DDE Supplement / Attachment

DDIdentifier$_{(10)}$	DDEName
225	Setpoint Working Length
226	Actual Working Length
227	Minimum Working Length
228	Maximum Working Length

By using the Actual Working Length and Actual Working Width of a device element a rectangular area can be defined. This area represents the actual working/coverage area and defines offsets for turning sections on and off (line 2 / line 1) by Section Control.
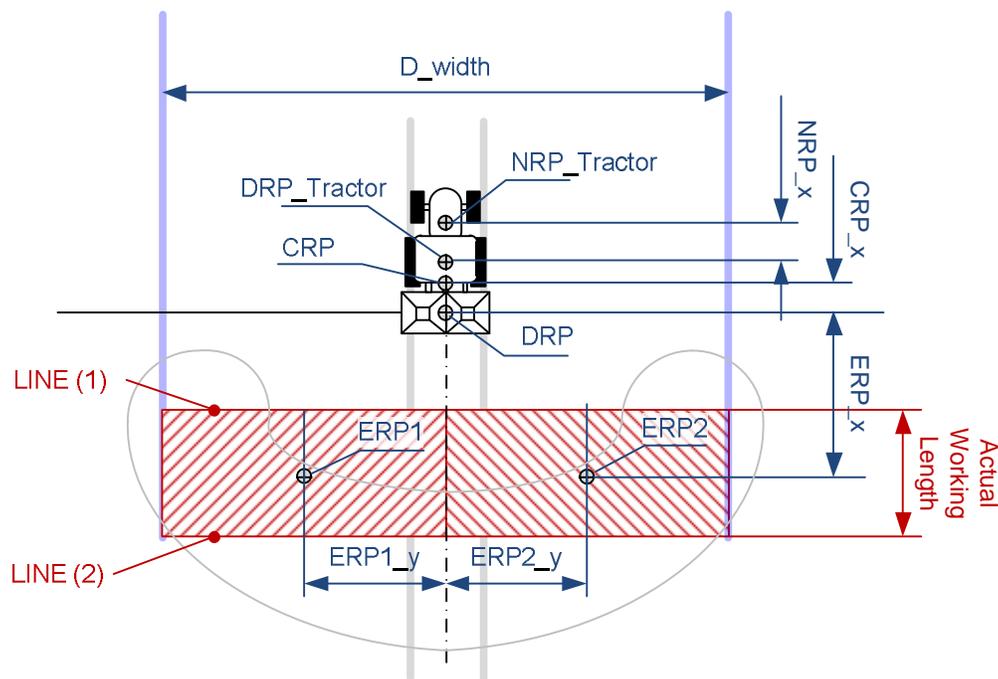
The offset from the DRP to LINE (1) is specified as:

$$(ERP\_X + Actual\ Working\ Length / 2)$$

The offset from the DRP to LINE (2) is specified as:

$$(ERP\_X - Actual\ Working\ Length / 2)$$

When the Actual Working Length is not provided by an implement, it is set to 0 and the representation of a rectangle is reduced to a line.

DDE Supplement / Attachment

Example of usage for spreader application section control:

Driving into the headland the device element can be turned OFF when LINE (1) enters an area that has already been processed. Driving from the headland into an unprocessed area, the device element can be turned ON when LINE (2) enters the area that has not been processed.

**Relation to Setpoint, Minimum and Maximum Working Length DDEs:**

The DDEs Setpoint Working Length (225), Minimum Working Length (227) and Maximum Working Length (228) are defined along the Actual Working Length as a set of DDEs that share the same geometry definitions. These setpoint, minimum and maximum DDEs can be used to expose control of the Working Length and communicate operating limits.

DDE Supplement / Attachment

Example of usage for tillage or planter to define first and last operation line:

The Actual Working Length DDI can be used to define the working length of an overall operation or a single device element such as a section. In case that the working length is not centered the appropriate offsets on the same device element will define the value of the shift. The first and last operation lines might be used for sequence control applications to define where to start and stop an action to perform sequence control.

