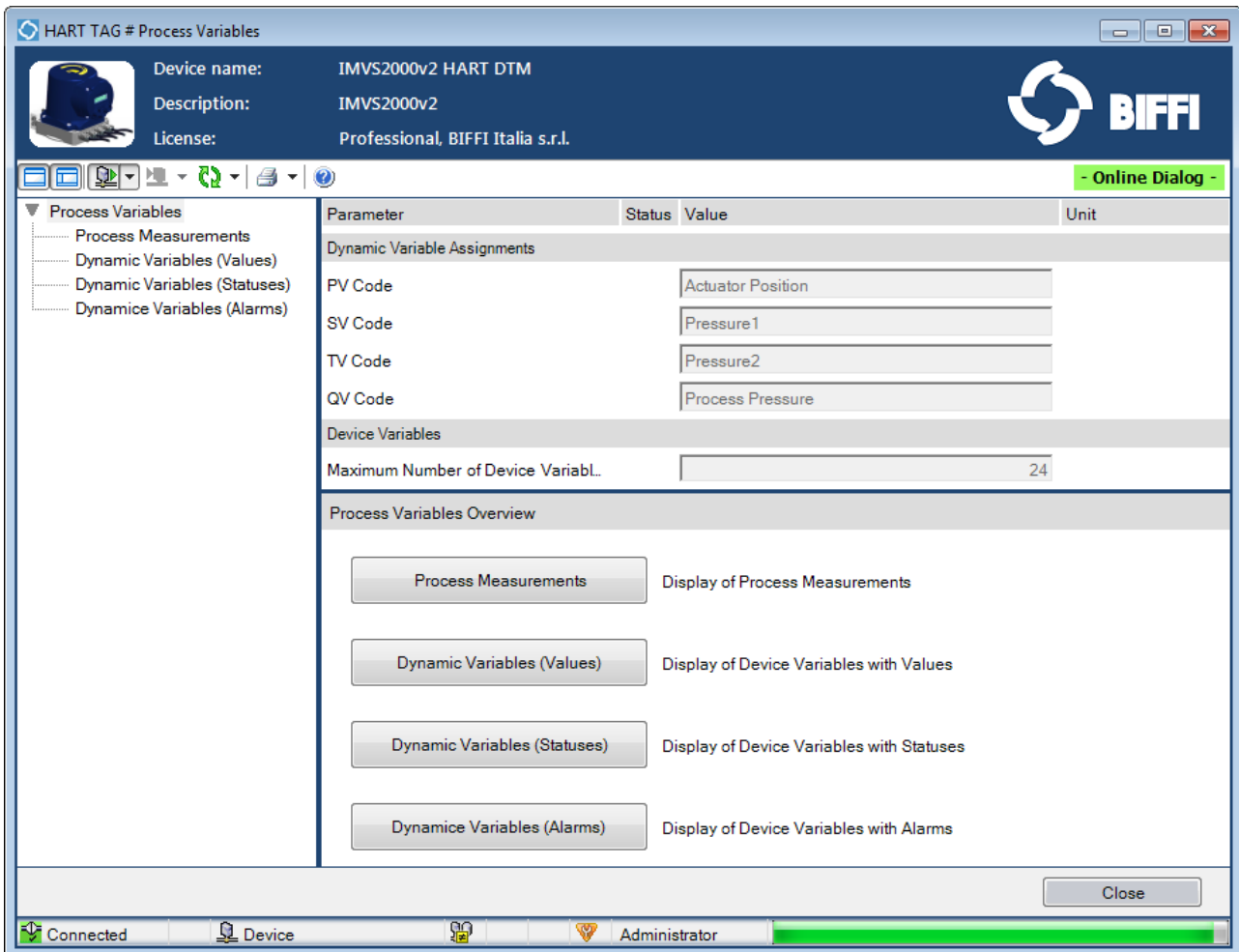
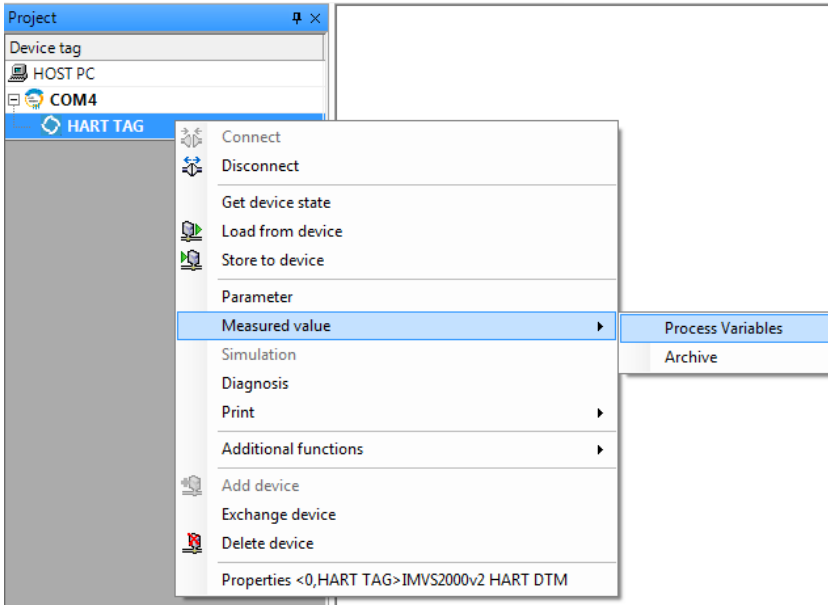
Graph Data Points (X: Time, Y: Value):
 X: 2,400 Y: 26,5
 X: 2,400 Y: 1,0
 X: 2,400 Y: 100,2
 X: 2,400 Y: 25,5

Buttons: OK, Cancel, Apply

3.3 Measured Value

3.3.1 Measured Value – Process Variables

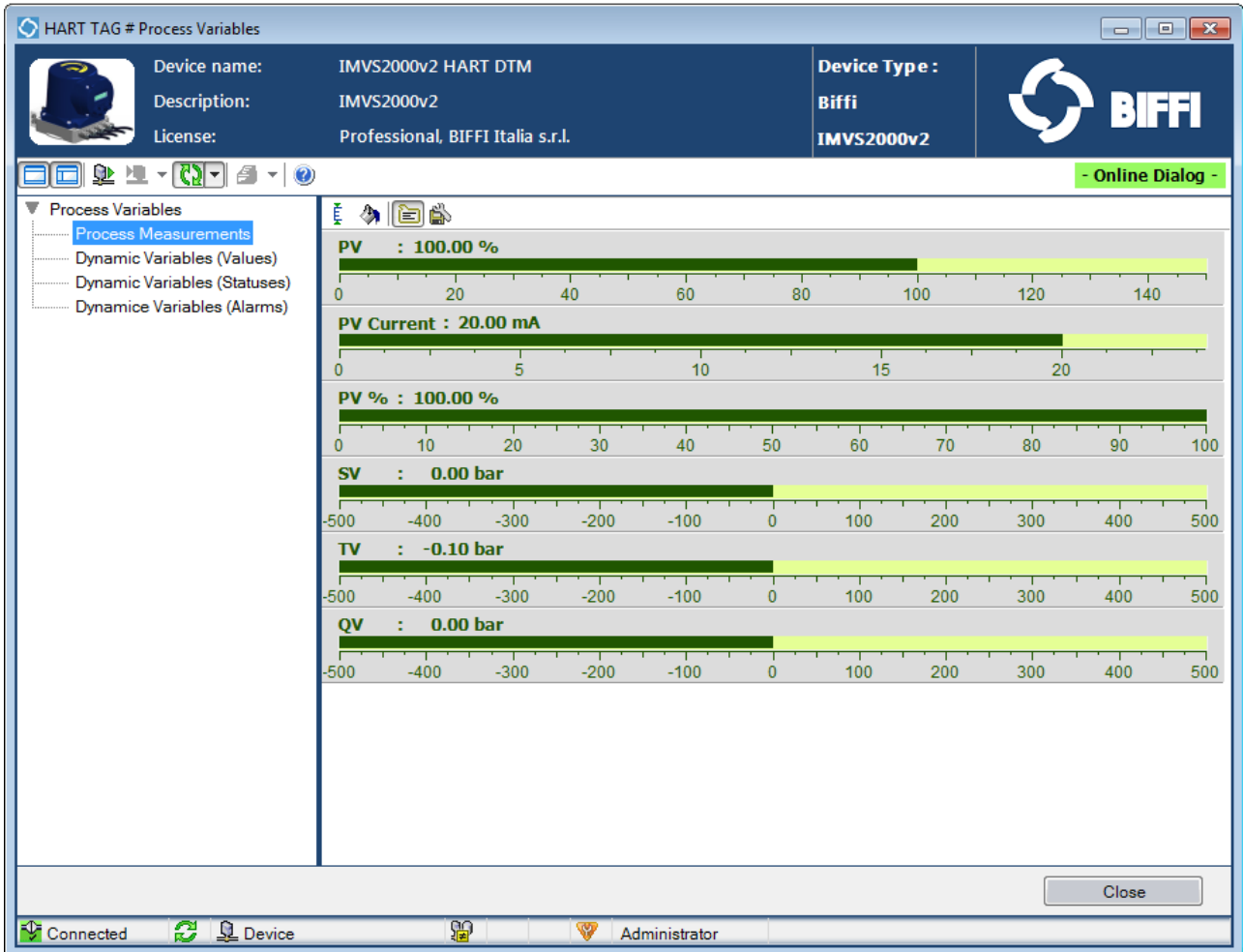
This menu is available only if the connection is established.



3.3.2 Measured Value – Process Variables – Process Measurement

Path: Measured Value -> Process Variables -> Process Measurements

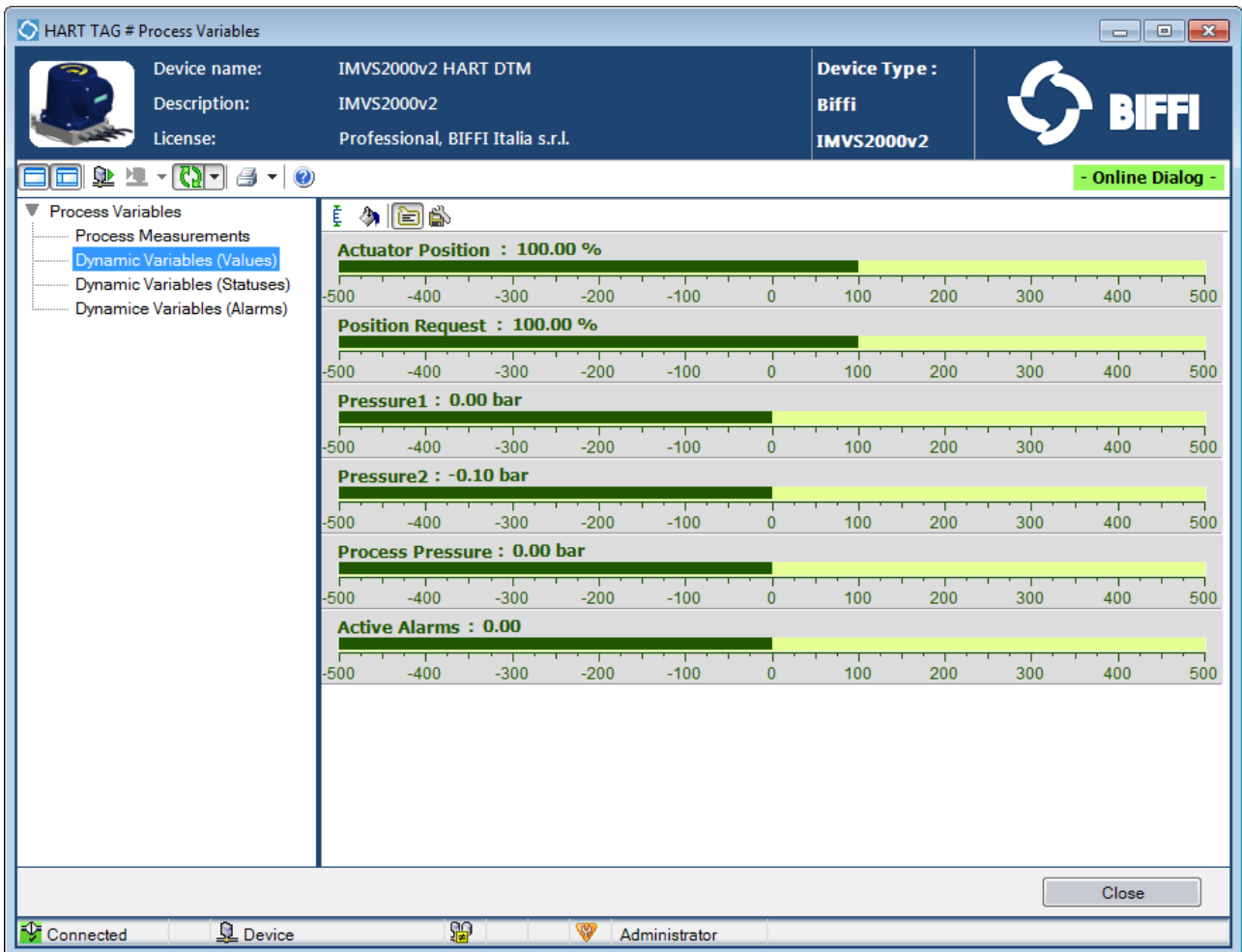
This menu shows the Process Variables value.



3.3.3 Measured Value – Process Variables – Dynamic Variables (Values)

Path: Measured Value -> Process Variables -> Dynamic Variables (Values)

This menu shows the Dynamic Variables (Values).



3.3.4 Measured Value – Process Variables – Dynamic Variables (Statuses)

Path: Measured Value -> Process Variables -> Dynamic Variables (Statuses)

This menu shows the Dynamic Variables (Statuses).

The screenshot displays the 'HART TAG # Process Variables' window. The header shows device details: Device name: IMVS2000v2 HART DTM, Description: IMVS2000v2, License: Professional, BIFFI Italia s.r.l. The left sidebar shows a tree view with 'Dynamic Variables (Statuses)' selected. The main area contains a table with the following data:

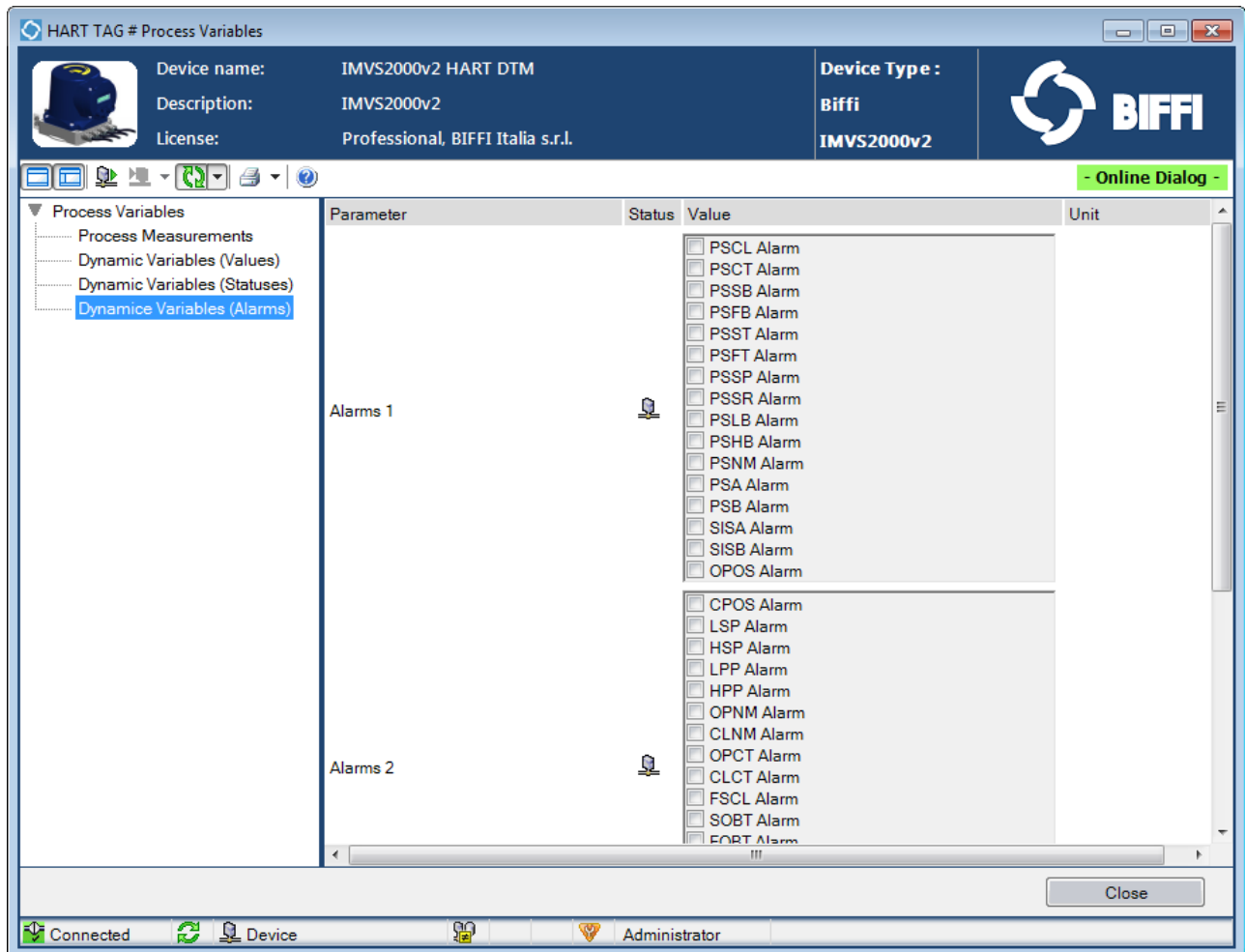
Parameter	Status	Value	Unit
Calibration Status		Passed	
Baseline Signature Status		Passed	
Maintenance Signature Status		Passed	
Baseline PST Status		Passed	
Manual PST Status		Passed	
Common Failure Alarm Status		Not Active	

The status bar at the bottom indicates 'Connected', 'Device', and 'Administrator'.

