

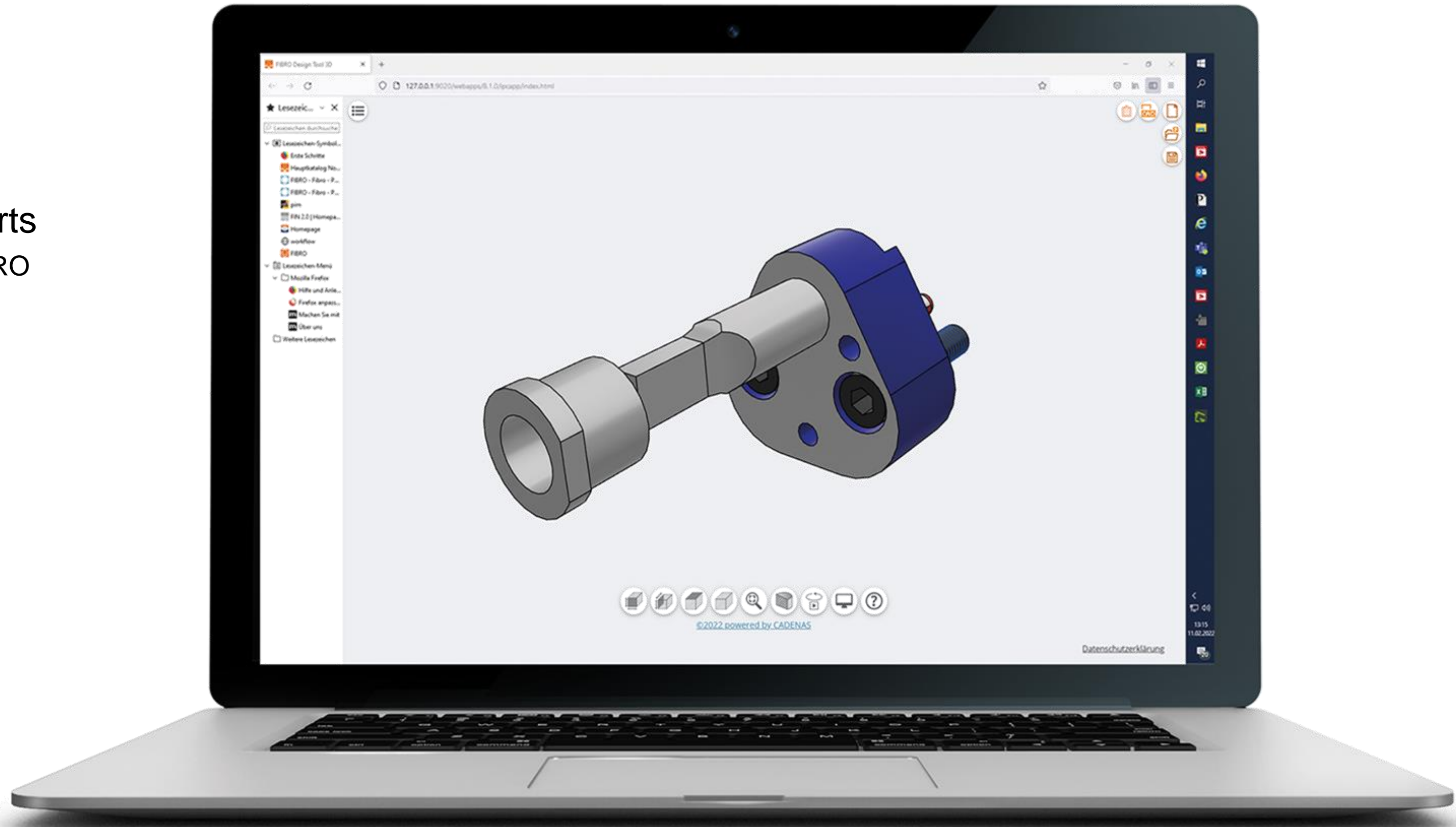
# 3D INTERACTIVE PRODUCT CONFIGURATOR **FIBRO IPC**

