



## DDE Supplement / Attachment

| DDIdentifier <sup>(10)</sup> | DDName                          |
|------------------------------|---------------------------------|
| 350                          | Function or Operation Technique |

Version: 9.0

In a DDOP (Device Description Object Pool) of an ISOBUS device there are different functionalities covered. The device element types in the Task Controller standard which are Device, Function, Bin, Section, Unit, Connector Type, and Navigation Reference do not last out for certain or more complex devices to describe all information in a unique way to the Task Controller Server.

For instance the different *header* types of a harvester device and also the additional functionalities such as the *separator* or the *auger* cannot be described uniquely to the TC Server without a Function or Operation Technique DDI. Another example is the operation technique used by a baler device to produce a *round* or a *square bale*. Per device class definition “Forage” and the Actual Cultural practice DDI “baling” it is not clear whether a round or square bale is produced.

To ensure that for a device element the function or operation technique is clearly defined the Function or Operation Technique DDI shall be added below the appropriate device element using the values defined below.

The Function or Operation Technique DDI will be split into **Function or Operation Technique enumeration (Byte 1 & 2) least significant** and **Function or Operation Technique definition (Byte 3 & 4) most significant**.

In case a Function or Operation Technique can perform multiple applications such as a sensor that is able to measure Temperature and Humidity the sensor shall handle it within the DDOP structure where it has two DET of type *function* defined and each function has the appropriate DDI #350 attached.

| Function or Operation Technique | Enumeration value (Byte 1+2, LSB) | Sub Type / Definition values (Byte 3 + 4, MSB)  |
|---------------------------------|-----------------------------------|---|
| Unknown                         | 0                                 | Set to FF   |
| Header                          | 1                                 | 0 = Unknown (default)<br>1 = Row-independent<br>2 = Row-crop<br>3 = Crop-pick-up<br>4 to 57343 = Reserved for future assignment |
| Auger                           | 2                                 | 0 = Unknown (default)<br>1 to 57343 = Reserved for future assignment  |
| Separator                       | 3                                 | 0 = Unknown (default)<br>1 to 57343 = Reserved for future assignment  |
| Sensor                          | 4                                 | 0 = Unknown (default)<br>1 = Yield<br>2 = Moisture<br>3 = Humidity  |



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| Function or Operation Technique | Enumeration value (Byte 1+2, LSB) | Sub Type / Definition values (Byte 3 + 4, MSB)  |
|---------------------------------|-----------------------------------|---|
|                                 |                                   | 4 = Temperature<br>5 = Wind<br>6 = Height<br>7 = Load<br>8 to 57343= Reserved for future assignment   |
| Tillage                         | 5                                 | 0 = Unknown (default)<br>1 = Disk<br>2 = Ripper<br>3 = Closing Disk<br>4 = Shank<br>5 = Opener<br>6 = Basket<br>7 = Coulter<br>8 = Harrow<br>9 = Roller<br>10-57343= Reserved for future assignment |
| Baling (Pressing)               | 6                                 | 0 = Unknown<br>1 = Square Bale (Size equals length)<br>2 = Round Bale (Size equals diameter)<br>3 = Pellets<br>4-57343= Reserved for future assignment  |
| Silage Additives Application    | 7                                 | 0 = Unknown<br>1 = Rough / Coarse Dosing (High Liquid Volume)<br>2 = Fine / Precise Dosing (Low Liquid Volume)<br>3 = Powder / Granulate (Dry Material)<br>4-57343 = Reserved for future assignment |
| Proprietary                     | 57344 to 65534                    | Manufacturer specific definition  |

Function Type Enumeration values 8 to 57343 are reserved for future ISO assignment.

Function Sub Type / Definition values 57344 to 65534 are reserved for manufacturer proprietary assignment.

Function Type 65535 is reserved.



International  
Organization for  
Standardization

**ISO 11783-11**  
**Mobile Data Element Dictionary**  
**DDE Request Form**



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### **Examples:**

- (1) Square Baler: 0x00010006 (decimal 65542)
  - Enumeration value: 6
  - Sub Type / Definition value: 1
- (2) Crop-pick-up Header: 0x00030001 (decimal 196609)
  - Enumeration value: 1
  - Sub Type / Definition value: 3
- (3) Wind Sensor: 0x00050004 (decimal 327684)
  - Enumeration value: 4
  - Sub Type / Definition value: 5

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### Change History Notes:

Version 4 changes (20171004):

- In version 3 there was a mistake that Tillage type 5 was replaced by Baling instead of adding Baling as 6 behind Tillage 5.

Version 5 changes (20171004)

- Fixed some typos

Version 6 changes (20180409)

- Added a proprietary function to be used for manufacture specific applications

Version 7 changes (20190325)

- Added 3 = Pellets to Baling operation

Version 8 changes (20190327)

- Added (Pressing) behind Baling

Version 9 changes (20260505)

- Added Silage Additives Application
- Clarified the usage of enumeration and definition bytes (LSB and MSB)
- Added examples for different Function Types