

2018



Intelligent Finding

instead of

PART SAFARI

Track hidden
components with



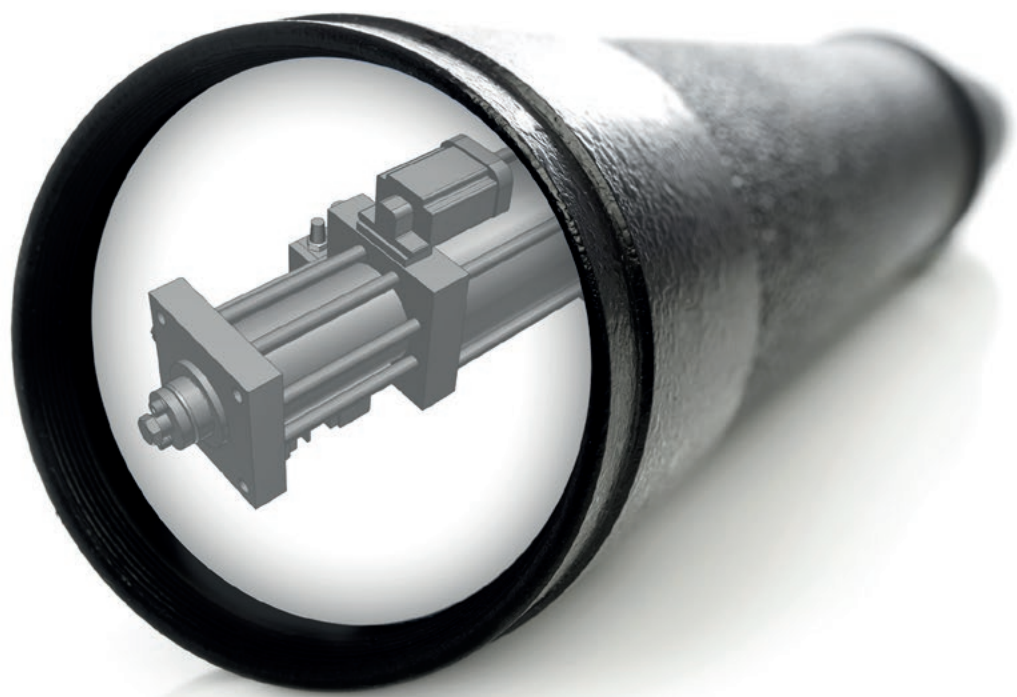
PARTsolutions



Intelligent Finding instead of Part Safari – Track hidden components

Endless expanses, pure wilderness, fascinating animals: A safari is a unique experience. Equipped with binoculars and camera, you set out in search of those shy animals. Unfortunately, there is no guarantee that you will actually find any of them: In the worst case, you could travel around for a week without spotting a whole lot of animals.

What might be acceptable on a safari is not so desirable in the daily work of an engineer. Rather than wandering aimlessly around in a wilderness of parts, it would be good to know where those hidden objects can be found. Because: Finding components that already exist and using them again means a whole lot of time saved for you as well as downstream departments. As an engineer what's better than freeing up time to spend on creating new innovative products?



Intelligent Finding with PARTsolutions – Your guide through the parts wilderness

So that it will no longer be a matter of luck for you to locate the correct component in the future, CADENAS opens entirely new possibilities for intelligently finding product information as well as CAD data of standard, purchased and company parts. The search functions have been optimised specifically for the needs of engineers and purchasers and make it possible to find the required components intelligently through intuitive operation.

During the next 12 months, we will show you how the search methods of the Strategic Parts Management can give you beastly support for your daily work:



Inverse Search



Topology Search



LIVEsearch



Partial Search



Search by Sketching



Filter Assistants



Geometric Search



PURCHINEERING



Color Search



Mounting Part Search



Unmachined Part Search



Combination of Search Methods



Anybody can find the suitable counterpart
with the **Inverse Search**

JANUARY

MO	TUE	WED	THU	FR	SA	SUN	CW
New Year's Day 1	CADENAS Company Holidays 2	CADENAS Company Holidays 3	CADENAS Company Holidays 4	CADENAS Company Holidays 5	Epiphany* 6	7	01
8	9	10	11	12	13	14	02
15	16	17	18	19	20	21	03
22	23	24	25	26	27	28	04
29	30	31					05

* not nationwide



Anybody can find the suitable counterpart with the Inverse Search



Did you know?