Augsburg, May 10<sup>th</sup>, 2023



# FIBRO IPC AGENDA

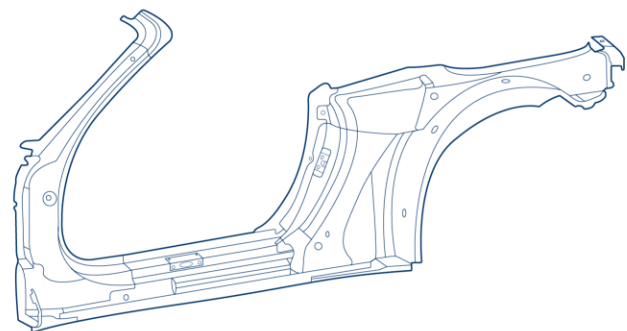
- FIBRO Standard Parts
  - LÄPPLE Group & FIBRO
  - Sites, facts & figures
  - Our products
- The speaker
  - Who am I
  - Where I work
  - What I do
- IPC
  - Why IPC
  - The path to IPC
  - How the IPC works



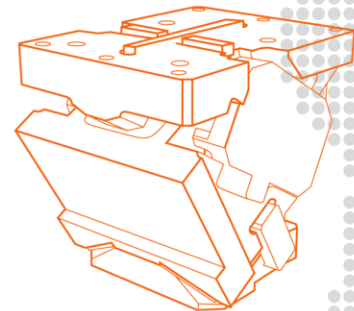
# LÄPPLE GROUP YOUR GLOBAL PARTNER



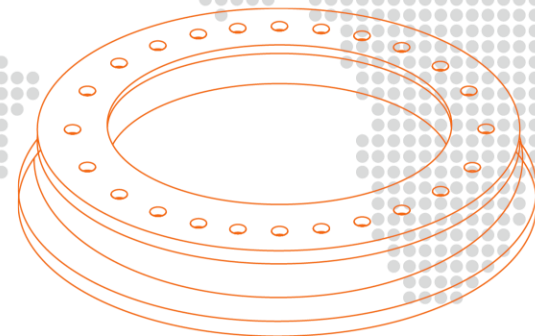
CAR BODY  
MODULES



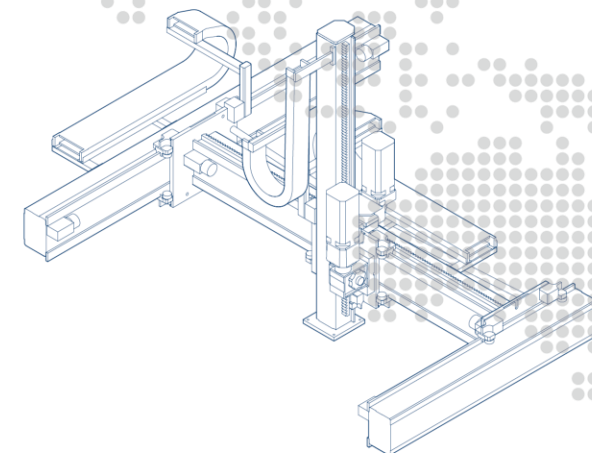
STANDARD  
PARTS



ROTARY  
TABLES



AUTOMATION  
SOLUTIONS



TRAINING AND  
QUALIFICATIONS



# LÄPPLE GROUP FACTS AND FIGURES

**1919**  
Company  
founded

**100%**  
family-owned

**2,500**  
employees

**EUR 497.7**  
**Million**  
turnover

  
CAR BODY MODULES

  
STANDARD PARTS

  
ROTARY TABLES

  
AUTOMATION SOLUTIONS

  
TRAINING AND FURTHER EDUCATION



TURNOVER  
€MIO



1,120

327.0



540

93.8



255

24.2



225

44.8



360

7.8

\*Turnover includes EUR 11.7 million internal sales / as at: May 2022

# FIBRO PRESENT WORLDWIDE



NORTH AMERICA



GERMANY



FRANCE



ITALY



POLAND



KOREA



CHINA



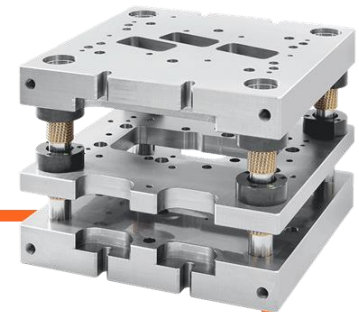
INDIA



SINGAPORE

**We are there for our customers on the spot all over the world:**  
With **new production, sales and service companies** as well as more than 35 trade agencies, we ensure the best possible service with minimal response times.

