

Promoting know-how in the field of software applications and component selection in the technical training by means of CADENAS software solutions

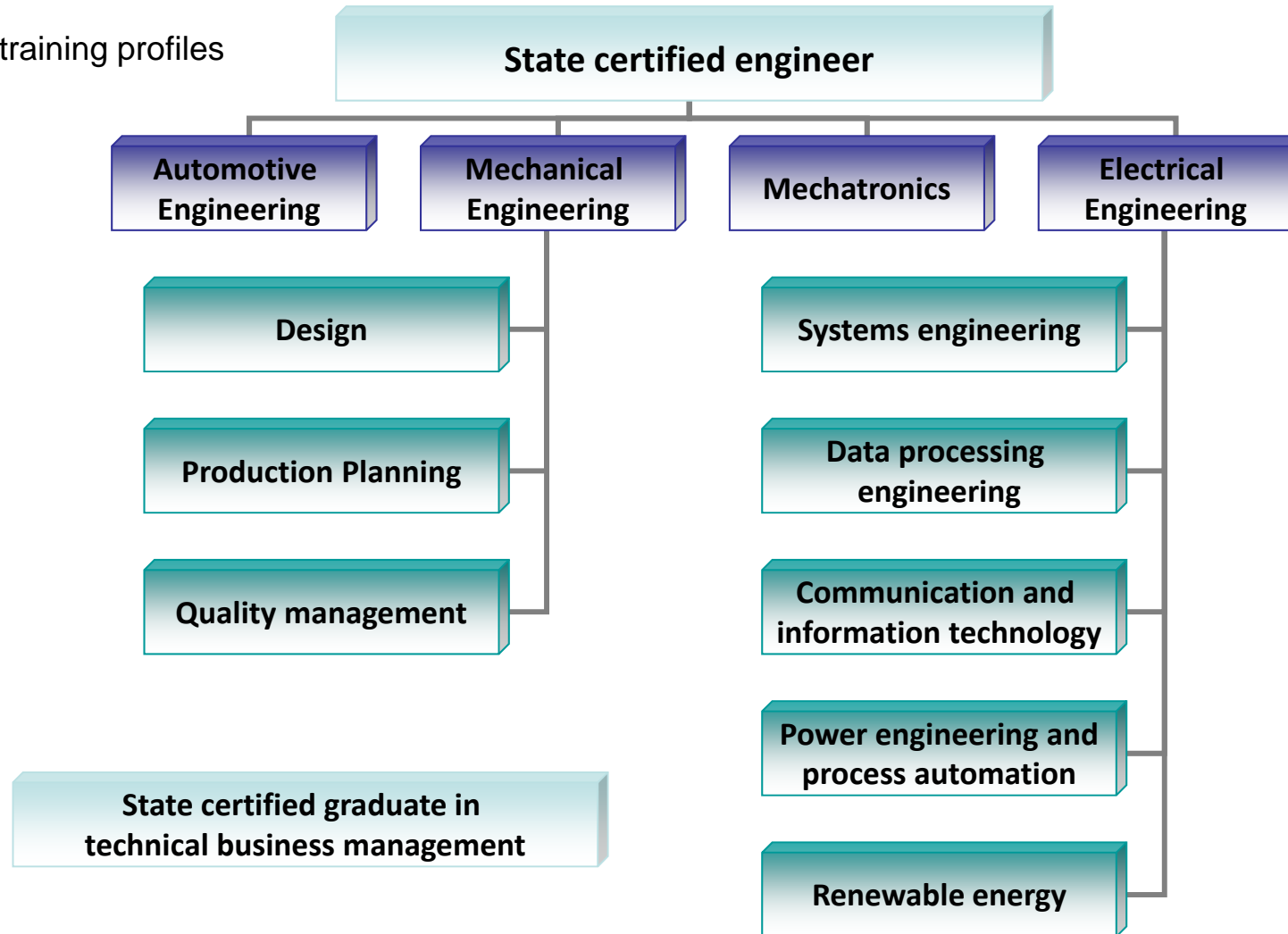


- Technical College of Engineering Muehlhausen
- Training of State certified engineers
- Why using PARTsolutions
- Projects, making use of PARTsolutions
- Prospects

- was founded as training centre for teachers
 - at the end of the 60-ies training of engineering teachers
 - from 1976 to 1994 training of engineers in the field of electrical engineering
 - 1990 change into Technical college of engineering
 - 1997 removal to Muehlhausen



Overview of training profiles



Corporate Identity

The technical college acts as a partner of economy!

