



Schutzeinrichtungen

Simplification of planning process

by use of the interactive product configurator
at Hans Georg Brühl GmbH

20.02.2013

Dipl. Ing. Timo Kleemann



Sprache: [DE](#) [GB](#)



Produkte:

- [▶ BRÜHL SAFETY FENCE DESIGNER](#)
- [▶ BRÜHL 3D CAD Katalog](#)

Dokumente:

- [▶ Erste Schritte](#)
- [▶ Kontaktdaten](#)

V1.2, 27.08.2012

© 1992 - 2012 CADENAS GmbH

Content

- **Introduction of the company**
- Initial situation
- Simplification of planning process
 - Order process
 - Distribution process
 - Sales partnerships
- Result
- Prospects

Introduction of the company

- Specifications

- Owner-managed medium-sized enterprise based in Siegen
- Since 1983 producer of dividing safety guards for machinery and plant construction
- Currently 145 employee at the headquarter
- Several sales office in Europe

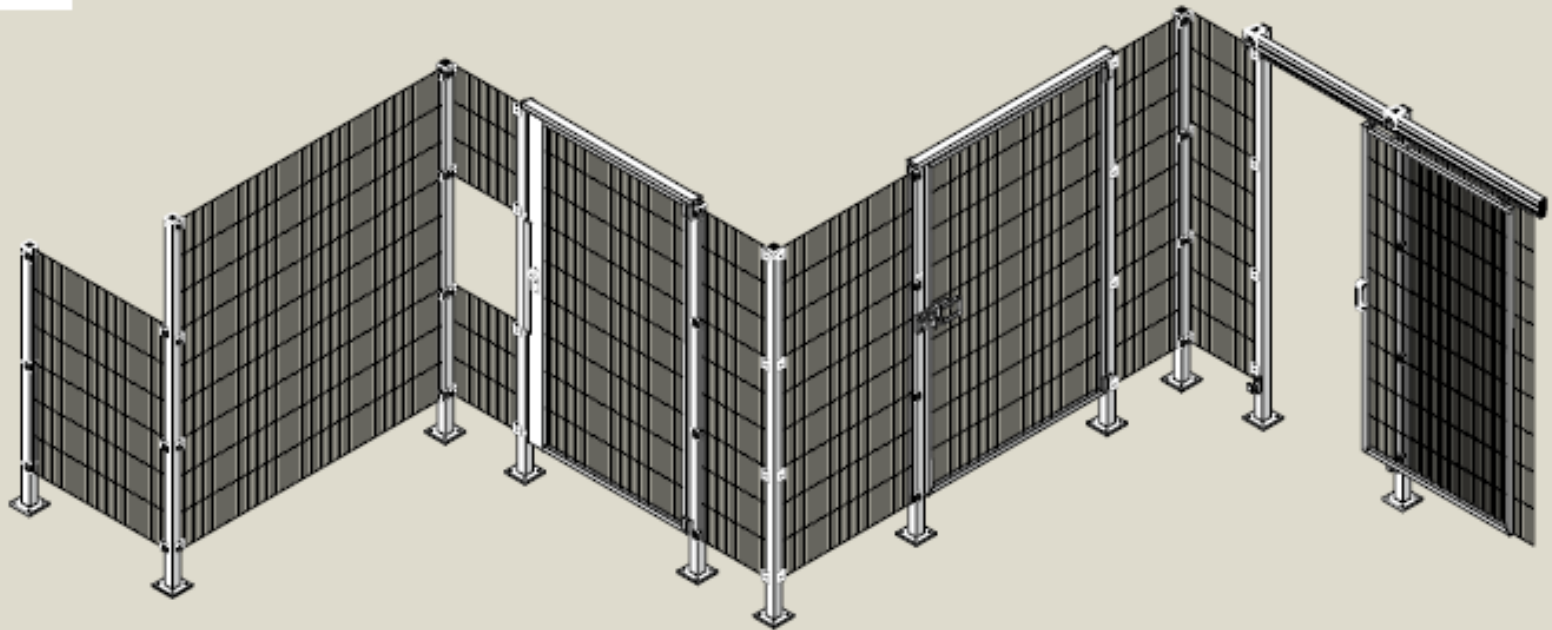


Introduction of the company

- Products

SCHUTZZAUNSYSTEM FLEX II

Ab Seite 27.

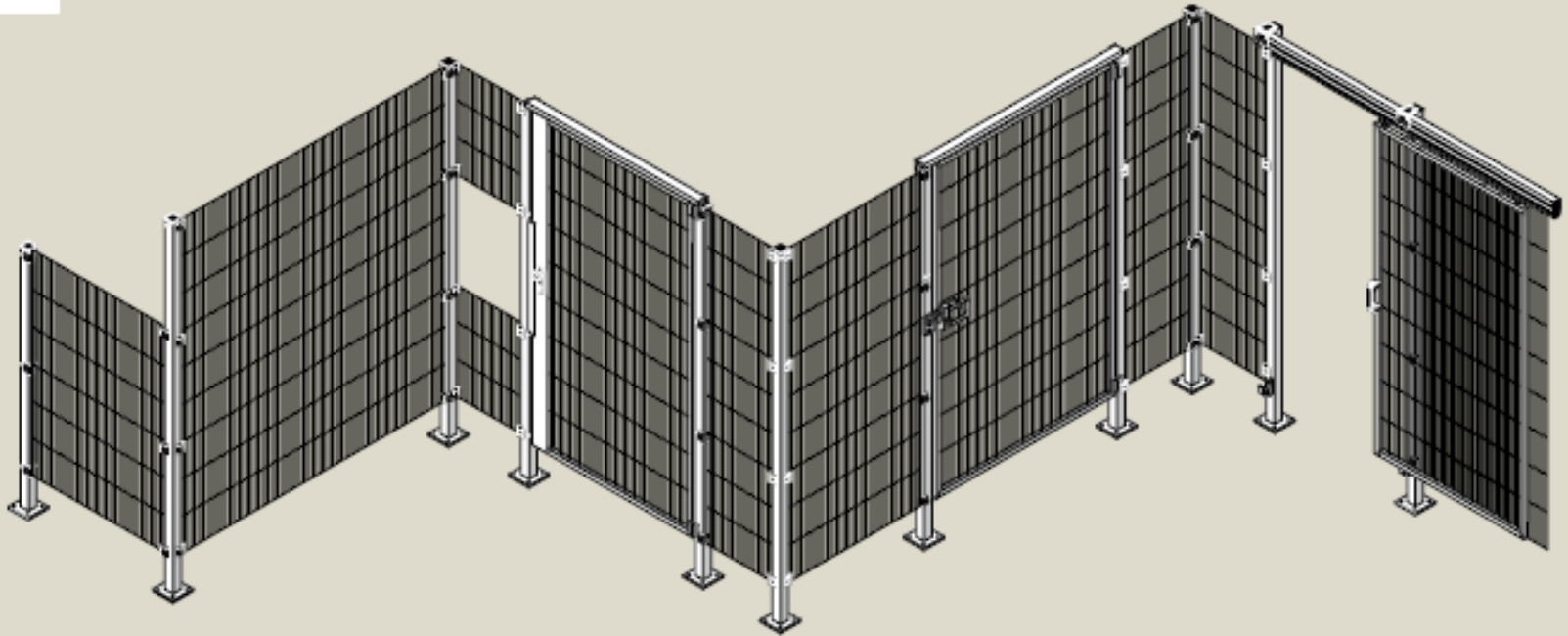


Introduction of the company

- Products

EDELSTAHL SCHUTZZAUNSYSTEM FLEX II

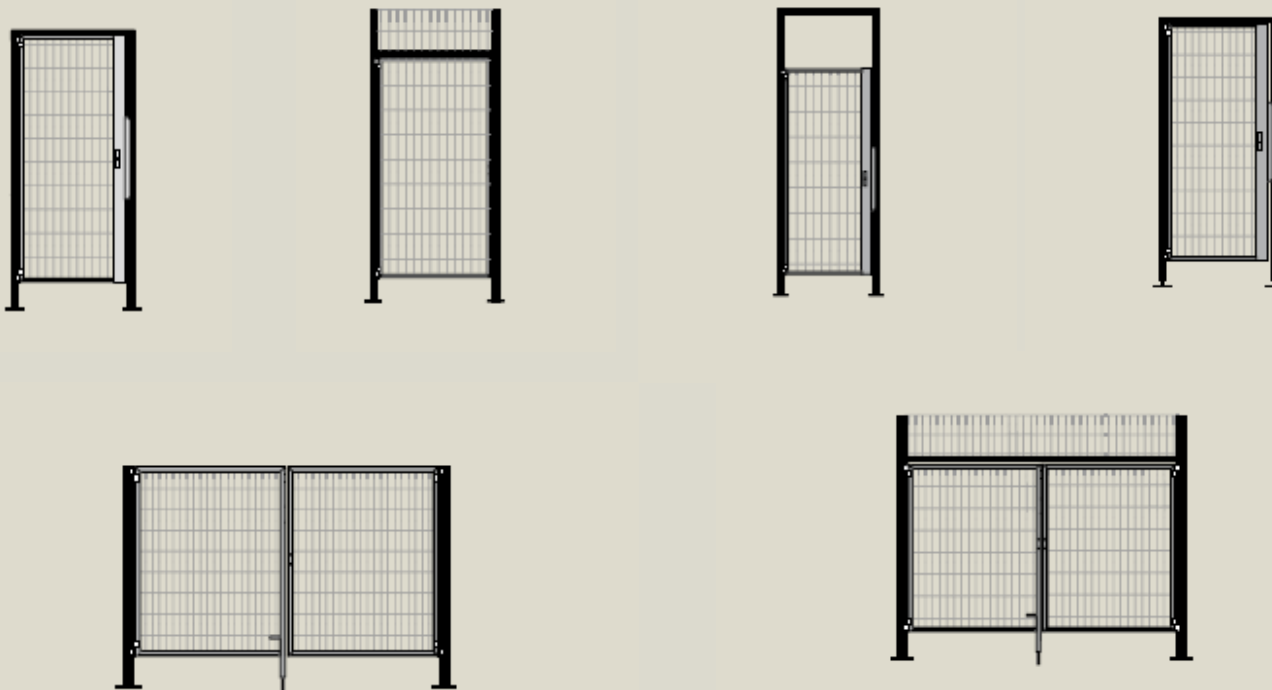
➔ Ab Seite 64.