# FIBRO STANDARD PARTS PRODUCTS



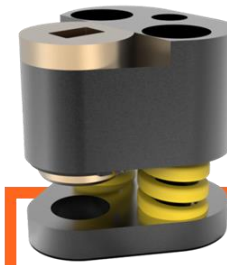
PILLAR  
GUIDE  
RACKS

PRECISION  
MACHINED  
PLATES AND  
FLAT BARS



TRANSPORT  
AND  
MOUNTING

GUIDE  
ELEMENTS

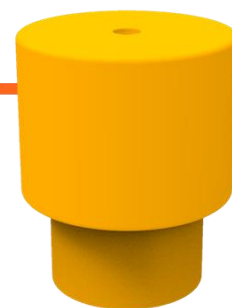


PRECISION  
ELEMENTS



SPRINGS AND  
GAS SPRINGS

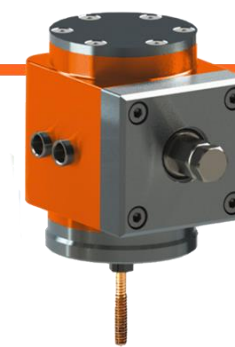
FIBROFLEX  
ELASTOMERS



FIBROLIT  
CHEMICAL  
ARTICLES



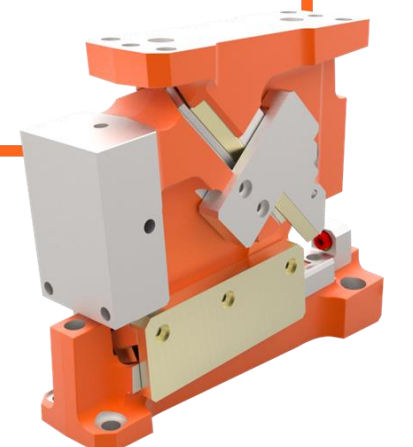
PERIPHERAL  
EQUIPMENT,  
CONVEYING  
TECHNOLOG



MOULD  
MAKING



CAM UNITS



# FIBRO STANDARD PARTS DIGITAL BUSINESS

- FIBRO customer portal for convenient management of all data and processing of all orders
- Easy ordering with just a few clicks in the FIBRO Webshop
- Direct EDI connection possible for FIBRO customers worldwide
- FIBRO PartCommunity enables the download of 2D and 3D CAD data