Training state-of-the art –
art according latest industrial standards



Specialist conferences and symposia for interested firms

2004 „Technical college of engineering – Partner of economy“

2010 „Renewable energy – Discover the possibilities“

2013 „Specialist conference – Intelligent data management“

Cooperation with associations, organizations and firms for completion/enlargement of training



Company fairs for getting in touch with potential engineers



- Training of skilled engineers for management on medium level
- Possible jobs, e.g. in mechanical engineering
 - Design and Development
 - Engineering documentation/documentary report
 - Production planning and production preparation
 - Quality management
 - ...

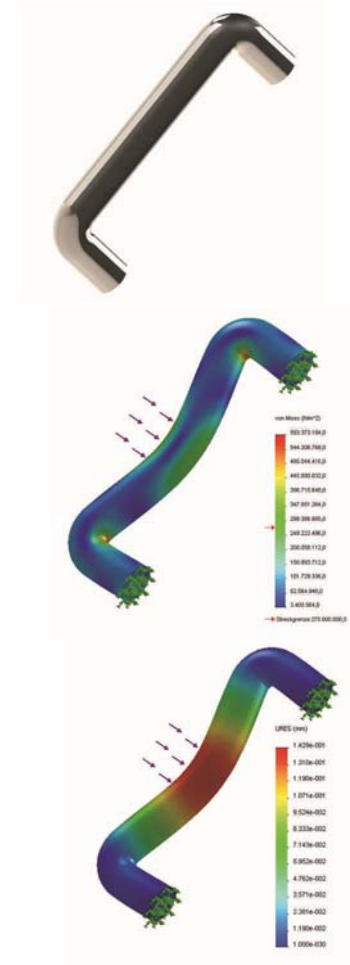


Subject: Design/CAD

- systematics of design VDI 2222 ff
- design of devices
- design of tools
- CAD-training

CAD-equipment

- 2001 Catia V5
- 2003 CADENAS PARTsolutions
- 2009 Solidworks
- 2013 SiemensNX
- 2013 PDM-System „Speedy“





Actual situation 2001

Design of devices and tools allowed, needs the use of standard parts and bought-in parts

Recherche: there are three-dimensional data of standard and bought-in parts

Manufactures offers data in different CAD formattings for downloading, but:

A large variety of converting methods and different software are necessary for integration of data
Standard and bought-in parts can be edited and changed partly only

Why using PARTsolution



Recherché:

- internet
- catalogues
- ...



special conversion software

macros
*.vbascrpt, ...

neutral data formats
*.step , *.sat



Standard parts and bought-in parts can be downloaded,
But cannot edited and adapted!

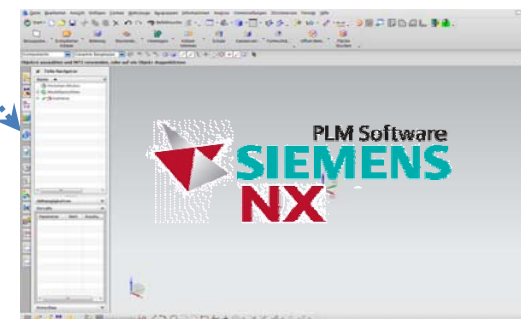
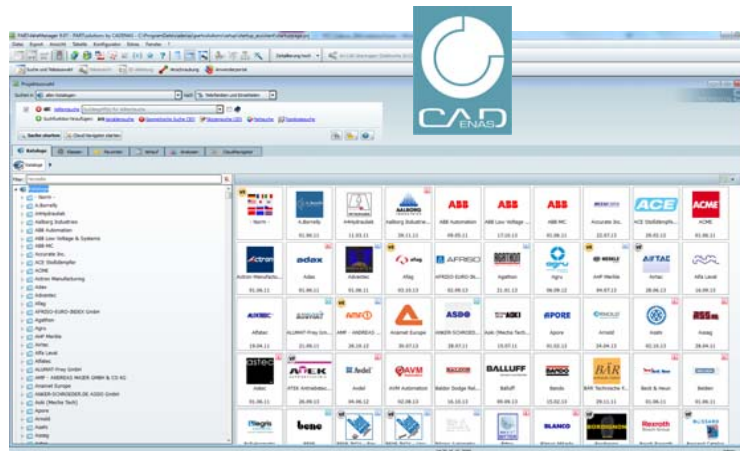
Standard parts and bought-in parts have to design again!

