

### **SMARTElectrode**

**Demo Script** 

### Agenda



- Get SMARTElectrode & Demo
- Installation
- Start of Application
- Demo / Tutorial
- Workflow
- Ribbon UI
- Project and Operation
- Create 1<sup>st</sup> Edm
- Create 2<sup>nd</sup> position
- Check and create drawings
- Get In Touch / Learn More





CD-Image Demo License Tutorial Training

---Slides

---Models

---Part

---Project

---Movies

Get latest release here Contact b&w (florian@buw-soft.de) Braun Shaver Series 5 (From "What's new in PTC Creo 3.0") Training **Tutorial documents** js748100\_as.zip (Creo 3.0)

<u>js748100\_as\_se\_asm.zip</u>

Videos for tutorial



### Installation 1/2



Download:

#### Install:

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<u>Download</u> compressed CD-image and extract to any temp folder

Run setup.exe, press "Install Software" "Install B&W Licenseserver" is not necessary for demo license

Accept terms of Product License Agreement and press "Next"

### **Installation 2/2**



#### Install:

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Select installation path and press "Next" Demo license will be selected automatically

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Check settings and press "Install" Close dialog when installation is done That's it!

# Startup



# Demo License: Start in Creo:

Au	ixiliary Application	s X
Name	Status	Start
B&W Product	Not Running	Stop
		Delete
		Register
		Info
		Close

Copy license.dat to subfolder "bin" Start Creo Open "Auxiliary Applications" Press "Register" Select "<install dir>\bin\Creo\protk.dat" Select app and press "Start" Done!

Configuration:

Auto-Start in Creo:

Add "<install dir>\bin\Creo\config.pro" to your custom config.pro Default configuration is copied from "text\<language>\configuration" on 1<sup>st</sup> startup.

### **Demo / Tutorial**





Configuration:

Tutorial:

Project:

Extract SME-Configuration-Demo.zip and replace configuration in SME. Alternatively you can add environment variable SE\_USER\_CONFIG\_PATH and set the path to extracted config. Open js748100\_as.zip to load the tutorial part. Open js748100\_as\_se\_asm.zip to load finished project assembly.

#### Workflow









### **New Assembly**



1 New Prepare Project T	
Project Setup         Reference Model(s)         JS748100_AS         Settings         Creation Method         Creation Method         Unit       Accuracy         Value         mm       absolute         0.0048         inch       relative         Names         Prefix < pre>       Postfix < post>         Statil00_AS         Project Name         JS748100_AS_SE_BG         Reference Model         JS748100_AS_SE_REF	

#### <u>Note</u>

Selected option creates a copy of the workpiece – a reference part. A reference part can be used to simplify the geometry before the electrode design starts.

# Preparation





#### <u>Note</u>

The preparation UI can be used to analyze and simplify the geometry. In this case we remove ejectors and cooling from EMX but it's also possible to work with imports.

# **Define Origin / Operation**





#### <u>Note</u>

Selected csys is the reference for position calculation of electrodes. Datum plane FREE is offset from the solid bounding box and used for the electrode base. START and SECURE are for data output. CAN BE REDEFINED IF NECESSARY!

#### Add new electrode

![](_page_12_Picture_1.jpeg)

	B	•1	<b>J</b>		J	d,
	Add	Activate	Repeat	Move	Сору	Check
	Electrode 🔻					
	► Placement					
	□ SEITE_Y_Z □ BASIS X Z					
Result						

#### <u>Note</u>

Empty model is copied from solid part template and activated to show design level ribbon. Datum plane FREE\_FACE is a copy of assembly default.

![](_page_13_Picture_1.jpeg)

![](_page_13_Figure_2.jpeg)

#### **Create Cutout**

![](_page_14_Picture_1.jpeg)

![](_page_14_Figure_2.jpeg)

#### <u>Note</u>

Cutout is used for solid modeling while Copy Geometry is used if only the surfaces should be copied.

# **Control Visibility**

![](_page_15_Picture_1.jpeg)

![](_page_15_Figure_2.jpeg)

#### Note

Hide all other models with Isolate to work with electrode model like in part mode – no change of active window necessary! Toggle surfaces to hide/show datum surfaces.

### Cleanup

![](_page_16_Picture_1.jpeg)

![](_page_16_Figure_2.jpeg)

#### <u>Note</u>

• • •

### Cleanup

![](_page_17_Picture_1.jpeg)

![](_page_17_Figure_2.jpeg)

#### <u>Note</u>

. . .

### Cleanup

![](_page_18_Picture_1.jpeg)

![](_page_18_Figure_2.jpeg)

<u>Note</u>

• • •

### **Mirror Solid**

![](_page_19_Picture_1.jpeg)

![](_page_19_Figure_2.jpeg)

#### <u>Note</u> Mirrored solid gemetry will be used for 2<sup>nd</sup> placement of electrode.

#### **Add Electrode Base**

![](_page_20_Picture_1.jpeg)

![](_page_20_Figure_2.jpeg)

#### <u>Note</u>

Command Base finishs the electrode solid and adds a base template from library. Several steps are performed automatically. The 2<sup>nd</sup> page can be used to set technology parameters.

#### **Add Electrode Base - Explanation**

![](_page_21_Picture_1.jpeg)

![](_page_21_Figure_2.jpeg)

#### <u>Note</u>

Automatic offset, base dimensions and position of electrode csys are loaded from customizable configuration.

# **Back To Assembly**

![](_page_22_Picture_1.jpeg)

Ctrl+a to activate assembly and process ribbon again. Electrode models will be shown again.

![](_page_22_Picture_3.jpeg)

Use Show all to unhide electrode modes hidden by user in modeltree.

![](_page_22_Figure_5.jpeg)

### **Assemble Again**

![](_page_23_Picture_1.jpeg)

![](_page_23_Figure_2.jpeg)

#### <u>Note</u>

#### **Check and calculate burn-area**

![](_page_24_Picture_1.jpeg)

#### <u>Note</u>

### **Create Drawings**

![](_page_25_Picture_1.jpeg)

![](_page_25_Figure_2.jpeg)

#### <u>Note</u>

# **Get In Touch / Learn More**

![](_page_26_Picture_1.jpeg)

Data Sheet: Videos: Product Page: Contact:

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![](_page_27_Picture_0.jpeg)

![](_page_27_Picture_1.jpeg)