Industrial Assembly Solutions - ADH

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ASC5000V3 MQTT Specification Interface Standard IAS

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1. Revision History

Date	Modifications	by	Version
02.05.2023	Messages definition	Markus Herold	V0.1
09.05.2023	Layout adaptations	Markus Herold	V1.0
20.11.2023	Json examples added	Aparna Lakshmi	V1.1
08.11.2024	Added Barrel Data / Barrel Changed	Dirk Gottschling	V1.2
05.12.2024	Added Station Name Attribute	Dirk Gottschling	V1.3
16.01.2025	Commertial Guideline and contact person updated	Leandro Gil	V1.4

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2. MQTT Data Collection

2.1 Commercial Guideline & Recommendations

1. The current document serves as a guide. It is continuously enriched and maintained by Atlas Copco.
2. The enabling of the data transfer functionality, is linked to a license file activation on the controller.
   A temporary license can be provided for up to 3 months, for Demo purposes.
3. It has to be noted that some quantities might only be available through the use of specific options in the controller,
   which might not be activated by default.
4. A simulator is usually provided to facilitate the integration in the factory network, prior the delivery of the real system.

2.2 Data description

Available data are listed in the table below.
Within JSON messages (especially for MQTT), the order of the properties may differ in the future,
but the names of the properties are fixed.

Data	Description	Name in json	Example / Format	Unit	Mqtt Version
Contained in every message					
Ip-address	IP-address	IpAddress	string	-	5.0.8
Machine Name	Machine name	MachineName	string	-	5.0.8
System Number	System Number	SystemNr	string	-	5.0.8
Station Name	Station Name	SystemNr	string	-	5.0.8

Data	Description	Name in json	Example / Format	Unit	Mqtt Version
Applications	Topic:				
Application Time Stamp	Time stamp at end of application	DateTime	e.g. "2024-08-01T12:03:59.807Z"	-	5.0.8
Unique-ID	UniqueId	UniqueId	Integer	-	5.0.8
Type / Part ID	Type / Part ID	PartId	string	-	5.0.8
Material Program Number	Material program number	Programfloat	Integer (0-255)	-	5.0.8
Application Result	Result of application	ApplicationResult	string, z.B. "OK"	-	5.0.8
Target Volume	Target volume	TargetVolume	float, e.g. 36.4064	cm^3	5.0.8
Measured Volume	Applied volume	MeasuredVolume	float, e.g. 36.432	cm^3	5.0.8
Volume Deviation	Volume deviation	VolumeDeviation	float, e.g. 0.07032013	cm^3	5.0.8
Gun Open Time	Gun open time	ApplTime	float, e.g. 7.380121	s	5.0.8
Max Pressure 1	Maximum pressure for meter 1 (already given in the initial prompt)	MaxPressure1	float	bar	5.0.8
Max Pressure 2	Maximum pressure for meter 2	MaxPressure2	float	bar	5.0.8
Bead Count	Number of beads	BeadCount	float	-	5.0.8
Bead Numbers	Bead number	Beadfloat	Integer	-	5.0.8
Station	Id of the runtime system	Station	string	-	5.0.8
Weight	Applied volume in gram	Weight	float	gm	
Set Weight	Set volume to apply in gram	SetWeight	float	gm	5.0.8
Gun Open Mask	Bit field which indicate which applicator is open	GunOpenMask	float	-	5.0.8
Max Occured Torque	Maximum torque of dynamic mixer motor	MaxOccuredTorque	float	Nm	5.0.8
Set Point Mix	Set value of mixing ratio	SetPointMix	float	-	5.0.8
Actual Mix	Actual value value of mixing ratio	ActualMix	float	-	5.0.8
Set Point Mixer RPM	Set value of rotating speed of dynamic mixer motor	SetPointMixerRPM	float	-	5.0.8
Actual Mixer RPM	Maximum speed of dynamic mixer motor	ActualMixerRPM	float	-	
Robot Index	Indicates which robot does the application. Normally we have one robot.	RobotIndex	float	-	5.0.8