- Our digital assistants and configurators help you find the right product

AVAILABLE  
IN DIGITAL  
FORMAT



# FIBRO IPC THE SPEAKER

Erich Markowitsch

- Since 1985 at FIBRO GmbH, Business Unit Standard Parts in Product Management.
- Initially with focus on consulting and elaboration of customer-specific inquiries and special solutions for the use of toolmaking standard parts.
- With the beginning of the cooperation with Cadenas in 1998, responsible for the content of the electronic product catalog.





# THE JUNGLE OF PRECISION PARTS

## WHY IPC

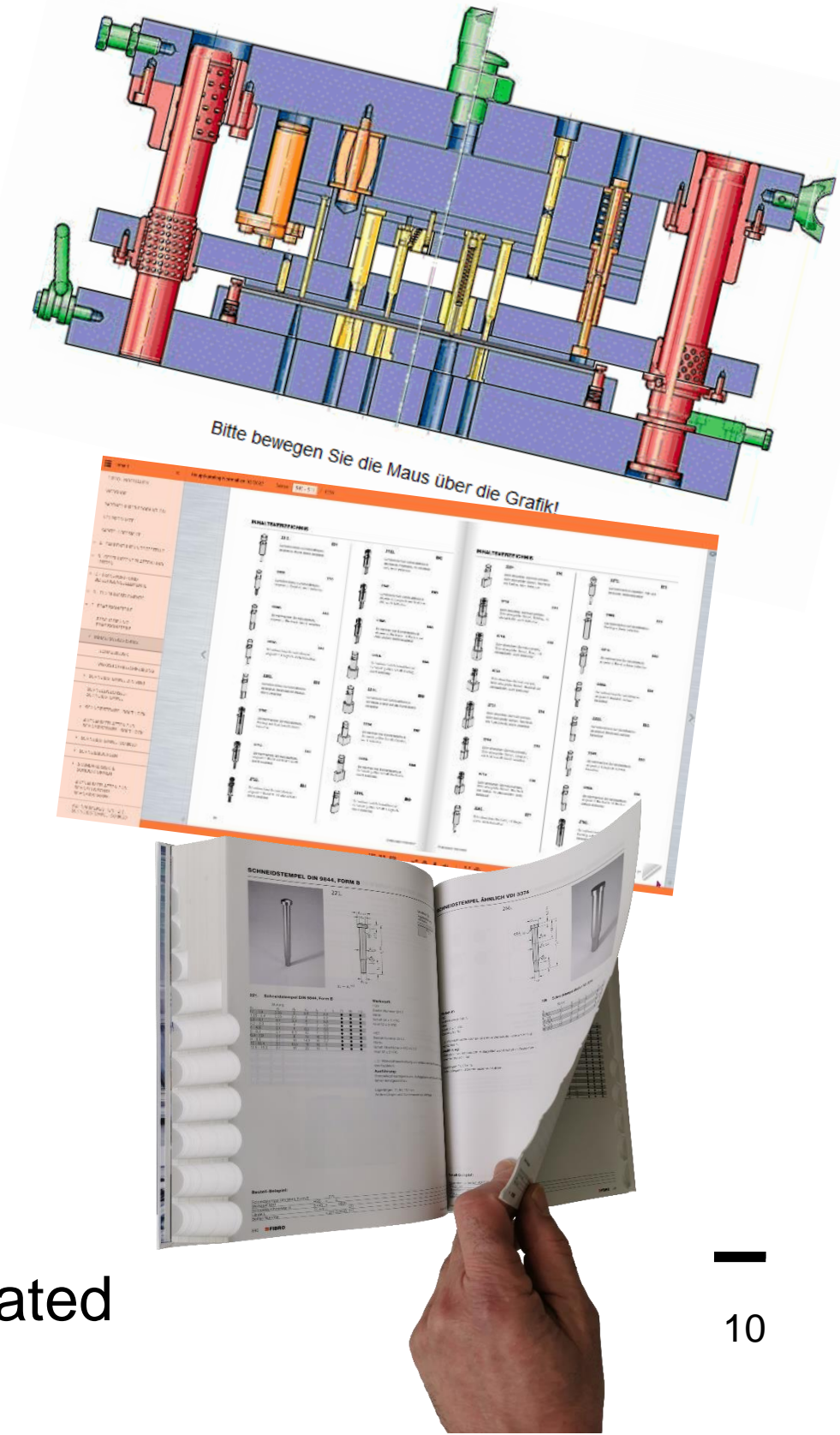
- Punches of different
  - head shapes
  - punch shapes
  - lengths
- Bushings
  - with/without collar
  - of different shapes
  - with conical/cylindrical clearance bore
- Retainers



