SMARTElectrode 14.0.0.0

What‘s New

Enhancement

What

- Disabled commands to convert electrode assemblies to Inseparable Assemblies
- https://redmine.buw-soft.de/issues/11929

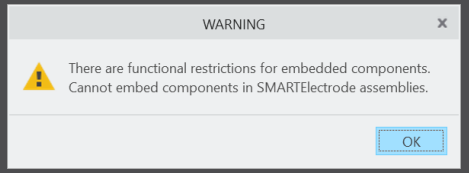
Why

Commands are disabled because of limitations:

- Drawing creation / repeat regions for electrodes may fail
- Potential issues with userdefined features
- No reuse of embedded electrodes in other projects

How

- A warning appears if user executes >Inseparable Assemblies >Embed or >Model >Operations >Inseparable Assemblies >Make Inseparable

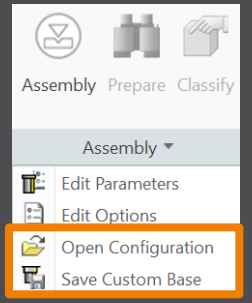


- SMARTElectrode does not process components already embedded in electrode assembly. Embedded components are not listed in burnsheet nor exported. A warning will be displayed in message window:
„Embedded component <*component name*> not processed in SMARTElectrode.“

Enhancement

What

- Added new command to “Save Custom Base” to save userdefined feature (UDF) and data file for electrode blank.
- https://redmine.buw-soft.de/issues/12001



Why

- New command simplifies creation of customized base and saves a valid data file for it.

How

- Use command "Open Configuration" to browse to "electrode\<*supplier*>\base_templates“ and select part to customize.
- Incorporate changes.
- Select "Save Base Template" to create UDF and data file.
- Customize data file.
- Copy UDF and DAT to supplier directory to activate template
- NOTE: All variable dimensions to be controlled in data file require a custom symbol name.
- NOTE: Open “Getting-Started” document for more information.

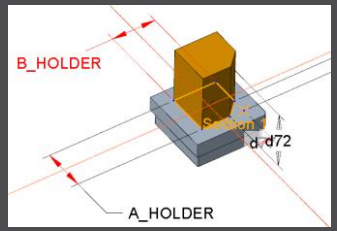
Enhancement

What

- Allow additional variable dimensions and parameters in blank data file (*.dat)
- https://redmine.buw-soft.de/issues/9953

Why

- Customer specific templates sometimes need to control additional dimensions or parameters – for example if holder or order number are part of electrode blank



How

- To use additional parameters with data file an additional line “VALUETYPE” has to be added between “INSTANCE” and blank sizes.

INSTANCE	A_BASE	B_BASE	FRAME_WIDTH	FRAME_HEIGHT	A_HOLDER	B_HOLDER	PARAMINT	PARAMSTRING	PARAMDOUBLE
VALUETYPE	DIM	DIM	DIM	DIM	DIM	DIM	INTEGER	STRING	DOUBLE
E-15-15	15	15	1	3.2	15	15	1515	E-15-15	15.15

- Available types:
  - DIM → Creo dimensions like A_BASE, B_BASE, LENGTH, base height D2 and additional dimensions
  - INTERN → internal values used for calculation and advanced settings like D1, D3, MATERIAL, MFG_TEMPLATE, HOLDER, …
  - INTEGER → integer parameter
  - STRING → string parameter
  - DOUBLE → double parameter
- NOTE: open “Getting-Started” document for more information

Improvement

What

- Adjusted behavior for default values from parameter configuration.
- https://redmine.buw-soft.de/issues/12025

Why

- Different behavior for default values if…
  - defined in sel_list.txt

```
SPARK_MODE ... &priority
```

```
#PRIORITY
Normal wear
Low wear
Normal wear
High removal
```

  - defined in parameter.cfg directly

```
SPARK_MODE ... Normal wear
```

How

In both cases…

- default value defined in parameter.cfg
- default value defined in sel_list.txt

…the value from SMARTElectrode configuration will be used now. The value will be set regardless whether the parameter already exists in template for new electrodes or not.

Fixed error

Description

- Operations/origins unreadable if group changed.
- https://redmine.buw-soft.de/issues/12010

Cause

- SMARTElectrode expects a fixed sequence order in operation groups:
  - Reference Csys (this is the selected csys)
  - Default Csys (orientation like selected csys on assembly default; used to assemble new electrodes on)
  - Freeface datum plane (default position of electrode base)
  - Default start datum plane (default start position of electrode if not defined otherwise)
  - Default secure datum plane (default secure position of electrode if not defined otherwise)
  - Operation cosmetic for drawing (optional)

Solution

- SMARTElectrode tries now to identify features in group, but it's still recommended to keep the group unchanged.