Ext Prog Number	Some customers send 32 bit value ExternalProgram number and we search for controller specific 255 program numbers from this value.	ExtProgfloat	float	-	5.0.8
Total Volume Meter G1	Total volume applied with Meter 1 in gram	TotalVolumeMeterG1	float	g	5.0.8
Total Volume Meter G2	Total volume applied with Meter 2 in gram	TotalVolumeMeterG2	float	g	5.0.8
Total Volume Meter C1	Total volume applied with Meter 1 in ccm	TotalVolumeMeterC1	float	cm^3	5.0.8
Total Volume Meter C2	Total volume applied with Meter 2 in ccm	TotalVolumeMeterC2	float	cm^3	5.0.8
Application Time Meter 1	Gun open time	ApplicationTimeMeter 1	float	s	5.0.8
Application Time Meter 2	Gun open time	ApplicationTimeMeter 2	float	s	5.0.8
Filling Time Meter 1	Filling Time Meter 1	FillingTimeMeter1	float	s	5.0.8
Filling Time Meter 2	Filling Time Meter 2	FillingTimeMeter2	float	s	5.0.8
Min Pressure Meter 1	Minimum pressure for meter 1	MinPressure1	float	bar	5.0.8
Min Pressure Meter 2	Minimum pressure for meter 2	MinPressure2	float	bar	5.0.8
Set PrePressure Meter 1	Set PrePressure for meter 1	PrePressSetMeter1	float	bar	5.0.8
Set PrePressure Meter 2	Set PrePressure for meter 2	PrePressSetMeter2	float	bar	5.0.8
Actual PrePressure Meter 1	Actual PrePressure for meter 1	PrePressActualMeter1	float	bar	5.0.8
Actual PrePressure Meter 2	Actual PrePressure for meter 2	PrePressActualMeter2	float	bar	5.0.8
PrePressure Deviation Meter 1	Deviation in PrePressure in Meter 1 in %	PrePressDeviationMeter1	float	bar	5.0.8
PrePressure Deviation Meter 2	Deviation in PrePressure in Meter 2 in %	PrePressDeviationMeter2	float	bar	5.0.8
Active Barrel Hpc 1	Barrel used to refill the meter for Hpc 1 (0: no barrel or barrel number 1 or 2)	ActiveBarrelNumberHpc1	Integer	-	5.6.20
Active Barrel Hpc 2	Barrel used to refill the meter for Hpc 2 (0: no barrel or barrel number 1 or 2)	ActiveBarrelNumberHpc2	Integer	-	5.6.20
Last Auto Purge	Duration since last automatic purge	DurationSinceLastAutoPurge	float		5.6.20
Elapsed Pot Life	Elapsed pot life at start of the application	PotlifeElapsed	float		5.6.20
Applicator temperature	Applicator temperature	ApplicatorTemperature	float		5.6.20
Application => Bead Arrays					
Bead Numbers array	Bead number	Beadfloat	Integer	-	5.0.8

Bead results	Array of single bead application results. Depending upon the customer requirement each value can be extracted in derived data logic.	Result	e.g. "OK"	-	5.0.8
Bead Measured Volumes	Array of single bead application volumes. Depending upon the customer requirement each value can be extracted in derived data logic.	MeasuredVolume	float	cm^3	5.0.8
Bead Target Volume	Array of single bead target volumes. Depending upon the customer requirement each value can be extracted in derived data logic.	TargetVolume	float	cm^3	5.0.8
Bead Application Times	Gun open time	ApplicationTime	float	s	5.0.8
Bead Min Pressures Meter 1	Array of single bead min pressures for meter 1. Depending upon the customer requirement each value can be extracted in derived data logic.	MinPressure1	float	bar	5.0.8
Bead Min Pressures Meter 2	Array of single bead min pressures for meter 2. Depending upon the customer requirement each value can be extracted in derived data logic.	MinPressure2	float	bar	5.0.8
Bead Max Pressures Meter 1	Array of single bead max pressures for meter 1. Depending upon the customer requirement each value can be extracted in derived data logic.	MaxPressure1	float	bar	5.0.8
Bead Max Pressures Meter 2	Array of single bead max pressures for meter 2. Depending upon the customer requirement each value can be extracted in derived data logic.	MaxPressure2	float	bar	5.0.8

Data	Description	Name in json	Example / Format	Unit	Mqtt Version
Errors					
Date Time	Timestamp of error event	DateTime	e.g. "2024-08-01T12:03:59.807Z"	-	5.0.8
UniqueId	Error event unique id	UniqueId	e.g. 25765	-	5.0.8
Error Number (Code)	This data is used to derive messageDescription, messageHint, messageTitle	ErrorCode	Integer	-	5.0.8