Single operations implement:
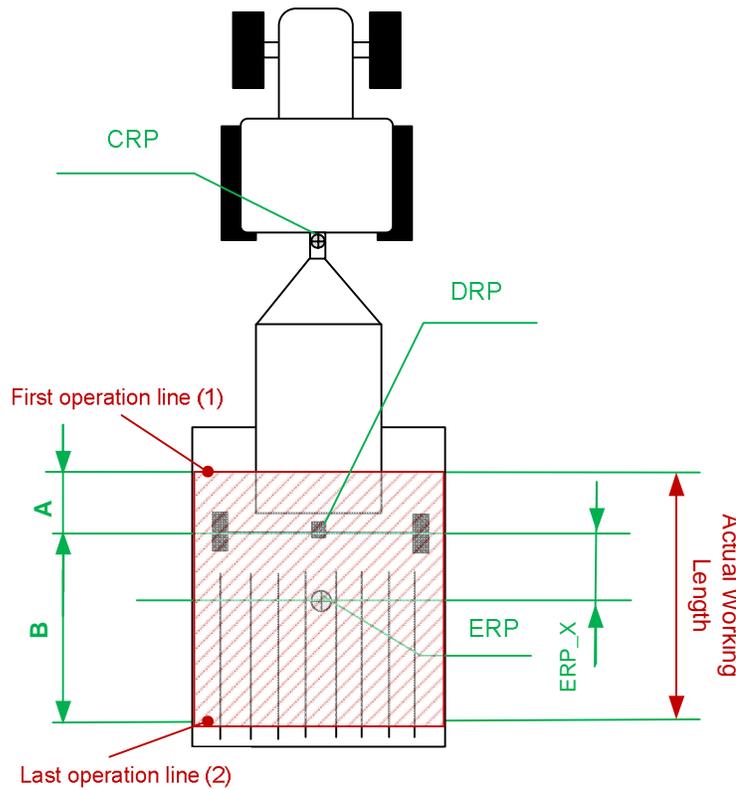
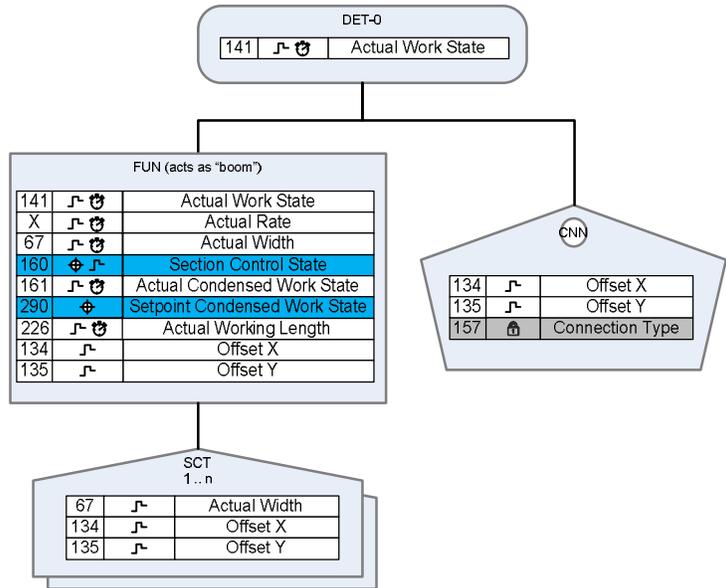The offset from the DRP to LINE (1) is specified as:
        A = (ERP_X + Actual Working Length / 2)
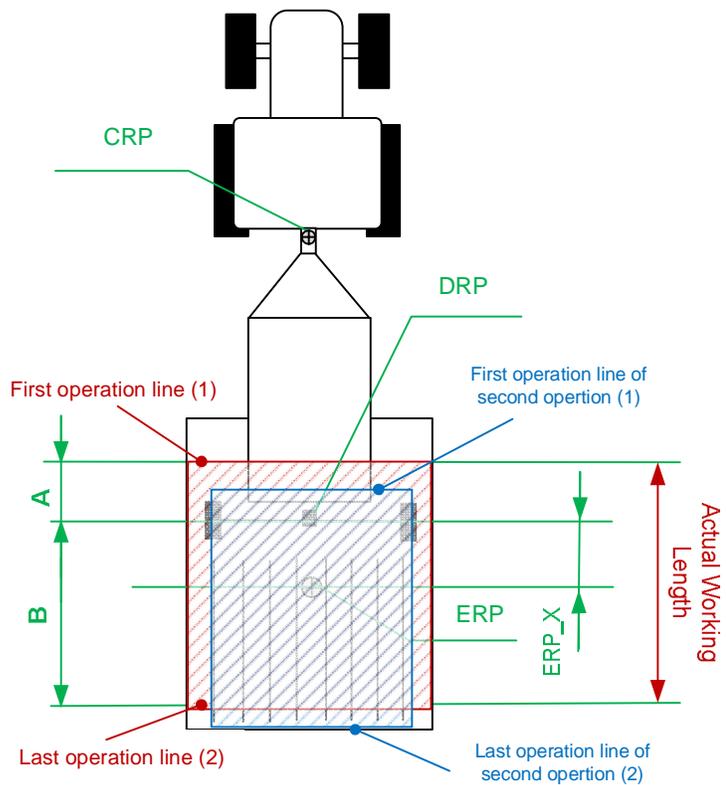The offset from the DRP to LINE (2) is specified as:
        B = (ERP_X - Actual Working Length / 2)