Question: Is there a solution?

Introduction of PARTsolutions changes the situation!



Actual situation 2013



geplant

Standard parts and bought-in parts can be integrated in the different CAD-systems and can be edited and adapted!

Look back - 14. Industry-Forum 2013

Presentation „Innovative knowledge database with examples of application for engineers and buyers“

Dipl.-Ing (FH) Jürgen Heimbach , Managing Director CADENAS Ltd.

Objectives: Creation of an Engineering Encyclopedia as an interactive encyclopedia of design

Support by examples, applications and experience

Motivation for producers and engineers

Engineering Challenge eCHALLENGES



1x Samsung Galaxy Note 10.1
sponsored by **GANTER**

EINSATZ VON NORMELEMENTEN AUS DEM HAUSE GANTER IN KONSTRUKTIVEN LÖSUNGEN!

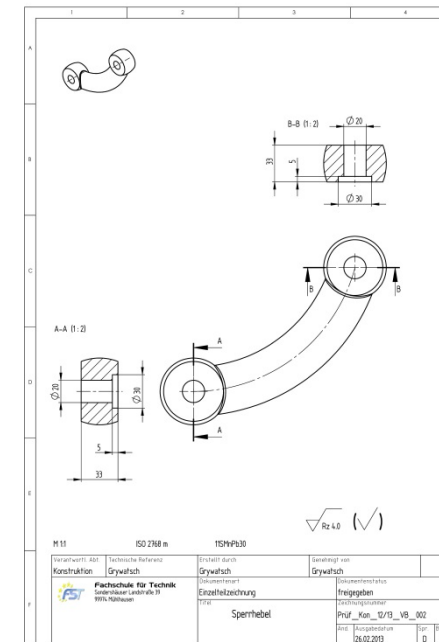
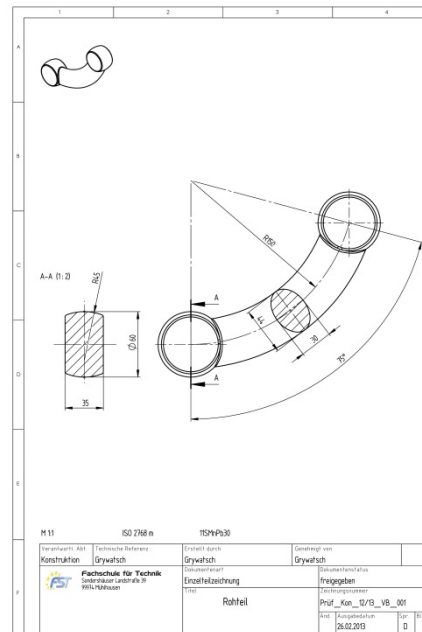
Der Teilnehmer mit dem interessantesten Anwendungsbeispiel für Ganter gewinnt ein Galaxy Note 10.1

Veranstalter: Otto Ganter GmbH & Co. KG
Teilnehmer: B2B PARTcommunity User aus deutschsprachigem Raum
Aufgabe: Schicken Sie uns Ihre Anwendungen mit Ganter-Produkten
Laufzeit: bis 16.11.2012
Prämie: 1x Samsung Galaxy Note 10.1

[Mehr erfahren »](#)

Project task

Drawing up/design of a clamping devices for metal cutting/
Machining, using standard and bought-in parts of the firm Ganter



Objectives:

- work out of a solution for design
- use of standard and bought-in parts
- dimension of parts
- design with CAD (integration of standard and bought-in parts)
- drawing up of engineering documents
- design and manufacture of the clamping device