Introduction of the company

- Products

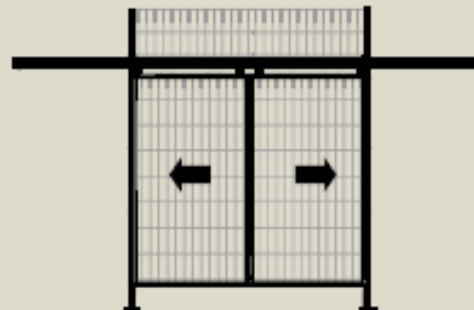
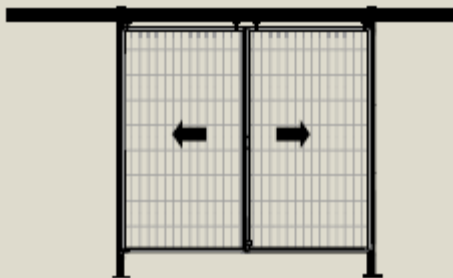
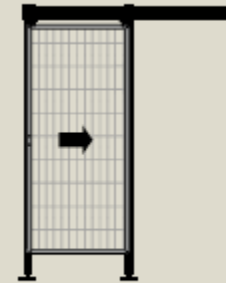
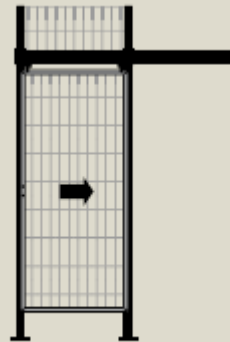
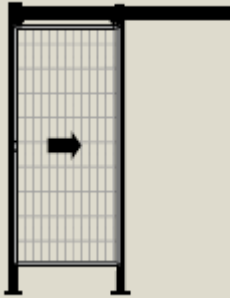
FLÜGELTÜREN



Introduction of the company

- Products

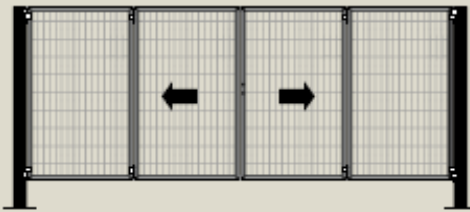
SCHIEBETÜREN



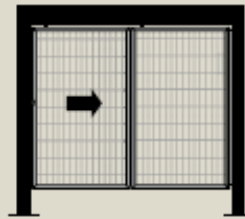
Introduction of the company

- Products

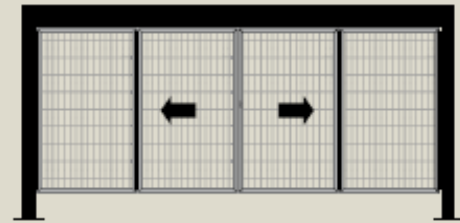
DOPPELFALTFLÜGELTÜREN



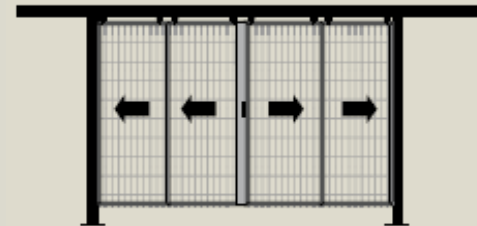
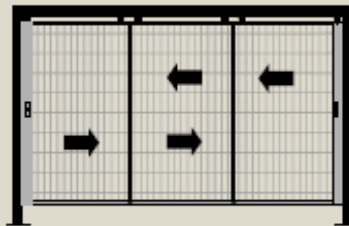
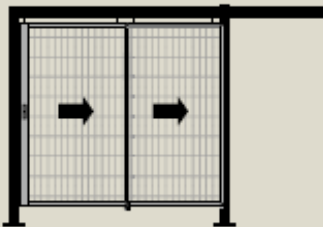
FALTSCHIEBETÜREN



DOPPELFALTSCHIEBETÜREN



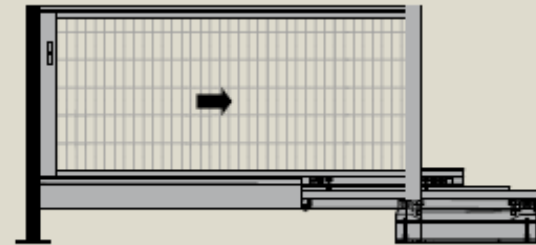
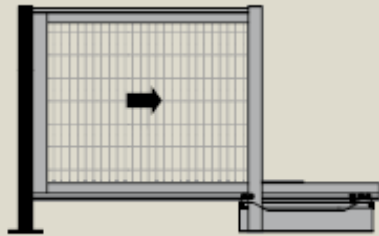
SCHIEBETÜREN, TELESKOPIERBAR



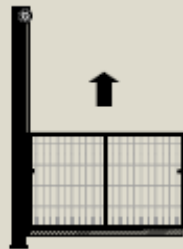
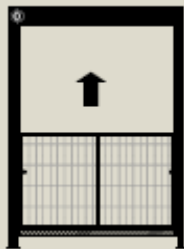
Introduction of the company

- Products

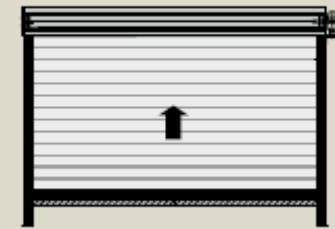
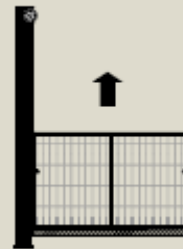
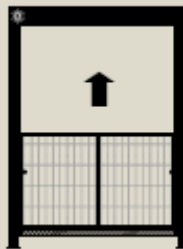
FREITRAGENDE SCHIEBETÜREN



HUBFELDER



KRAFTBETÄTIGTE TORE MIT VERTIKALER ÖFFNUNGSRICHTUNG



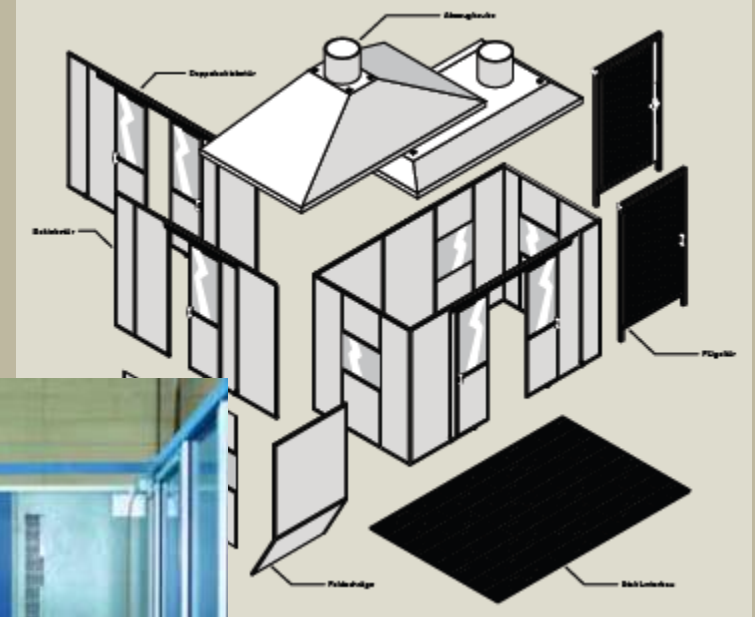
Introduction of the company

- Special-purpose solutions



Introduction of the company

- Special-purpose solutions



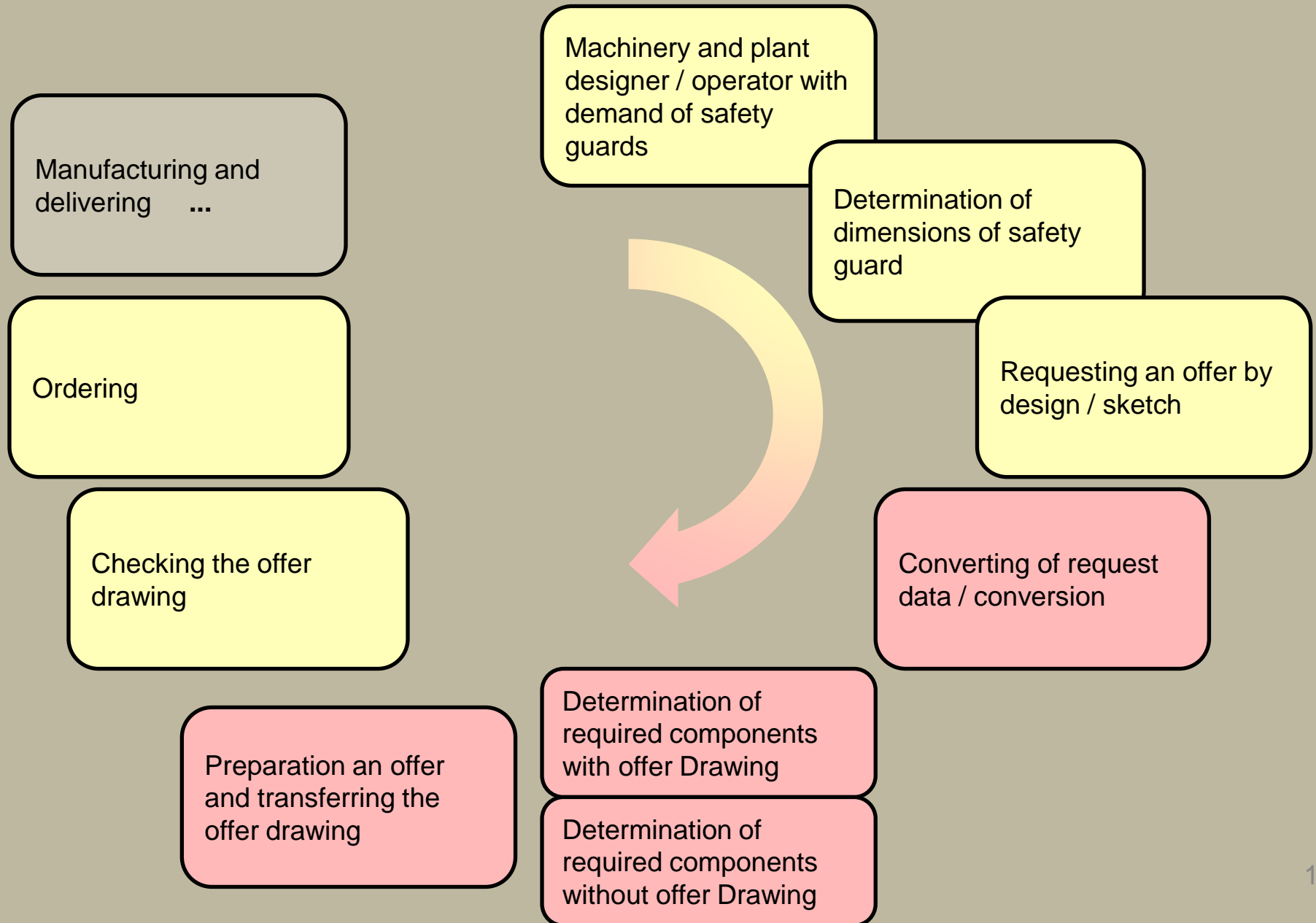
Content

- Introduction of the company
- **Initial situation**
- Simplification of planning process
 - Order process
 - Distribution process
 - Sales partnerships
- Result
- Prospects