Error Type	Type of error. Types are given below, *Error *Warning *NoAckError *MinorError *NoAckWarning	ErrorType	e.g. "Error 3"	-	5.0.8
Error Acknowledged	Indicates whether an error is acknowledged or not.	Acknowledged	boolean	-	5.0.8
Error Text	Error text is derived using error number and error params	ErrorText	string, e.g. "Emergency off activated"	-	5.0.8
Error Parameter Main State	Enum that indicate the main state of the system. Enums are given below, 0 Ruheschritt 1 Modus: Auto, Hand, Service 2 Referenzieren 3 Füllen 4 Kalibrierspülen 5 Applizieren im Automatikbetrieb 6 Spülen 7 Servicebetrieb 8 Zirkulationsbetrieb 9 Leeren 10 Warten auf das Vision System 11 XML-Datei wird geladen 12 Automatische Schmierung 13 Pistolen Kalibreirung 14 Zahnraddosierer 15 Schlauchbruchüberwachung 16 Modellbildung der offenen Strecke ohne (Druck-)Regler 17: Generate graph for visco control 18: Handling for the self test 19: Handling for monitoring the pressure distance graph 20: Handling for purging the meter chamber 21: Handling of Bubble Detection process 22: Wait devices ready to operate (MAC Motor signals	ErrorParameterMainState	Integer	-	5.0.8
Error Parameter Extended Main State	Enum that indicate the extended state of the system. If there is an extended state it will override the main state.	ErrorParameterExtendedMainState	Integer	-	5.0.8
Controller Mode	Mode of the controller.	ControllerMode	Integer	-	5.0.8
Error Parm 1	Error paramater which is used to derive messageDescription, messageHint, messageTitle, errorText	Parameter1	Integer	-	5.0.8

Error Parm 2	Error paramater which is used to derive messageDescription, messageHint, messageTitle, errorText	Parameter2	Integer	-	5.0.8
Error Parm 3	Error paramater is used to derive messageDescription, messageHint, messageTitle, errorText which	Parameter3	Integer	-	5.0.8
Station	Id of the runtime system	Station	e.g. "801"	-	5.0.8
Handle	This is a number that increases whenever there is a new error. This was used for sorting the errors.	Handle	Integer	-	5.0.8
Origin	Origin	Origin	Integer	-	5.0.8
SpsWhoAcked	Indicates who acknowledged the error. e_AckNone, e_AckRobot, e_AckPLC, e_AckUser, e_External	SpsWhoAcked	Integer	-	5.0.8
WhoAcked	Indicates who acknowledged the error. e_AckNone, e_AckRobot, e_AckPLC, e_AckUser, e_External	WhoAcked	e.g. "..."	-	5.0.8
Operator Name	Operator that was logged in	OperatorName	string, e.g. ""	-	5.0.8
Acknowledgment Reason	Reason of the acknowledgement	AckReason	string, e.g. ""	-	5.0.8
Acknowledgment Timestamp	Timestamp of the acknowledgement	AckTimestamp	e.g. "2024-08-01T12:03:59.807Z"	-	5.0.8

Data	Description	Name in json	Example / Format	Unit	Mqtt Version
Active Alarms					
Array of error codes	This data is used to derive messageDescription, messageHint, messageTitle	ErrorCode	Integer		5.2.1
Array of error categories	Type of error. Types are given below, *Error *Warning *NoAckError *MinorError *NoAckWarning	ErrorType	e.g. "Error 3"		5.2.1
Array of extended main state	Enum that indicate the extended state of the system. If there is an extended state it will override the main state.	ErrorParameterExtendedMainState	Integer		5.2.1
Array of controller mode	Mode of the controller.	ControllerMode	Integer		5.2.1

Array of handle	This is a number that increases whenever there is a new error. This was used for sorting the errors.	Handle	Integer		5.2.1
Array of error parameter 1	Error paramater which is used to derive messageDescription, messageHint, messageTitle, errorText	Parameter1	Integer		5.2.1
Array of error parameter 2	Error paramater which is used to derive messageDescription, messageHint, messageTitle, errorText	Parameter2	Integer		5.2.1
Array of error parameter 3	Error paramater is used to derive messageDescription, messageHint, messageTitle, errorText which	Parameter3	Integer		5.2.1
Array of whether the error is acknowledgable	Indicates whether an error is acknowledged or not.	IsAckable	Bool		5.2.1
Array of key	The key	Key	e.g. "0"		5.2.1
Array of main state	Enum that indicate the main state of the system. Enums are given below, 0 Ruheschritt 1 Modus: Auto, Hand, Service 2 Referenzieren 3 Füllen 4 Kalibrierspülen 5 Applizieren im Automatikbetrieb 6 Spülen 7 Servicebetrieb 8 Zirkulationsbetrieb 9 Leeren 10 Warten auf das Vision System 11 XML-Datei wird geladen 12 Automatische Schmierung 13 Pistolen Kalibreirung 14 Zahnraddosierer 15 Schlauchbruchüberwachung 16 Modellbildung der offenen Strecke ohne (Druck-)Regler 17: Generate graph for visco control 18: Handling for the self test 19: Handling for monitoring the pressure distance graph 20: Handling for purging the meter chamber 21: Handling of Bubble Detection process 22: Wait devices ready to operate (MAC Motor signals	ErrorParameterMainState	Integer		5.2.1
Array of origin	Origin	Origin	Integer		5.2.1