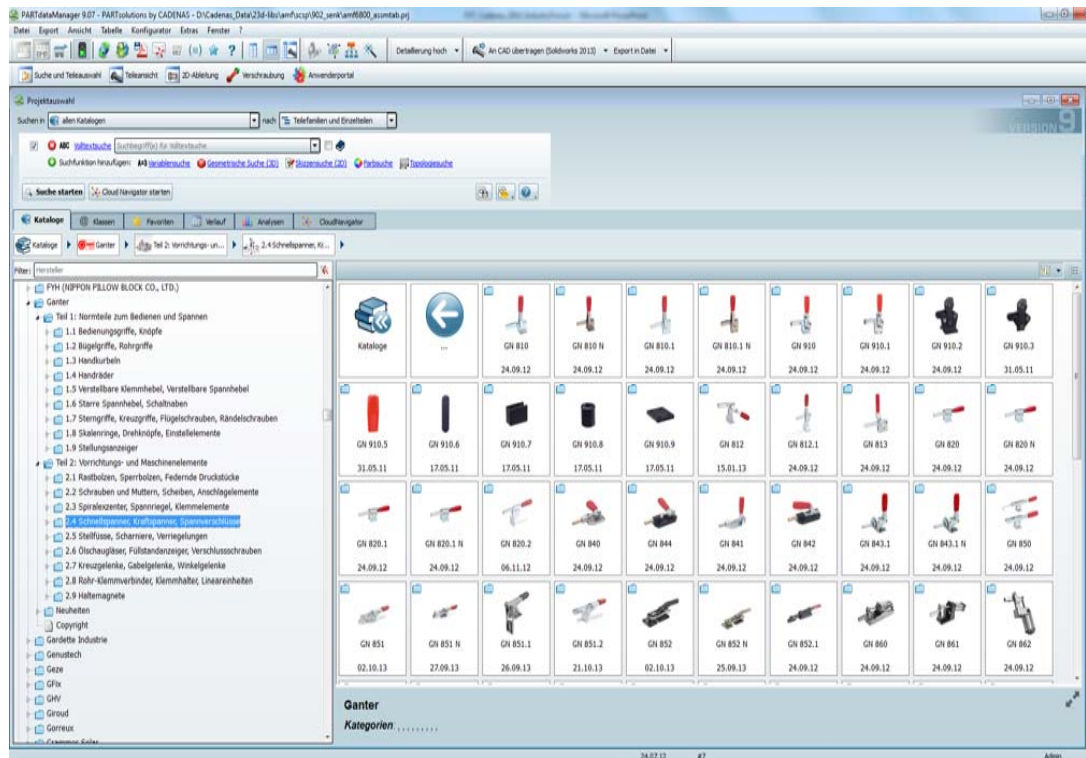


**The firm Ganter provides
the chosen components**



PARTsolutions / PARTcommunity

Recherché/examples of application/
database for information





Anwendungsfälle (Online)


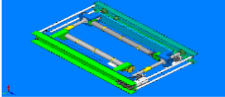
4 Post(s)

Posten Sie Ihren individuellen ENGINEERING ANWENDUNGSFALL. Laden Sie dazu reale Bilder oder Screenshots aus CAD Systemen mit einer kurzen Beschreibung hoch.

Die besten Anwendungsfälle werden ständig mit Sonderaktionen und interessanten Preisen prämiert. Eine Liste von aktuellen ENGINEERING CHALLENGES finden Sie hier.