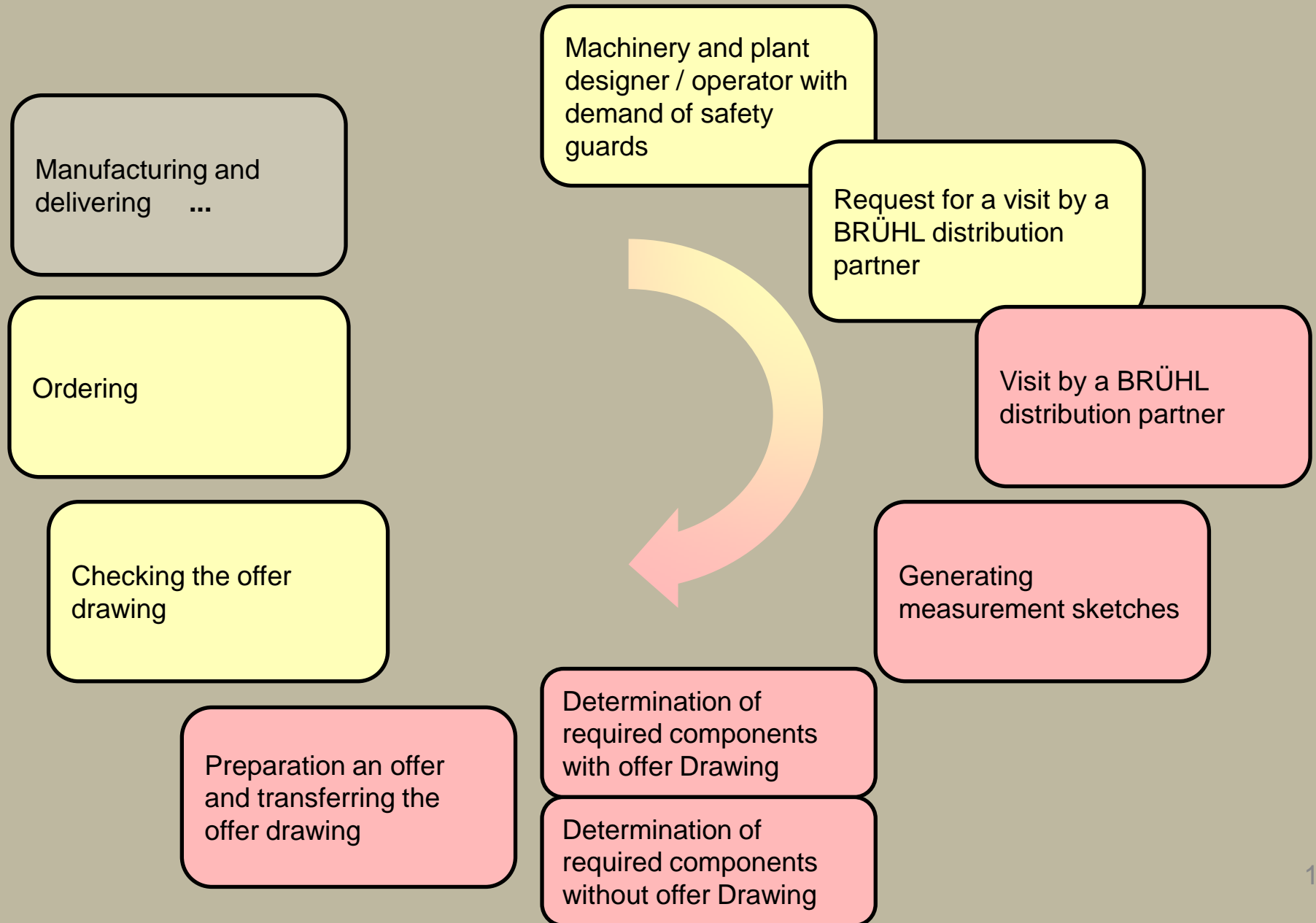
Initial situation

- High variety of products and types
- Demand of preferably short delivery times
- Rising requirements of customers:
 - Supply of 3D design data for further use by builders of machinery and plants
 - Providing high preciseness in design
 - Faster processing of orders

Current order process



Current distribution process



Initial situation

Objective target of Hans Georg Brühl GmbH:

- Opening up of new markets
- Retention of product variety
- Faster processing of orders by simplification of processes
- Faster Supply of design data
- Reduction of internal effort

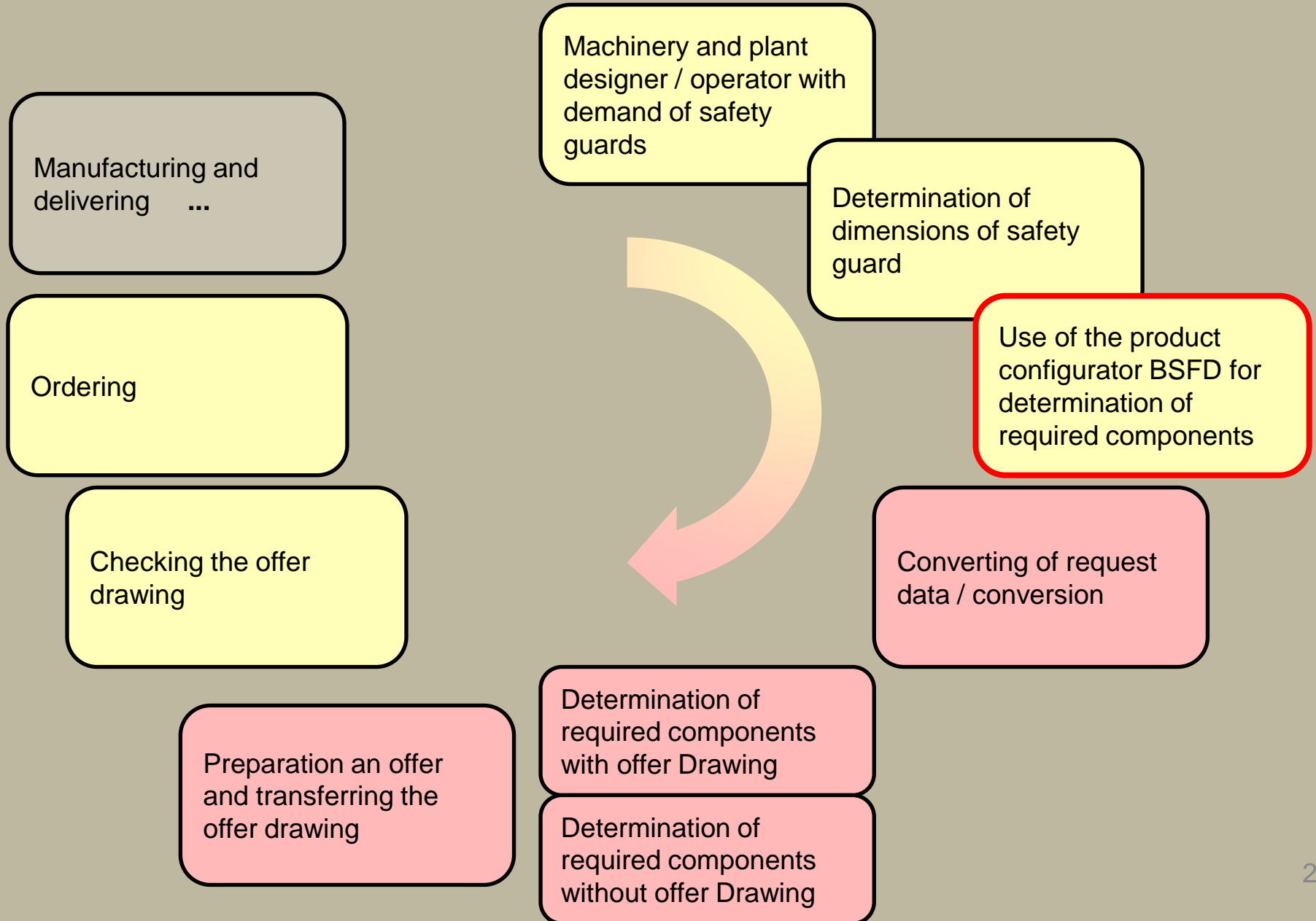
Content

- Introduction of the company
- Initial situation
- **Simplification of planning process**
 - Order process
 - Distribution process
 - Sales partnerships
- Result
- Prospects