Array of runtime system	the runtime system, e.g. 801 or 811	Station	e.g. "801"		5.2.1
Array of datetime	The timestamp when the alarm was raised.	DateTime	e.g. "2024-08-01T12:03:59.807Z"		5.2.1
Array of error text	Error text is derived using error number and error params	Text	e.g. "Automatic lubrication 1 is requested"		5.2.1

Data	Description	Name in json	Example / Format	Unit	Mqtt Version
Parmeter Changes					
Parameter Date Time	Timestamp of parameter change	DateTime	e.g. "2024-08-01T12:03:59.807Z"	-	5.0.8
UniqueId	UniqueId of parameter change	UniqueId	Integer	-	5.0.8
Parameter Change User	User name	User	e.g. "Guest"	-	5.0.8
Parameter Change OldValue	Old value	OldValue	e.g. "de-DE"	-	5.0.8
Parameter Change NewValue	New value	NewValue	e.g. "en-US"	-	5.0.8
Station	Id of the runtime system	Station	e.g. "801"	-	5.0.8
Parameter Name	Name of parameter that was changed	ParamName	e.g. "Change language"	-	5.0.8
Change Reason	Reason for the change of the parameter	ChangeReason	e.g. ""	-	5.0.8
Change Type	NotSet = 0, System = 1, User = 2, NotLogged = 3, UserFollowUp = 4	ChangeType	Integer	-	5.0.8

Data	Description	Name in json	Example / Format	Unit	Mqtt Version
Counters					
System Cycles	System cycle counter	SystemCycles	Integer	-	5.0.8
Cycles Applicator 1	Cycles applicator for applicator 1	CyclesApplicator1	Integer	-	5.0.8
Cycles Applicator 2	Cycles applicator for applicator 2	CyclesApplicator2	Integer	-	5.0.8
Cycles Applicator 3	Cycles applicator for applicator 3	CyclesApplicator3	Integer	-	5.0.8
Cycles Applicator 4	Cycles applicator for applicator 4	CyclesApplicator4	Integer	-	5.0.8
Cycles Meter 1 Fill Valve	Cycles fill valve for meter 1	Meter1.CyclesFillValve	Integer	-	5.0.8
Cycles Meter 2 Fill Valve	Cycles fill valve for meter 2	Meter2.CyclesFillValve	Integer	-	5.0.8
Total Used Volume	Including maintenance, purge, applications	TotalUsedVolume	float	-	5.0.8
Hpc1 Number Strokes Pump 1	Number of strokes for Hpc 1 Pump 1	Hpc1.floatOfStrokesPump1	Integer	-	5.0.8
Hpc1 Number Strokes Pump 2	Number of strokes for Hpc 1 Pump 2	Hpc1.floatOfStrokesPump2	Integer	-	5.0.8

Hpc1 Total Quantity	Total quantity for Hpc 1	Hpc1.TotalQuantity	float	-	5.0.8
Hpc2 Number Strokes Pump 1	Number of strokes for Hpc 2 Pump 1	Hpc2.floatOfStrokesPump1	Integer	-	5.0.8
Hpc2 Number Strokes Pump 2	Number of strokes for Hpc 2 Pump 2	Hpc2.floatOfStrokesPump2	Integer	-	5.0.8
Hpc2 Total Quantity	Total quantity for Hpc 2	Hpc2.TotalQuantity	float	-	5.0.8