DIE AKTUELLESTEN ANWENDUNGSFÄLLE

Anwendungsfall hinzufügen >>

Als Matthias Grywatsch posten

Firmeninformationen und Slogan anhängen bearbeiten / hinzufügen

ANWENDUNGSFÄLLE IM DETAIL

Bernd Weiskopf

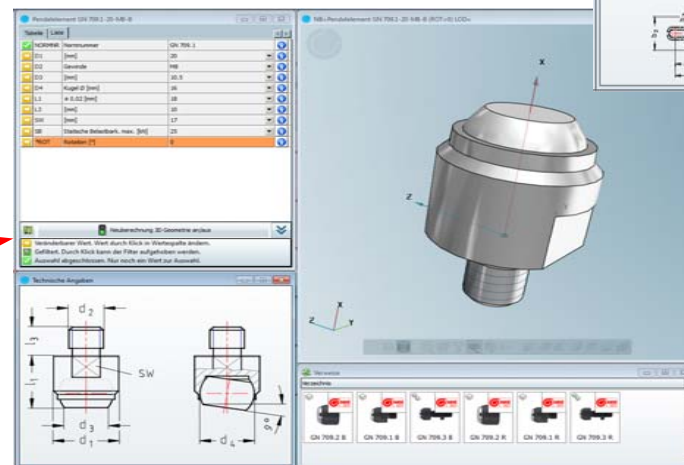
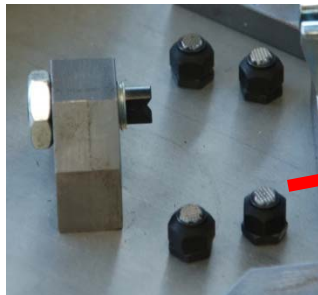
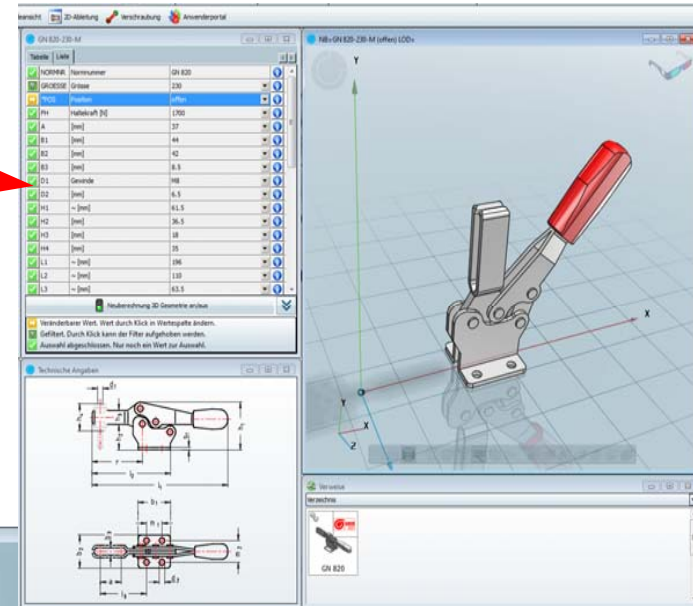
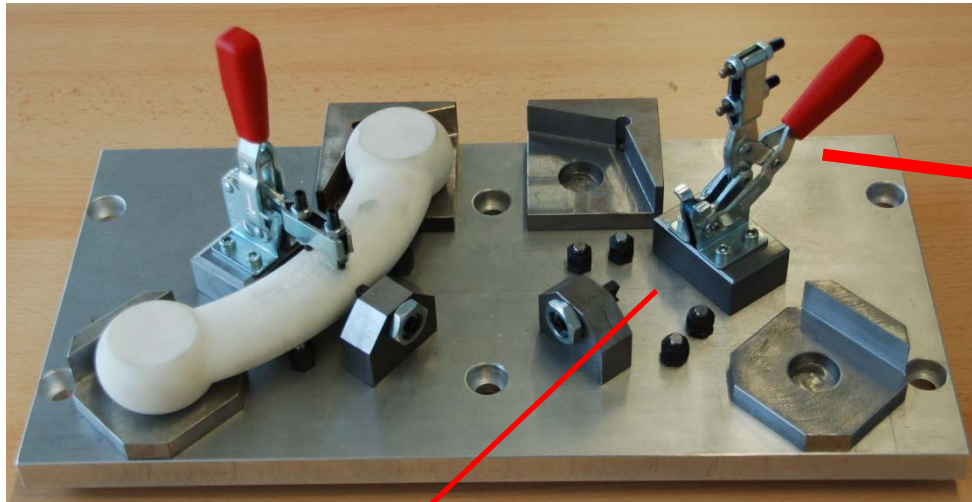
Made by CAD SolidWorks
Type Of Machine Mold and Die > Injection Molding
Functionality Focused Testing/Verifying
Konturlehre – Sichtspaltprüfung

Zur schnellen und sicheren Überprüfung von filigranen Spritzgussteilen, verwendet man beim Einrichten und während der Fertigung spezielle Konturlehren.