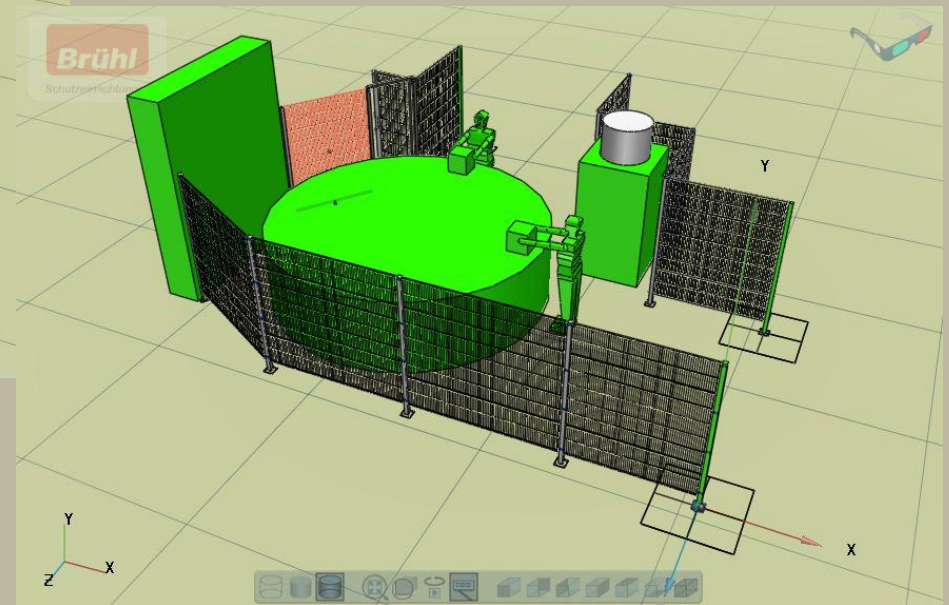
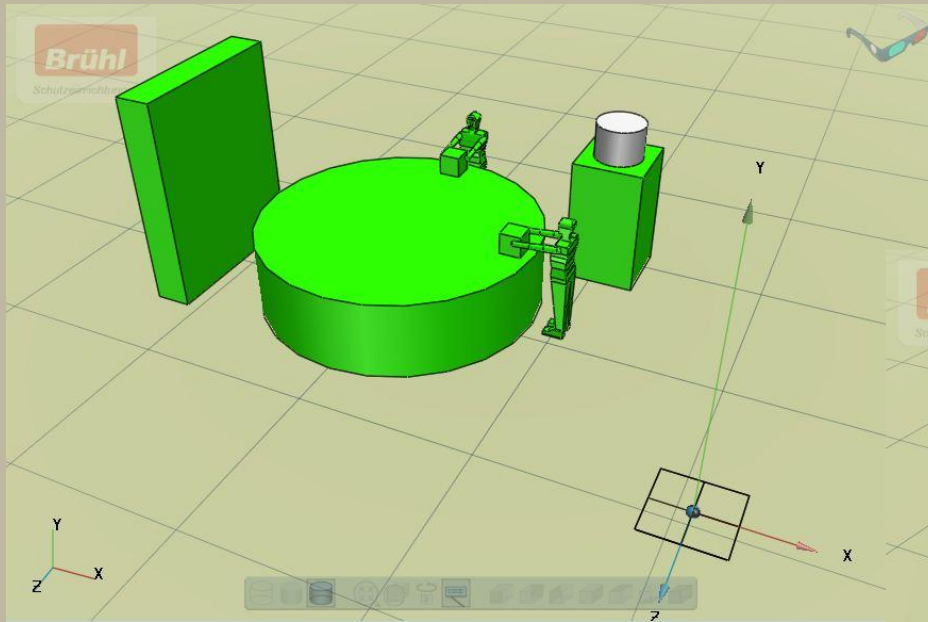
Simplification of planning process

- Improvement of order process

New order process



Simplification of planning process



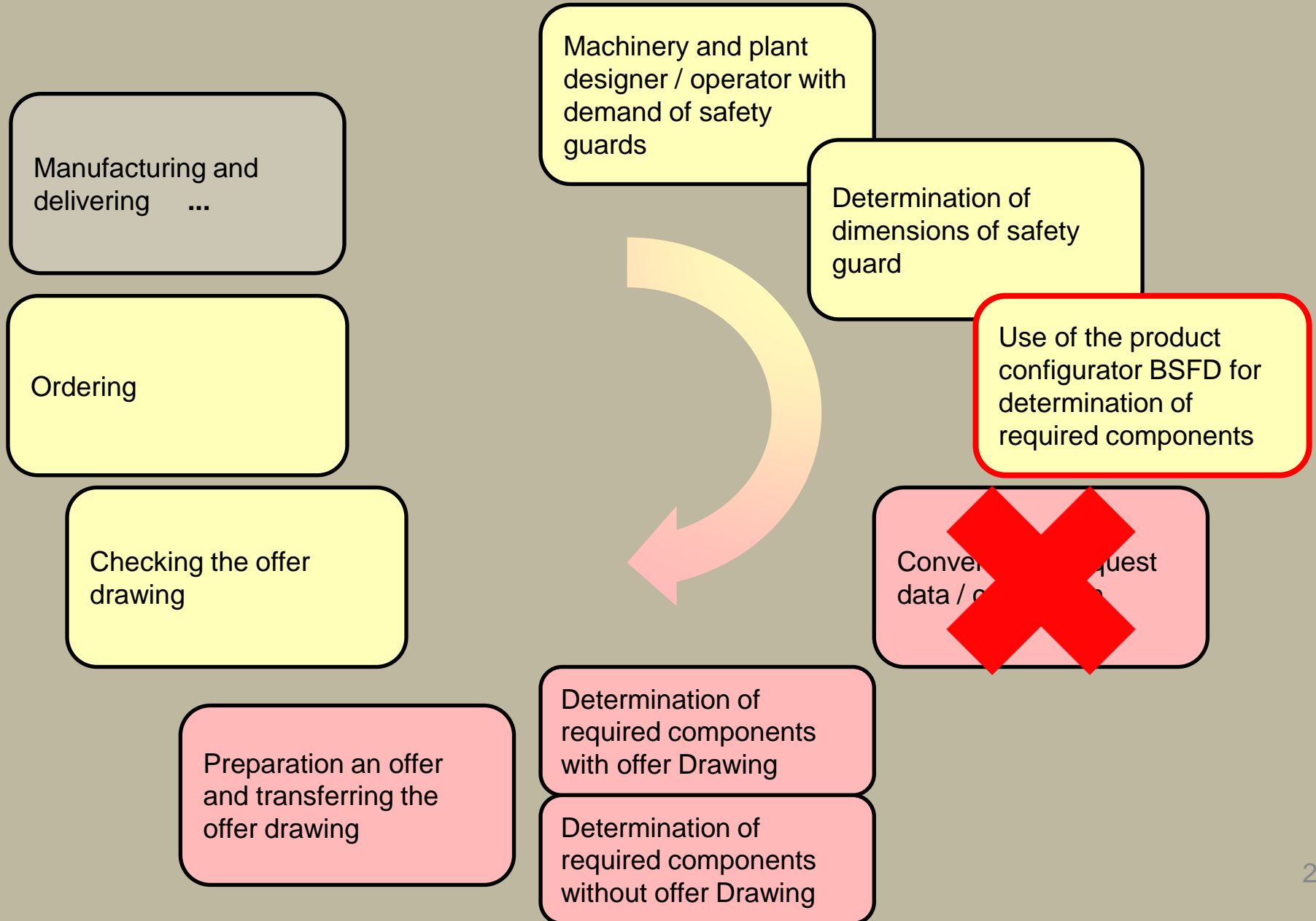
Simplification of planning process

The screenshot shows a software interface for loading a DXF file. On the left, a control panel titled "Raumplan von DXF Datei laden" (Load room plan from DXF file) includes the following settings:

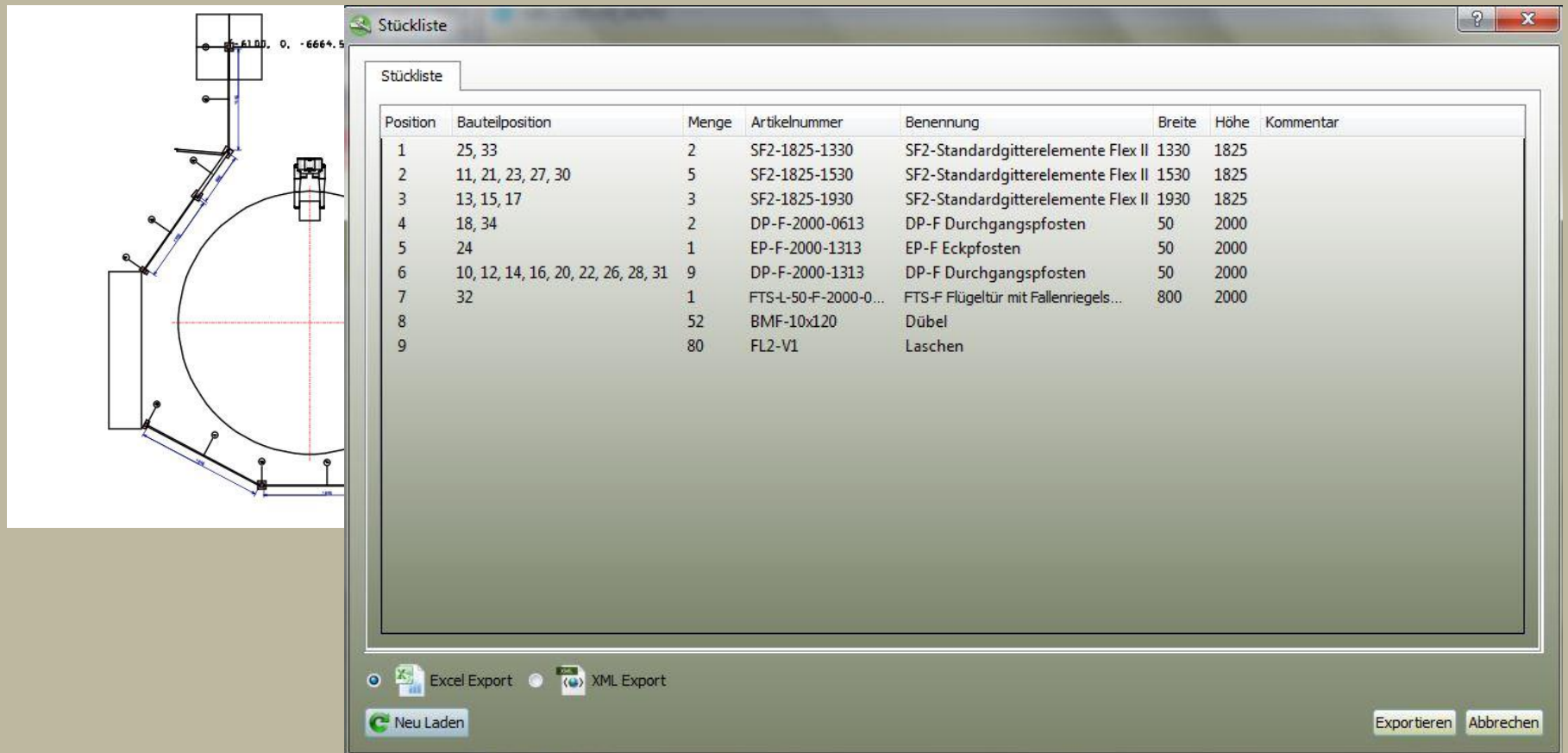
- DXF Datei: timo Kleemann/Desktop/Bilder Vortr
- Rotation: 0°
- Verschiebung X: 0
- Verschiebung Y: 0
- Maßstab: 1 : 1