The hermit crab constantly changes its snail shell as it grows. To protect its abdomen, the small critter is always in search of the ideal counterpart. Hermit crabs don't fit in just any old snail shell. Depending on the type or „build“, different kinds of housings may be preferred. Decisive is the size, general shape and the spiral of the snail shell. Only the home that fits perfectly is then accepted.

Inverse Search

Thanks to the Inverse Search by CADENAS you can find the „lid“ to your „pot“. Through the Geometric Similarity Search you can take a component e.g. screw or plug and find the exact opposite counterpart to it.

This search process works with all components and of course goes both ways.

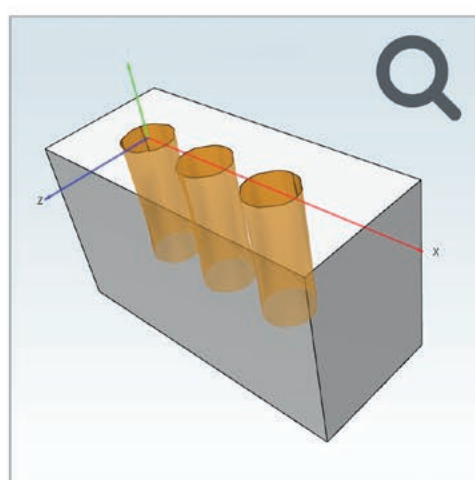
Your benefits

- Find the right counterpart regardless of the exterior form
- Optimally suited for searching by (accessory) components
- Optimised for freely definable bore tolerance for diameter and distances
- No CAD required at the workstation

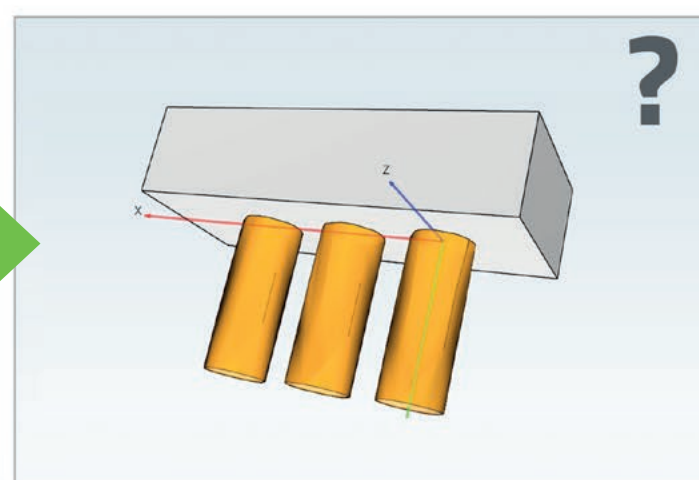


In practice

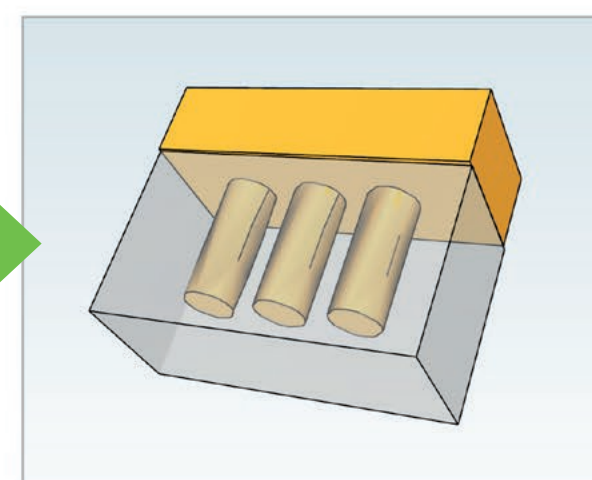
Although the components differ on the outside, the Inverse Search finds the geometric and size-dependent suitable negative segment in the existing CAD database with thousands of components.



