



Configuration  
of the  
torch system

Selection of optional  
plant  
components

CAD data  
download  
or request

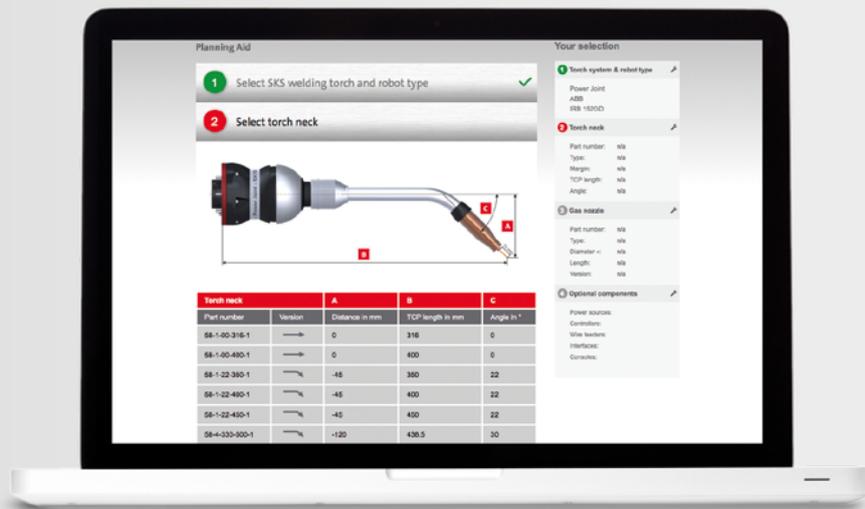


## SKS CAD Planner Quick Guide

[www.sks-welding.com/cad-planner](http://www.sks-welding.com/cad-planner)

**Solutions for:** • ABB • FANUC • KUKA • YASKAWA / MOTOMAN

The SKS CAD Planner assists you planning your welding system. With only a few clicks, the requested 3D data will be provided for download in PDF or STP formats. Optionally, you can also download the CAD data of individual SKS welding machine components



## New planning aid for plant installers online

SKS has developed a comprehensive tool to support the planning of welding cells. With only a few clicks, 3D data is provided for download in STP and PDF formats.

[www.sks-welding.com/cad-planner](http://www.sks-welding.com/cad-planner)

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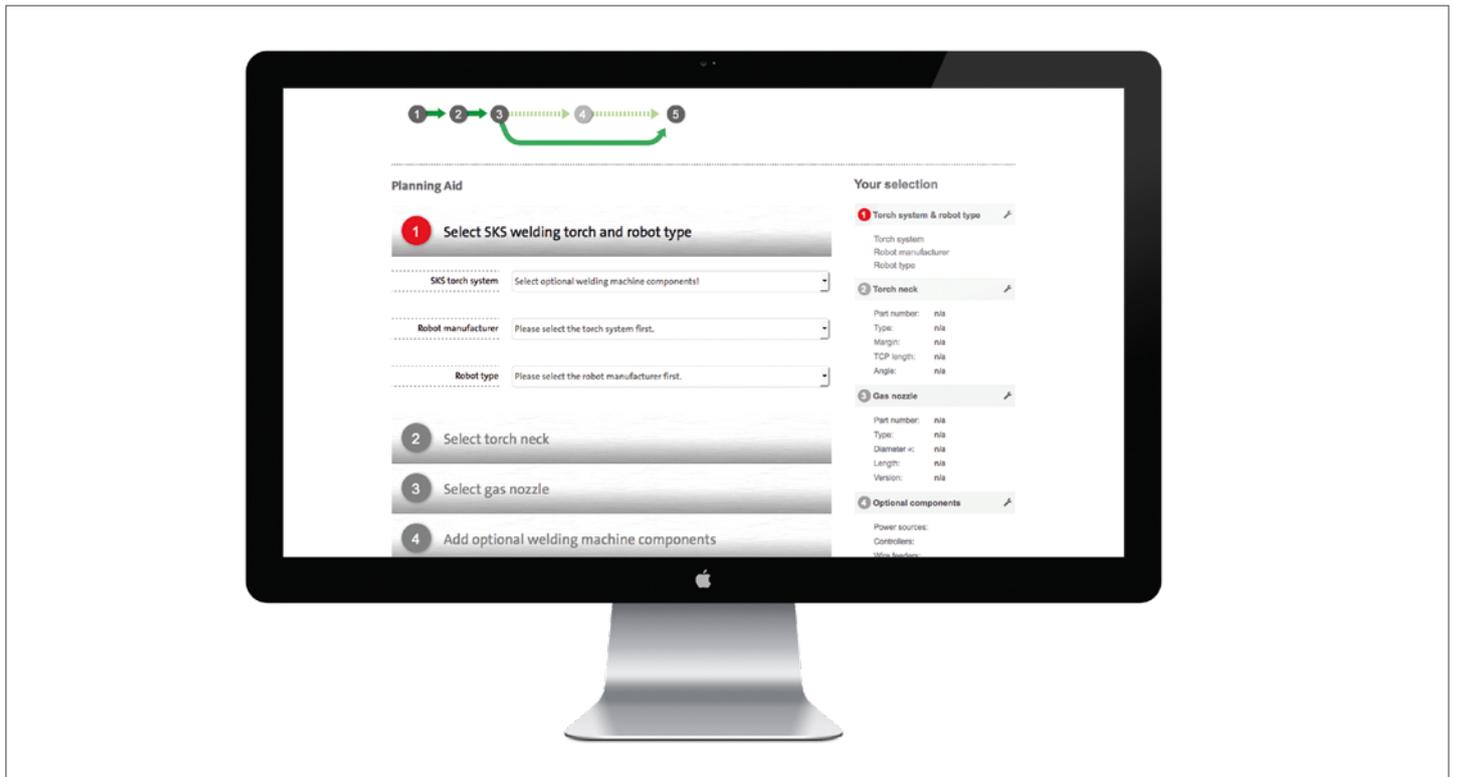
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## SKS CAD Planner – Introduction