Damit kann der Fertigungsanlauf zügig freigegeben und der

[Registrieren](#) Admin

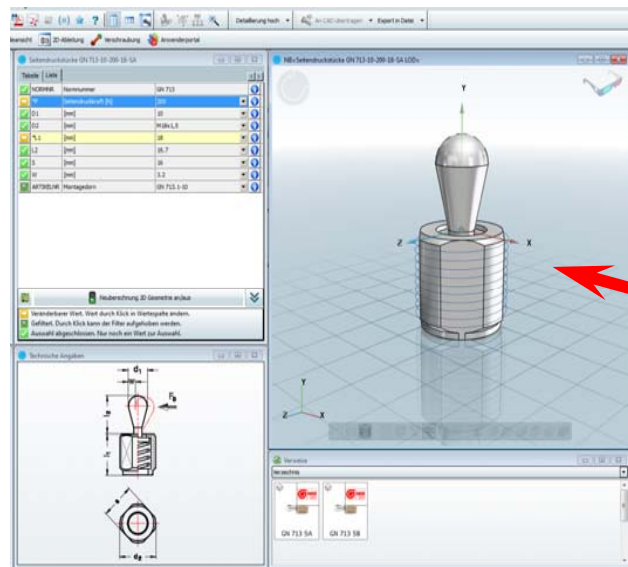
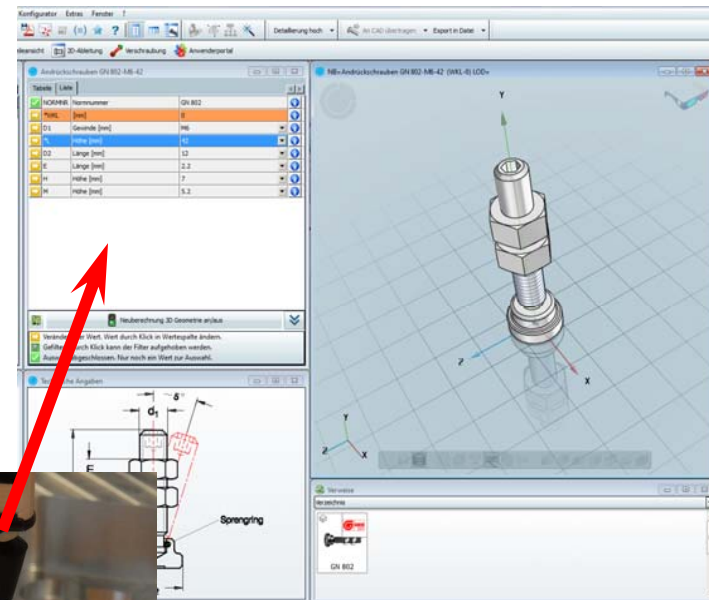
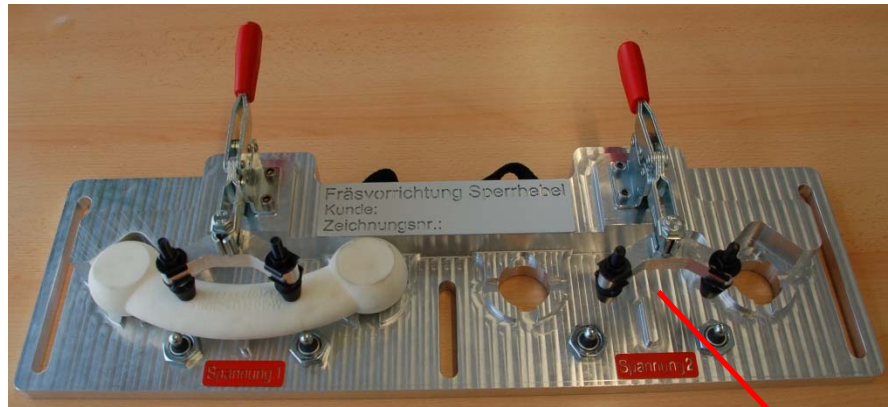
solutions



used components:

- GN820-230-M
- GN802-M6-42
- GN709.3-13-M8-R

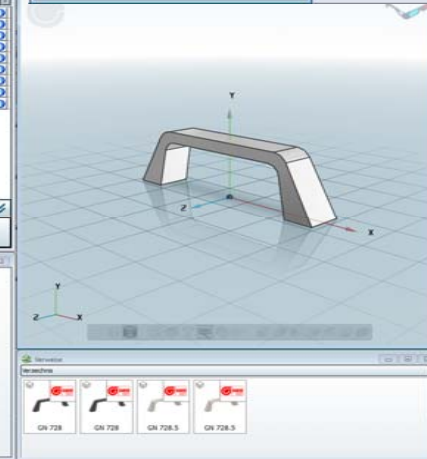
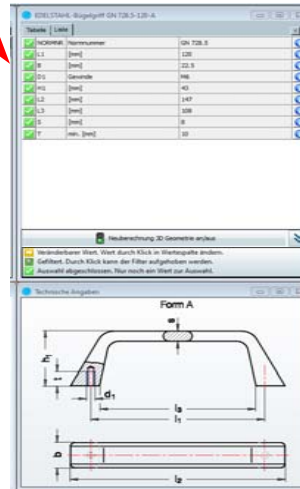
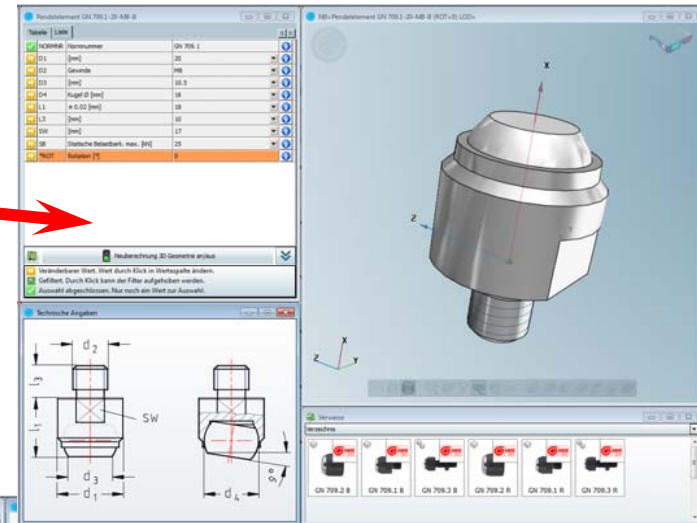
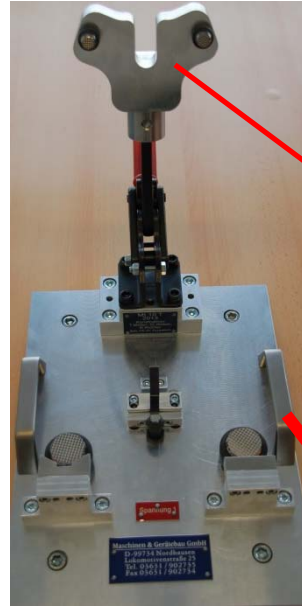
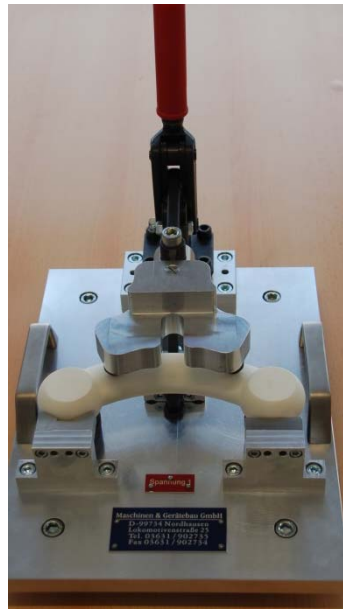
solutions



used components:

- GN810-125-A
- GN802-M6-42
- GN713-10-200-18-SA

solutions



used components

- GN910-850-E
- GN709.1-50-M20-R
- GN709.1-20M8-R
- GN709.3-17-M12-R
- GN709.3-17-M12-B
- GN728.5-120-A



Solutions are posted as examples of application

The screenshot displays the PARTsolutions software interface. At the top, there is a search bar with 'Aktuelle Auswahl (Ganter)' and 'Teilefamilien und Einzelteilen'. Below it, search filters include 'ABC Volltextsuche GN910' and various search functions like 'Variablensuche', 'Geometrische Suche (3D)', 'Skizzenuche (2D)', and 'Farbsuche'. A red arrow points to the 'Suche starten' button. The main area shows search results for 'GN 910' with a table of parts and their descriptions. A second red arrow points to the 'Anwendungsfall hinzufügen' button in the right-hand pane. This pane shows 'DIE AKTUELLESTEN ANWENDUNGSFÄLLE' and 'ANWENDUNGSFÄLLE IM DETAIL' for a specific case by Matthias Grywatsch, featuring a photo of a mechanical part and a detailed description of its application in a milling fixture.



Advantages with PARTsolutions

- simplifys recherche
- comparison of different standard and bought-in parts
- examples of application support the way of finding solutions
- desing with CAD/standard and bought-in parts
- saving of time
- Availability with the help of PARTcommunity, Apps, etc.
- ...

eCHALLENGES / PARTcommunity

- factor of motivation for training
- platform of contact between manufacturer und user
- Engineering Encyclopedia (database of information)



USE CASE POSTEN

Wert: **750 EUR**

► 1x DVD Version PARTsolutions Norm- und Kaufteillebibliothek gewinnen!

Anwendungsfall des Monats

Wir prämiieren den besten Anwendungsfall! Zeigen Sie uns einfach Ihre interessanteste Konstruktion mit [Komponenten aus der CAD Bibliothek](#), posten Sie diese unter "Anwendungsfälle - Wissen" und gewinnen Sie jeden Monat tolle Preise!

Gewinner der zweiten Runde (13.06.2013 - 02.07.2013)

 **Jorge Franco** [Zum Anwendungsfall »](#)

[Was ist Partsolutions?](#)

Allgemeine Teilnahmebedingungen unter: <http://www.cadenas.de/challenges/teilnahmebedingungen>

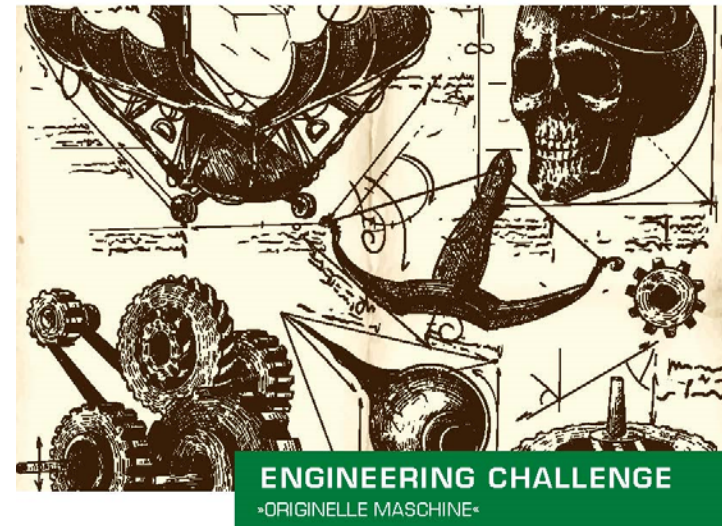
more intensive use of possibilities provided by eCHALLENGES / PARTcommunity, future tasks directed on eCHALLENGES

Engineering Challenge

Competition of design for students

Objectives:

- support/stimulation of creativity
- use of existing possibilities
- platform of contact



partner:

CADENAS GmbH



norelem Normelemente KG



Vogel Business Media GmbH & Co. KG



Bundesarbeitskreis Fachschule für Technik





PARTsolutions/PARTcommunity has influenced training a positive way and is an important guarantor for high quality training in design!

Should this cooperation be further developed?

If you are interested and want a stake?

How can you use the positive aspects of an engineering challenge for everyone involved and expand?



Thank you for your attention!

OStR Matthias Grywatsch

Fachschule für Technik

an den Beruflichen Schulen des UH-Kreises

Sondershäuser Landstraße 39

99974 Mühlhausen

www.fachschule-fuer-technik-mhl.de

www.fachschule.tk