3.3.5 Measured Value – Process Measurement - Dynamic Variables (Alarms)

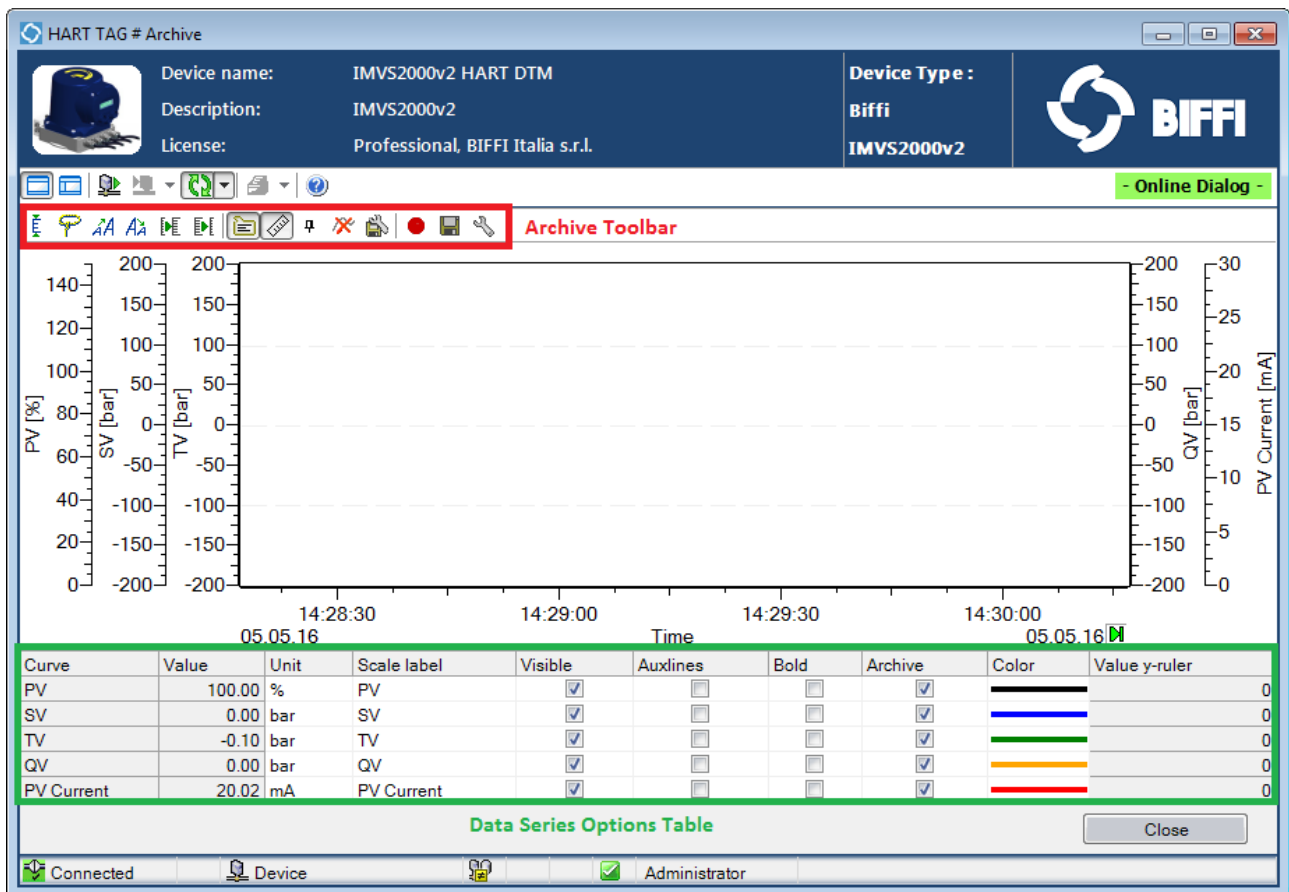
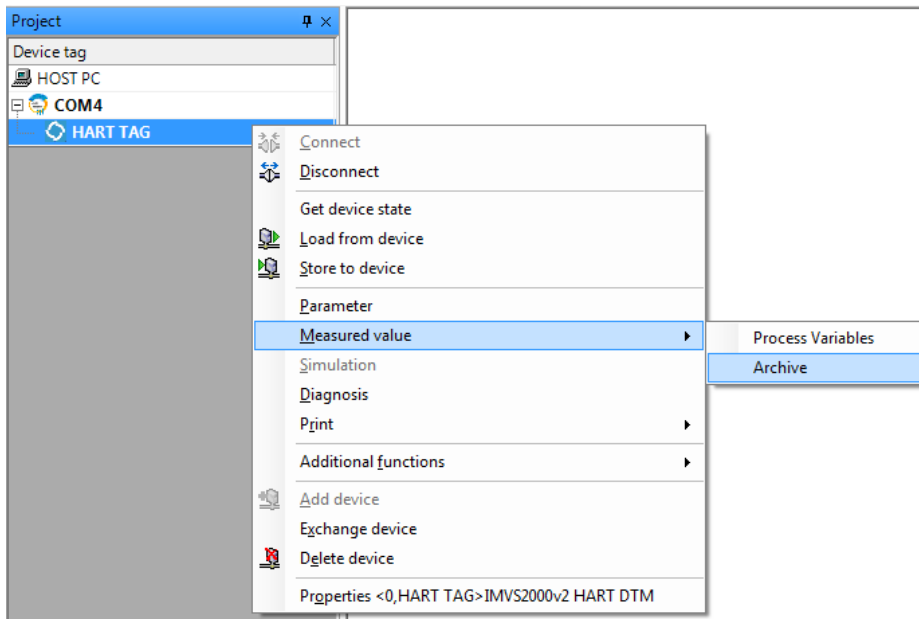
Path: Measured Value -> Process Variables -> Dynamic Variables (Alarms)

This menu shows the Dynamic Variables (Alarms).




3.3.6 Measured Value – Archive

This menu is available only if the connection is established.



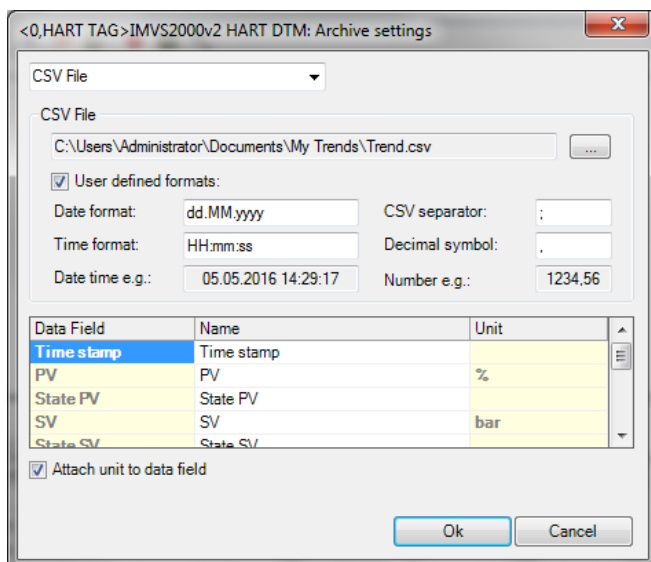
This menu allows registering the Dynamic Variables trend.

The  button allows selecting the sampling time.

The “Archive toolbar” contains the following buttons:

Button	Description
	Update measurement range and units
	Capture Curves
	Font enlarge
	Font reduce
	Scale width enlarge
	Scale width reduce
	Display tooltips
	Display Ruler
	Allow scale positioning
	Delete curves
	Save settings
	Auto-archiving
	Archive active curves
	Archive settings

The “Archive settings” button () allows selecting the file in which the data are saved.

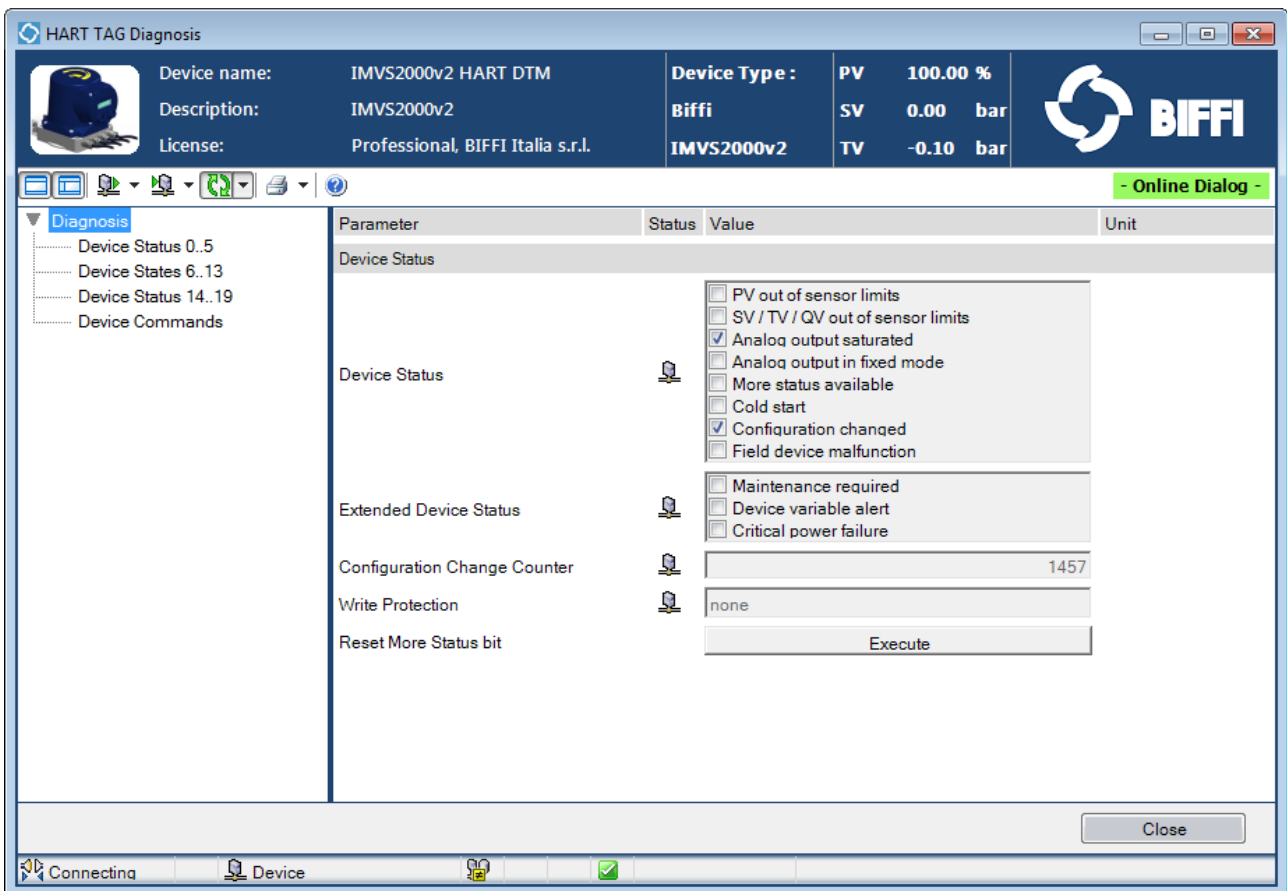
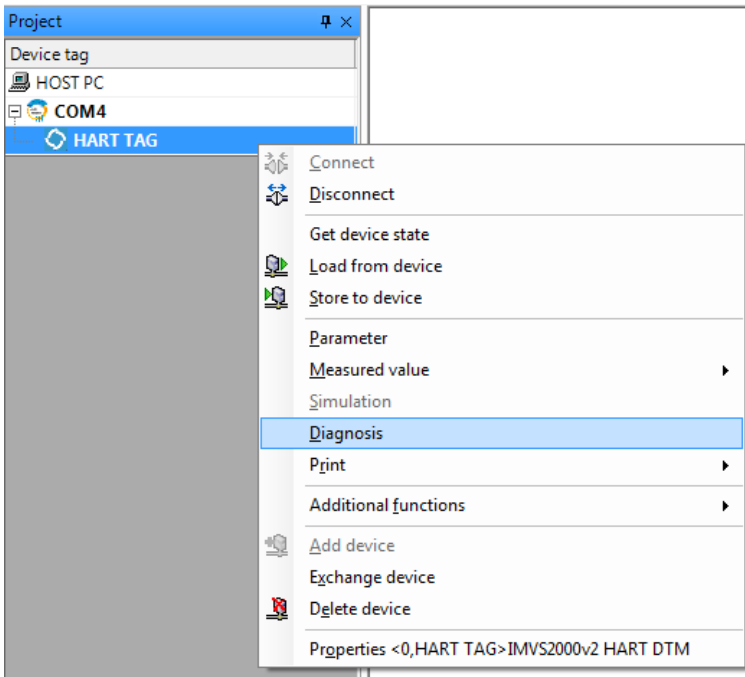


If the “Archive active curves” button is pushed the buffered data are saved in the file indicated in “Archive Settings (in the example the file name is “Trend.csv”).

The “Data Series Options table” allows to:

- Shows or hide a data series
- Archive or not a data series
- Shows or hide auxiliary data series line
- Set or not the data series line width “Bold”

3.4 Diagnosis



Refer to [3] for more information about “Device Status” and “Extended Device Status”. Press “Reset More Status bit” to clear “More status available” flag.

3.4.1 Diagnosis – Device Status 0..5

Path: *Diagnosis -> Device Status 0..5*

The screenshot shows the 'HART TAG # Diagnosis' window. At the top, there is a header bar with the BIFFI logo and the text 'BIFI'. Below this, a table provides device details:

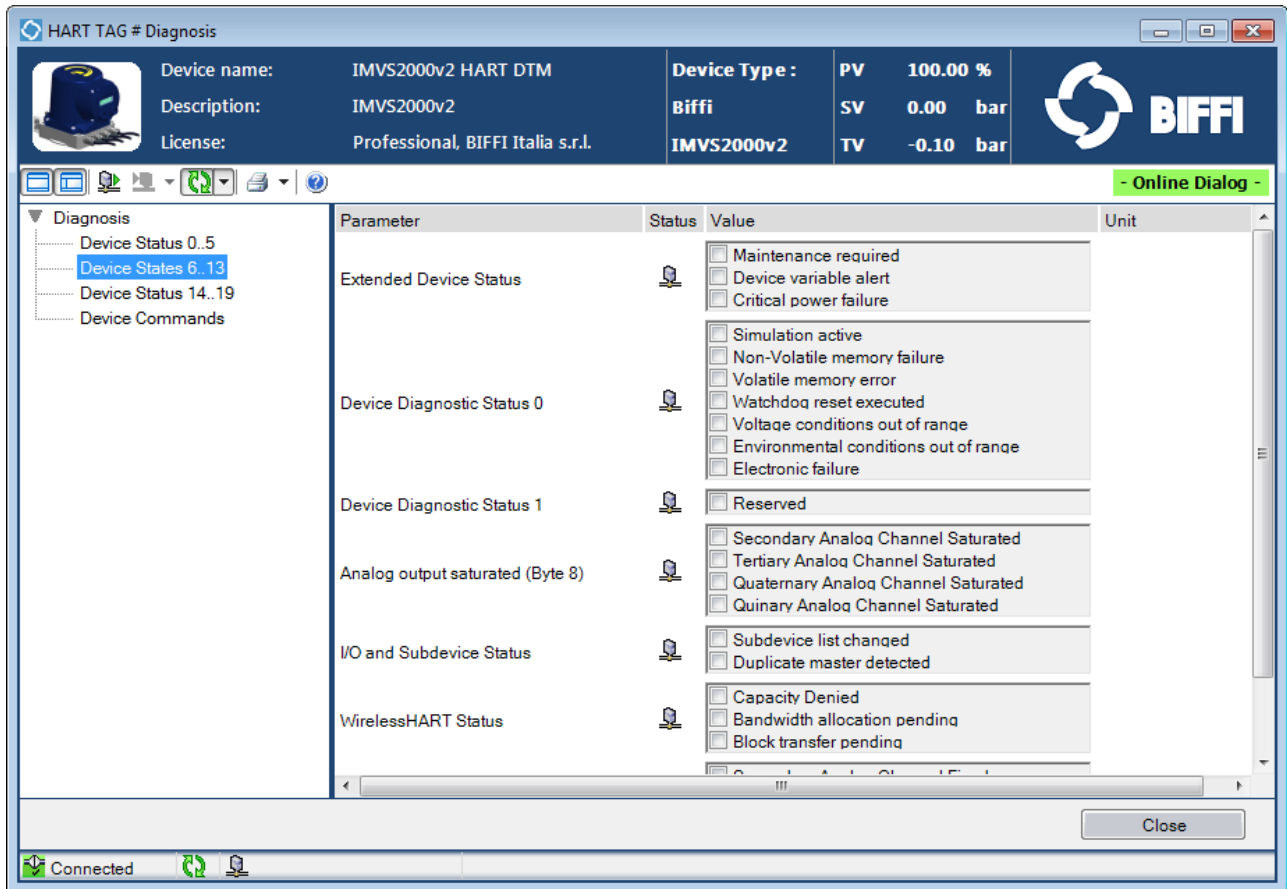
Device name:	IMVS2000v2 HART DTM	Device Type :	PV	100.00 %
Description:	IMVS2000v2	Biffi	SV	0.00 bar
License:	Professional, BIFFI Italia s.r.l.	IMVS2000v2	TV	-0.10 bar

Below the header, there is a tree view on the left under 'Diagnosis'. The 'Device Status 0..5' item is selected. The main area displays a table with columns: Parameter, Status, Value, and Unit. The table is organized into three sections for 'Status Group (Byte 0)', 'Status Group (Byte 1)', and 'Status Group (Byte 2)'. Each section contains a list of checkboxes for 'Field Device Status 1' through 'Field Device Status 8'. A 'Close' button is located at the bottom right of the window. At the bottom of the interface, there is a status bar with icons for 'Connected', 'Device', and 'Administrator'.

Refer to [3] for more information about “Status Group” bytes.

3.4.2 Diagnosis – Device Status 6..13

Path: Diagnosis-> Device Status 6..13



Refer to [3] for more information about “Extended Device Status”, “Device Diagnostic Status 0” and “Device Diagnostic Status 1”.

“Analog output saturated (Byte 8)”, “I/O and Subdevice Status”, “WirelessHART Status” and “Analog Output fixed (Byte 11)” are not used by HRT_IMVS2000v2 device.