Selected features and inner contour are the basis for search



Features are looked for where the outer contour matches the selected pattern



As an option, tolerances are freely definable



www.cadenas.de/en/products/partsolutions/finding-information/intelligent-finding/inverse-search-3d



With the **Topology Search**, even the hippo „Kim K.“ finds what’s right to settle down and relax on its rear end

FEBRUARY

MO	TUE	WED	THU	FR	SA	SUN	CW
			1	2	3	4	05
5	6	7	8	9	10	11	06
Carnival Monday 12	Shrove Tuesday 13	Valentine's Day Ash Wednesday 14	15	16	17	18	07
19	20	21	22	23	24	25	08
26	27	28					09



With the topology search, even the hippo „Kim K.“ finds what’s right to settle down and relax on its rear end



Did you know?

The hippo is the third largest land mammal after the elephant and the rhino. A hippo can weigh as much as 4.5 tons and yet is almost entirely vegan. As grazers, they take in about 40 kg per day. Even with the abdomen being a downright bulwark, that part of the body is not a direct weapon. The large tusks are for that purpose. The hippo actually needs little time to rest. If the thick-skinned animals get tired, they simply sink to the bottom of the water and rest there up to a quarter of an hour.

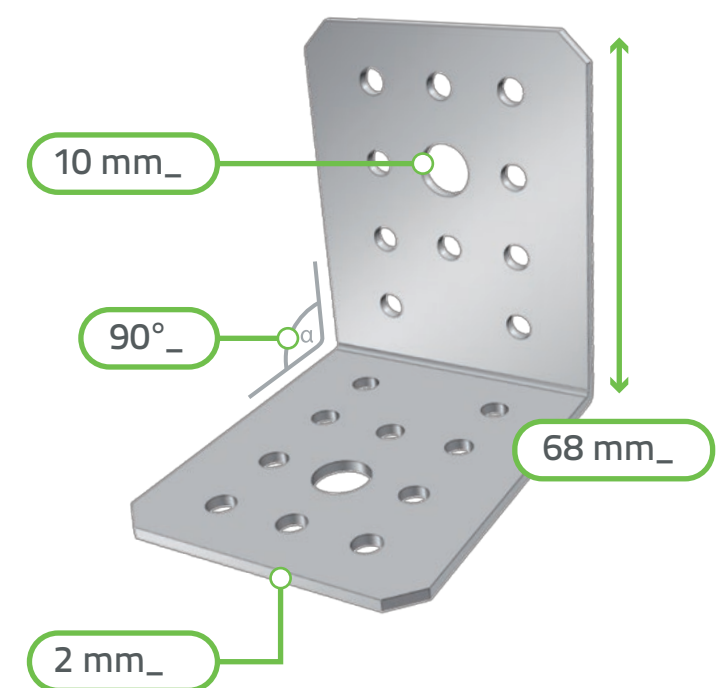
Topology Search

CADENAS' Topology Search allows you to browse the whole database for the properties and dimensions of components which match the component you need.

Simply enter attributes such as length, width and diameter to receive class-encompassing search results that correspond to your requirements.

Your benefits

- Filtering components according to volume, surface, basic shape, dimensions, drillings, diameter, angle, etc.
- Features are automatically extracted from the CAD model, manual classification is not necessary
- No limits on a classification feature, as searching on all topologies is possible



In practice

With the help of the CADENAS Topology Search, suitable components are suggested based on the technical features entered.

All you do is enter the various properties in a mask.

The combination of characteristics is also possible.