Data	Description	Name in json	Example / Format	Unit	Mqtt Version
SystemStatus					
Hpc1 State Pump 1	Pump Status for Hpc 1 Pump 1. Removed it from Standarad interface because the Opc tags we were using was not correct and these variables can belong to either PCU1 or PCU2 depending upon what is chosen in Visu. So this is not the correct variable to use and till nw we didn't get a proper variable to use for PumpStatus.	Hpc1.StatePump1	e.g. "0"	-	5.0.8
Hpc1 State Pump 2	Pump Status for Hpc 1 Pump 2. Removed it from Standarad interface because the Opc tags we were using was not correct and these variables can belong to either PCU1 or PCU2 depending upon what is chosen in Visu. So this is not the correct variable to use and till nw we didn't get a proper variable to use for PumpStatus.	Hpc1.StatePump2	e.g. "0"	-	5.0.8
Hpc1 Fill Level Warning Pump 1	Fill level warning for Hpc1 Pump 1	Hpc1.FillLevelWarningPump1	e.g. "False"	-	5.0.8
Hpc1 Fill Level Warning Pump 2	Fill level warning for Hpc1 Pump 2	Hpc1.FillLevelWarningPump2	e.g. "False"	-	5.0.8
Hpc2 State Pump 1	Pump Status for Hpc 2 Pump 1. Removed it from Standarad interface because the Opc tags we were using was not correct and these variables can belong to either PCU1 or PCU2 depending upon what is chosen in Visu. So this is not the correct variable to use and till nw we didn't get a proper variable to use for PumpStatus.	Hpc2.StatePump1	e.g. "0"	-	5.0.8

Hpc2 State Pump 2	Pump Status for Hpc 2 Pump 2. Removed it from Standarad interface because the Opc tags we were using was not correct and these variables can belong to either PCU1 or PCU2 depending upon what is chosen in Visu. So this is not the correct variable to use and till nw we didn't get a proper variable to use for PumpStatus.	Hpc2.StatePump2	e.g. "0"	-	5.0.8
Hpc2 Fill Level Warning Pump 1	Fill level warning for Hpc2 Pump 1	Hpc2.FillLevelWarning Pump1	e.g. "False"	-	5.0.8
Hpc2 Fill Level Warning Pump 2	Fill level warning for Hpc2 Pump 2	Hpc2.FillLevelWarning Pump2	e.g. "False"	-	5.0.8

Data	Description	Name in json	Example / Format	Unit	Mqtt Version
BarrelChange	Triggered when a barrel change is				
Installation Date	Timestamp of barrel change event = Installation date	TimeStamp	e.g. "2024-08-01T12:03:59.807Z"	-	5.6.20
Charge Number	Charge number	Charge	String	-	5.6.20
Barrel Number	Barrel number (0: no barrel or barrel number 1 or 2)	Barrel	Integer	-	5.6.20
Material Name	Adhesive material name	Material	String	-	5.6.20
Material Expiration Date	Expiration date of material	ExpirationDate	e.g. "2024-08-01T12:03:59"	-	5.6.20
Package Number	Package number	PackageNumber		-	5.6.20
User Name	User name	UserName		-	5.6.20
HPC Number	HPC (Heating Pump Cabinet) number	Hpc	Integer	-	5.6.20

Data	Description	Name in json	Example / Format	Unit	Mqtt Version
BarrelData					
Hpc1 Present	Hpc 1 is available	Hpc1.Available	Bool, e.g. "False"	-	5.6.20
Hpc1 Active Barrel	Active barrel number of Hpc 1 (0: no barrel or barrel number 1 or 2)	Hpc1.ActiveBarrelNumber	e.g. "0"	-	5.6.20
Hpc1 Material 1	Adhesive material name of barrel 1 of Hpc 1	Hpc1.Barrel1.Material	String	-	5.6.20
Hpc1 Material 1 ExpirationDate	Expiration date of material in barrel 1 of Hpc 1	Hpc1.Barrel1.ExpirationDate	e.g. "2024-08-01"	-	5.6.20
Hpc1 Material 1 UserName	not available	Hpc1.Barrel1.UserName	""	-	5.6.20
Hpc1 Material 1 Charge	Charge number of material in barrel 1 of Hpc 1	Hpc1.Barrel1.Charge	String	-	5.6.20
Hpc1 Material 1 PackageNumber	not available	Hpc1.Barrel1.PackageNumber	""	-	5.6.20
Hpc1 Material 1 InstallDate	Installation date of material in barrel 1 of Hpc 1	Hpc1.Barrel1.InstallDate	e.g. "2024-08-01"	-	5.6.20
Hpc1 Material 2	Adhesive material name of barrel 2 of Hpc 1	Hpc1.Barrel2.Material	String	-	5.6.20