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# The SKS CAD Planner

Get your CAD data with only a few clicks.



This document describes the use of the SKS CAD Planner ([www.sks-welding.com/cad-planner](http://www.sks-welding.com/cad-planner))

Implemented using state-of-the-art web technologies, this software tool allows you to get the CAD drawings for your desired – and technically feasible – welding system configuration. Depending on your user status and the data maintained in our database, you can directly download your drawings or request them from SKS. In the following, you will find step-by-step instructions from planning your system to downloading the desired drawings.

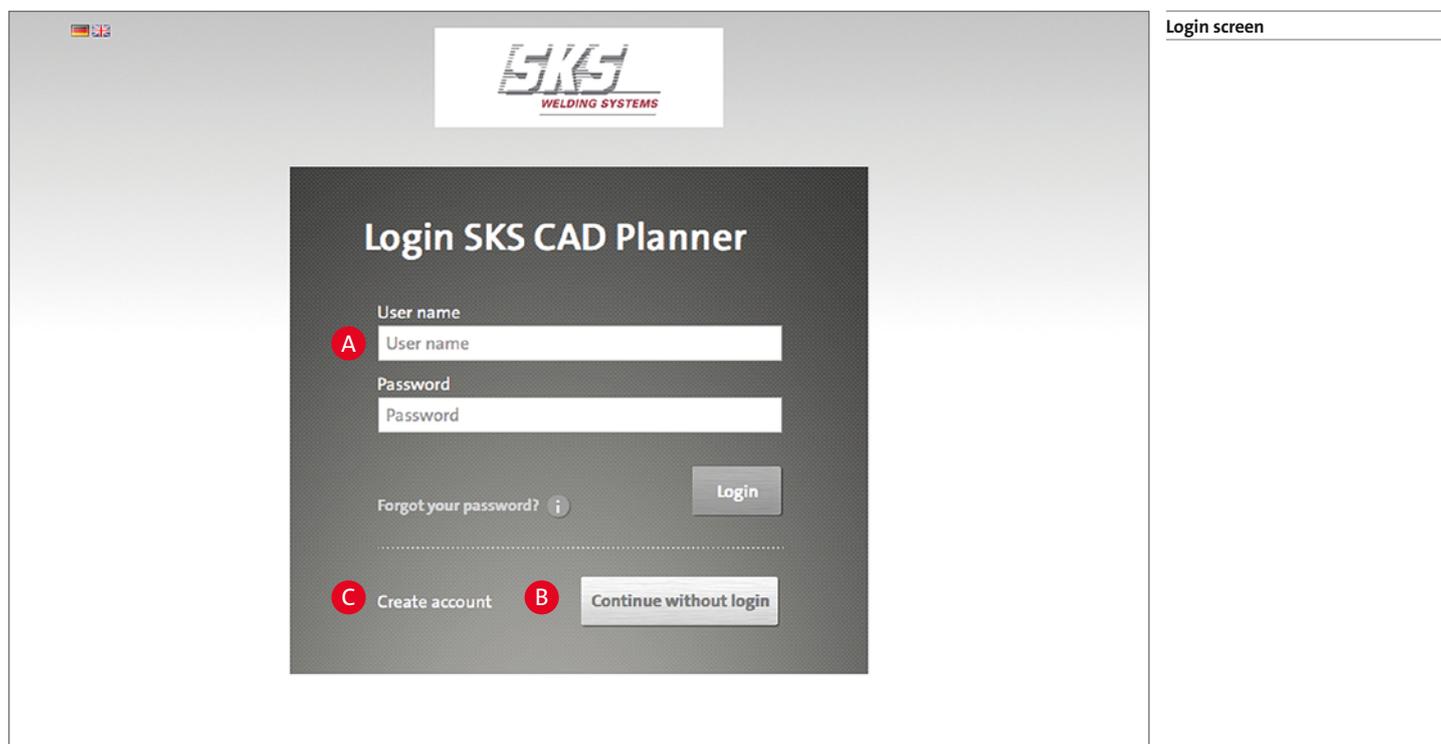
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## SKS CAD Planner - Login