Vorschau	Projekt	Zusammenfassung	Größe	Bleche	Loch
1	023013008	MATNO = ... FRP-Nummer = 023013008 Status = Freigegeben Werkstoff = 8.8	Größte Ausdehnung: 116 mm Mittlere Ausdehnung: 75 mm	Materialstärke: 32 mm	3 X Bohrungstyp: Keine/Egal, Durchmesser: 11 mm

Fügen Sie eine oder mehrere Suchbedingungen hinzu:

☐ Größe
 ☐ Fläche/Volumen
 ☐ Symmetrie
 ☐ Abstände
 ☐ Winkel
 ☐ Cylinders

☐ Kegel
 ☐ Loch
 ☐ Verlängerter Zylinder
 ☐ Kreismuster
 ☐ Lineares Muster

☐ Langlochmuster
 ☐ Bleche

Größe	X: --- mm	Y: --- mm	Z: --- mm	
	Größte Ausdehnung: 116 mm	Mittlere Ausdehnung: 75 mm	Kleinste Ausdehnung: --- mm	
Bleche	Materialstärke: 32 mm			
Loch	Tiefe: --- mm	Anzahl: >0	Bohrungstyp: Keine/Egal	Durchmesser: 11 mm

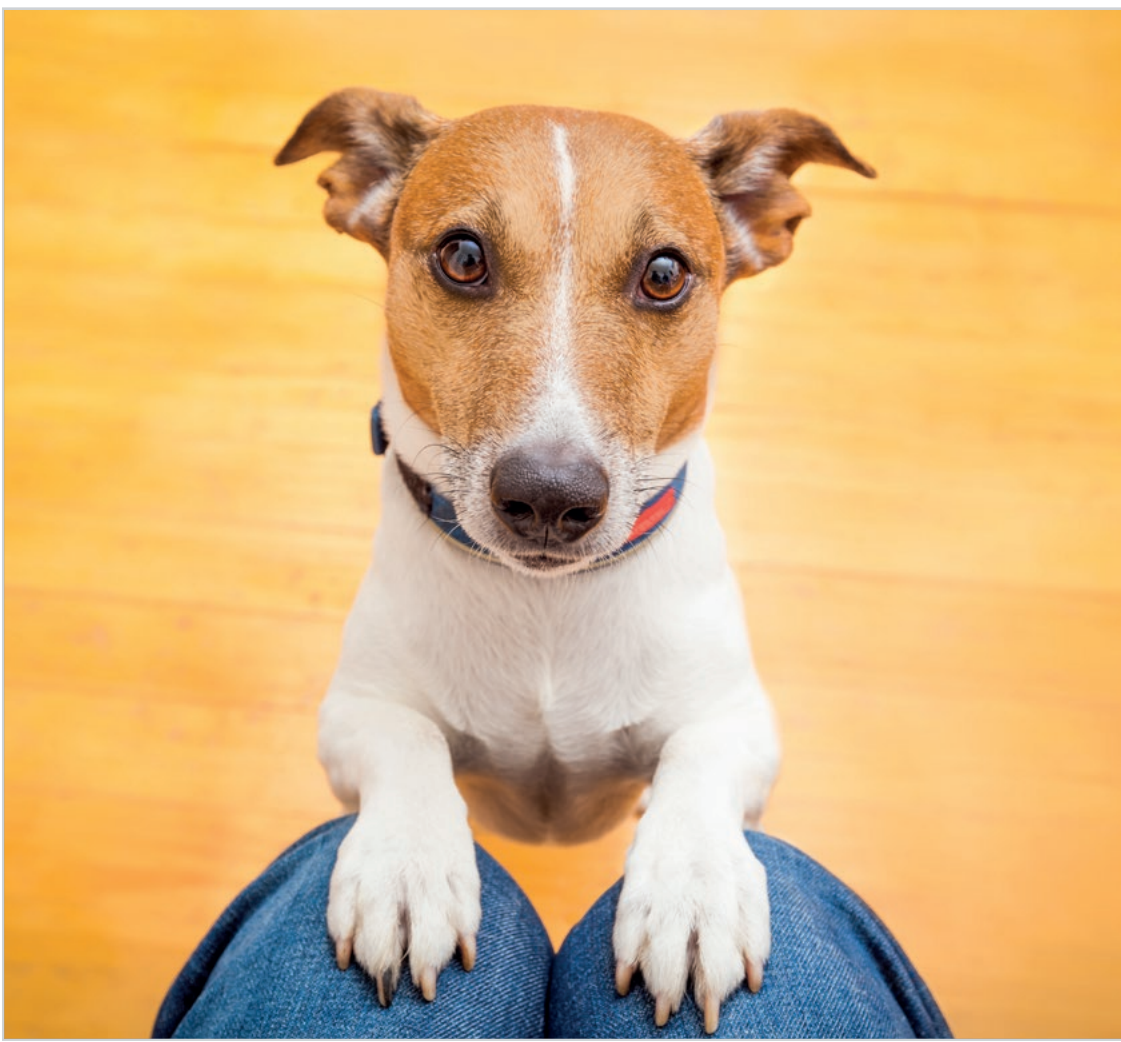


www.cadenas.de/en/products/partsolutions/finding-information/intelligent-finding/topology-search

LIVesearch can read every
desire from your eyes

MARCH

MO	TUE	WED	THU	FR	SA	SUN	CW
			1	2	3	4	09
5	6	7	8	9	10	11	10
12	13	14	15	16	17	18	11
19	Spring Begin 20	21	22	23	24	Begin Daylight Saving Time 25	12
26	27	28	29	Good Friday 30	Holy Saturday 31		13



LIVSearch can read every desire from your eyes



Did you know?

Many animals communicate with a glance of the eyes, however usually only among their own kind. Dogs are an exception here: They communicate with us also by looking at us in the eyes. They can move their master to feed them simply by giving them a „begging look“. Reason: A doggy's look triggers a strong neuronal process in us similar to what our own offspring can do. It's different with wolves: They avoid eye contact with humans, even if they were raised by them. The „doggy look“ is due to domestication.

LIVSearch

The LIVSearch is a Geometric Similarity Search that runs automatically in the background during the modelling process regardless of the CAD system in use. This allows for the engineer to receive information and tips during the construction process about already existing parts that are similar to the one that they are newly creating.

Your benefits

- Reduction in the demand for newly created parts resulting in time and money savings
- Reduction in the necessity to change components in the later product development stages through the early optimised engineering process, thus offering lower cost and effort
- No system change required when using the Geometric Similarity Search
- Promotes parts re-usage
- Seamless integration in the existing CAD system