DDE Supplement / Attachment

DET-0

| 141 | ⌐ ♻ | Actual Work State |

FUN (acts as "boom")

141	⌐ ♻	Actual Work State
X	⌐ ♻	Actual Rate
67	⌐ ♻	Actual Width
160	⊕ ⌐	Section Control State
161	⌐ ♻	Actual Condensed Work State
290	⊕	Setpoint Condensed Work State
226	⌐ ♻	Actual Working Length
134	⌐	Offset X
135	⌐	Offset Y

CNN

134	⌐	Offset X
135	⌐	Offset Y
157	🔒	Connection Type

SCT 1 .. n

67	⌐	Actual Width
134	⌐	Offset X
135	⌐	Offset Y

Multiple operation implement:

CRP, DRP, First operation line (1), First operation line of second opertion (1), A, B, ERP, ERP_X, Actual Working Length, Last operation line (2), Last operation line of second opertion (2)

DDE Supplement / Attachment
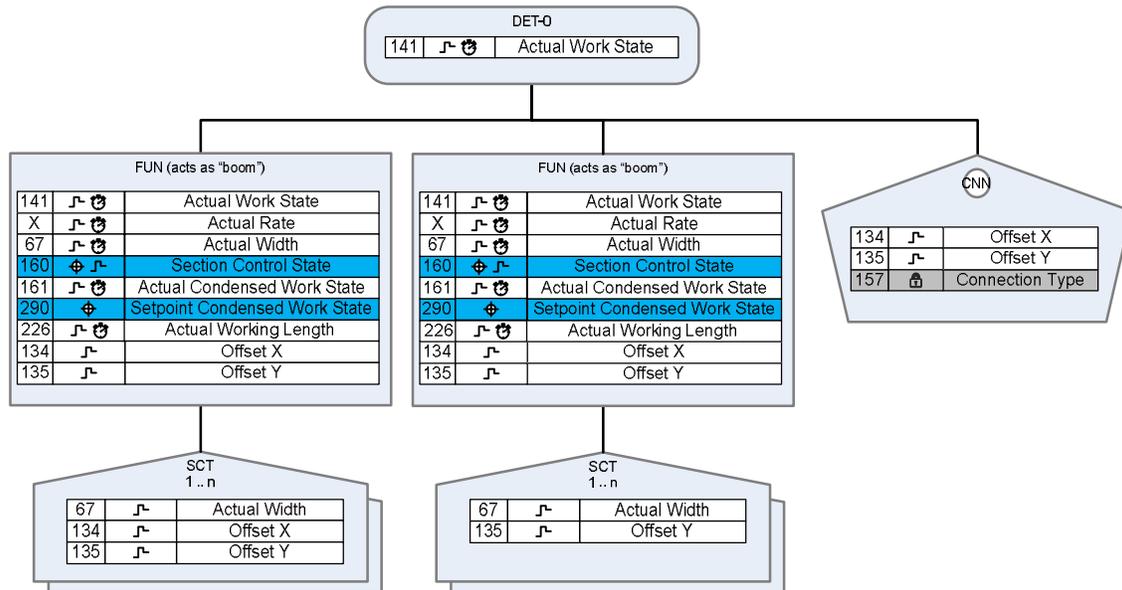
All Device Elements that contain process data other than configuration or total values shall provide a width and offsets to specify their geometry. At a minimum, geometry is defined by properties or process data for Offset X, Offset Y and Width DDIs. For the relation between a boom and sections only one exception from this minimum definition of geometry is allowed:

1. A Section type device element does not need to provide an Offset X if its parent device element has an Offset X defined. In this case, the Offset X from the parent device element is valid for all its Section type child device elements. This optimizes the size of the Section type device elements. **Note:** In case that an Actual Working Length DDI is attached to the boom and depending on the device geometry the inheritance of the X-Offset may not work and the sections requires their own X-Offsets.