Hpc1 Material 2 ExpirationDate	Expiration date of material in barrel 2 of Hpc 1	Hpc1.Barrel2.ExpirationDate	e.g. "2024-08-01"	-	5.6.20
Hpc1 Material 2 UserName	not available	Hpc1.Barrel2.UserName	""	-	5.6.20
Hpc1 Material 2 Charge	Charge number of material in barrel 2 of Hpc 1	Hpc1.Barrel2.Charge	String	-	5.6.20
Hpc1 Material 2 PackageNumber	not available	Hpc1.Barrel2.PackageNumber	""	-	5.6.20
Hpc1 Material 2 InstallDate	Installation date of material in barrel 2 of Hpc 1	Hpc1.Barrel2.InstallDate	e.g. "2024-08-01"	-	5.6.20
Hpc2 Present	Hpc 2 is available	Hpc2.Available	Bool, e.g. "False"	-	5.6.20
Hpc2 Active Barrel	Active barrel number of Hpc 2 (0: no barrel or barrel number 1 or 2)	Hpc2.ActiveBarrelNumber	e.g. "0"	-	5.6.20
Hpc2 Material 1	Adhesive material name of barrel 1 of Hpc 2	Hpc2.Barrel1.Material	String	-	5.6.20
Hpc2 Material 1 ExpirationDate	Expiration date of material in barrel 1 of Hpc 2	Hpc2.Barrel1.ExpirationDate	e.g. "2024-08-01"	-	5.6.20
Hpc2 Material 1 UserName	not available	Hpc2.Barrel1.UserName	""	-	5.6.20
Hpc2 Material 1 Charge	Charge number of material in barrel 1 of Hpc 2	Hpc2.Barrel1.Charge	String	-	5.6.20
Hpc2 Material 1 PackageNumber	not available	Hpc2.Barrel1.PackageNumber	""	-	5.6.20
Hpc2 Material 1 InstallDate	Installation date of material in barrel 1 of Hpc 2	Hpc2.Barrel1.InstallDate	e.g. "2024-08-01"	-	5.6.20
Hpc2 Material 2	Adhesive material name of barrel 2 of Hpc 2	Hpc2.Barrel2.Material	String	-	5.6.20
Hpc2 Material 2 ExpirationDate	Expiration date of material in barrel 2 of Hpc 2	Hpc2.Barrel2.ExpirationDate	e.g. "2024-08-01"	-	5.6.20
Hpc2 Material 2 UserName	not available	Hpc2.Barrel2.UserName	""	-	5.6.20
Hpc2 Material 2 Charge	Charge number of material in barrel 2 of Hpc 2	Hpc2.Barrel2.Charge	String	-	5.6.20
Hpc2 Material 2 PackageNumber	not available	Hpc2.Barrel2.PackageNumber	""	-	5.6.20
Hpc2 Material 2 InstallDate	Installation date of material in barrel 2 of Hpc 2	Hpc2.Barrel2.InstallDate	e.g. "2024-08-01"	-	5.6.20

Sample Code

Application Message

Line


```
1  {
2     "DateTime":"08.11.2024 10:44:22",
3     "UniqueId":4,
4     "PartId":"PartId_4",
5     "ProgramNumber":5,
6     "ApplicationResult":"OK",
7     "TargetVolume":150.0,
8     "MeasuredVolume":166.3189,
9     "VolumeDeviation":16.31889,
10    "ApplTime":10.0,
11    "MaxPressure1":147.0,
12    "MaxPressure2":45.0,
13    "BeadCount":0,
14    "BeadNumber":0,
15    "Station":"801",
16    "Weight":100.0,
17    "SetWeight":150.0,
18    "GunOpenMask":1,
19    "MaxOccuredTorque":0.0,
20    "SetPointMix":1.0,
21    "ActualMix":0.0,
22    "SetPointMixerRPM":1000.0,
23    "ActualMixerRPM":999.0,
24    "RobotIndex":1,
25    "ExtProgNumber":1,
26    "TotalVolumeMeterG1":0.0,
27    "TotalVolumeMeterG2":0.0,
28    "TotalVolumeMeterC1":66.31889,
29    "TotalVolumeMeterC2":0.0,
30    "ApplicationTimeMeter1":10.0,
31    "ApplicationTimeMeter2":0.0,
32    "FillingTimeMeter1":0.0,
33    "FillingTimeMeter2":0.0,
34    "MinPressure1":29.663189,
35    "MinPressure2":29.663189,
36    "PrePressSetMeter1":30.0,
37    "PrePressSetMeter2":30.0,
38    "PrePressActualMeter1":29.663189,
39    "PrePressActualMeter2":29.663189,
40    "PrePressDeviationMeter1":0.1631889,
41    "PrePressDeviationMeter2":0.1631889,
42    "ActiveBarrelNumberHpc1":1,
43    "ActiveBarrelNumberHpc2":0,
44    "DurationSinceLastAutoPurge":42,
```

```
   "PotlifeElapsed":128.0,
   "ApplicatorTemperature":99.78,
   "System":{
      "MachineName":"Not available",
      "IpAddress":"Not available.",
      "SystemNr":"1"
      "StationName": "Unnamed"
   },
   "Beads":[
      {
         "BeadCount":1,
         "BeadNumber":1,
         "Result":"OK",
         "MeasuredVolume":2.68,
         "TargetVolume":3.2,
         "ApplicationTime":10.0,
         "MinPressure1":30.0,
         "MinPressure2":0.0,
         "MaxPressure1":0,
         "MaxPressure2":0.0
      },
      {
         "BeadCount":2,
         "BeadNumber":2,
         "Result":"OK",
         "MeasuredVolume":2.66,
         "TargetVolume":3.2,
         "ApplicationTime":15.0,
         "MinPressure1":30.0,
         "MinPressure2":0.0,
         "MaxPressure1":0,
         "MaxPressure2":0.0
      },
      {
         "BeadCount":0,
         "BeadNumber":0,
         "Result":"OK",
         "MeasuredVolume":2.56,
         "TargetVolume":3.2,
         "ApplicationTime":13.0,
         "MinPressure1":30.0,
         "MinPressure2":0.0,
         "MaxPressure1":0,
         "MaxPressure2":0.0
      }
   ]
}
```