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The process is started by opening the CAD Planner in your web browser:

[www.sks-welding.com/cad-planner](http://www.sks-welding.com/cad-planner)



Here, you can log in using your existing user data **A** or continue without login **B**. If you are still not a registered user, you can register here by creating a new user account **C**.

This will take you to the actual CAD Planner screen. There, you can apply the following 5 steps to get your desired data:

- 1 Select torch system and robot type (page 4)
- 2 Select torch neck (page 5)
- 3 Select gas nozzle (page 6)
- 4 Add optional welding machine components (page 7)
- 5 Request CAD data (page 8)

# 1 Select torch system and robot type

The screenshot displays the SKS CAD planner interface. At the top, there is a navigation bar with 'Legal Notice' and 'Privacy' links, and the SKS WELDING SYSTEMS logo. The main heading is 'Planner for CAD data'. Below this, a brief description states: 'SKS' CAD planner assists you in planning your system. With only a few clicks, your desired 3D data will be made available for download in STP, IGS and PDF file formats. Optionally, you can also download CAD data of the SKS welding machine components. If your desired configuration is not available, you can request it from us via e-mail.' A process flow diagram shows five steps: 1. Configure the torch system, 2. Select optional welding machine components, 3. Download or request CAD data, 4. (dashed), 5. (dashed). A red box highlights the first step, '1 Select SKS welding torch and robot type'. This step includes three dropdown menus: 'SKS torch system' (with a placeholder 'Select optional welding machine components!'), 'Robot manufacturer' (with a placeholder 'Please select the torch system first.'), and 'Robot type' (with a placeholder 'Please select the robot manufacturer first.'). To the right, a 'Helpdesk' section provides contact information: 'Do you have questions or need professional advice? We will be happy to provide further assistance. Phone: +49 6301 7986-0 service@de.sks-welding.com'. Below the main content, a 'Your selection' panel shows the current state of the configuration, with the first step '1 Torch system & robot type' selected. It lists 'Torch system', 'Robot manufacturer', and 'Robot type' as 'n/a'. Other steps include '2 Torch neck', '3 Gas nozzle', and '4 Optional components', each with their respective parameters listed as 'n/a'.

## Step 1: Select torch system and robot type

First, you will be prompted to select the desired torch system, robot manufacturer, and robot type. You can only select combinations that are technically feasible.

A valid combination is, for example:

SKS torch system: Power Joint  
Robot manufacturer: Motoman/Yaskawa  
Robot type: EA1400

After the selection has been completed, the tool automatically guides you to step 2.

## 2 Select torch neck

Planning Aid

**1** Select SKS welding torch and robot type ✓

**2** Select torch neck



Torch neck		A	B	C
Part number	Version	Distance in mm	TCP length in mm	Angle in °
58-1-00-316-1	→	0	316	0
58-1-00-400-1	→	0	400	0
58-1-22-350-1	↘	-45	350	22
58-1-22-400-1	↘	-45	400	22
58-1-22-450-1	↘	-45	450	22
58-4-330-500-1	↘	-120	438.5	30
58-1-130-450-1	↘	0	450	30
58-1-35-400-1	↘	-70	400	35
58-1-45-350-1	↘	-90	350	45
58-1-45-400-1	↘	-90	400	45
58-1-45-450-1	↘	-90	450	45
58-4-345-450-1	↘	-120	388.5	45
58-4-345-567-1	↘	-120	505.5	45
58-4-360-450-1	↘	-120	388.5	60
58-1-245-400-1	↘	-62	400	45