3.4.3 Diagnosis – Device Status 14..19

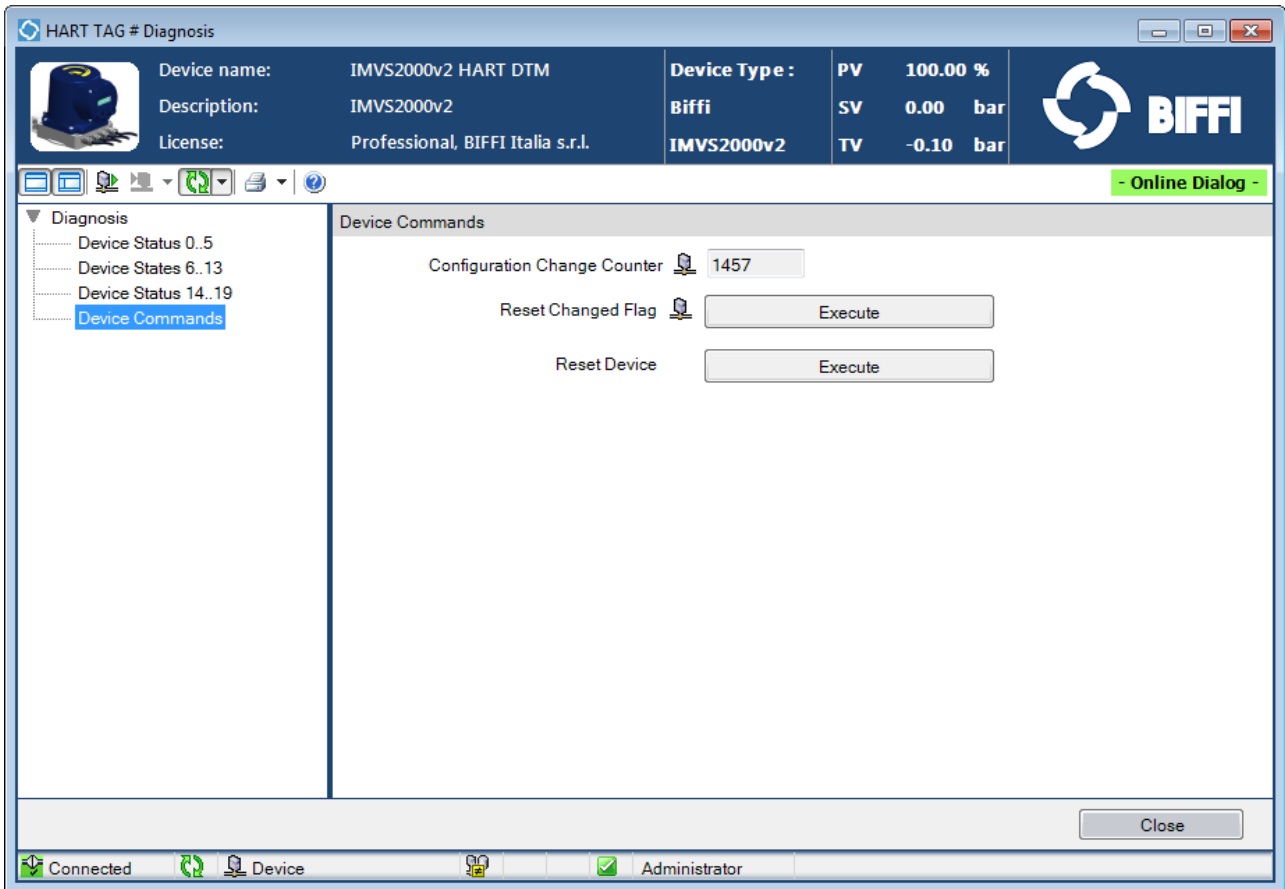
Path: Diagnosis -> Device Status 14..19

Parameter	Status	Value	Unit
Status Group (Byte 14)		<input type="checkbox"/> PSCL Alarm	
		<input type="checkbox"/> PSCT Alarm	
		<input type="checkbox"/> PSSB Alarm	
		<input type="checkbox"/> PSFB Alarm	
		<input type="checkbox"/> PSST Alarm	
		<input type="checkbox"/> PSFT Alarm	
		<input type="checkbox"/> PSSP Alarm	
		<input type="checkbox"/> PSSR Alarm	
Status Group (Byte 15)		<input type="checkbox"/> PSLB Alarm	
		<input type="checkbox"/> PSHB Alarm	
		<input type="checkbox"/> PSNM Alarm	
		<input type="checkbox"/> PSA Alarm	
		<input type="checkbox"/> PSB Alarm	
		<input type="checkbox"/> SISA Alarm	
		<input type="checkbox"/> SISB Alarm	
Status Group (Byte 16)		<input type="checkbox"/> OPOS Alarm	
		<input type="checkbox"/> CPOS Alarm	
		<input type="checkbox"/> LSP Alarm	
		<input type="checkbox"/> HSP Alarm	
		<input type="checkbox"/> LPP Alarm	
		<input type="checkbox"/> HPP Alarm	

Refer to [1] for more information about “Status Group (Byte 14)”, “Status Group (Byte 15)”, “Status Group (Byte 16)”, “Status Group (Byte 17)”, “Status Group (Byte 18)” and “Status Group (Byte 19)”.

3.4.4 Diagnosis – Device Commands

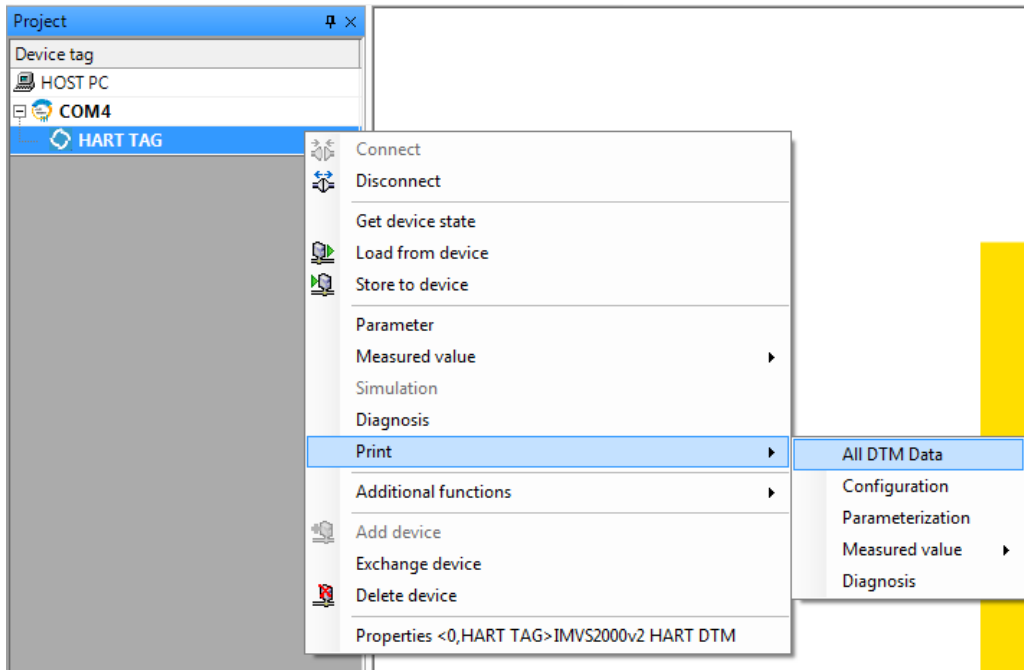
Path: *Diagnosis -> Device Commands*



Press “Reset Changed Flag Execute” button to clear the “Configuration Changed” flag (see 3.4 Diagnosis).

Press “Reset Device Execute” button to perform a reset of the HRT_IMVS2000v2 device.

3.5 Print



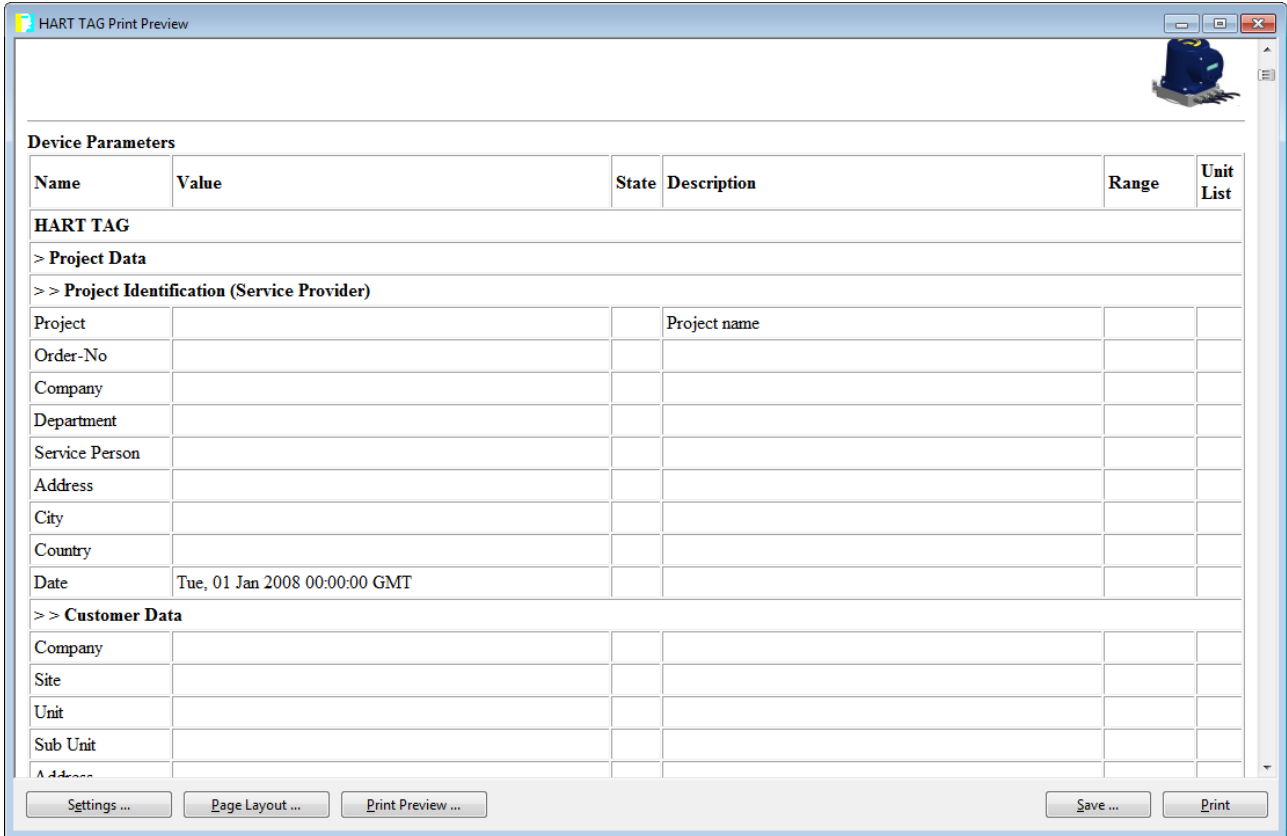
A resuming list of the DTM/HART parameters is printed by entering in the Print Menu (Device->Print).

The “Load from device” command (Device->Load from device) must be used before entering in the Print Menu (the values of the parameters are updated).

3.5.1 Print – All DTM Data

Path: Print -> All DTM Data

This menu prints all data loaded by the DTM (except graphs).



3.5.2 Print – Configuration

Path: Print -> Configuration

This menu prints the project configurations (see 3.6.6 for details).

The screenshot shows a window titled "HART TAG Print Preview" with a small printer icon in the top right corner. The main content is a table with the following structure:

Device Parameters					
Name	Value	State	Description	Range	Unit List
HART TAG					
> Project Data					
>> Project Identification (Service Provider)					
Project			Project name		
Order-No					
Company					
Department					
Service Person					
Address					
City					
Country					
Date	Tue, 01 Jan 2008 00:00:00 GMT				
>> Customer Data					
Company					
Site					
Unit					
Sub Unit					
Address					

At the bottom of the window, there are several buttons: "Settings ...", "Page Layout ...", "Print Preview ...", "Save ...", and "Print".

3.5.3 Print – Parameterization

This menu prints the project configuration and the settings values of the device.

HART TAG Print Preview

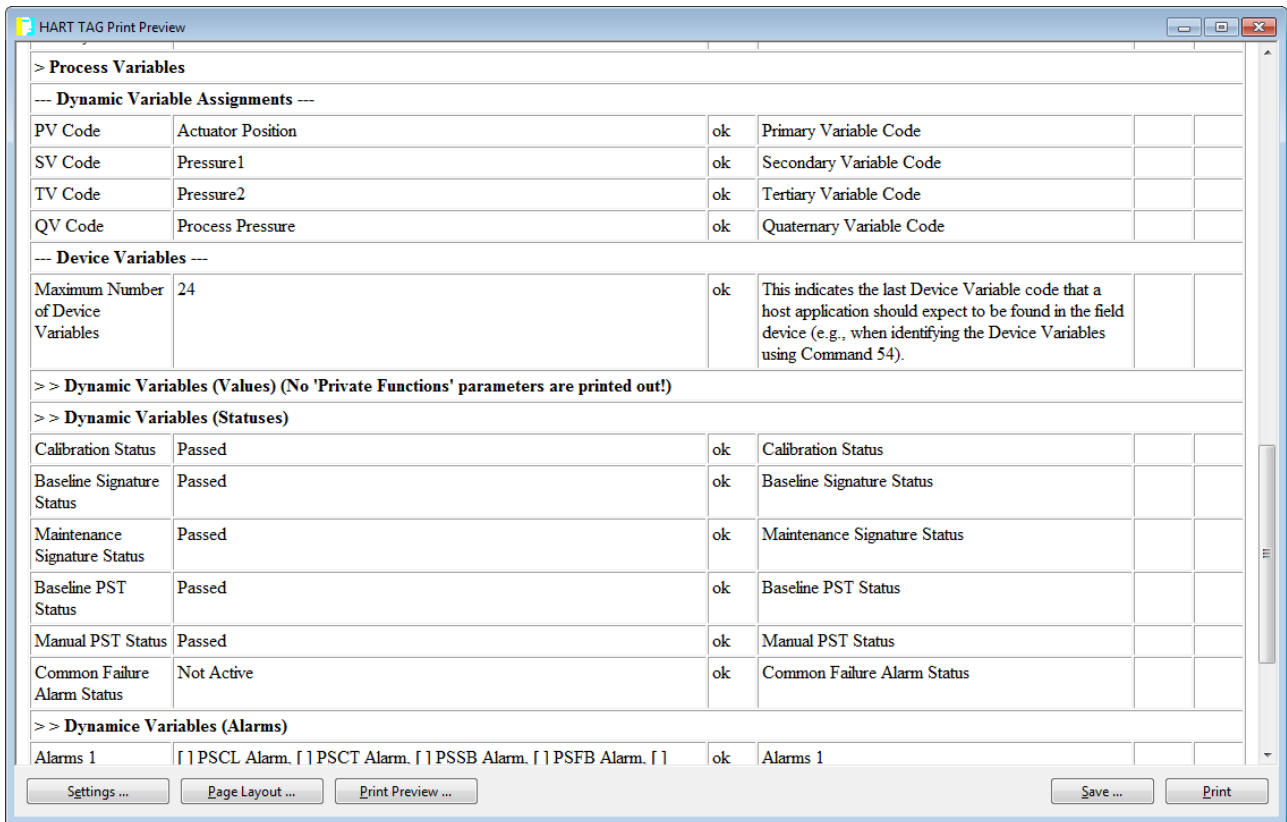
Address				
City				
Country				
> Parameter				
>> Name Plate				
>>> Device Data				
Device Manufacturer	Biffi	ok	Device Manufacturer	
Device Name	IMVS2000v2	ok	Device Name	
Device Tag Name	IMVS2000v2 DB EF	ok	Device Tag Name	
Device Serial Number	00000000000000000001	ok	Device Serial Number	
Device Date of Manufacturing - Day	19	ok	Device Date of Manufacturing - Day	1 - 31
Device Date of Manufacturing - Month	4	ok	Device Date of Manufacturing - Month	1 - 12
Device Date of Manufacturing - Year	2016	ok	Device Date of Manufacturing - Year	2014 - 2099
Logic Card FW Revision	01.00.00	ok	Logic Card FW Revision	
>>> Actuator Data				
Actuator Manufacturer	BIFFI MANUF	ok	Actuator Manufacturer	

Settings ... Page Layout ... Print Preview ... Save ... Print

3.5.4 Print – Measured Value – Process Variables

Path: Print -> Measured Value -> Process Variables

This menu prints the project configuration and the latest values read of process variables of the device.



The screenshot shows a software window titled "HART TAG Print Preview". The content is organized into several sections:

- > Process Variables**
 - Dynamic Variable Assignments ---**

PV Code	Actuator Position	ok	Primary Variable Code		
SV Code	Pressure1	ok	Secondary Variable Code		
TV Code	Pressure2	ok	Tertiary Variable Code		
QV Code	Process Pressure	ok	Quaternary Variable Code		
 - Device Variables ---**

Maximum Number of Device Variables	24	ok	This indicates the last Device Variable code that a host application should expect to be found in the field device (e.g., when identifying the Device Variables using Command 54).		
------------------------------------	----	----	--	--	--
- >> Dynamic Variables (Values) (No 'Private Functions' parameters are printed out!)**
- >> Dynamic Variables (Statuses)**

Calibration Status	Passed	ok	Calibration Status		
Baseline Signature Status	Passed	ok	Baseline Signature Status		
Maintenance Signature Status	Passed	ok	Maintenance Signature Status		
Baseline PST Status	Passed	ok	Baseline PST Status		
Manual PST Status	Passed	ok	Manual PST Status		
Common Failure Alarm Status	Not Active	ok	Common Failure Alarm Status		
- >> Dynamic Variables (Alarms)**

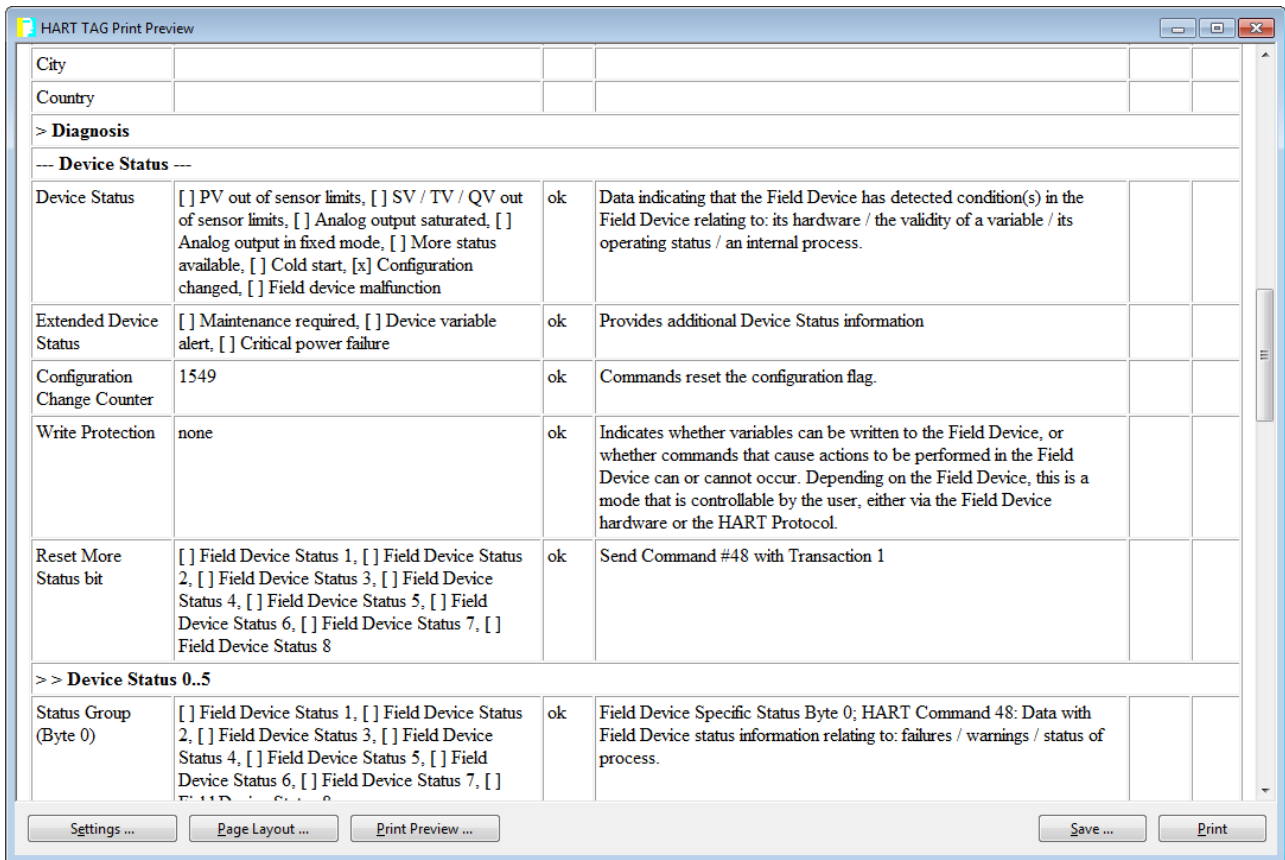
Alarms 1	<input type="checkbox"/> PSCL Alarm, <input type="checkbox"/> PSCT Alarm, <input type="checkbox"/> PSSB Alarm, <input type="checkbox"/> PSFB Alarm, <input type="checkbox"/>	ok	Alarms 1		
----------	--	----	----------	--	--

At the bottom of the window, there are buttons for "Settings ...", "Page Layout ...", "Print Preview ...", "Save ...", and "Print".