# THE JUNGLE OF PRECISION PARTS

## WHY IPC

- Simplifying the selection of the required components, taking into account the specific parameters
  - Material to be punched and sheet thickness result in cutting clearance
  - Plausibility check – Selection of possible combinations only
- Time saving
  - No cumbersome browsing/searching in the catalog (print/online)
  - Download of CAD geometries in „one step“
  - Handover of the ordering list
- Reduction of ordering errors
  - Article numbers are plausible to the ERP system – only what works is generated



# THE JUNGLE OF PRECISION PARTS

## WHY IPC



### INCREASED PRODUCTIVITY

Customized configuration of punch and bushing with intuitive operation.



### IMPROVED QUALITY

Error prevention by excluding combinations that are not possible.



### OPTIMIZED USE OF RESOURCES

Simplified and fast design processes save time and money.

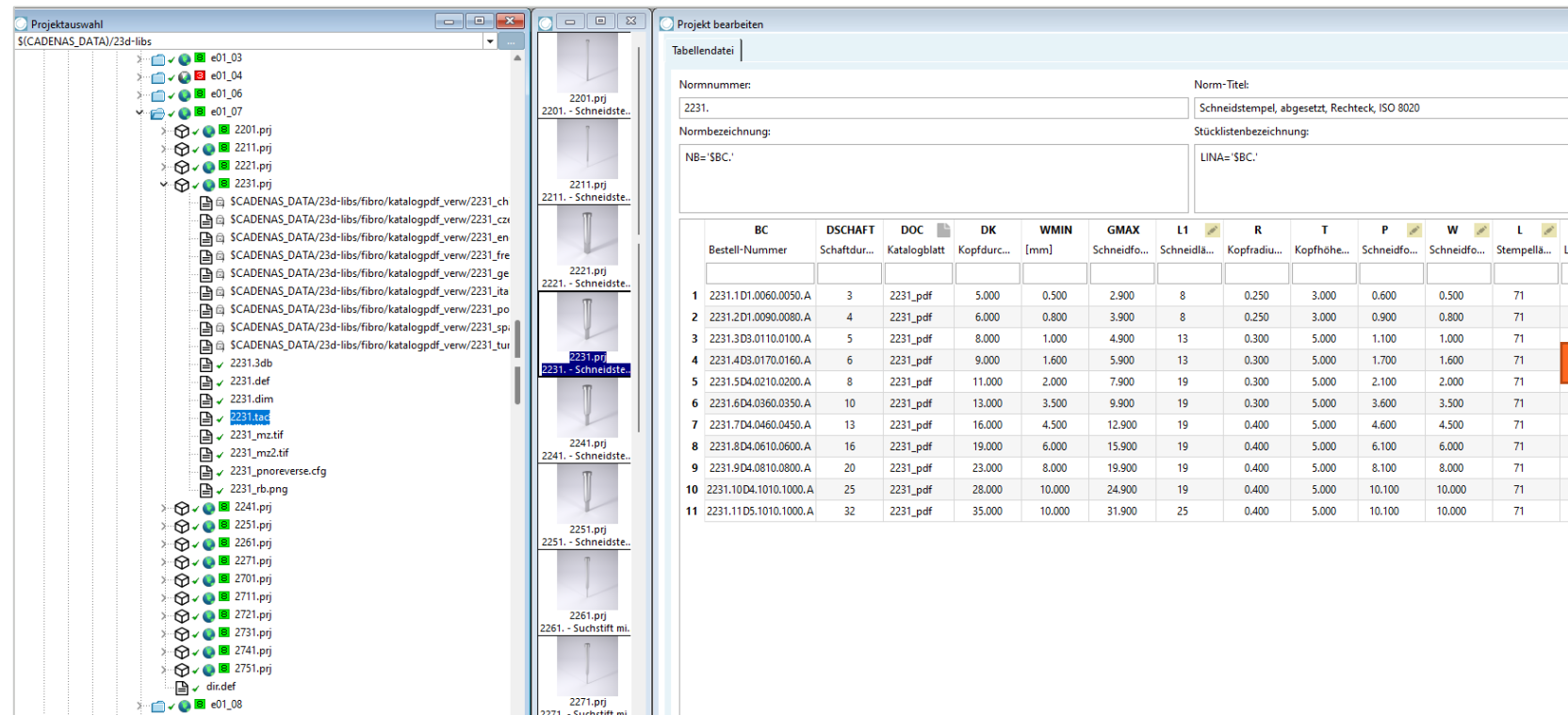
# THE JUNGLE OF PRECISION PARTS THE PATH TO IPC

- Workshop with CADENAS
  - Review of the relevant article groups
  - Creation of a roadmap
  - Requirements / specifications