Your selection

**1** Torch system & robot type ↗

Power Joint:  
ABB  
IRB 1520ID

**2** Torch neck ↗

Part number: n/a  
Type: n/a  
Margin: n/a  
TCP length: n/a  
Angle: n/a

**3** Gas nozzle ↗

Part number: n/a  
Type: n/a  
Diameter: n/a  
Length: n/a  
Version: n/a

**4** Optional components ↗

Power sources:  
Controllers:  
Wire feeders:  
Interfaces:  
Consoles:

### Step 2: Select torch neck

In the second step, you can select the desired torch neck from the list of available items. A technical drawing on the screen illustrates the TCP length, angle and distance of each torch. By clicking on the corresponding row in the table, the selected torch neck is added to your configuration and the tool automatically guides you to step **3** – the last and most important step to get possible layout plans for your welding machine.

### 3 Select gas nozzle

Planning Aid

- 1 Select SKS welding torch and robot type ✓
- 2 Select torch neck ✓
- 3 Select gas nozzle**

Gas nozzles are available in bottle or conical shapes and in different diameters to suit the requirements of different applications. For high-performance applications, heavy-duty versions are available in addition to our standard gas nozzles.

Gas nozzle					
Part number	Design	ø in mm	Length	Type	Dimensions
401-48-50-G	bottle-shaped	13	short	standard	
41-8-13-BF	bottle-shaped	13	flush	standard	
401-42-50-G	bottle-shaped	13	long	standard	
41-8-13-TS	tapered	13	short	standard	
41-8-13-TF	tapered	13	flush	standard	
401-4-50-G	tapered	13	long	standard	
41-8-15-BS	bottle-shaped	15	short	standard	
401-8-62-G	tapered	16	short	standard	
41-8-16-TF	tapered	16	flush	standard	
401-4-62-G	tapered	16	long	standard	
41-9-13-BF	bottle-shaped	13	flush	heavy-duty	
401-6-50-G	tapered	13	long	heavy-duty	
401-81-62-G	tapered	16	short	heavy-duty	
41-9-16-TF	tapered	16	flush	heavy-duty	
401-6-62-G	tapered	16	long	heavy-duty	

- 4 Add optional welding machine components
- 5 CAD Data Request

Your selection

- 1 Torch system & robot type ✓  
Power Joint  
ABB  
IRB 1520ID
- 2 Torch neck ✓  
Part number: 58-1-00-316-1  
Type: gerade  
Margin: 0  
TCP length: 316  
Angle: 0
- 3 Gas nozzle** ✓  
Part number: n/a  
Type: n/a  
Diameter ø: n/a  
Length: n/a  
Version: n/a
- 4 Optional components ✓  
Power sources:  
Controllers:  
Wire feeders:  
Interfaces:  
Consoles:

#### Step 3: Select the gas nozzle

This step is similar to step 2 „Select torch neck“. It offers the additional option to display dimensioned drawings of the gas nozzle via the „Dimensions“ column.

By clicking on the desired row of the table, your selection is saved and you will be guided to the next step. By completing step 3 you have fulfilled all conditions to obtain CAD data for your torch configuration.

## 4 Add optional welding machine components

The screenshot displays a software interface for configuring welding machine components. The main window is titled "4 Add optional welding machine components" and contains a table of power sources. Below the table are categories: Controllers, Wire feeders, Interfaces, and Console. A "Continue to next step" button is at the bottom right. A sidebar on the right shows details for selected components: "2 Torch neck" (Part number: 58-1-00-316-1) and "3 Gas nozzle" (Part number: 401-48-50-G). A "5 CAD Data Request" button is at the bottom left.