3.5.5 Print – Diagnosis

Path: Print -> Diagnosis

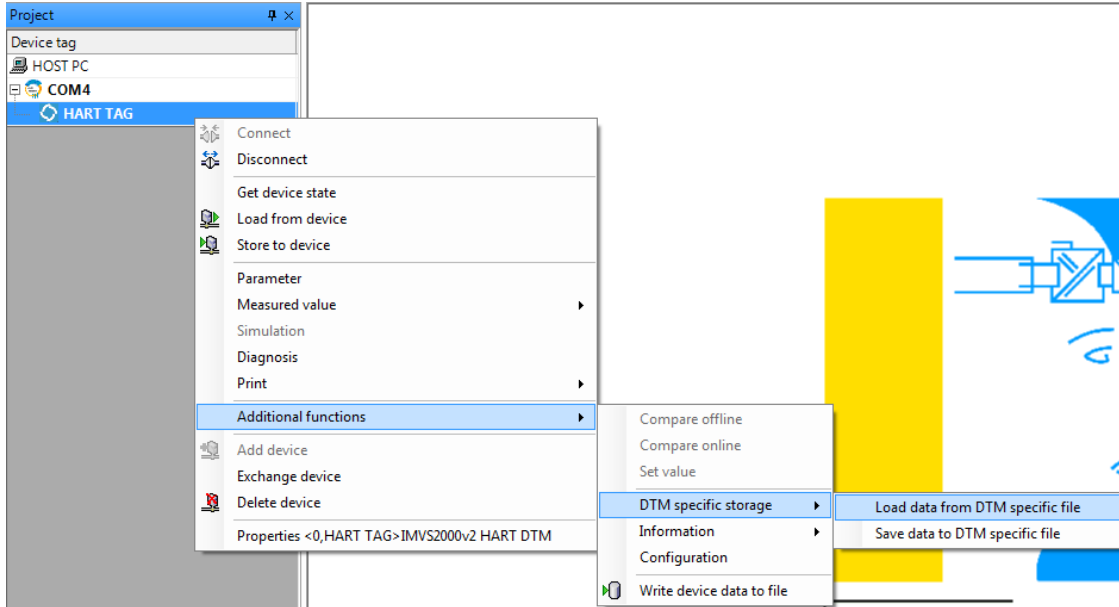
This menu prints the project configuration and the latest values loaded of the “Diagnosis” Menu.




3.6 Additional functions

3.6.1 Additional functions – DTM specific storage – Load data from DTM specific file

Path: Additional Functions -> DTM Specific storage -> Load data from DTM specific file

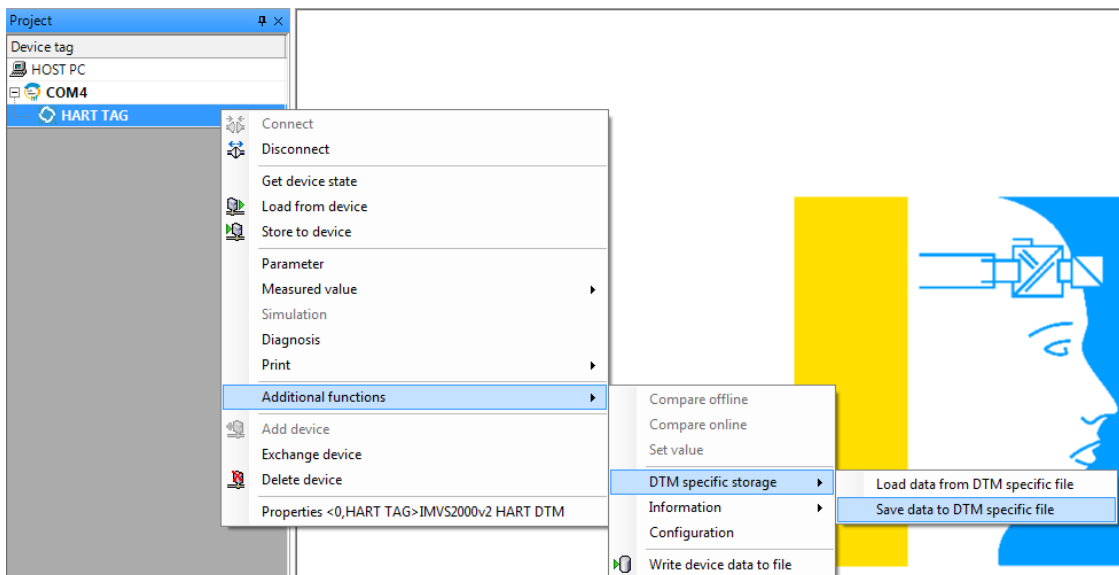


This function allows to load a DTM configuration file previous saved in the current project.

By using the “Store to the device” command (), it's possible to download the entire configuration to the IMVS2000v2 device.

3.6.2 Additional functions – DTM specific storage – Save data to DTM specific file

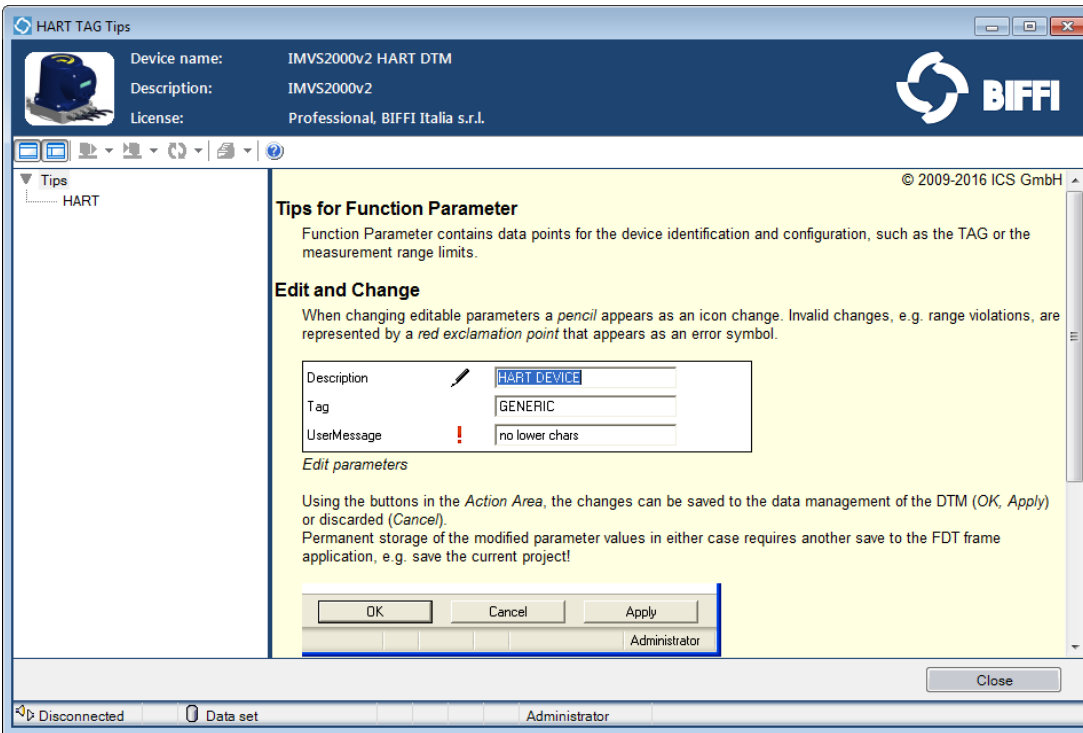
Path: Additional Functions -> DTM Specific storage -> Save data to DTM specific file



This function allows the user to save the entire configuration device (except graphs).

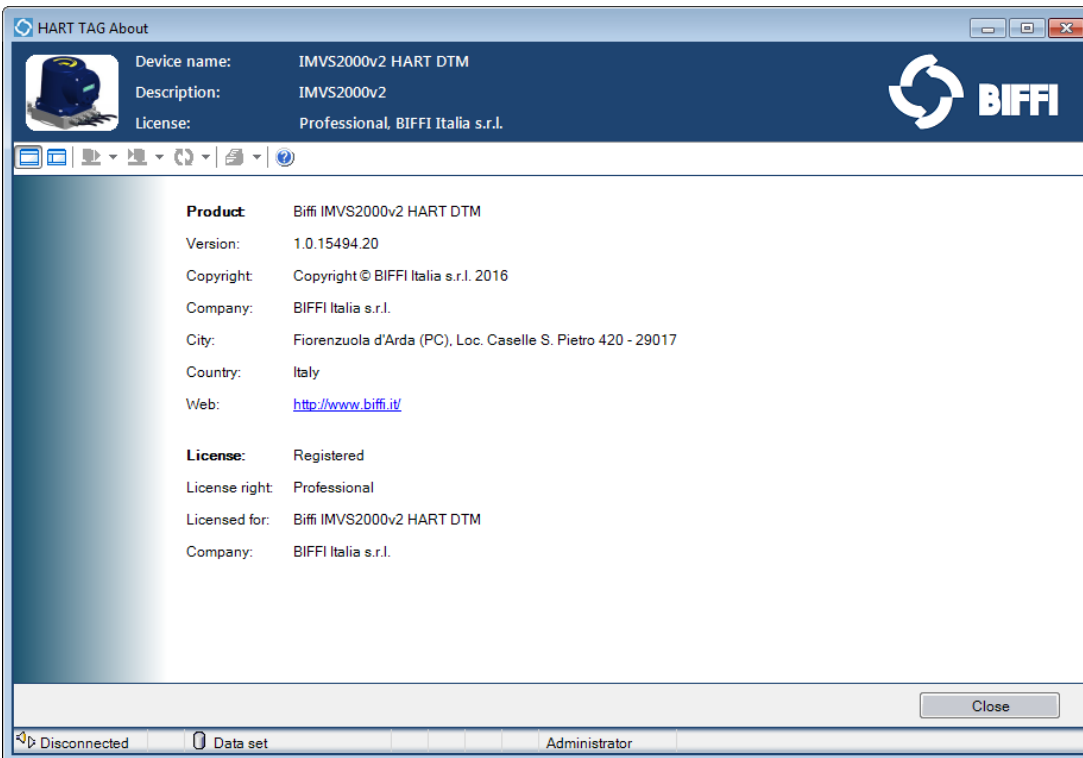
3.6.3 Additional functions – Information – Tips

This section describes the generic features of a DTM.



3.6.4 Additional function – Information – About

This section contains information about the HRT_IMVS2000v2 DTM.



3.6.5 Additional function – Information – Help

This menu opens the current document.

3.6.6 Additional function – Configuration

This section contains all information about the DTM project.

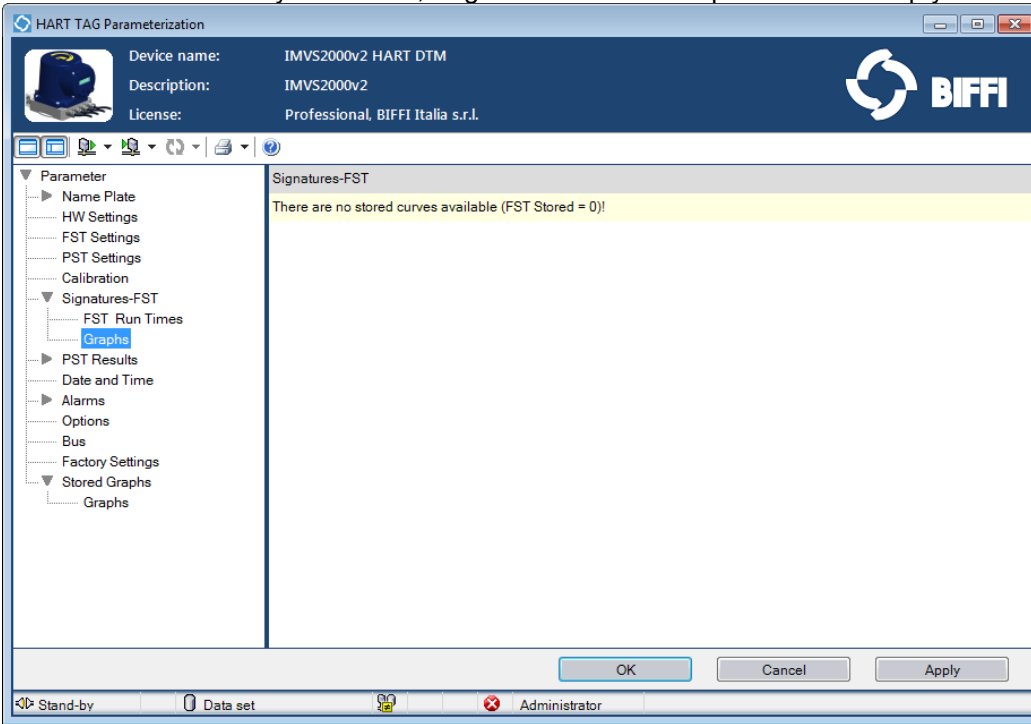
These data are not stored inside the device.

Parameter	Status	Value	Unit
Project Identification (Service Provider)			
Project	0	<input type="text"/>	
Order-No	0	<input type="text"/>	
Company	0	<input type="text"/>	
Department	0	<input type="text"/>	
Service Person	0	<input type="text"/>	
Address	0	<input type="text"/>	
City	0	<input type="text"/>	
Country	0	<input type="text"/>	
Date	0	01/01/2008	
Customer Data			
Company	0	<input type="text"/>	
Site	0	<input type="text"/>	
Unit	0	<input type="text"/>	
Sub Unit	0	<input type="text"/>	
Address	0	<input type="text"/>	
City	0	<input type="text"/>	
Country	0	<input type="text"/>	

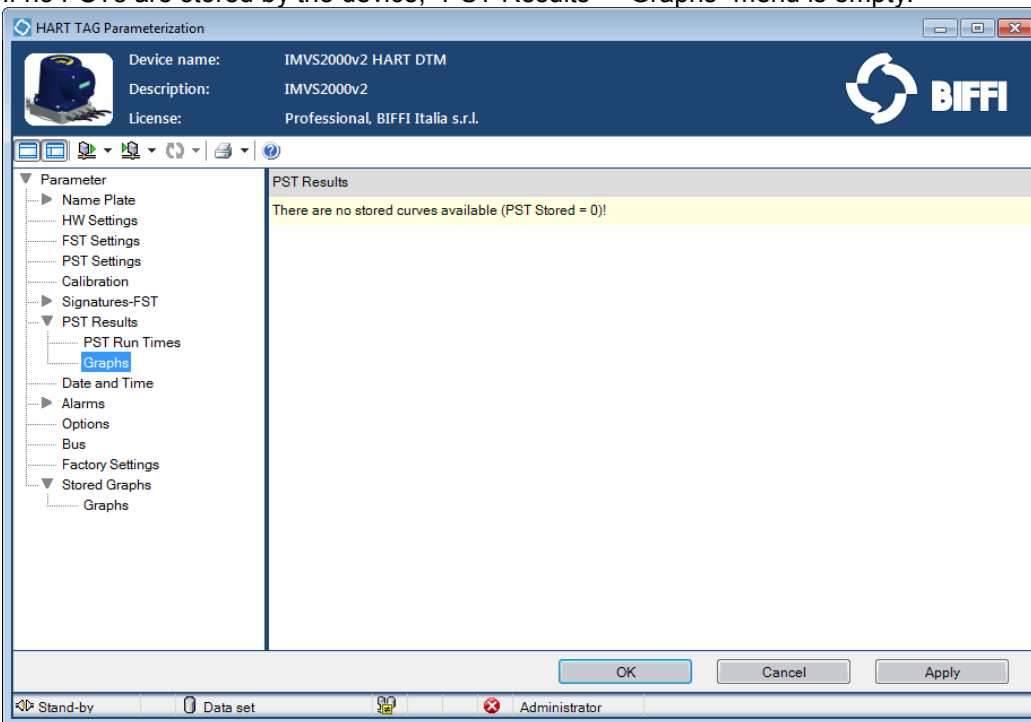
4 GRAPHS OPERATIONS

Graphs menus are available only if the connection is established.

If no FSTs are stored by the device, “Signatures-FST -> Graphs” menu is empty.



If no PSTs are stored by the device, “PST Results -> Graphs” menu is empty.



When graphs are available, Graph menu is displayed.

“View Selection” allows choosing the format to view the graph:

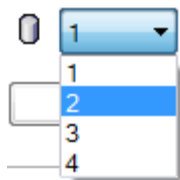
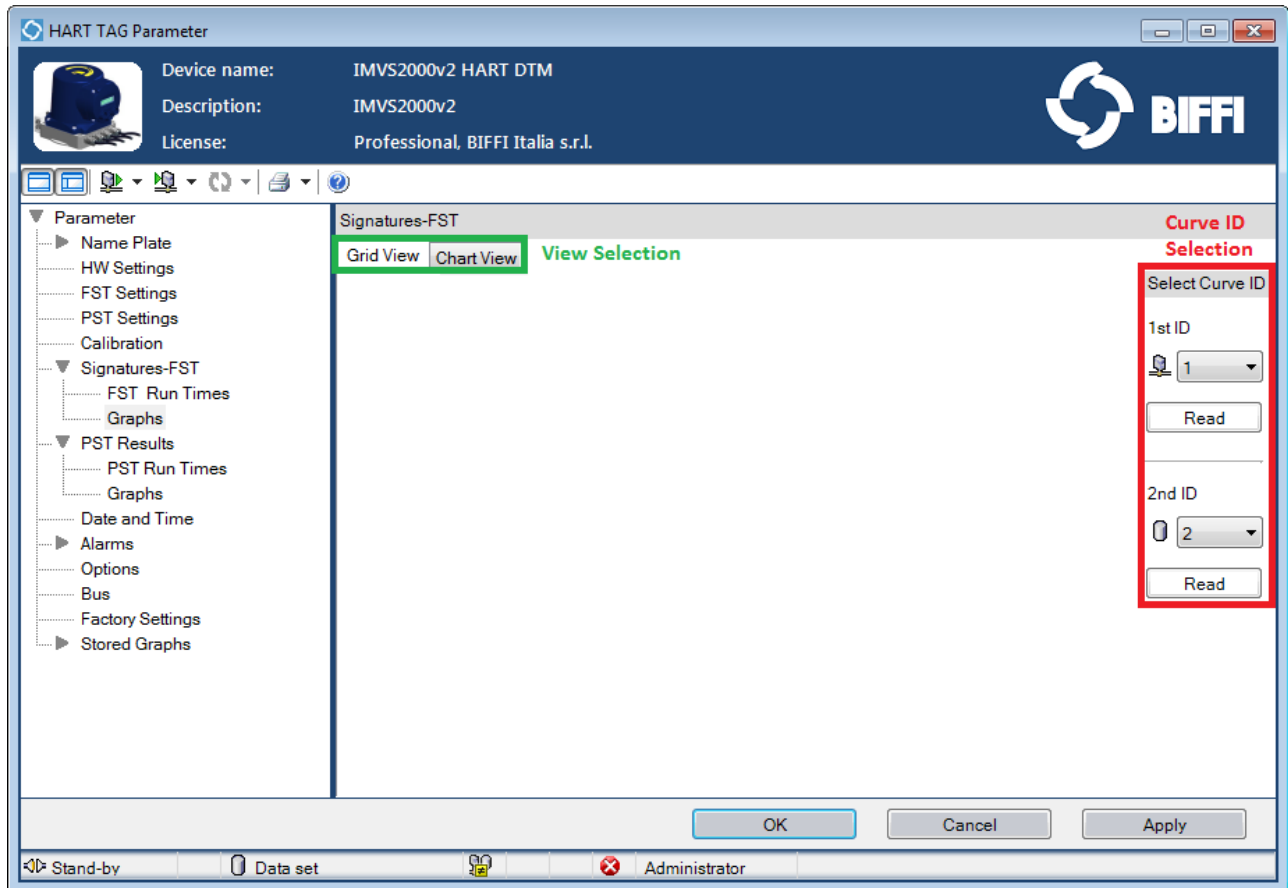
- Grid View (the data are displayed in a table)
- Chart View (the data are plotted)

“Curve ID Selection” allows choosing the Curve to load from the device; the list of the available curves is automatically updates when “Graphs” menu is selected.