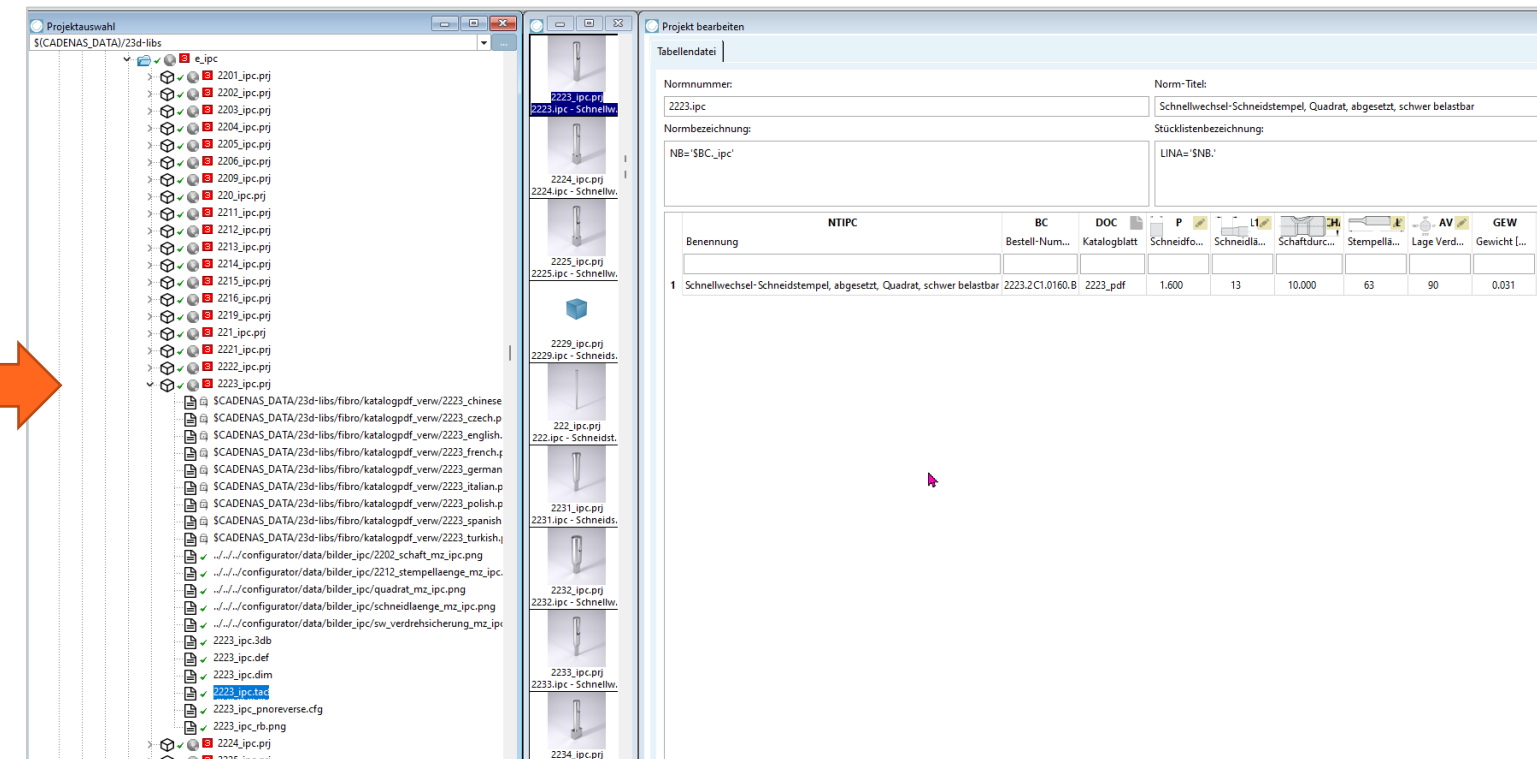
# THE JUNGLE OF PRECISION PARTS THE PATH TO IPC – DOING INHOUSE

## 1. Conversion of projects concerned in PartProject



BC	DSCHAFT	DOC	DK	WMIN	GMAX	L1	R	T	P	W	L	
Bestell-Nummer	Schaftdur...	Katalogblatt	Kopfdurc...	[mm]	Schneidf...	Schneidl...	Kopfradiu...	Kopfhöhe...	Schneidf...	Schneidf...	Stempella...	
1	2231.1D1.0060.0050.A	3	2231_pdf	5.000	0.500	2.900	8	0.250	3.000	0.600	0.500	71
2	2231.2D1.0090.0080.A	4	2231_pdf	6.000	0.800	3.900	8	0.250	3.000	0.900	0.800	71
3	2231.3D3.0110.0100.A	5	2231_pdf	8.000	1.000	4.900	13	0.300	5.000	1.100	1.000	71
4	2231.4D3.0170.0160.A	6	2231_pdf	9.000	1.600	5.900	13	0.300	5.000	1.700	1.600	71
5	2231.5D4.0210.0200.A	8	2231_pdf	11.000	2.000	7.900	19	0.300	5.000	2.100	2.000	71
6	2231.6D4.0360.0350.A	10	2231_pdf	13.000	3.500	9.900	19	0.300	5.000	3.600	3.500	71
7	2231.7D4.0460.0450.A	13	2231_pdf	16.000	4.500	12.900	19	0.400	5.000	4.600	4.500	71
8	2231.8D4.0610.0600.A	16	2231_pdf	19.000	6.000	15.900	19	0.400	5.000	6.100	6.000	71
9	2231.9D4.0810.0800.A	20	2231_pdf	23.000	8.000	19.900	19	0.400	5.000	8.100	8.000	71
10	2231.10D4.1010.1000.A	25	2231_pdf	28.000	10.000	24.900	19	0.400	5.000	10.100	10.000	71
11	2231.11D5.1010.1000.A	32	2231_pdf	35.000	10.000	31.900	25	0.400	5.000	10.100	10.000	71

