

## UF\_DPUD\_drtype\_e [\(view source\)](#)

Defined in: `uf_dpud.h`

Also known as:

- `UF_DPUD_drtype_t`

### Overview

`UF_DPUD_drtype` indicates the type of drive position which is being generated. Cut and stepover drive positions differ only in the feedrate used for the projected motions. The first drive position output must be of type cut. When a local lift is output, the processor will generate a local retract/transfer/engage sequence based on the non-cutting parameters of the requesting operation. This sequence of non-cutting motions will start at the previously projected drive position and ending at the following projected drive position. A local lift therefore must be bracketed by either cut or stepover positions, and there should be at least two cut or stepover positions between any two lifts. Note that because the tool is engaging to this position, the feedrate of the drive position following a local lift will be ignored. The stepover drive position type acts just like a cut, but is assigned the stepover feedrate. The last drive position must be of type final lift. This signals the Surface Contouring processor to stop and to generate a final retract sequence from the previously output cut or stepover position.

### Data Members

**`UF_DPUD_DRTYPE_NONE = 0`**

Undefined drive position type

**`UF_DPUD_DRTYPE_CUT = 1`**

Normal cut position

**`UF_DPUD_DRTYPE_STEPOVER = 10`**

Stepover cut position

**`UF_DPUD_DRTYPE_LOCAL_LIFT = 50`**

Output retract/engage sequence

**`UF_DPUD_DRTYPE_FINAL_LIFT = 51`**

Output final retract sequence

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## UF\_DPUD\_proj\_option\_e [\(view source\)](#)

Defined in: `uf_dpud.h`

Also known as:

- `UF_DPUD_proj_option_t`

### Overview

`UF_DPUD_proj_option` indicates how the projection vector is to be calculated.  
Note: use UF-specified projection vector only if variable

### Data Members

**UF\_DPUD\_PROJ\_CONSTANT**

Projection vector is constant and NX-specified

**UF\_DPUD\_PROJ\_VARIABLE**

Projection vector is variable and NX-specified

**UF\_DPUD\_PROJ\_USER\_DEFINED**

Projection vector is variable and UF-specified

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**UF\_DPUD\_purpose\_e** ([view source](#))

Defined in: `uf_dpud.h`

Also known as:

- `UF_DPUD_purpose_t`

**Overview**

`UF_DPUD_purpose` indicates the purpose for which the user function request is being made from the Surface Contouring Drive Path Processor

**Data Members****UF\_DPUD\_USER\_PARAMS**

Specify user parameters

**UF\_DPUD\_TAXIS\_PARAMS**

Specify tool axis parameters

**UF\_DPUD\_PROJ\_PARAMS**

Specify projection vector parameters

**UF\_DPUD\_INIT\_PROCESSOR**

Initialize the UFUNC processor

**UF\_DPUD\_GET\_USER\_DATA\_SIZE**

Get size of user data for drive positions

**UF\_DPUD\_GET\_NEXT**

Get the next drive position

**UF\_DPUD\_GET\_INTERMEDIATE**

Get an intermediate drive position

**UF\_DPUD\_REWIND**

Rewind the drive path

**UF\_DPUD\_STOP\_PROCESSOR**

Deallocate memory used by processor

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**UF\_DPUD\_taxis\_option\_e** ([view source](#))

**Defined in:** `uf_dpud.h`

**Also known as:**

- `UF_DPUD_taxis_option_t`

## Overview

`UF_DPUD_taxis_option` indicates how the tool axis is to be calculated.

Note: use UF-specified tool axis only if variable

## Data Members

### **`UF_DPUD_TAXIS_CONSTANT`**

Tool axis is constant and NX-specified

### **`UF_DPUD_TAXIS_VARIABLE`**

Tool axis is variable and NX-specified

### **`UF_DPUD_TAXIS_USER_DEFINED`**

Tool axis is variable and UF-specified

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