A red warning message reads: "Bitte beachten Sie den Maßstab Ihrer Zeichnung" (Please pay attention to the scale of your drawing). The main area displays a technical drawing of a room plan on a green grid. The drawing includes various rooms, corridors, and furniture, with labels such as "Raum 100" through "Raum 110" and "Raum 120". A coordinate system in the bottom left shows X, Y, and Z axes. The Brühl logo and "Schutz einrichtungen" are visible in the top left of the drawing area. A toolbar with various icons is located at the bottom of the drawing area.

New order process



Simplification of planning process

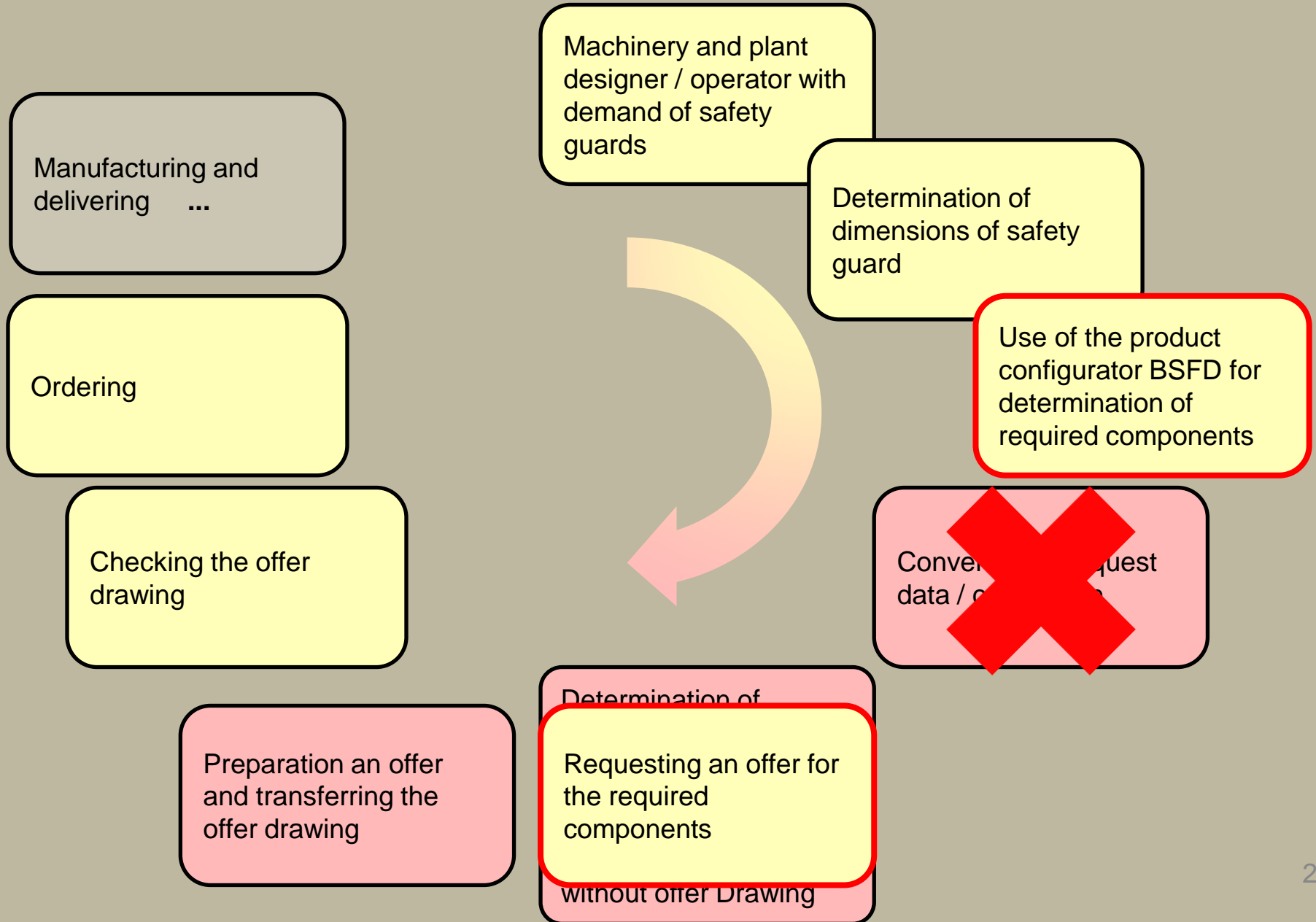


The image shows a technical drawing of a door assembly on the left, with numbered callouts (1-9) indicating specific components. On the right, a software window titled 'Stückliste' (Bill of Materials) displays a table of parts. The table has columns for Position, Bauteilposition, Menge, Artikelnummer, Benennung, Breite, Höhe, and Kommentar. The data is as follows:

Position	Bauteilposition	Menge	Artikelnummer	Benennung	Breite	Höhe	Kommentar
1	25, 33	2	SF2-1825-1330	SF2-Standardgitterelemente Flex II	1330	1825	
2	11, 21, 23, 27, 30	5	SF2-1825-1530	SF2-Standardgitterelemente Flex II	1530	1825	
3	13, 15, 17	3	SF2-1825-1930	SF2-Standardgitterelemente Flex II	1930	1825	
4	18, 34	2	DP-F-2000-0613	DP-F Durchgangspfosten	50	2000	
5	24	1	EP-F-2000-1313	EP-F Eckpfosten	50	2000	
6	10, 12, 14, 16, 20, 22, 26, 28, 31	9	DP-F-2000-1313	DP-F Durchgangspfosten	50	2000	
7	32	1	FTS-L-50-F-2000-0...	FTS-F Flügeltür mit Fallenriegels...	800	2000	
8		52	BMF-10x120	Dübel			
9		80	FL2-V1	Laschen			

At the bottom of the 'Stückliste' window, there are buttons for 'Excel Export', 'XML Export', 'Neu Laden', 'Exportieren', and 'Abbrechen'.

New order process



Simplification of planning process

Details

 Exportieren Sie die aktuelle Konfiguration als ZIP-Datei und versenden sie als Anhang einer Email

Zip-Datei

Name: Timo Kleemann_<Datum>_<Uhrzeit>.zip

Pfad: ...

Folgende Dateien werden dem Archiv hinzugefügt:

-  Timo Kleemann_<Datum>_<Uhrzeit>.dxf
-  Timo Kleemann_<Datum>_<Uhrzeit>.cfg
-  Timo Kleemann_<Datum>_<Uhrzeit>.jpeg

Email-Versand

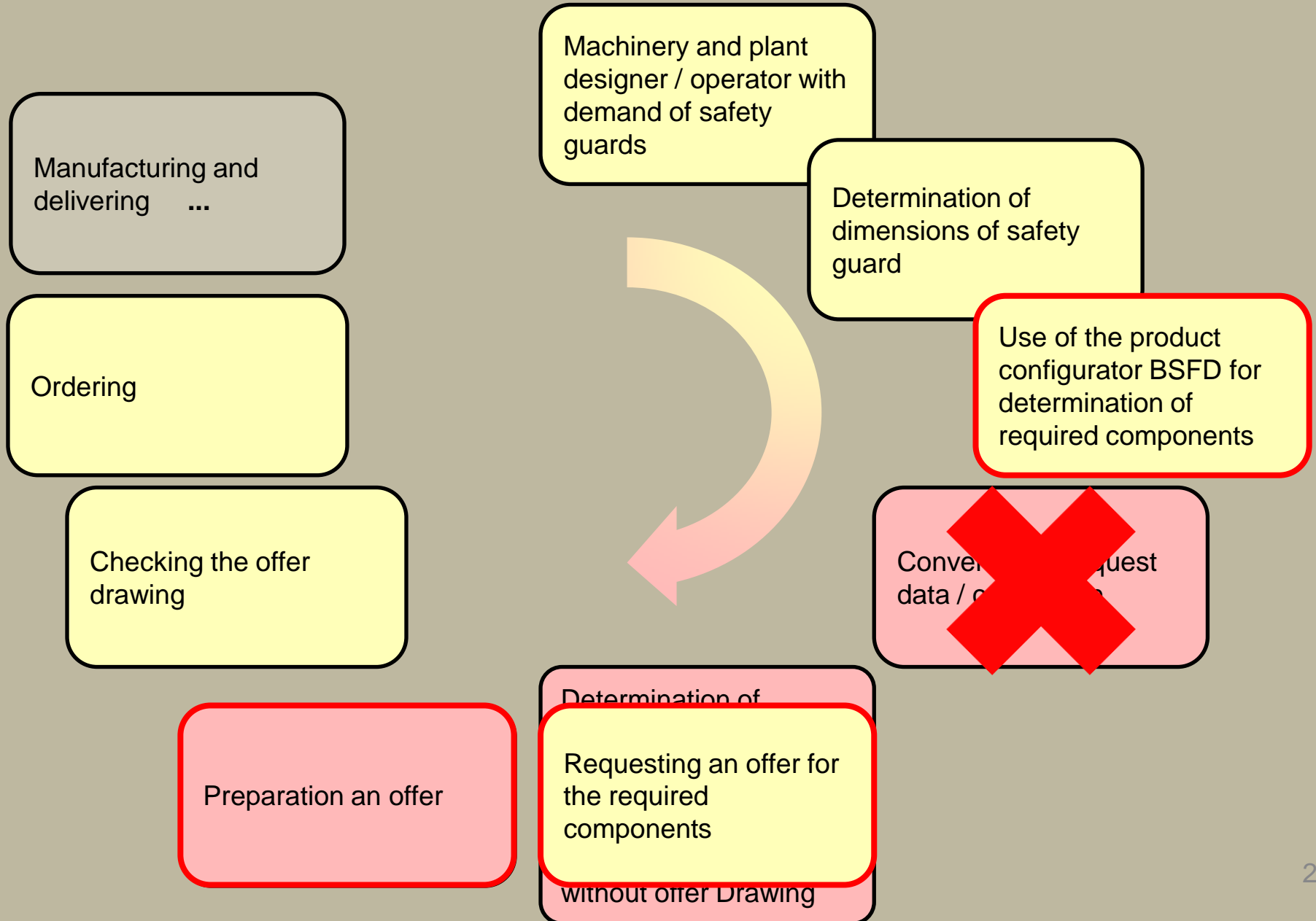
Adresse:

Betreff:

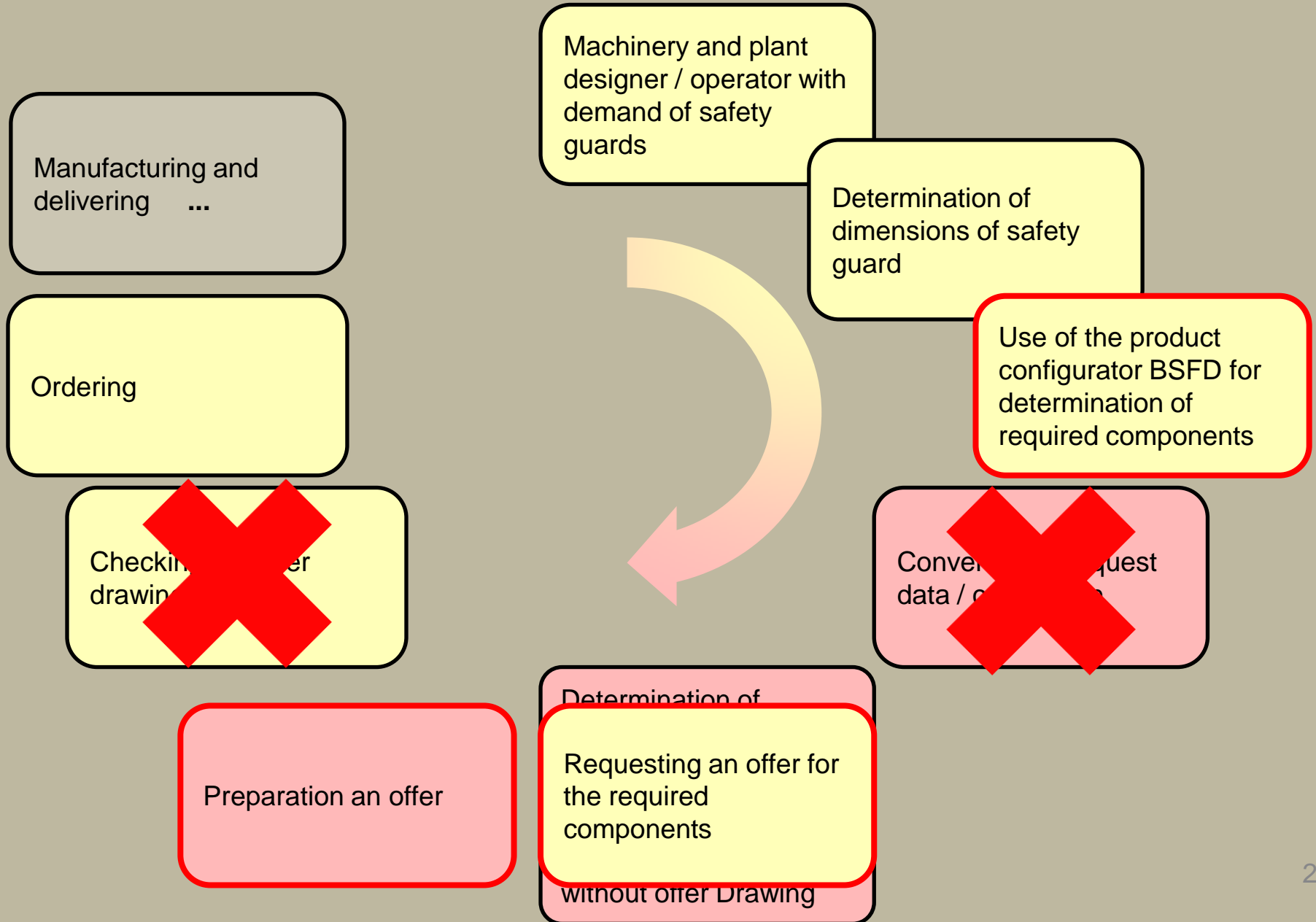
Zusätzliche Angaben:



New order process



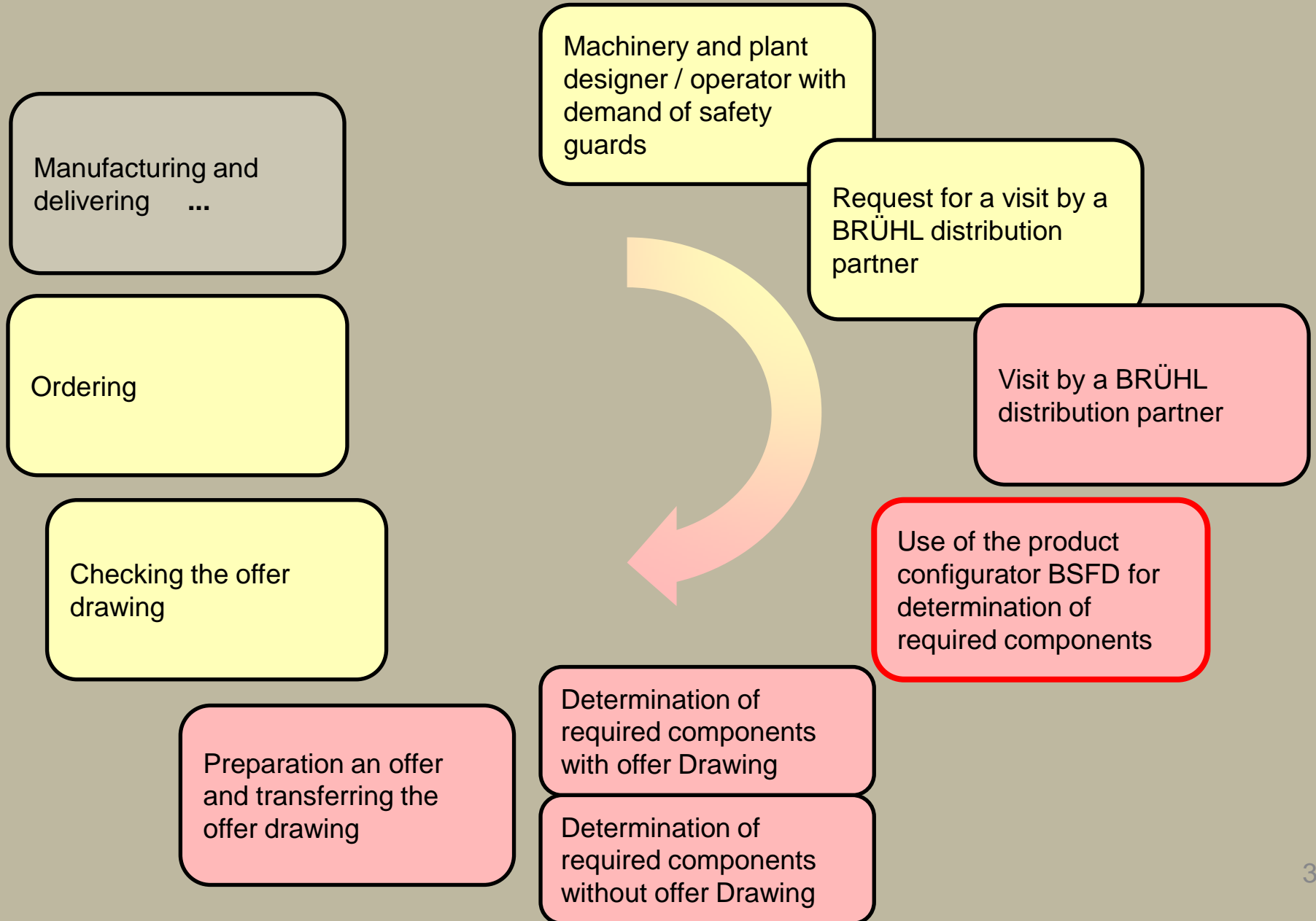
New order process



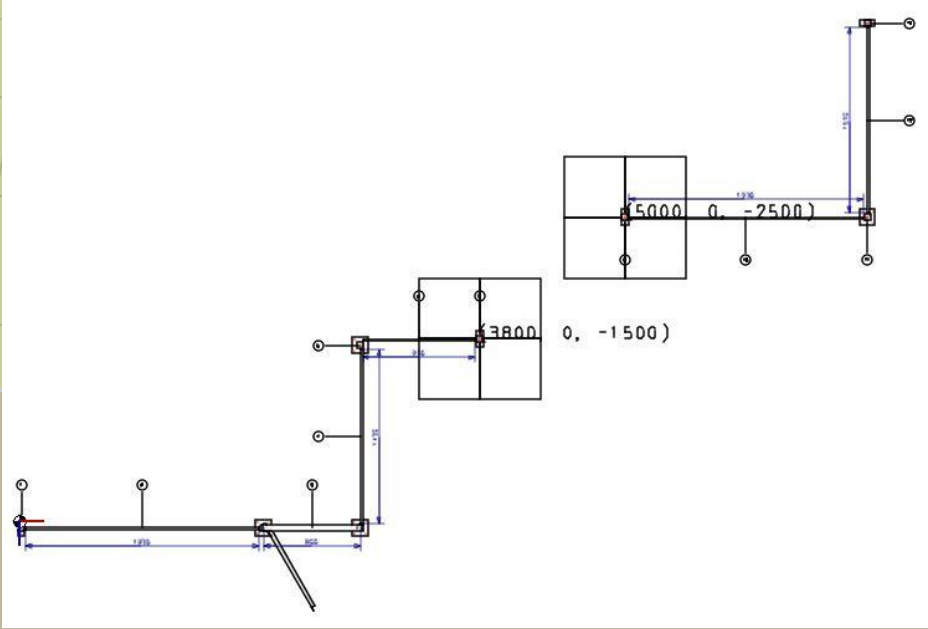
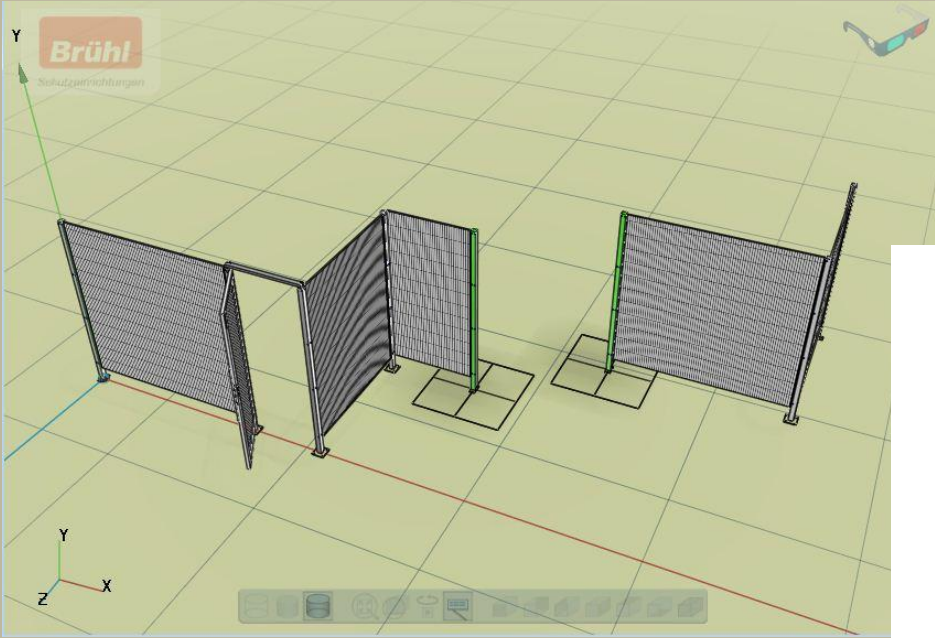
Simplification of planning process