Standard project

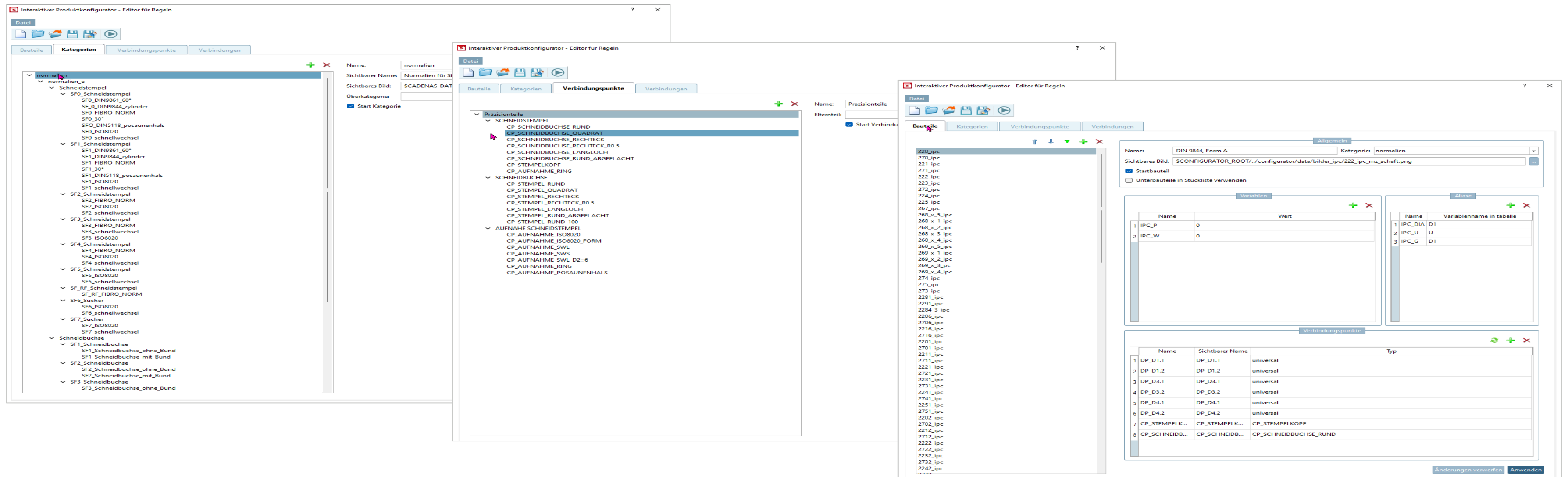



NTIPC	BC	DOC	P	W	L	GEW			
Benennung	Bestell-Num...	Katalogblatt	Schneidf...	Schneidl...	Schaftdur...	Stempella... Lage Verd... Gewicht [...]			
1	Schnellwechsel-Schneidtempel, abgesetzt, Quadrat, schwer belastbar	2232.2C1.0160.B	2223_pdf	1.600	13	10.000	63	90	0.031

IPC project

# THE JUNGLE OF PRECISION PARTS THE PATH TO IPC – DOING INHOUSE

## 2. Creation of rulebook



The screenshots illustrate the software interface for creating a rulebook. The first window shows a hierarchical tree of parts under 'normalien\_e', including categories like 'Schneidstempel' and 'Schneidbuchse'. The second window shows a similar tree for 'Präzisionsteile' with sub-categories like 'SCHNEIDSTEMPEL' and 'AUFNAHME SCHNEIDSTEMPEL'. The third window shows the configuration of a specific rule for 'DIN 9844, Form A', including a list of variables and connection points.

**Variables Table:**

Name	Wert
IPC_P	0
IPC_W	0

**Aliases Table:**

Name	Variablenname in tabelle
IPC_DIA	D1
IPC_U	U
IPC_G	D1

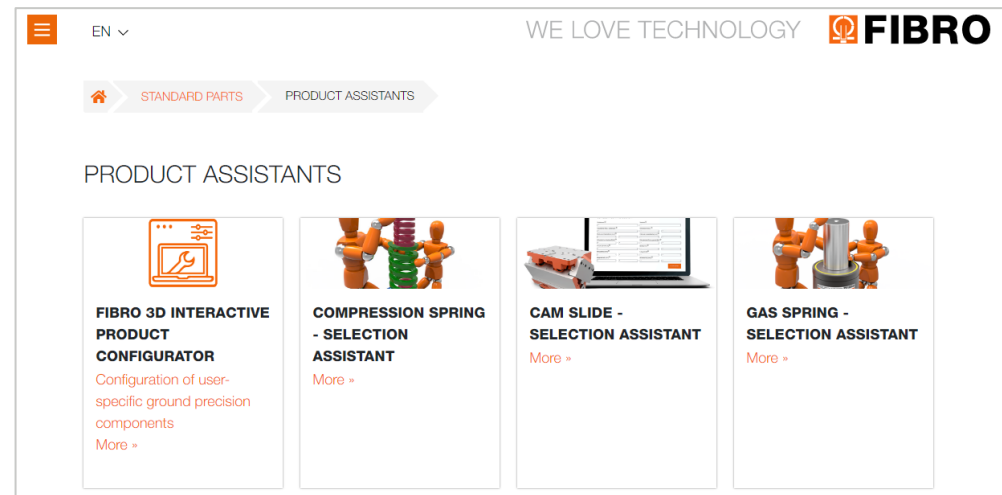
**Connection Points Table:**

Name	Sichtbarer Name	Typ
DP_D1.1	DP_D1.1	universal
DP_D1.2	DP_D1.2	universal
DP_D3.1	DP_D3.1	universal
DP_D3.2	DP_D3.2	universal
DP_D4.1	DP_D4.1	universal
DP_D4.2	DP_D4.2	universal
CP_STEMPELK...	CP_STEMPELK...	CP_STEMPELKOPF
CP_SCHNEIDB...	CP_SCHNEIDB...	CP_SCHNEIDBUCHSE_RUND