Up to 2 curves can loaded at the same time.

“1st ID” indicates the 1st curve to load with the correspondent “Read” button

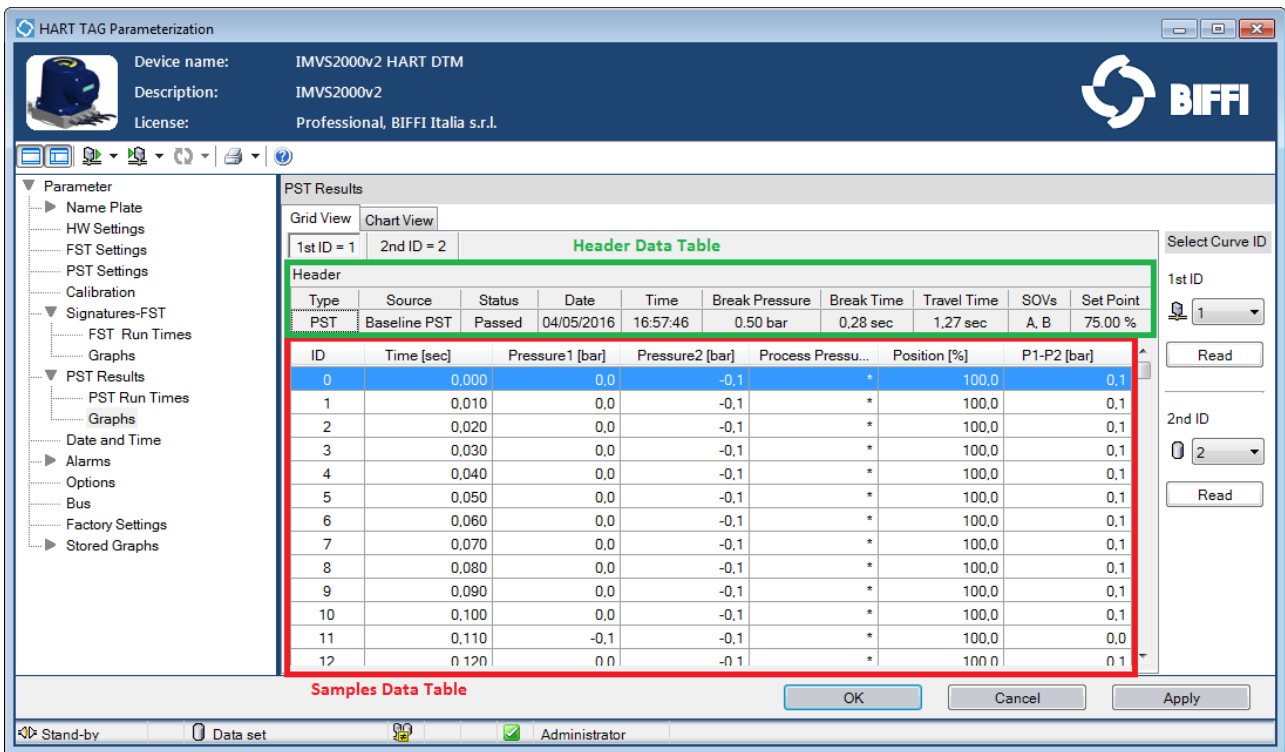
“2nd ID” indicates the 2nd curve to load with the correspondent “Read” button



Select the curve ID from the list

Press the  Button to load the curve.

4.1 Grid View Section



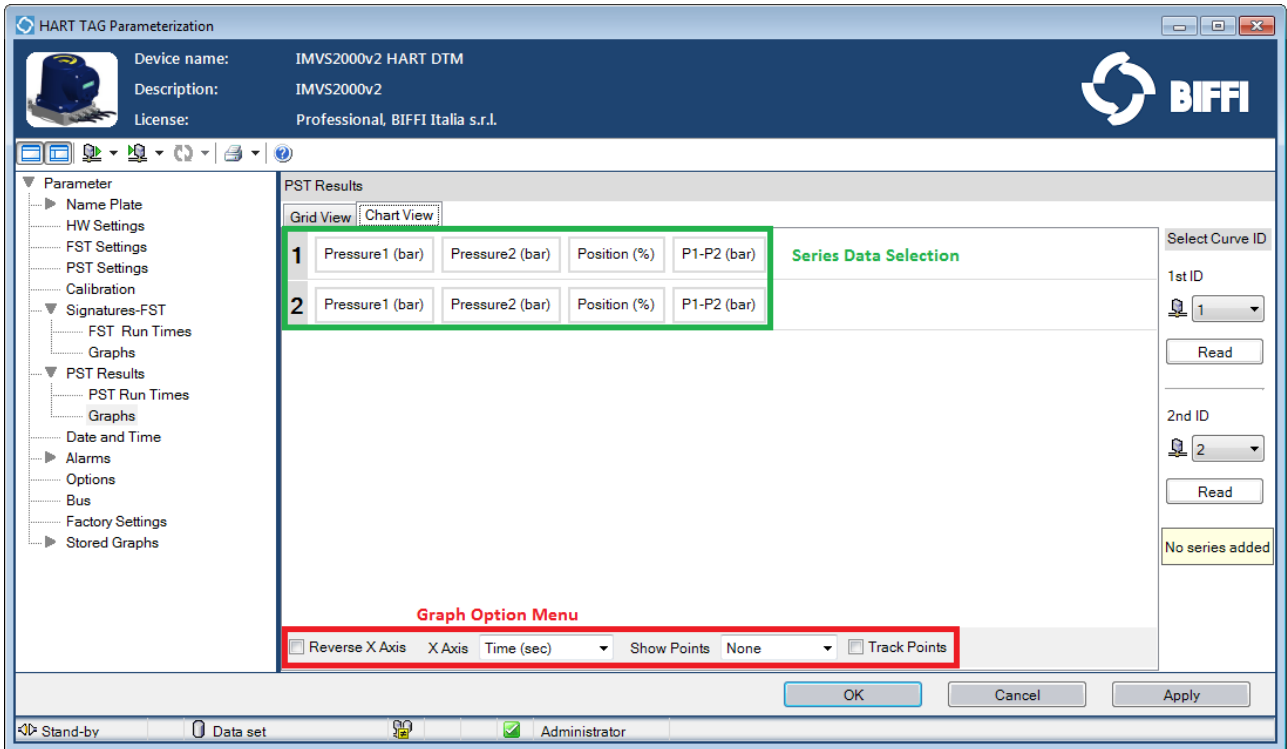
The “Header Data table” contains general information about the curve:

- Graph type (FST, PST, Empty)
- Source (Baseline, Maintenance, Digital Input, External Control for FST curves; Baseline PST, Manual PST, Auto-PST, Digital Input for PST curves)
- Date and Time of registration
- Status
- Break Pressure
- Break Time
- Travel Time
- SOVs Used (only for PST curves)
- PST Set Point (only for PST curves)

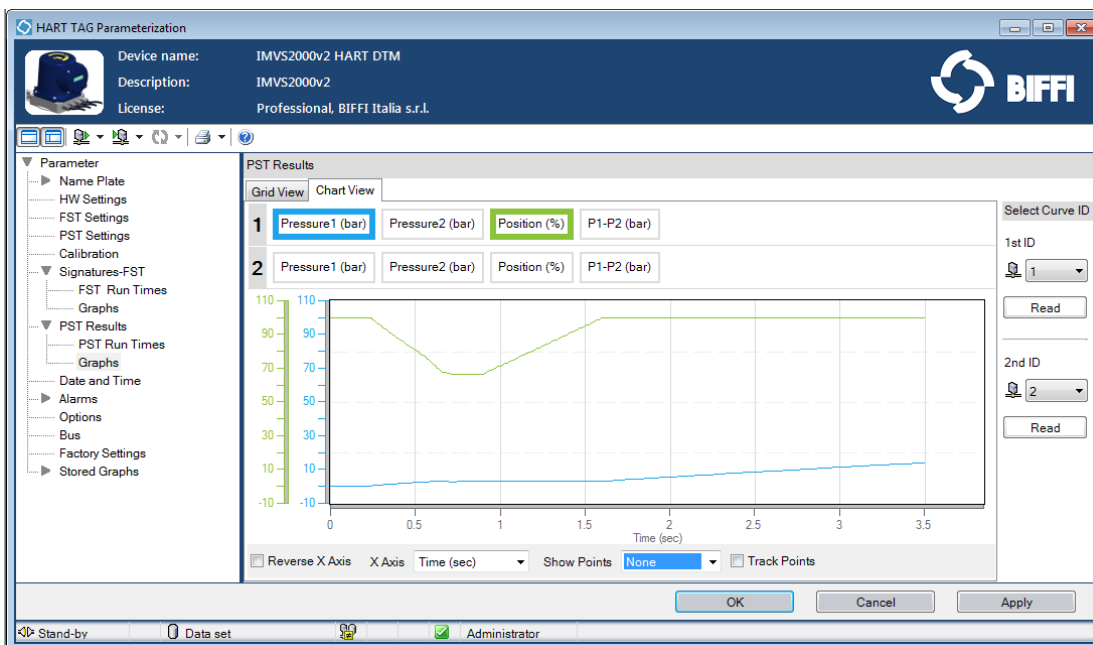
The “Samples Data table” contains all curve samples of “Pressure1”, “Pressure2”, “Process Pressure”, “Position” and “P1-P2”.

If a sample is not available in a curve, it's replaced by “*” (i.e. if Process Pressure sensor is not present).

4.2 Chart View Section

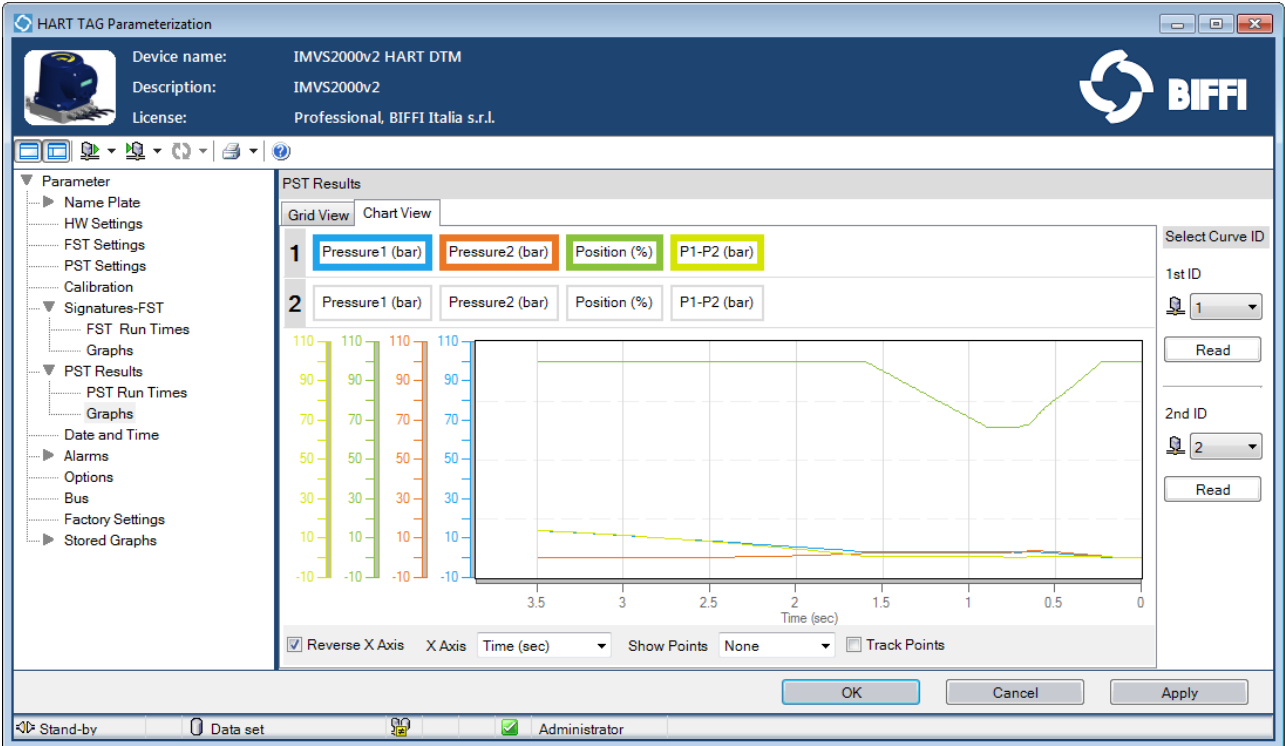


The “Series Data Selection” allows selecting the series of data will be plot. Plot and clear a data series by clicking on it. Each data series is plotted by a different colour.

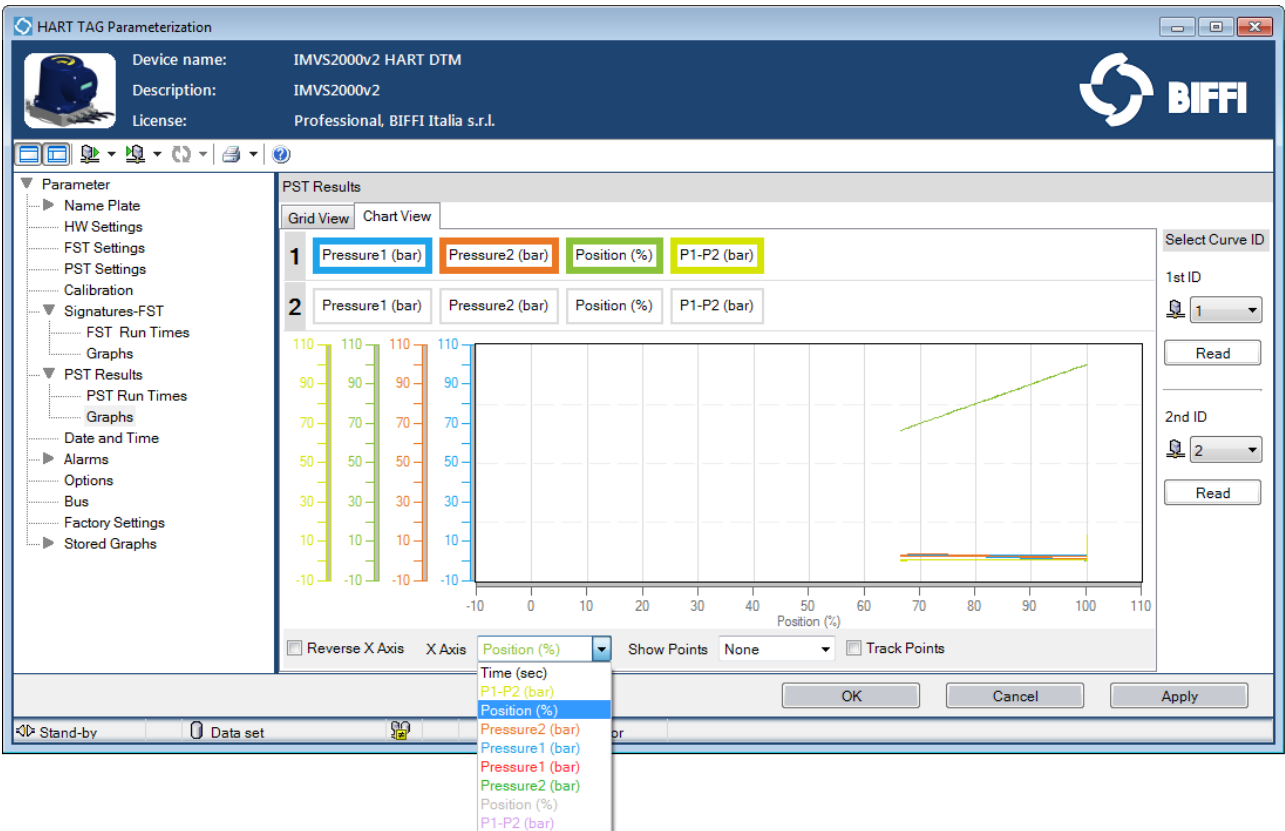


The “Graph Options Menu”:

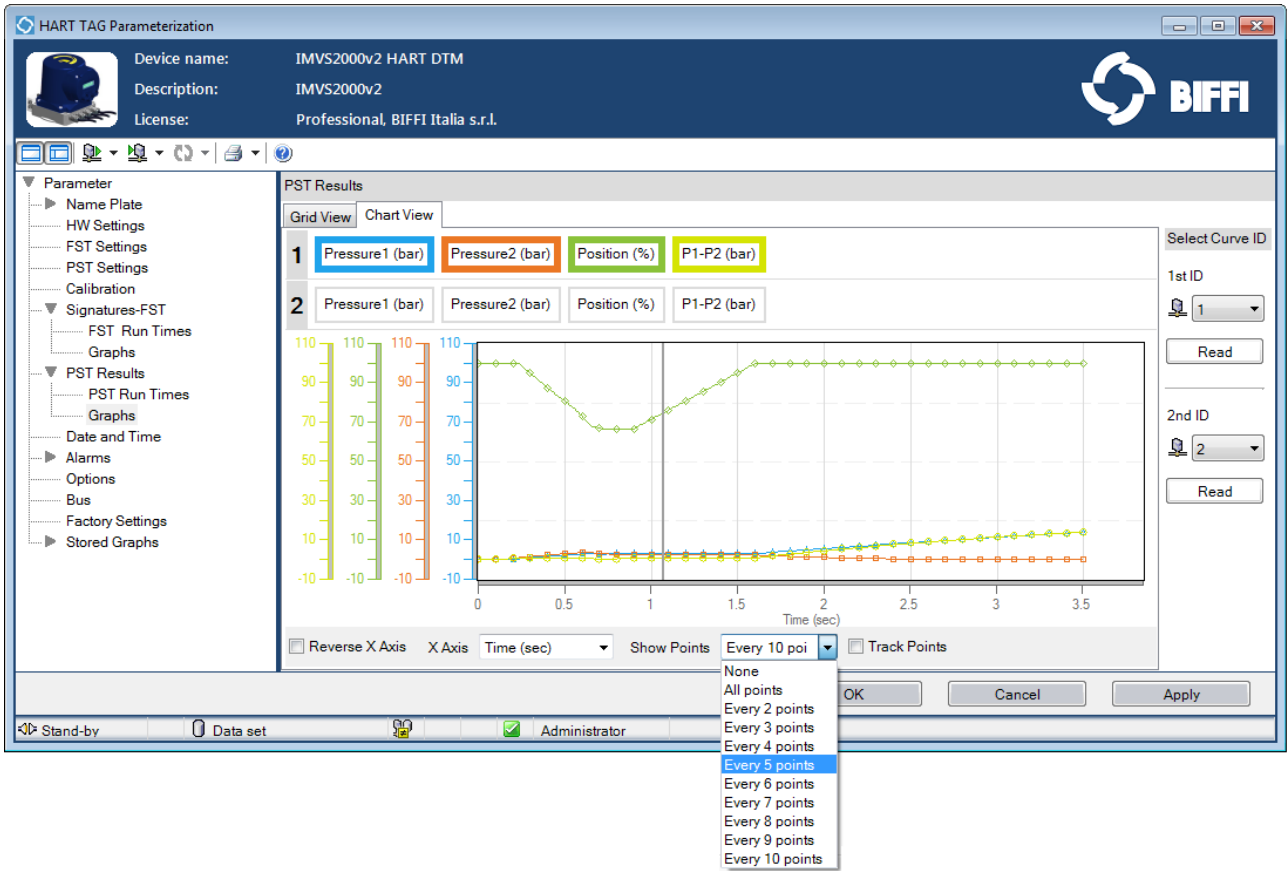
- “Reverse X Axis” reverse the data series of “X Axis” and “Y Axis”