Part number	Product type	Description	Select
77-1184-30	LSQ3A/Q4	DCT-Power Source LSQ3A with Q4 Weld Process Controller	<input type="checkbox"/>
77-1184-20	LSQ3/Q4	DCT-Power Source LSQ3 with Q4 Weld Process Controller	<input type="checkbox"/>
77-1184-20	LSQ5/Q4	DCT-Power Source LSQ5 with Q4 Weld Process Controller	<input type="checkbox"/>
77-1184-10	LSQ3A	DCT-Power Source LSQ3A (3x480V) Direct-Control-Technology	<input type="checkbox"/>
77-1184-00	LSQ3	DCT-Power Source LSQ3 Direct-Control-Technology	<input type="checkbox"/>
77-1185-00	LSQ5	DCT-Power Source LSQ5 Direct-Control-Technology	<input type="checkbox"/>

**Power Sources**

**Controllers**

**Wire feeders**

**Interfaces**

**Console**

**2 Torch neck**

Part number: 58-1-00-316-1  
Type: gerade  
Margin: 0  
TCP length: 316  
Angle: 0

**3 Gas nozzle**

Part number: 401-48-50-G  
Type: bottle-shaped  
Diameter ø: 13  
Length: short  
Version: standard

**4 Optional components**

Power sources:  
Controllers:  
Wire feeders:  
Interfaces:  
Consoles:

**5 CAD Data Request**

**Continue to next step**

### Step 4: Add optional welding machine components

In the following step, optional system components can be added. If you own the corresponding rights, you can download the selected components in a separate window.

### Skip step

You will initially be prompted by the system if you want to add additional system components. By clicking on „No“ this step is skipped and you will be taken directly to the next step.

### Select installation components

If you click on „Yes“, a selection menu with compatible machine components will be loaded. By clicking on the respective category (e. g. welding process controller) all suitable components will be displayed. By clicking on the box at the end of a row, the components are added to the current configuration. It is possible to select multiple components.

## 5 Request CAD data

Optionally, you can also download CAD data of the SKS welding machine components. If your desired configuration is not available, you can request it from us via e-mail.

Configure the torch system | Select optional welding machine components | Download or request CAD data

1 → 2 → 3 → 4 → 5

happy to provide further assistance.  
Phone: +49 6301 7986-0  
service@de.sks-welding.com

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### Planning Aid

1	Select SKS welding torch and robot type	✓
2	Select torch neck	✓
3	Select gas nozzle	✓
4	Add optional welding machine components	✓
5	<b>CAD Data Request</b>	

Note

The database was created with the greatest possible care; however, no guarantees for its correctness can be accepted. We therefore recommend performing a final verification.

Accept and proceed

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### Your selection

1	Torch system & robot type	✕
Power Joint ABB IRB 1520ID		
2	Torch neck	✕
Part number: 58-1-00-316-1 Type: gerade Margin: 0 TCP length: 316 Angle: 0		
3	Gas nozzle	✕
Part number: 401-48-50-G Type: bottle-shaped Diameter a: 13 Length: short Version: standard		
4	Optional components	✕
Power sources: 77-1184-30 Controllers: Wire feeders: Interfaces: Consoles:		

### Step 5: Request CAD data:

Accept disclaimer

In the last step, you need to agree to the disclaimer to continue.

Then – depending on your user status („activated“, „logged in“ or „unregistered“) – the result of your request will be displayed (see next page).

## 5 Request CAD data

1 Select SKS welding torch and robot type ✓

2 Select torch neck ✓

3 Select gas nozzle ✓

4 Add optional welding machine components ✓

**5 CAD Data Request**

Thank you very much for submitting your configuration. Please request the CAD data via the contact form below.

First name:  Last name:

Company:  E-mail:

Message:

1 Torch system & robot type ✓

Power Joint  
ABB  
IRB 1520ID

2 Torch neck ✓

Part number: 58-1-00-316-1  
Type: gerade  
Margin: 0  
TCP length: 316  
Angle: 0

3 Gas nozzle ✓

Part number: 401-48-50-G  
Type: bottle-shaped  
Diameter a: 13  
Length: short  
Version: standard

4 Optional components ✓

Power sources: 77-1184-30  
Controllers:  
Wire feeders:  
Interfaces:  
Consoles:

Step 5: Request CAD data  
using the inquiry form

### Activated users:

If the desired CAD data were found in the database maintained on the server, it can now be downloaded as a ZIP file. Optional system components are offered as a separate download. If the files are not yet available, an application form will be displayed and the data can be requested from SKS „manually“. When doing so, all components of your current configuration are automatically submitted to SKS.

### Logged-in users:

Logged-in users without activation do not have the permission to download files, but can apply for it using the online application form. When using in the form, known data from your user registration is automatically filled in.

### Unregistered users:

Unregistered users are not allowed to access files directly. They can only see the contact form and will be asked to send a request to SKS. When doing so, all components of your current configuration will be automatically submitted to SKS.

# SKS

WELDING SYSTEMS



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