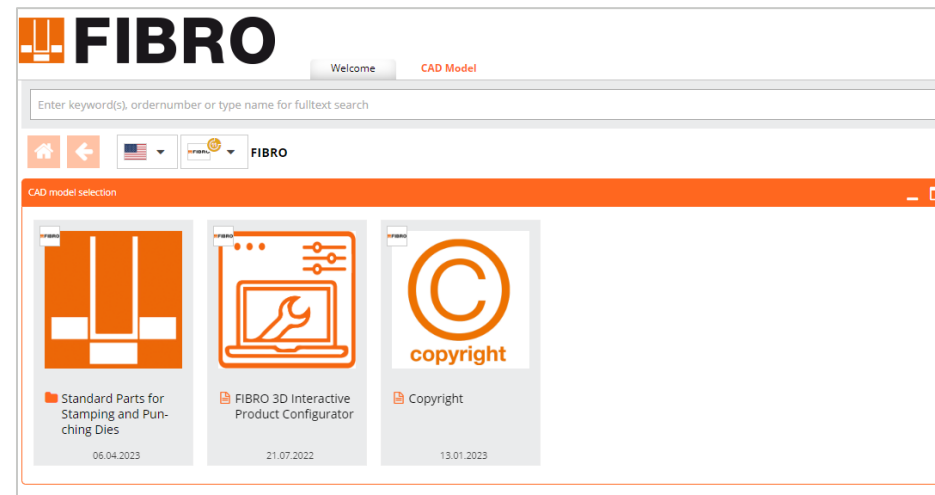


# THE JUNGLE OF PRECISION PARTS HOW THE IPC WORKS

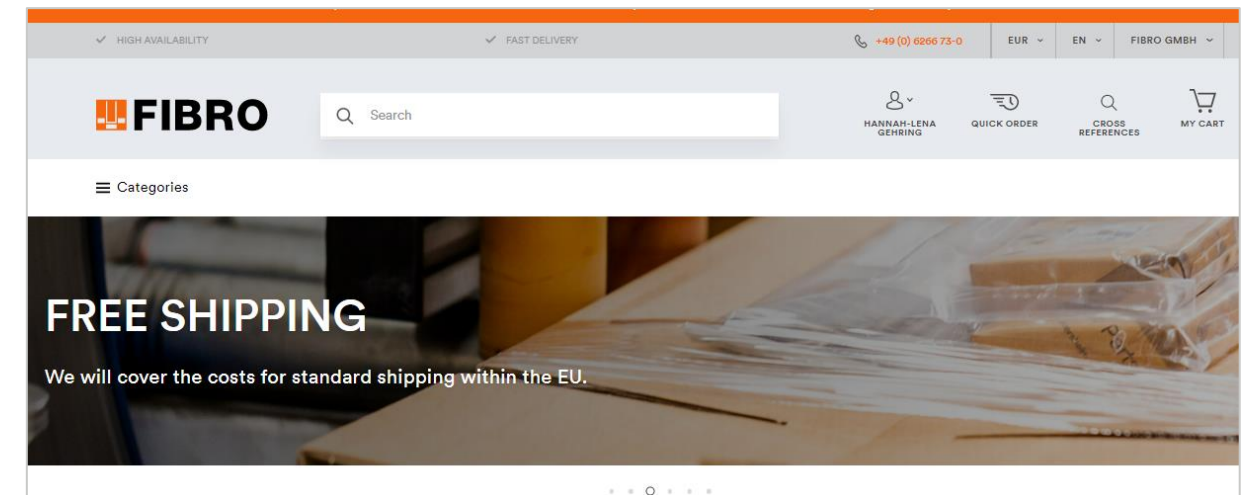
- Integrated in



FIBRO Homepage



FIBRO PartCommunity



FIBRO Webshop



# THE JUNGLE OF PRECISION PARTS HOW THE IPC WORKS





WE LOVE TECHNOLOGY

FIBRO GMBH | August-Läpple-Weg | 74855 Hassmersheim | [fibro.de](http://fibro.de)