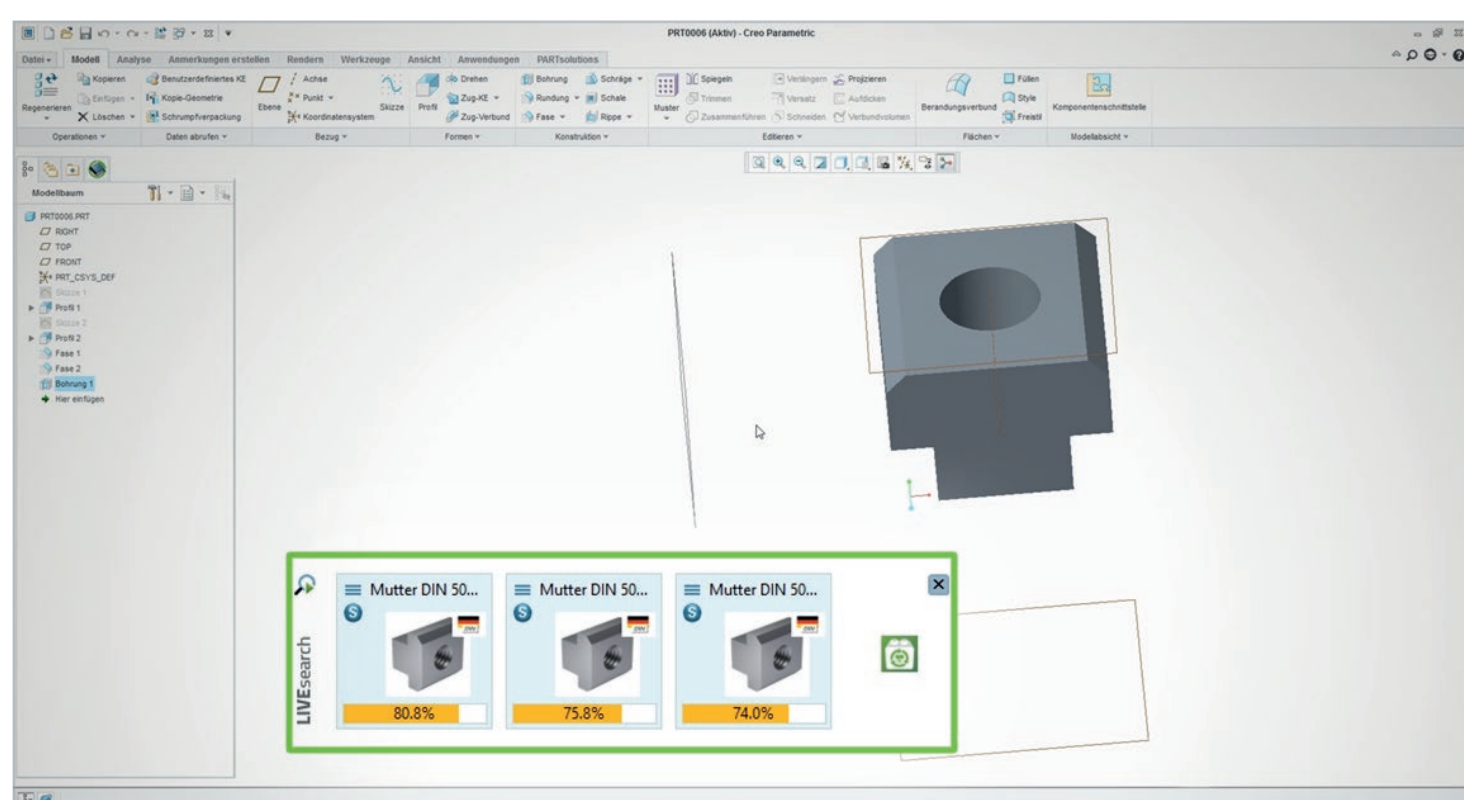


In practice

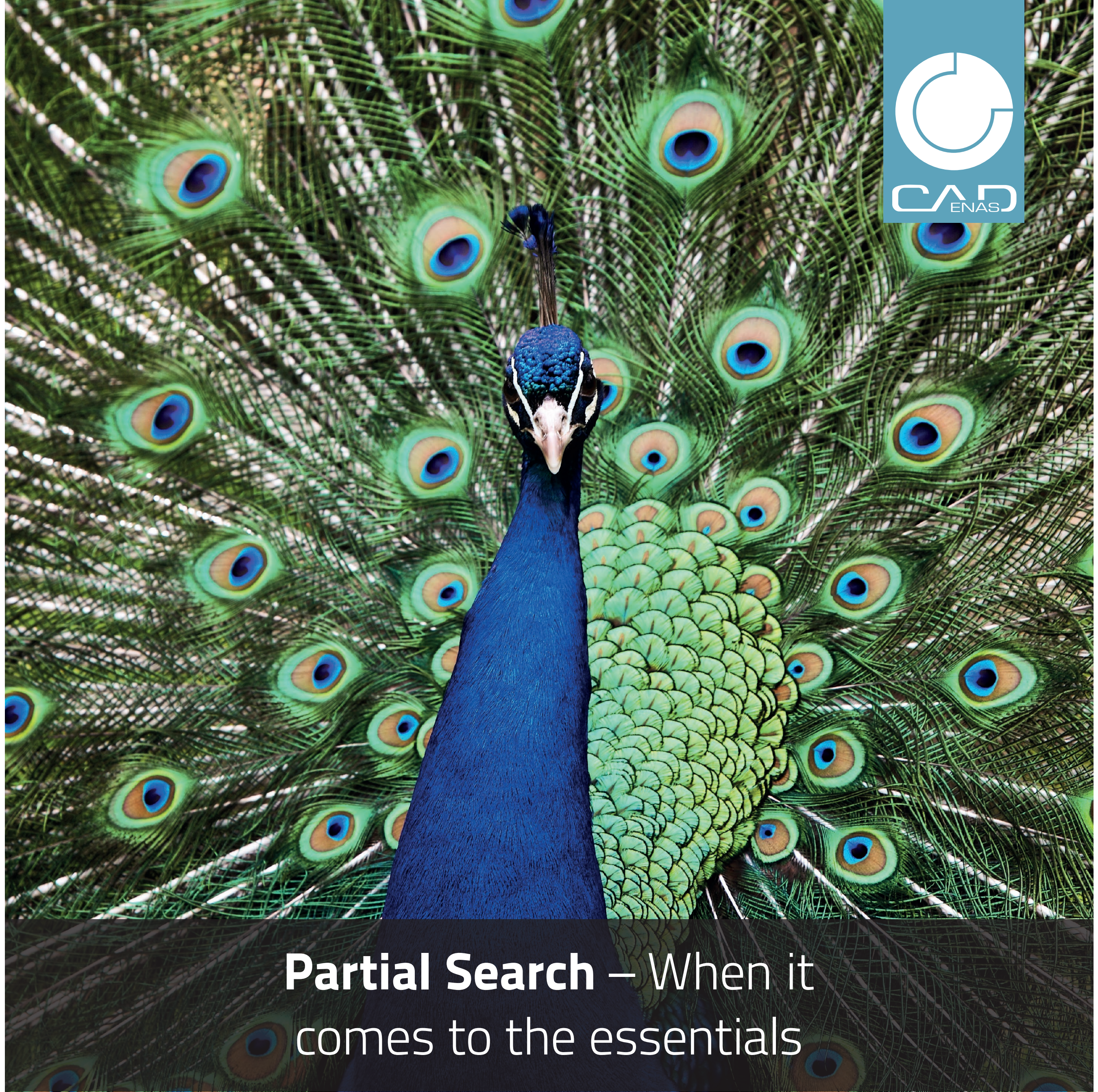
LIVSearch suggests geometrically similar components for the modelled parts during the ongoing design.