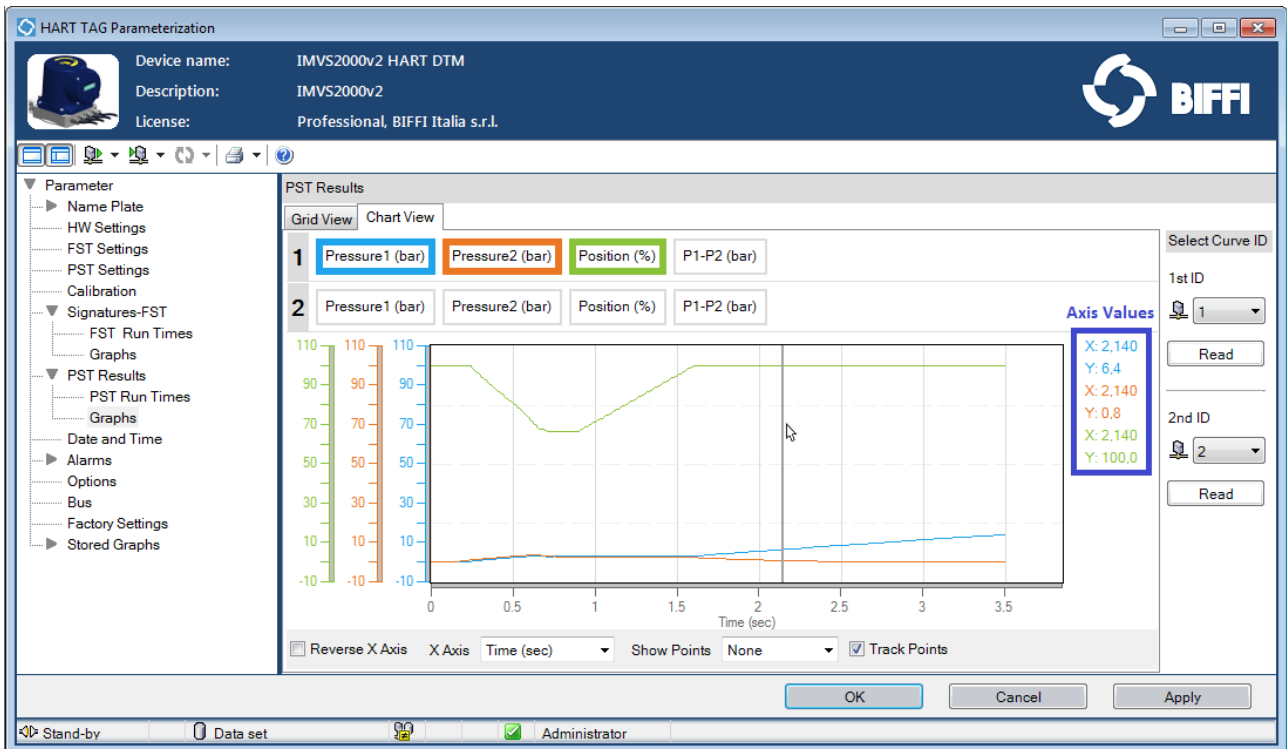
- “X Axis” allows to select the Data Series for X Axis



- “Show Points” displays the points over the graph



- “Track Points” shows the axis value by moving the mouse over the graph

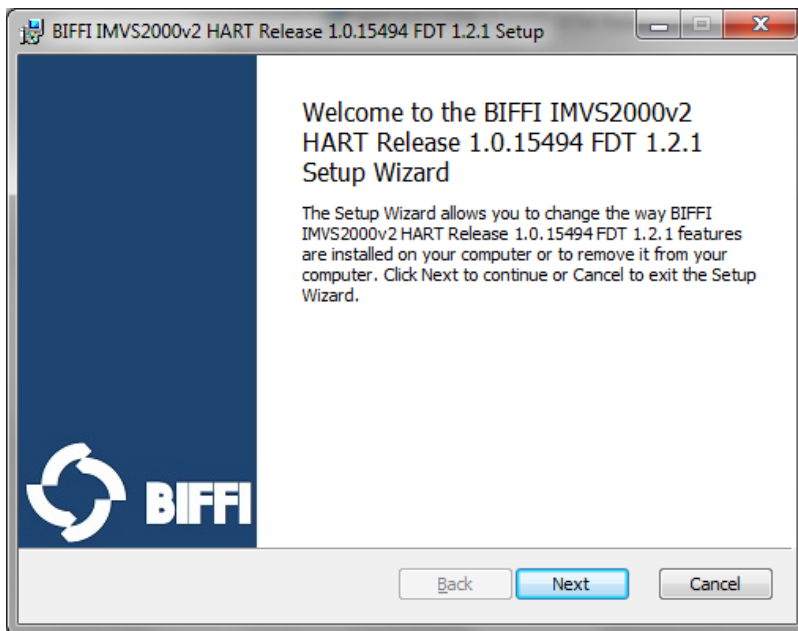


APPENDIX A – DTM/HART INSTALLATION

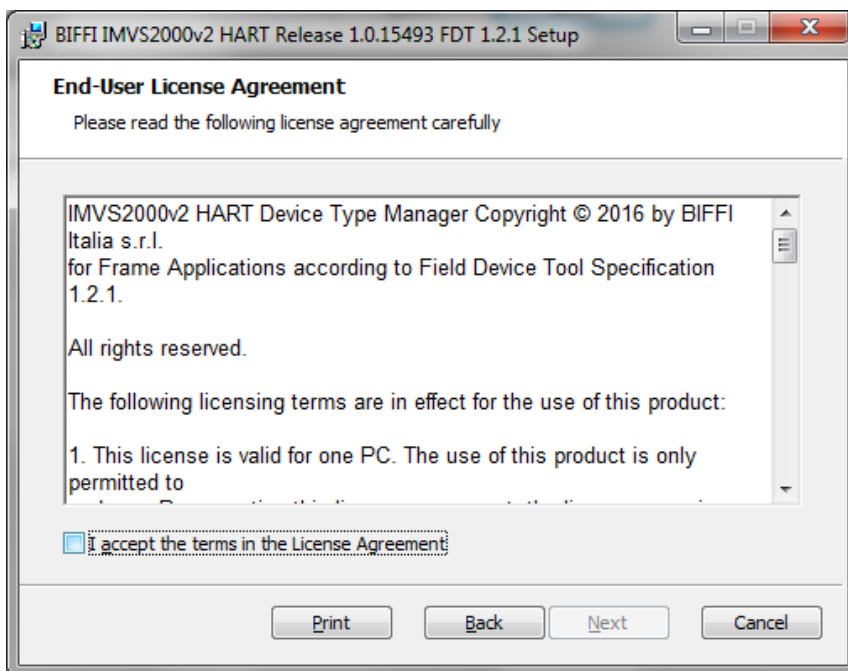
This appendix describes the HART/DTM installation procedure and how to add the DTM/HART to the PACTware tool.

A.1 Installation procedure

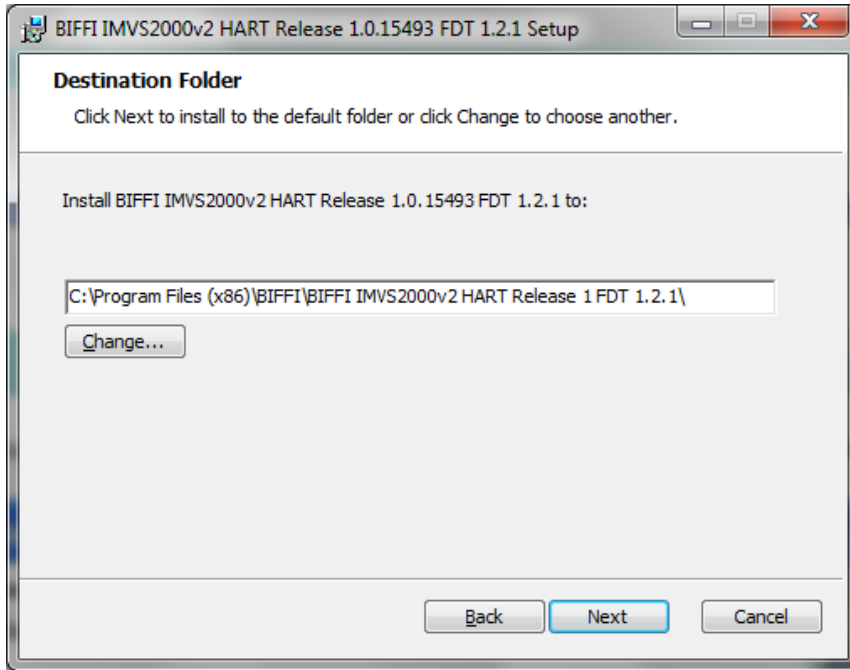
1. Launch the DTM Setup file
2. Click on the “Next” button for starting the installation.



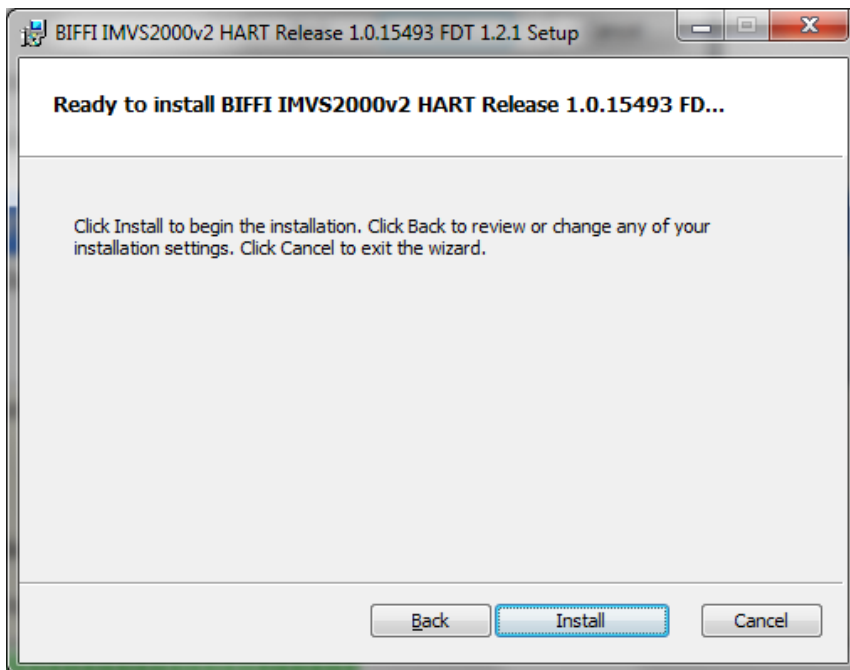
3. Read the “License Agreement”, accept it and then click on “Next” button.



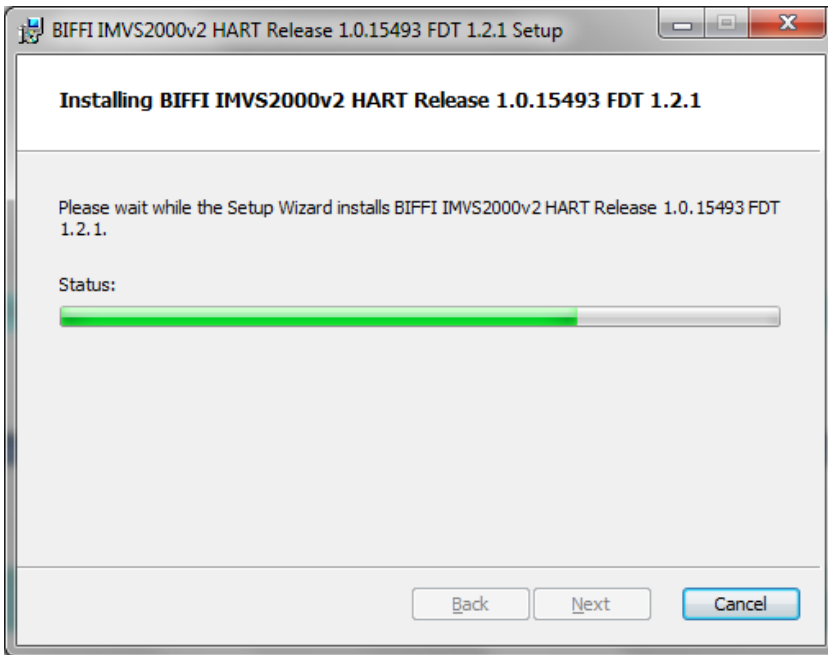
4. Select the “Destination Folder” by using the Browse button and then click on the “Next” button.



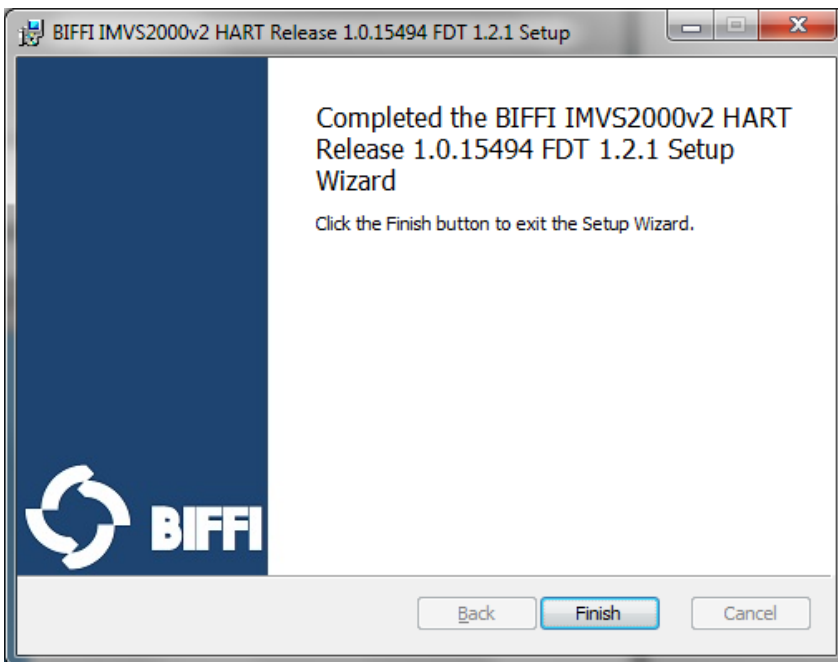
5. Click on "Install" button to begin the installation.