Error Message

Line


```
{
  "DateTime" : "15.11.2023 13:46:09",
  "UniqueId" : 8,
  "ErrorCode" : "0110",
  "ErrorType" : "Not acknowledgeable error",
  "Acknowledged" : true,
  "ErrorText" : "",
  "ErrorParameterMainState" : "0",
  "ErrorParameterExtendedMainState" : "0",
  "ControllerMode" : "0",
  "Parameter1" : "1",
  "Parameter2" : "2",
  "Parameter3" : "3",
  "Station" : "801",
  "Handle" : "8",
  "Origin" : "",
  "SpsWhoAcked" : "2",
  "WhoAcked" : "0",
  "OperatorName" : "MOCKUSER",
  "AckReason" : "",
  "AckTimestamp" : "01.01.0001 00:00:00",
  "System" : {
    "MachineName" : "SimulatedAsc5000",
    "IpAddress" : "10.49.12.14",
    "SystemNr" : "1"
    "StationName": "Unnamed"
  }
}
```

Alarm Message

Line


```
{
   "System":{
      "MachineName":"Not available",
      "IpAddress":"Not available.",
      "SystemNr":"1"
      "StationName": "Unnamed"
   },
   "ActiveAlarms":[
      {
         "ErrorType":"State",
         "ErrorCode":"-1",
         "Text":"",
         "DateTime":"08.11.2024 11:41:30",
         "ErrorParameterMainState":"0",
         "ErrorParameterExtendedMainState":"0",
         "ControllerMode":"0",
         "Handle":"1",
         "Parameter1":"1",
         "Parameter2":"0",
         "Parameter3":"0",
         "IsAckable":true,
         "Key":"1",
         "Origin":"0",
         "Station":"801"
      },
      {
         "ErrorType":"Error2",
         "ErrorCode":"-1",
         "Text":"",
         "DateTime":"08.11.2024 11:43:30",
         "ErrorParameterMainState":"0",
         "ErrorParameterExtendedMainState":"0",
         "ControllerMode":"0",
         "Handle":"2",
         "Parameter1":"0",
         "Parameter2":"0",
         "Parameter3":"0",
         "IsAckable":false,
         "Key":"2",
         "Origin":"0",
         "Station":"801"
      },
      {
         "ErrorType":"Warning",
```

```
        "ErrorCode":"-1",
        "Text":"",
        "DateTime":"08.11.2024 11:45:30",
        "ErrorParameterMainState":"0",
        "ErrorParameterExtendedMainState":"0",
        "ControllerMode":"0",
        "Handle":"3",
        "Parameter1":"0",
        "Parameter2":"0",
        "Parameter3":"0",
        "IsAckable":true,
        "Key":"3",
        "Origin":"0",
        "Station":"801"
    },
    {
        "ErrorType":"State",
        "ErrorCode":"0",
        "Text":"",
        "DateTime":"08.11.2024 11:47:30",
        "ErrorParameterMainState":"0",
        "ErrorParameterExtendedMainState":"16",
        "ControllerMode":"0",
        "Handle":"4",
        "Parameter1":"0",
        "Parameter2":"0",
        "Parameter3":"0",
        "IsAckable":false,
        "Key":"4",
        "Origin":"0",
        "Station":"801"
    }
  ]
}
```