The geometric similarity can also be compared with purchasable manufacturer components.

Subsequently, additional functions are available such as component comparison and CAD export.



www.cadenas.de/en/products/partssolutions/finding-information/intelligent-finding/livsearch



Partial Search – When it comes to the essentials

APRIL

MO	TUE	WED	THU	FR	SA	SUN	CW
						Easter Sunday 1	13
Easter Monday 2	3	4	5	6	7	8	14
9	10	11	12	13	14	15	15
16	17	18	19	20	21	22	16
23	24	25	26	27	28	29	17
30							18



Partial Search – When it comes to the essentials



Did you know?

The female peacock knows exactly what she needs to pay attention to when looking for a partner: The decisive criteria is the number of beautiful eyespots. The colorful tail feathers of the males are so long that they can only fly short distances at a low altitude. The male counterbalances this disadvantage with his impressive wheel of feathers during courtship.

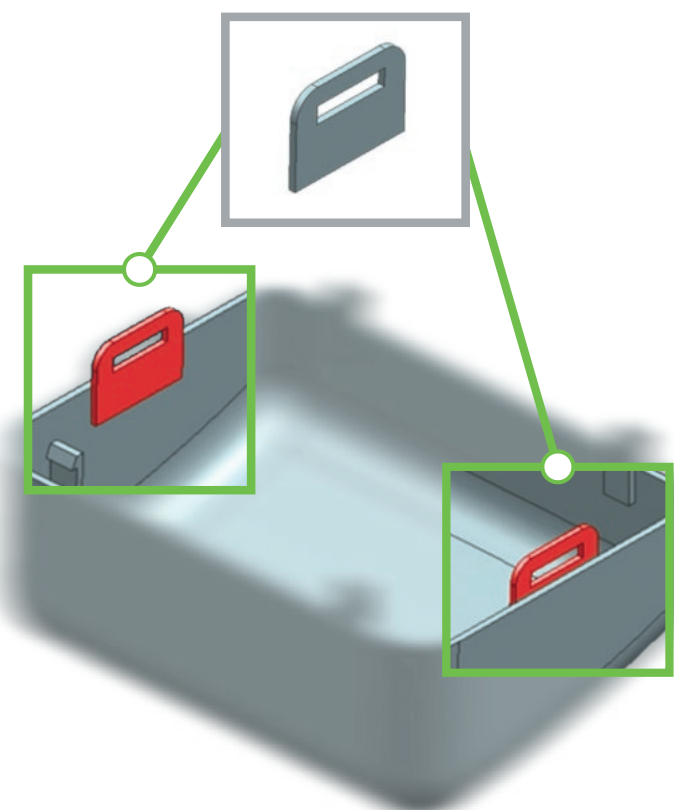
Partial Search

CADENAS Partial Search enables you to separate segments of an extensive group of parts and search within the existing data base for components and assemblies with similar partitions.