6. Wait for the installation process.

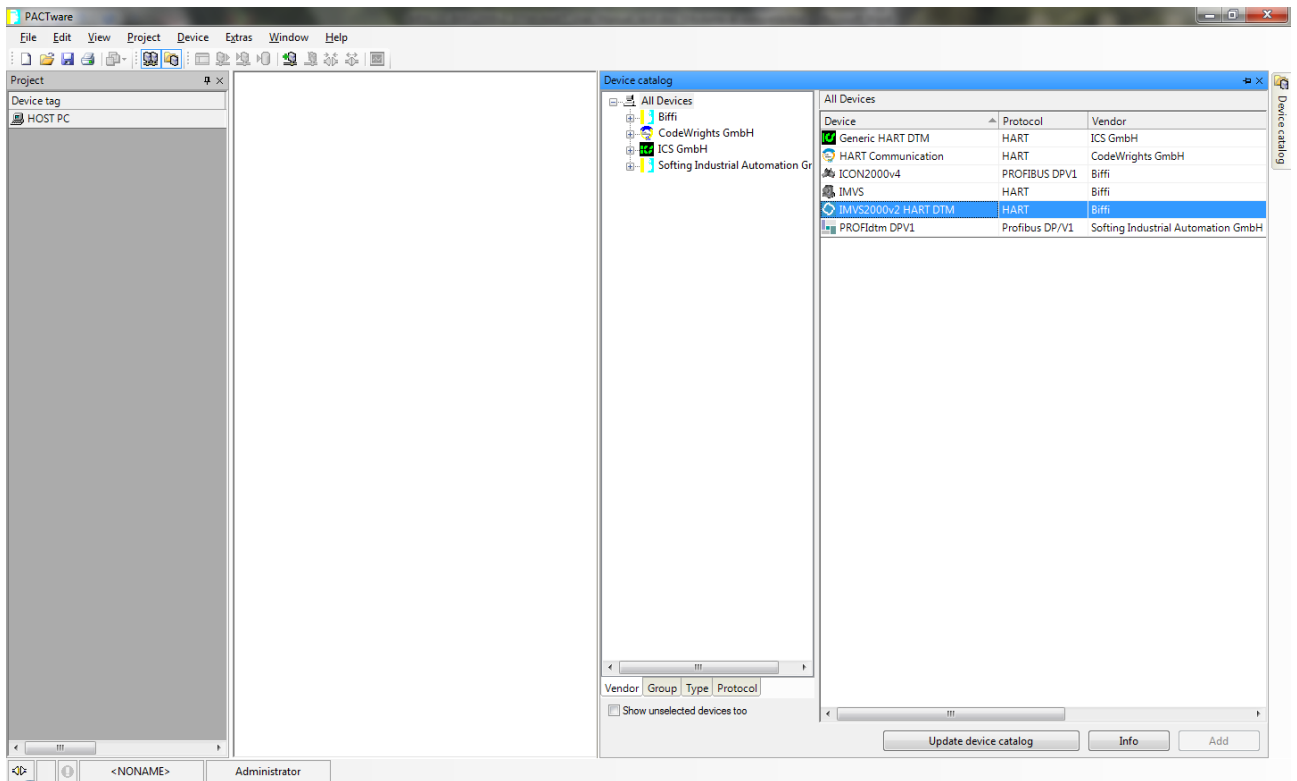


7. Click on the "Finish" button for closing the DTM/HART installation process.



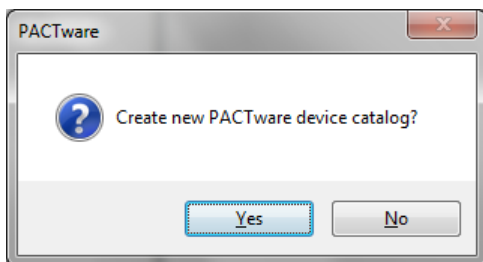
A.2 Add DTM/HART to the PACTware tool

1. Launch the PACTware tool and open the “Device Catalog” window (View->Device catalog).

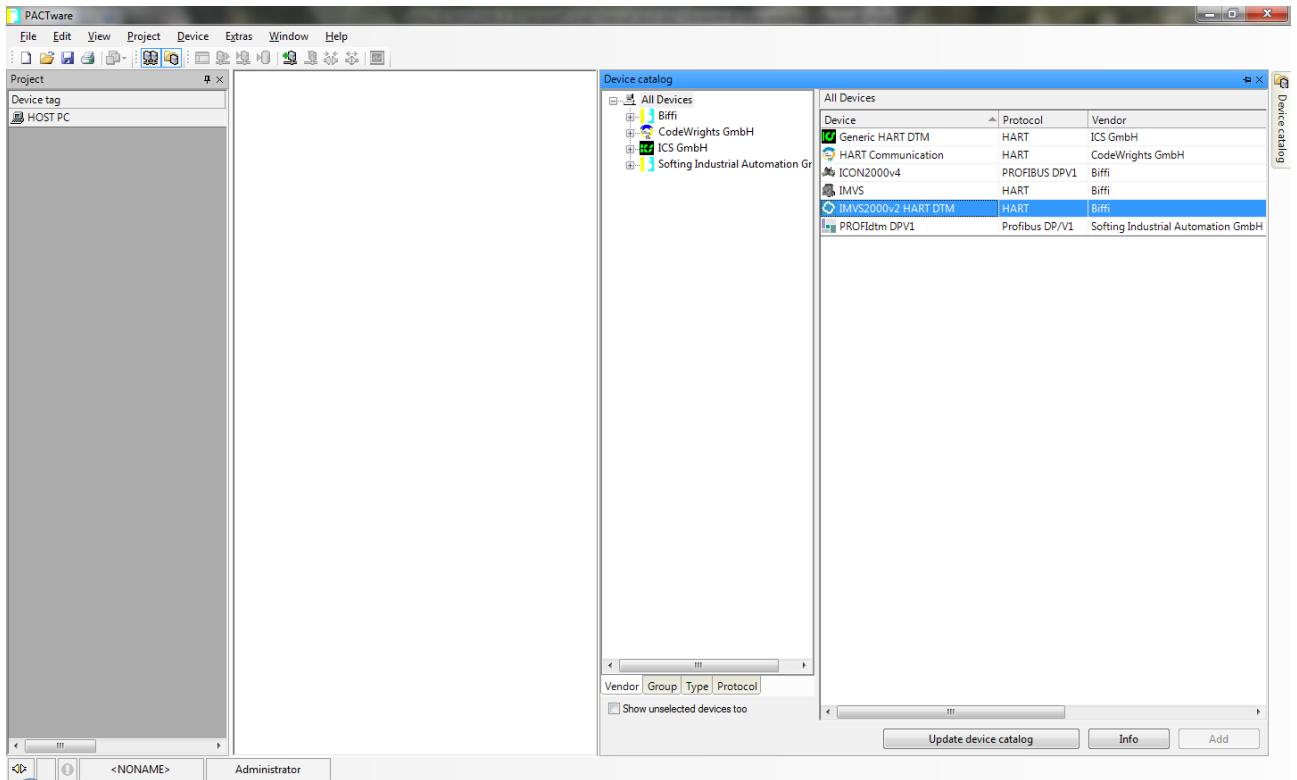


If “IMVS2000v2 HART DTM is already present” on Device Catalog, go to 4

2. Click on the “Update device catalog” button and on the “Yes” button of window that appears.

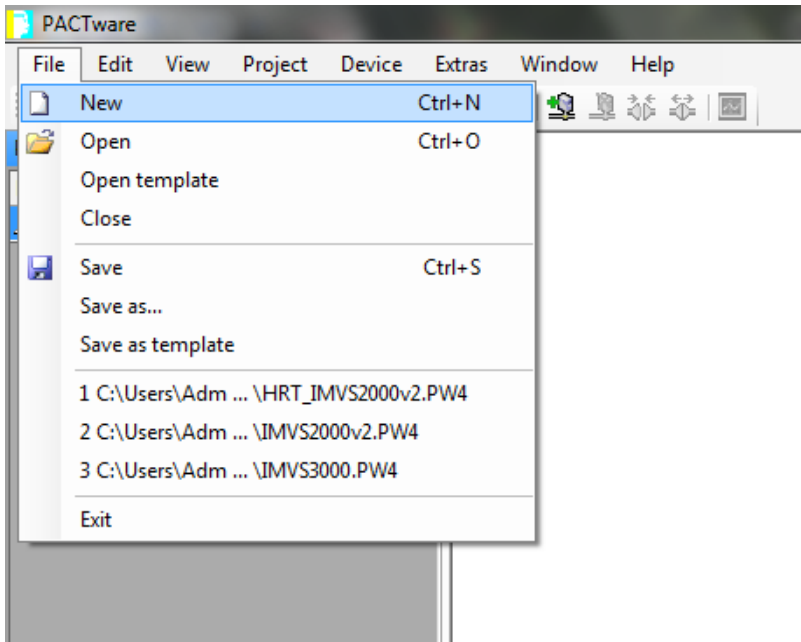


3. The IMVS will be added to the list of the available devices.

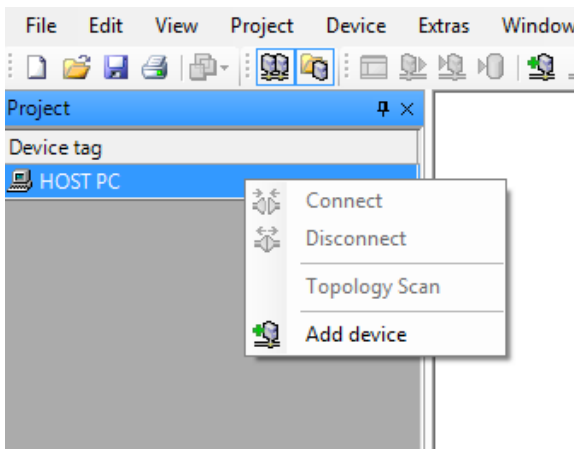


A.3 Create an IMVS2000v2 HART DTM Project

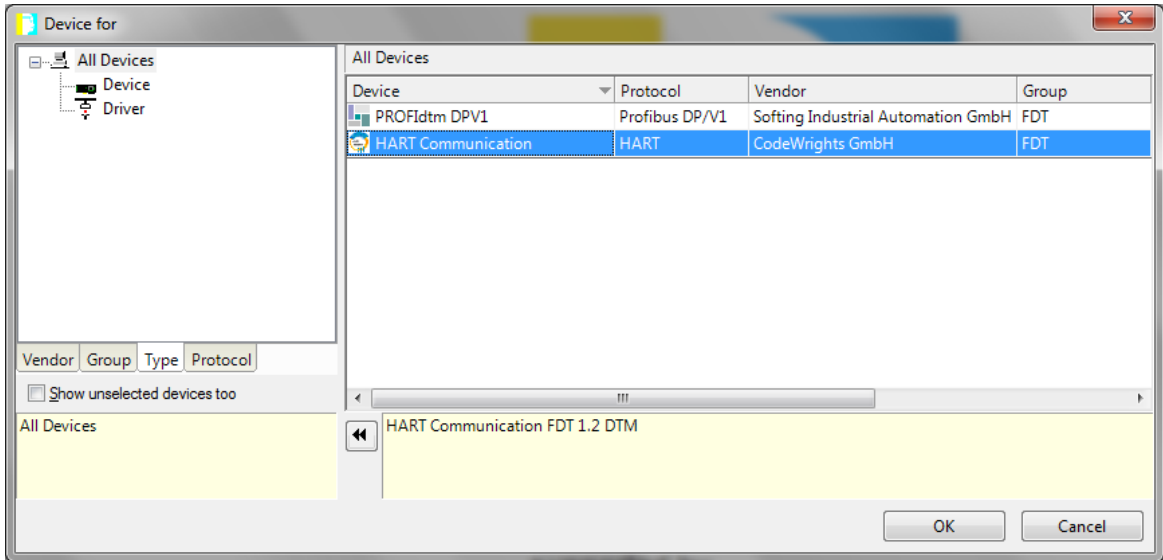
1. Launch the PACTware tool and select “New” from “File” menu.



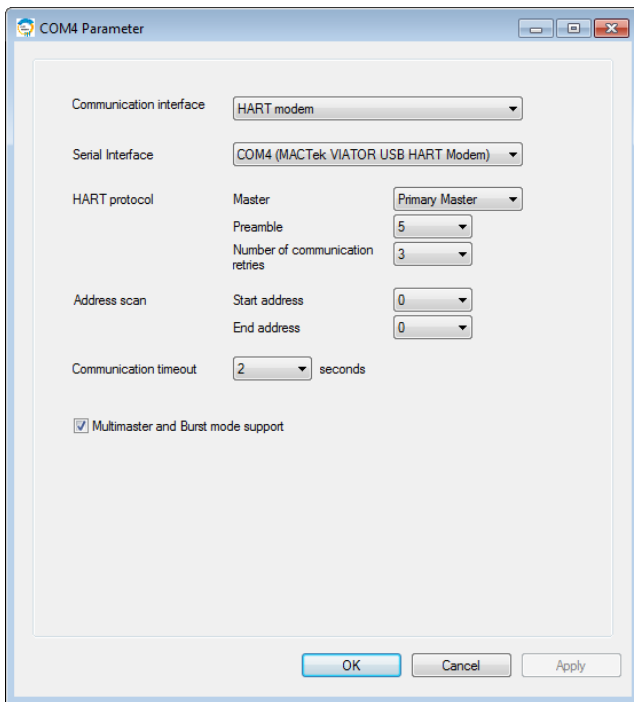
2. Right click on “HOST-PC” and select “Add device”



3. Select the HART Protocol and click OK

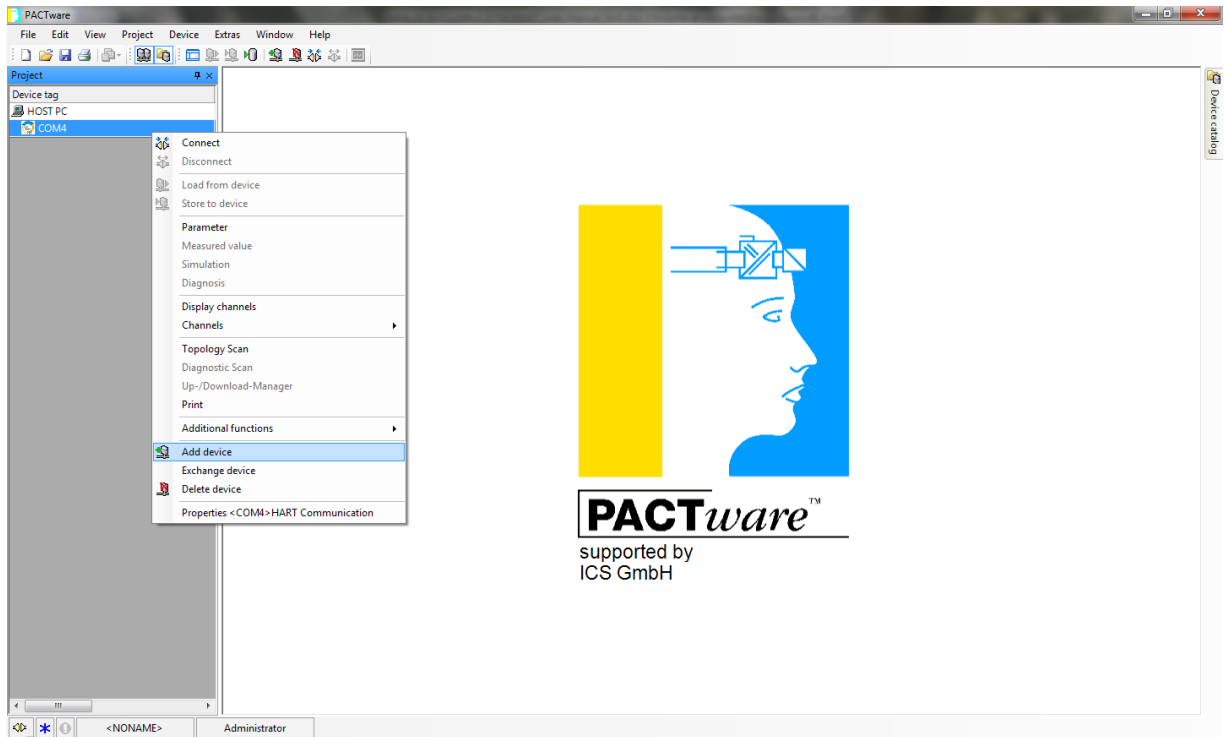


4. Double click on COM port appeared. The COM parameter window is showed.

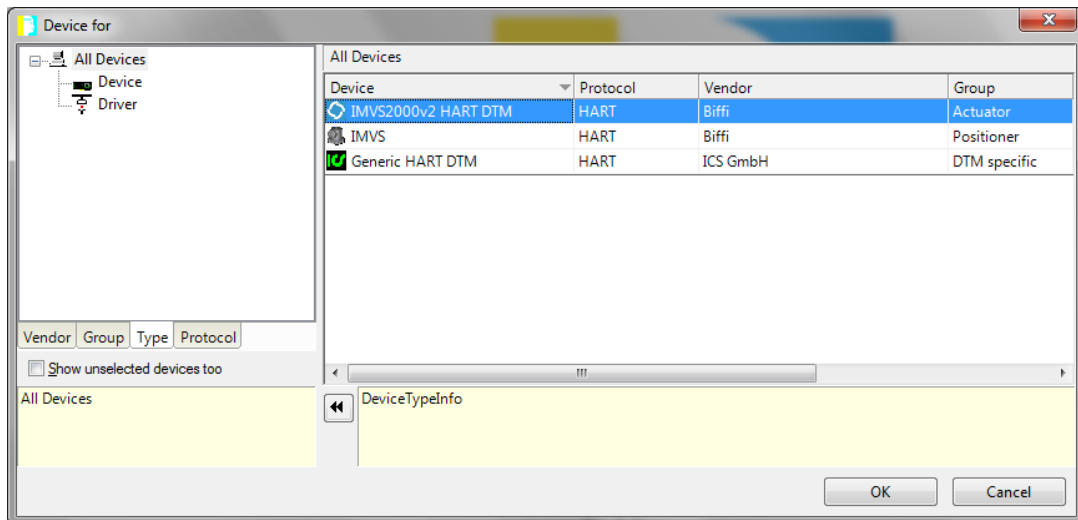



Select the COM port connected to the HART modem and click OK

- Right click on the COM port and select “Add device”.



- Select the “IMVS2000v2 HART DTM” and click OK.



- Click  to save the project.

APPENDIX B – 375/475 HART parameters of IMVS2000v2

B.1 Cross Reference table between 375/475 and DTM/HART parameters

DTM Parameter	DTM Path (PACTware)	375/475 Path	R/W	Biffi Assistant Path	Description
Device Manufacturer	Device-> Parameter-> Name Plate -> Device Data	Online -> Device Setup -> Name Plate -> Device Data	R	Device -> Name Plate -> Device Data	See 3.2.2
Device Name	Device-> Parameter-> Name Plate -> Device Data	Online -> Device Setup -> Name Plate -> Device Data	R	Device -> Name Plate -> Device Data	See 3.2.2
Device Tag Name	Device-> Parameter-> Name Plate -> Device Data	Online -> Device Setup -> Name Plate -> Device Data	R/W	Device -> Name Plate -> Device Data	See 3.2.2
Device Serial Number	Device-> Parameter-> Name Plate -> Device Data	Online -> Device Setup -> Name Plate -> Device Data	R	Device -> Name Plate -> Device Data	See 3.2.2
Device Date of Manufacturing – Day	Device-> Parameter-> Name Plate -> Device Data	Online -> Device Setup -> Name Plate -> Device Data	R/W	Device -> Name Plate -> Device Data	See 3.2.2
Device Date of Manufacturing – Month	Device-> Parameter-> Name Plate -> Device Data	Online -> Device Setup -> Name Plate -> Device Data	R/W	Device -> Name Plate -> Device Data	See 3.2.2
Device Date of Manufacturing – Year	Device-> Parameter-> Name Plate -> Device Data	Online -> Device Setup -> Name Plate -> Device Data	R/W	Device -> Name Plate -> Device Data	See 3.2.2
Logic Card FW Revision	Device-> Parameter-> Name Plate -> Device Data	Online -> Device Setup -> Name Plate -> Device Data	R/W	Device -> Name Plate -> Device Data	See 3.2.2
Actuator Manufacturer	Device-> Parameter-> Name Plate -> Actuator Data	Online -> Device Setup -> Name Plate -> Actuator Data	R/W	Device -> Name Plate -> Actuator Data	See 3.2.3
Actuator Model	Device-> Parameter-> Name Plate -> Actuator Data	Online -> Device Setup -> Name Plate -> Actuator Data	R/W	Device -> Name Plate -> Actuator Data	See 3.2.3
Actuator Tag	Device-> Parameter-> Name Plate -> Actuator Data	Online -> Device Setup -> Name Plate -> Actuator Data	R/W	Device -> Name Plate -> Actuator Data	See 3.2.3
Actuator Serial Number	Device-> Parameter-> Name Plate -> Actuator Data	Online -> Device Setup -> Name Plate -> Actuator Data	R/W	Device -> Name Plate -> Actuator Data	See 3.2.3
Actuator Pressure Size	Device-> Parameter-> Name Plate -> Actuator Data	Online -> Device Setup -> Name Plate -> Actuator Data	R/W	Device -> Name Plate -> Actuator Data	See 3.2.3
Actuator Date of Manufacturing - Day	Device-> Parameter-> Name Plate -> Actuator Data	Online -> Device Setup -> Name Plate -> Actuator Data	R/W	Device -> Name Plate -> Actuator Data	See 3.2.3
Actuator Date of Manufacturing – Month	Device-> Parameter-> Name Plate -> Actuator Data	Online -> Device Setup -> Name Plate -> Actuator Data	R/W	Device -> Name Plate -> Actuator Data	See 3.2.3
Actuator Date of Manufacturing – year	Device-> Parameter-> Name Plate -> Actuator Data	Online -> Device Setup -> Name Plate -> Actuator Data	R/W	Device -> Name Plate -> Actuator Data	See 3.2.3
Valve Manufacturer	Device-> Parameter-> Name Plate -> Valve Data	Online -> Device Setup -> Name Plate -> Valve Data	R/W	Device -> Name Plate -> Valve Data	See 3.2.4
Valve Model	Device-> Parameter-> Name Plate -> Valve Data	Online -> Device Setup -> Name Plate -> Valve Data	R/W	Device -> Name Plate -> Valve Data	See 3.2.4
Valve Tag	Device-> Parameter-> Name Plate -> Valve Data	Online -> Device Setup -> Name Plate -> Valve Data	R/W	Device -> Name Plate -> Valve Data	See 3.2.4
Valve Serial Number	Device-> Parameter-> Name Plate -> Valve Data	Online -> Device Setup -> Name Plate -> Valve Data	R/W	Device -> Name Plate -> Valve Data	See 3.2.4
Valve Date of Manufacturing - Day	Device-> Parameter-> Name Plate -> Valve Data	Online -> Device Setup -> Name Plate -> Valve Data	R/W	Device -> Name Plate -> Valve Data	See 3.2.4
Valve Date of Manufacturing – Month	Device-> Parameter-> Name Plate -> Valve Data	Online -> Device Setup -> Name Plate -> Valve Data	R/W	Device -> Name Plate -> Valve Data	See 3.2.4
Valve Date of Manufacturing – year	Device-> Parameter-> Name Plate -> Valve Data	Online -> Device Setup -> Name Plate -> Valve Data	R/W	Device -> Name Plate -> Valve Data	See 3.2.4
Acting Mode	Device-> Parameter-> HW Settings	Online -> Device Setup -> HW Settings	R/W	Device -> HW Settings -> HW Settings	See 3.2.5
Opening Rotation	Device-> Parameter-> HW Settings	Online -> Device Setup -> HW Settings	R	Device -> HW Settings -> HW Settings	See 3.2.5
Fail Action	Device-> Parameter-> HW Settings	Online -> Device Setup -> HW Settings	R/W	Device -> HW Settings -> HW Settings	See 3.2.5