- Improvement of order process
- Improvement of distribution process

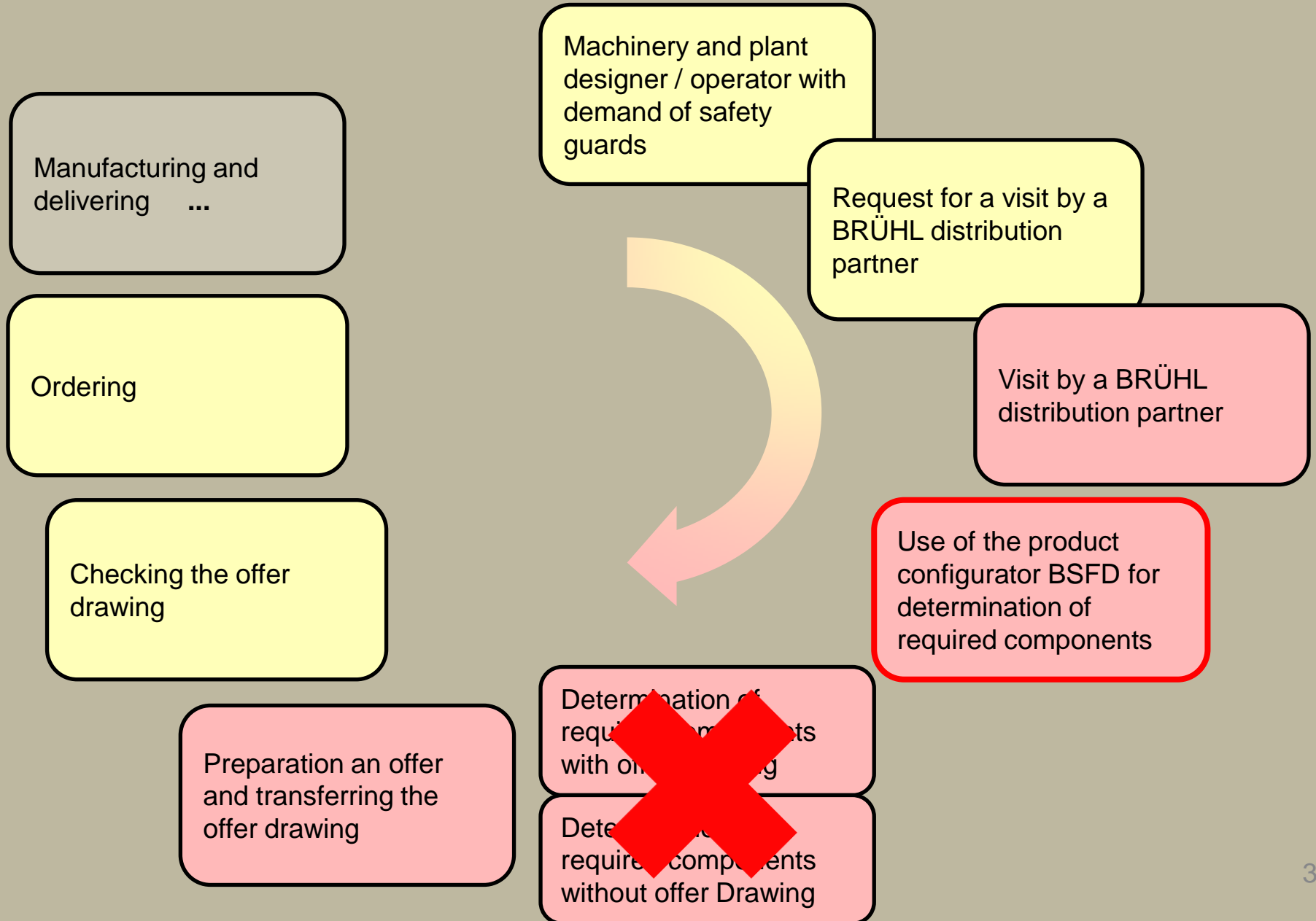
New distribution process



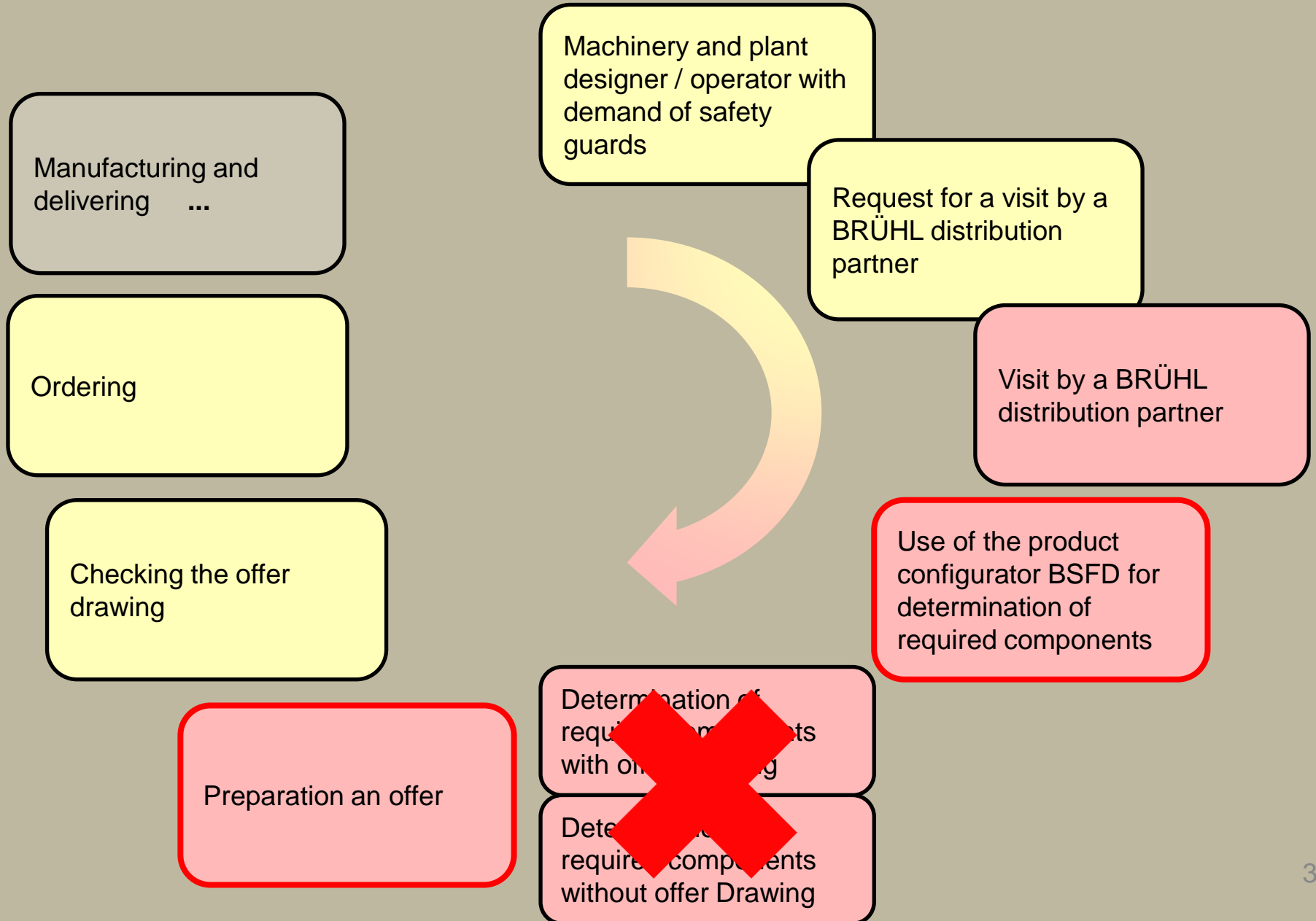
Simplification of planning process



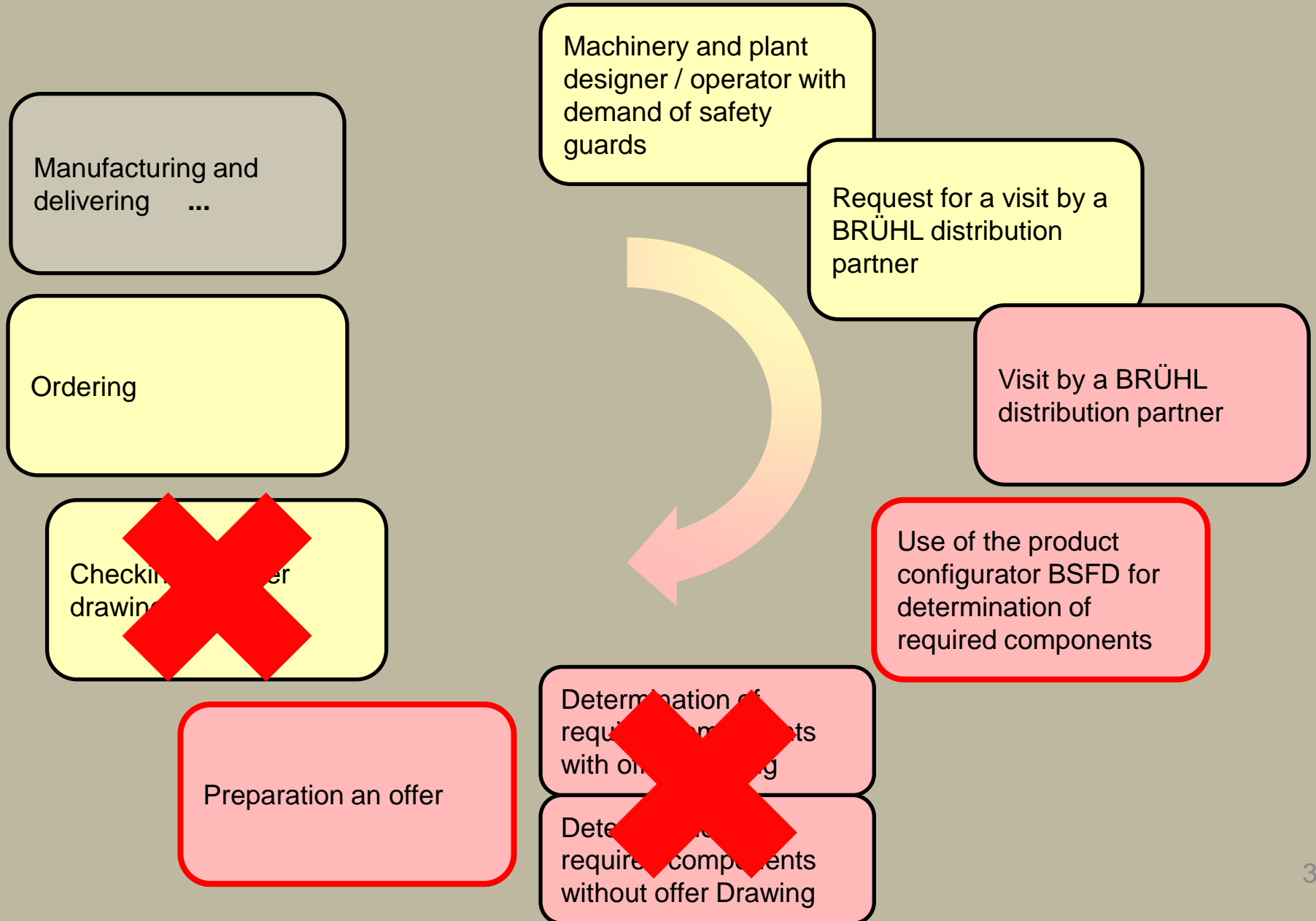
New distribution process



New distribution process



New distribution process



Simplification of planning process

- Improvement of order process
- Improvement of distribution process
- Sales partnerships
 - Reduction of supply chain by intermediate storage
 - Reduction of item variety by using the separate planning mode EasyFlex
 - On-side cuts

Simplification of planning process

Stückliste

Position	Bauteilposition	Menge	Artikelnummer	Benennung	Breite	Höhe	Kommentar
1	10	1	SF2-1825-1930	SF2-Zuschnitt-Gitterelemente EasyFlex ...	805	1825	
2	2, 4, 6, 8	4	SF2-1825-1930	SF2-Standardgitterelemente EasyFlex	1930	1825	
3	1, 3, 9	3	DP-F-2000-1313	DP-F Durchgangspfosten EasyFlex	50	2000	
4	7	1	EP-F-2000-1313	EP-F Eckpfosten EasyFlex	50	2000	
5	11, 12, 13	3	DP-F-2000-0613	DP-F Durchgangspfosten EasyFlex	50	2000	
6	5	1	FTR-L-50-F-2000-...	FTR-F Flügeltür für Griff oder Riegel Eas...	800	2000	
7		30	BMF-10x120	Dübel			
8		48	FL2-V1	Laschen			

Excel Export XML Export

Neu Laden Exportieren Abbrechen

Content

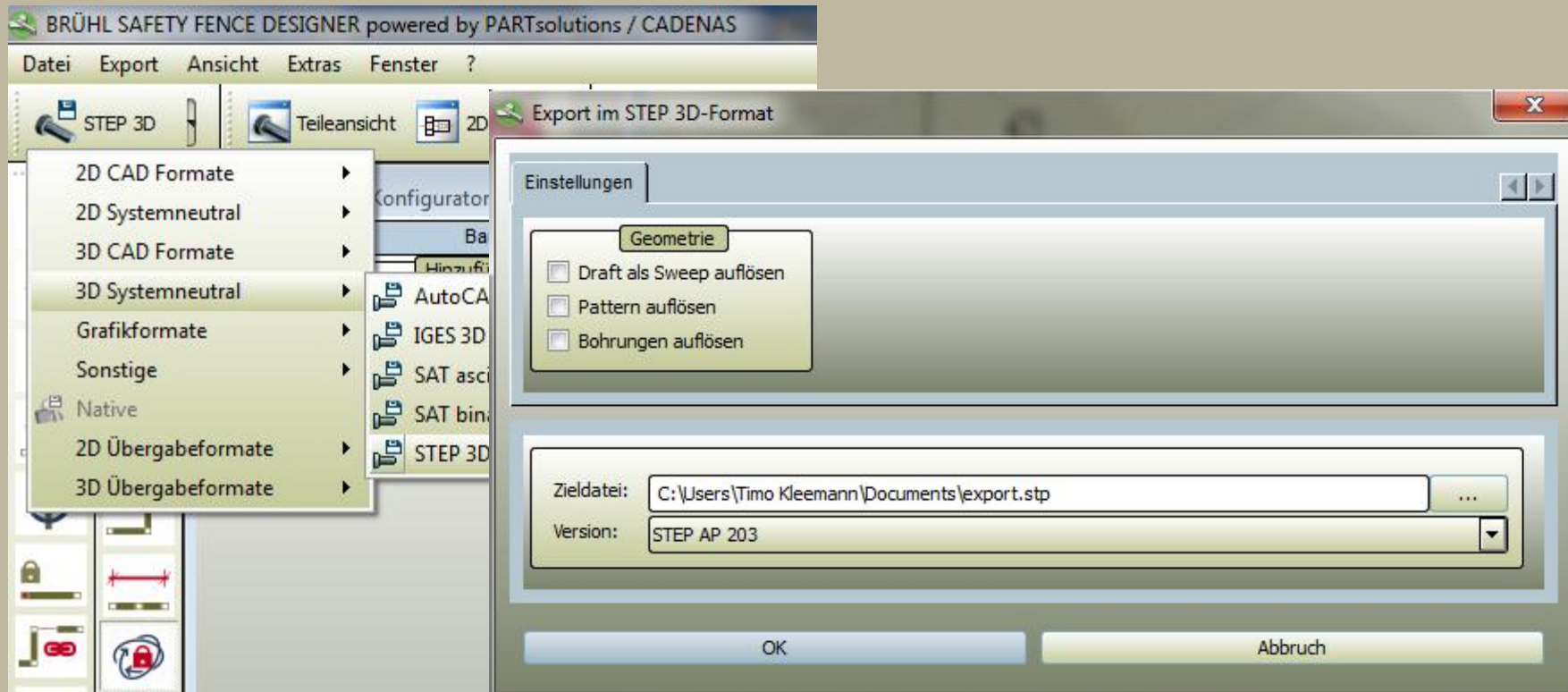
- Introduction of the company
- Initial situation
- Simplification of planning process
 - Order process
 - Distribution process
 - Sales partnerships
- **Result**
- Prospects

Result

- The interactive product configurator allows to simplify planning for the main products and parallel to retain the variety of products und types.
- By reduction of the planning processes short delivery times for standard products can be realized.
- Design data can be directly used by machinery and plant designers.
- A high preciseness in design is guaranteed.

Result

Export options:



Result

Objective target of Hans Georg Brühl GmbH:

- ✓ Opening up of new markets
- ✓ Retention of product variety
- ✓ Faster processing of orders by simplification of processes
- ✓ Faster Supply of design data
- ✓ Reduction of internal effort

Content

- Introduction of the company
- Initial situation
- Simplification of planning process
 - Order process
 - Distribution process
 - Sales partnerships
- Result
- **Prospects**

Prospects

Current tasks:

- Expansion of the use of the product configurator at our customers / gaining key-user
- Development of training concept for the BSFD
 - Training for customers
 - Training for sales partners

Prospects

Further projects:

- Partial automated preparation of offers by use of an interface between product configurator BSFD an ERP-system
- Implementation of further safety fence systems in the product configurator



Schutzeinrichtungen

Thank you for your attention!

20.02.2013

Dipl. Ing. Timo Kleemann