ParameterChange Message

Line

```
1 {
2   "DateTime" : "15.11.2023 13:45:19",
3   "UniqueId" : 3,
4   "User" : "MOCKUSER",
5   "OldValue" : "de-DE",
6   "NewValue" : "en-US",
7   "Station" : "1",
8   "ParamName" : "Change language",
9   "ChangeReason" : "",
10  "ChangeType" : "1",
11  "System" : {
12    "MachineName" : "SimulatedAsc5000",
13    "IpAddress" : "10.49.12.14",
14    "SystemNr" : "1"
15    "StationName": "Unnamed"
16  }
17 }
```

SystemStatus Message

Line

```
1 {
2   "System" : {
3     "MachineName" : "SimulatedAsc5000",
4     "IpAddress" : "10.49.12.14",
5     "SystemNr" : "1"
6     "StationName": "Unnamed"
7   },
8   "Hpc1" : {
9     "StatePump1" : "Barrel change mode",
10    "StatePump2" : "OFF",
11    "FillLevelWarningPump1" : "Not inside barrel",
12    "FillLevelWarningPump2" : "1"
13  },
14  "Hpc2" : {
15    "StatePump1" : "OFF",
16    "StatePump2" : "OFF",
17    "FillLevelWarningPump1" : "1",
18    "FillLevelWarningPump2" : "1"
19  }
20 }
```

Counters Message

Line

```
1  {
2    "SystemCycles" : 10,
3    "CyclesApplicator1" : 10,
4    "CyclesApplicator2" : 0,
5    "CyclesApplicator3" : 0,
6    "CyclesApplicator4" : 0,
7    "TotalUsedVolume" : 40.0,
8    "System" : {
9      "MachineName" : "Not available",
10     "IpAddress" : "Not available.",
11     "SystemNr" : "1"
12     "StationName": "Unnamed"
13   },
14   "Meter1" : {
15     "CyclesFillValve" : 10
16   },
17   "Meter2" : {
18     "CyclesFillValve" : 0
19   },
20   "Hpc1" : {
21     "NumberOfStrokesPump1" : 10,
22     "NumberOfStrokesPump2" : 10,
23     "TotalQuantity" : 10.0
24   },
25   "Hpc2" : {
26     "NumberOfStrokesPump1" : 10,
27     "NumberOfStrokesPump2" : 10,
28     "TotalQuantity" : 10.0
29   }
30 }
```

BarrelData Message

Line

```
1  {
2     "System":{
3        "MachineName":"Not available",
4        "IpAddress":"Not available.",
5        "SystemNr":"1"
6        "StationName": "Unnamed"
7     },
8     "Hpc1":{
9        "Available":true,
10       "ActiveBarrelNumber":2,
11       "Barrel1":{
12          "Material":"GlueXYZ",
13          "ExpirationDate":"2025-11-08",
14          "UserName":"",
15          "Charge":"Charge1",
16          "PackageNumber":"",
17          "InstallDate":"2024-11-07"
18       },
19       "Barrel2":{
20          "Material":"GlueXYZ",
21          "ExpirationDate":"2025-11-08",
22          "UserName":"",
23          "Charge":"Charge2",
24          "PackageNumber":"",
25          "InstallDate":"2024-11-06"
26       }
27    },
28    "Hpc2":{
29       "Available":false,
30       "ActiveBarrelNumber":0,
31       "Barrel1":{
32          "Material":"",
33          "ExpirationDate":"0001-01-01",
34          "UserName":"",
35          "Charge":"",
36          "PackageNumber":"",
37          "InstallDate":"0001-01-01"
38       },
39       "Barrel2":{
40          "Material":"",
41          "ExpirationDate":"0001-01-01",
42          "UserName":"",
43          "Charge":"",
44          "PackageNumber":"",
45          "InstallDate":"0001-01-01"
46       }
47    }
```

```
48 }
```

BarrelChange Message

Line

```
 1 {
 2    "TimeStamp":"2024-11-08T11:20:52.954Z",
 3    "Charge":"Charge1",
 4    "Barrel":1,
 5    "Material":"GlueXYZ",
 6    "ExpirationDate":"2025-11-08",
 7    "PackageNumber":"",
 8    "UserName":"",
 9    "Hpc":1,
10    "System":{
11       "MachineName":"Not available",
12       "IpAddress":"Not available.",
13       "SystemNr":"1"
14       "StationName": "Unnamed"
15    }
16 }
```