SOVs Quantity	Device-> Parameter-> HW Settings	Online -> Device Setup -> HW Settings	R/W	Device -> HW Settings -> HW Settings	See 3.2.5
Pressure Sensor 1-2	Device-> Parameter-> HW Settings	Online -> Device Setup -> HW Settings	R	Device -> HW Settings -> HW Settings	See 3.2.5
Process Sensor	Device-> Parameter-> HW Settings	Online -> Device Setup -> HW Settings	R	Device -> HW Settings -> HW Settings	See 3.2.5
Relay A Command	Device-> Parameter-> HW Settings	Online -> Device Setup -> HW Settings	R/W	Device -> HW Settings -> HW Settings	See 3.2.5
Relay B Command	Device-> Parameter-> HW Settings	Online -> Device Setup -> HW Settings	R/W	Device -> HW Settings -> HW Settings	See 3.2.5
Signatures Enabled	Device-> Parameter-> FST Settings	Online -> Device Setup -> FST Settings	R/W	Device -> FST Settings -> FST Settings	See 3.2.6
Open Position Hysteresis	Device-> Parameter-> FST Settings	Online -> Device Setup -> FST Settings	R/W	Device -> FST Settings -> FST Settings	See 3.2.6
Closed Position Hysteresis	Device-> Parameter-> FST Settings	Online -> Device Setup -> FST Settings	R/W	Device -> FST Settings -> FST Settings	See 3.2.6
Opening Time Hysteresis	Device-> Parameter-> FST Settings	Online -> Device Setup -> FST Settings	R/W	Device -> FST Settings -> FST Settings	See 3.2.6
Closing Time Hysteresis	Device-> Parameter-> FST Settings	Online -> Device Setup -> FST Settings	R/W	Device -> FST Settings -> FST Settings	See 3.2.6
FST Pressure Hysteresis	Device-> Parameter-> FST Settings	Online -> Device Setup -> FST Settings	R/W	Device -> FST Settings -> FST Settings	See 3.2.6
High Pressure Limit	Device-> Parameter-> FST Settings	Online -> Device Setup -> FST Settings	R/W	Device -> FST Settings -> FST Settings	See 3.2.6
Low Pressure Limit	Device-> Parameter-> FST Settings	Online -> Device Setup -> FST Settings	R/W	Device -> FST Settings -> FST Settings	See 3.2.6
High Process Pressure Limit	Device-> Parameter-> FST Settings	Online -> Device Setup -> FST Settings	R/W	Device -> FST Settings -> FST Settings	See 3.2.6
Low Process Pressure Limit	Device-> Parameter-> FST Settings	Online -> Device Setup -> FST Settings	R/W	Device -> FST Settings -> FST Settings	See 3.2.6
FST Cycle Limit	Device-> Parameter-> FST Settings	Online -> Device Setup -> FST Settings	R/W	Device -> FST Settings -> FST Settings	See 3.2.6
FST Cycle Count	Device-> Parameter-> FST Settings	Online -> Device Setup -> FST Settings	R/W	Device -> FST Settings -> FST Settings	See 3.2.6
FST Absolute Count	Device-> Parameter-> FST Settings	Online -> Device Setup -> FST Settings	R	Device -> FST Settings -> FST Settings	See 3.2.6
PST Enabled	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
PST Set Point	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
PST Position Hysteresis	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
PST Pressure Hysteresis	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
PST Time Hysteresis	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
PST Series SOVs	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
PST Cycle Limit	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
PST Cycle Count	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
PST Absolute Count	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R	Device -> PST Settings -> PST Settings	See 3.2.7
Auto PST Enabled	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
Auto PST Period	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
Auto PST Date – Day	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
Auto PST Date – Month	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
Auto PST Date – Year	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
Auto PST Time – Hours	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
Auto PST Time – Minutes	Device-> Parameter-> PST Settings	Online -> Device Setup -> PST Settings	R/W	Device -> PST Settings -> PST Settings	See 3.2.7
Calibration Enabled	Device-> Parameter-> Calibration	Online -> Device Setup -> Calibration	R/W	Device -> Calibration -> Calibration	See 3.2.8

Maintenance Opening Travel Time	Device-> Parameter-> Signatures-FST -> FST Run Times	Online -> Device Setup -> Signatures-FST -> FST Run Times	R	Device -> Signatures-FST -> FST Run Times	See 3.2.10
Baseline Opening Break Pressure	Device-> Parameter-> Signatures-FST -> FST Run Times	Online -> Device Setup -> Signatures-FST -> FST Run Times	R	Device -> Signatures-FST -> FST Run Times	See 3.2.10
Maintenance Opening Break Pressure	Device-> Parameter-> Signatures-FST -> FST Run Times	Online -> Device Setup -> Signatures-FST -> FST Run Times	R	Device -> Signatures-FST -> FST Run Times	See 3.2.10
Baseline Closing Break Time	Device-> Parameter-> Signatures-FST -> FST Run Times	Online -> Device Setup -> Signatures-FST -> FST Run Times	R	Device -> Signatures-FST -> FST Run Times	See 3.2.10
Maintenance Closing Break Time	Device-> Parameter-> Signatures-FST -> FST Run Times	Online -> Device Setup -> Signatures-FST -> FST Run Times	R	Device -> Signatures-FST -> FST Run Times	See 3.2.10
Baseline Closing Travel Time	Device-> Parameter-> Signatures-FST -> FST Run Times	Online -> Device Setup -> Signatures-FST -> FST Run Times	R	Device -> Signatures-FST -> FST Run Times	See 3.2.10
Maintenance Closing Travel Time	Device-> Parameter-> Signatures-FST -> FST Run Times	Online -> Device Setup -> Signatures-FST -> FST Run Times	R	Device -> Signatures-FST -> FST Run Times	See 3.2.10
Baseline Closing Break Pressure	Device-> Parameter-> Signatures-FST -> FST Run Times	Online -> Device Setup -> Signatures-FST -> FST Run Times	R	Device -> Signatures-FST -> FST Run Times	See 3.2.10
Maintenance Closing Break Pressure	Device-> Parameter-> Signatures-FST -> FST Run Times	Online -> Device Setup -> Signatures-FST -> FST Run Times	R	Device -> Signatures-FST -> FST Run Times	See 3.2.10
FST Graphs	Device-> Parameter-> Signatures-FST -> Graphs	Online -> Device Setup -> Graphs		Device -> Signatures-FST	See 3.2.11
Baseline PST Command	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	W	Device -> PST Results -> PST Results	See 3.2.12
Manual PST Command	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	W	Device -> PST Results -> PST Results	See 3.2.12
PST Set Point	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R/W	Device -> PST Results -> PST Results	See 3.2.12
Baseline PST Calculated Time	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R	Device -> PST Results -> PST Results	See 3.2.12
Baseline PST Maximum Time	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R/W	Device -> PST Results -> PST Results	See 3.2.12
Baseline PST Status	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R	Device -> PST Results -> PST Results	See 3.2.12
Baseline PST Date - Day	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R	Device -> PST Results -> PST Results	See 3.2.12
Baseline PST Date – Month	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R	Device -> PST Results -> PST Results	See 3.2.12
Baseline PST Date – Year	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R	Device -> PST Results -> PST Results	See 3.2.12
Baseline PST Time – Hours	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R	Device -> PST Results -> PST Results	See 3.2.12
Baseline PST Time – Minutes	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R	Device -> PST Results -> PST Results	See 3.2.12
Manual PST Status	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R	Device -> PST Results -> PST Results	See 3.2.12
Manual PST Date - Day	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R	Device -> PST Results -> PST Results	See 3.2.12
Manual PST Date – Month	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R	Device -> PST Results -> PST Results	See 3.2.12
Manual PST Date – Year	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R	Device -> PST Results -> PST Results	See 3.2.12
Manual PST Time- Hours	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R	Device -> PST Results -> PST Results	See 3.2.12
Manual PST Time – Minutes	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R	Device -> PST Results -> PST Results	See 3.2.12
PST Stored	Device-> Parameter-> PST Results	Online -> Device Setup -> PST Results	R	Device -> PST Results -> PST Results	See 3.2.12
Baseline PST Break Time	Device-> Parameter-> PST Results -> PST Run Times	Online -> Device Setup -> PST Results -> PST Run Times	R	Device -> PST Results -> PST Run Times	See 3.2.13
Manual PST Break Time	Device-> Parameter-> PST Results -> PST Run Times	Online -> Device Setup -> PST Results -> PST Run Times	R	Device -> PST Results -> PST Run Times	See 3.2.13

Baseline PST Travel Time	Device-> Parameter-> PST Results -> PST Run Times	Online -> Device Setup -> PST Results -> PST Run Times	R	Device -> PST Results -> PST Run Times	See 3.2.13
Manual PST Travel Time	Device-> Parameter-> PST Results -> PST Run Times	Online -> Device Setup -> PST Results -> PST Run Times	R	Device -> PST Results -> PST Run Times	See 3.2.13
Baseline PST Break Pressure	Device-> Parameter-> PST Results -> PST Run Times	Online -> Device Setup -> PST Results -> PST Run Times	R	Device -> PST Results -> PST Run Times	See 3.2.13
Manual PST Break Pressure	Device-> Parameter-> PST Results -> PST Run Times	Online -> Device Setup -> PST Results -> PST Run Times	R	Device -> PST Results -> PST Run Times	See 3.2.13
PST Graphs	Device-> Parameter-> PST Results -> Graphs	Online -> Device Setup -> Graphs		Device -> PST Results	See 3.2.14
Current Date – Day	Device-> Parameter-> Date and Time	Online -> Device Setup -> Date and Time	R/W	Device -> Date and Time -> Date and Time	See 3.2.15
Current Date – Month	Device-> Parameter-> Date and Time	Online -> Device Setup -> Date and Time	R/W	Device -> Date and Time -> Date and Time	See 3.2.15
Current Date - Year	Device-> Parameter-> Date and Time	Online -> Device Setup -> Date and Time	R/W	Device -> Date and Time -> Date and Time	See 3.2.15
Current Time – Hours	Device-> Parameter-> Date and Time	Online -> Device Setup -> Date and Time	R/W	Device -> Date and Time -> Date and Time	See 3.2.15
Current Time – Minutes	Device-> Parameter-> Date and Time	Online -> Device Setup -> Date and Time	R/W	Device -> Date and Time -> Date and Time	See 3.2.15
Next Maintenance Date – Day	Device-> Parameter-> Date and Time	Online -> Device Setup -> Date and Time	R/W	Device -> Date and Time -> Date and Time	See 3.2.15
Next Maintenance Date – Month	Device-> Parameter-> Date and Time	Online -> Device Setup -> Date and Time	R/W	Device -> Date and Time -> Date and Time	See 3.2.15
Next Maintenance Date – Year	Device-> Parameter-> Date and Time	Online -> Device Setup -> Date and Time	R/W	Device -> Date and Time -> Date and Time	See 3.2.15
Common Failure Alarms Status	Device-> Parameter-> Alarms	Online -> Device Setup -> Alarms	R	Device -> Alarms -> Alarms	See 3.2.16
Alarms1	Device-> Parameter-> Alarms	Online -> Device Setup -> Alarms	R	Device -> Alarms -> Alarms	See 3.2.16
Alarms2	Device-> Parameter-> Alarms	Online -> Device Setup -> Alarms	R	Device -> Alarms -> Alarms	See 3.2.16
Alarms3	Device-> Parameter-> Alarms	Online -> Device Setup -> Alarms	R	Device -> Alarms -> Alarms	See 3.2.16
Active Alarms	Device-> Parameter-> Alarms	Online -> Device Setup -> Alarms	R	Device -> Alarms -> Alarms	See 3.2.16
Clear Alarms List	Device-> Parameter-> Alarms	Online -> Device Setup -> Alarms	W	Device -> Alarms -> Alarms	See 3.2.16
Reset Alarms	Device-> Parameter-> Alarms	Online -> Device Setup -> Alarms	W	Device -> Alarms -> Alarms	See 3.2.16
Alarms List	Device-> Parameter-> Alarms -> Alarms List	Online -> Device Setup -> Alarms -> Alarms List	R	Device -> Alarms -> Alarms	See 3.2.17
PSCL Alarm Enabled	Device-> Parameter-> Alarms -> Alarms Enabled	Online -> Device Setup -> Alarms -> Alarms Enabled	R/W	Device -> Alarms -> Alarms Enabled	See 3.2.18
PSCT Alarm Enabled	Device-> Parameter-> Alarms -> Alarms Enabled	Online -> Device Setup -> Alarms -> Alarms Enabled	R/W	Device -> Alarms -> Alarms Enabled	See 3.2.18
PSSB Alarm Enabled	Device-> Parameter-> Alarms -> Alarms Enabled	Online -> Device Setup -> Alarms -> Alarms Enabled	R/W	Device -> Alarms -> Alarms Enabled	See 3.2.18
PSFB Alarm Enabled	Device-> Parameter-> Alarms -> Alarms Enabled	Online -> Device Setup -> Alarms -> Alarms Enabled	R/W	Device -> Alarms -> Alarms Enabled	See 3.2.18
PSST Alarm Enabled	Device-> Parameter-> Alarms -> Alarms Enabled	Online -> Device Setup -> Alarms -> Alarms Enabled	R/W	Device -> Alarms -> Alarms Enabled	See 3.2.18
PSFT Alarm Enabled	Device-> Parameter-> Alarms -> Alarms Enabled	Online -> Device Setup -> Alarms -> Alarms Enabled	R/W	Device -> Alarms -> Alarms Enabled	See 3.2.18
PSSP Alarm Enabled	Device-> Parameter-> Alarms -> Alarms Enabled	Online -> Device Setup -> Alarms -> Alarms Enabled	R/W	Device -> Alarms -> Alarms Enabled	See 3.2.18
PSSR Alarm Enabled	Device-> Parameter-> Alarms -> Alarms Enabled	Online -> Device Setup -> Alarms -> Alarms Enabled	R/W	Device -> Alarms -> Alarms Enabled	See 3.2.18
PSLB Alarm Enabled	Device-> Parameter-> Alarms -> Alarms Enabled	Online -> Device Setup -> Alarms -> Alarms Enabled	R/W	Device -> Alarms -> Alarms Enabled	See 3.2.18
PSHB Alarm Enabled	Device-> Parameter-> Alarms -> Alarms Enabled	Online -> Device Setup -> Alarms -> Alarms Enabled	R/W	Device -> Alarms -> Alarms Enabled	See 3.2.18
PSNM Alarm Enabled	Device-> Parameter-> Alarms -> Alarms Enabled	Online -> Device Setup -> Alarms -> Alarms Enabled	R/W	Device -> Alarms -> Alarms Enabled	See 3.2.18

Bluetooth Enabled	Device-> Parameter-> Options	Online - > Device Setup -> Options	R/W	Device -> Options -> Options	See 3.2.19
Manual FST Alarm Enabled	Device-> Parameter-> Options	Online - > Device Setup -> Options	R/W	Device -> Options -> Options	See 3.2.19
Polling Address	Device-> Parameter-> Bus	Online - > Device Setup -> Bus	R	Device -> Bus -> HART	See 3.2.20
Device Identification	Device-> Parameter-> Bus	Online - > Device Setup -> Bus	R	Device -> Bus -> HART	See 3.2.20
Loop Current Mode	Device-> Parameter-> Bus	Online - > Device Setup -> Bus	R	Device -> Bus -> HART	See 3.2.20
PV Code	Device-> Parameter-> Bus	Online - > Device Setup -> Bus	R	Device -> Bus -> HART	See 3.2.20
SV Code	Device-> Parameter-> Bus	Online - > Device Setup -> Bus	R	Device -> Bus -> HART	See 3.2.20
TV Code	Device-> Parameter-> Bus	Online - > Device Setup -> Bus	R	Device -> Bus -> HART	See 3.2.20
QV Code	Device-> Parameter-> Bus	Online - > Device Setup -> Bus	R	Device -> Bus -> HART	See 3.2.20
User Message	Device-> Parameter-> Bus	Online - > Device Setup -> Bus	R	Device -> Bus -> HART	See 3.2.20
Tag	Device-> Parameter-> Bus	Online - > Device Setup -> Bus	R	Device -> Bus -> HART	See 3.2.20
Description	Device-> Parameter-> Bus	Online - > Device Setup -> Bus	R	Device -> Bus -> HART	See 3.2.20
Date	Device-> Parameter-> Bus	Online - > Device Setup -> Bus	R	Device -> Bus -> HART	See 3.2.20
Long Tag	Device-> Parameter-> Bus	Online - > Device Setup -> Bus	R	Device -> Bus -> HART	See 3.2.20
Final Assembly Number	Device-> Parameter-> Bus	Online - > Device Setup -> Bus	R	Device -> Bus -> HART	See 3.2.20
Software Version	Device-> Parameter-> Bus	Online - > Device Setup -> Bus	R	Device -> Bus -> HART	See 3.2.20
DI SOVA Status	Device-> Parameter-> Factory Settings	Online - > Device Setup -> Factory Settings -> Digital Inputs	R	Device -> Bus -> Factory Settings	See 3.2.21
DI SOVB Status	Device-> Parameter-> Factory Settings	Online - > Device Setup -> Factory Settings -> Digital Inputs	R	Device -> Bus -> Factory Settings	See 3.2.21
DI PST Status	Device-> Parameter-> Factory Settings	Online - > Device Setup -> Factory Settings -> Digital Inputs	R	Device -> Bus -> Factory Settings	See 3.2.21
DI SISA Status	Device-> Parameter-> Factory Settings	Online - > Device Setup -> Factory Settings -> Digital Inputs	R	Device -> Bus -> Factory Settings	See 3.2.21
DI SISB Status	Device-> Parameter-> Factory Settings	Online - > Device Setup -> Factory Settings -> Digital Inputs	R	Device -> Bus -> Factory Settings	See 3.2.21
Stored Graphs	Device-> Parameter-> Stored Graphs -> Graphs	Online - > Device Setup -> Graphs		Device -> Stored Graphs -> Stored Graphs	See 3.2.14

NOTES:

A series of horizontal dotted lines providing a space for notes.



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