Thus the corresponding proceedings and already available tools can be adopted for your engineering.

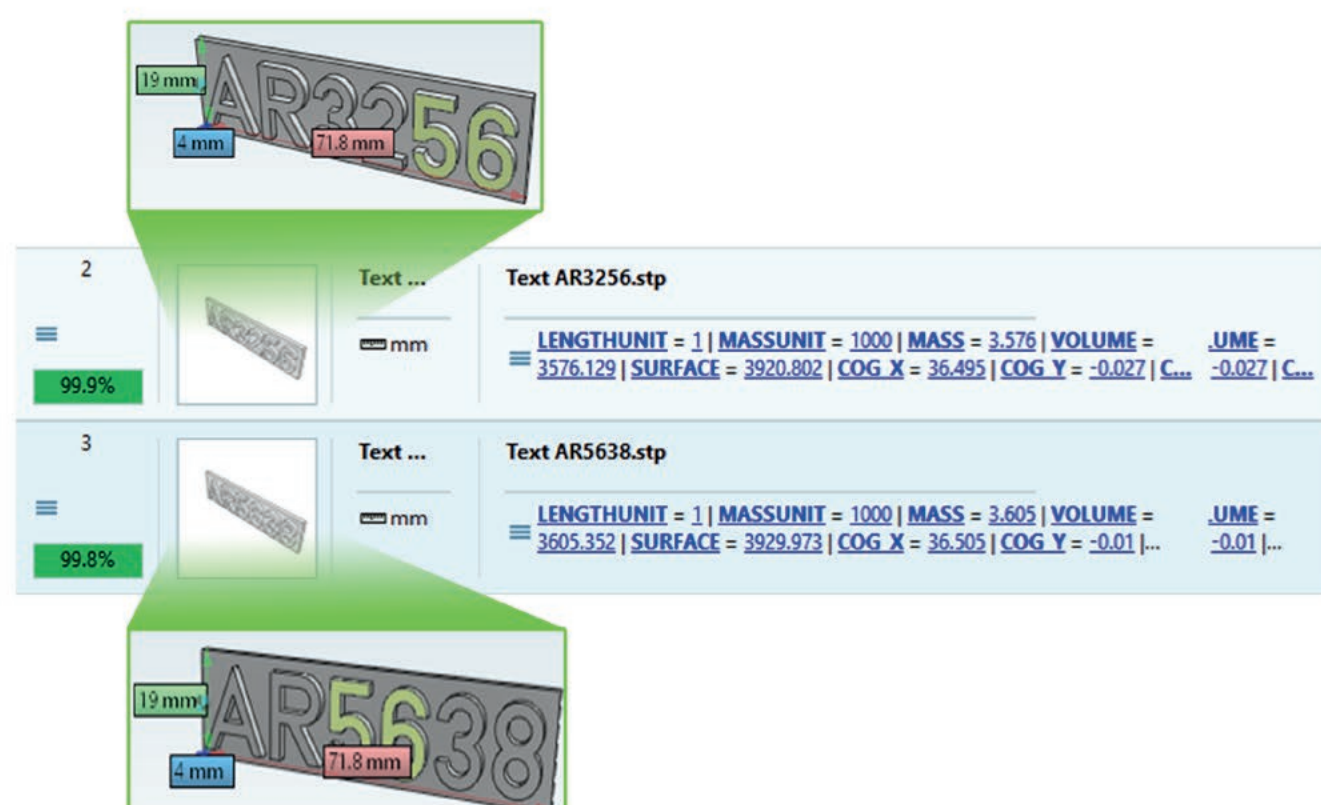
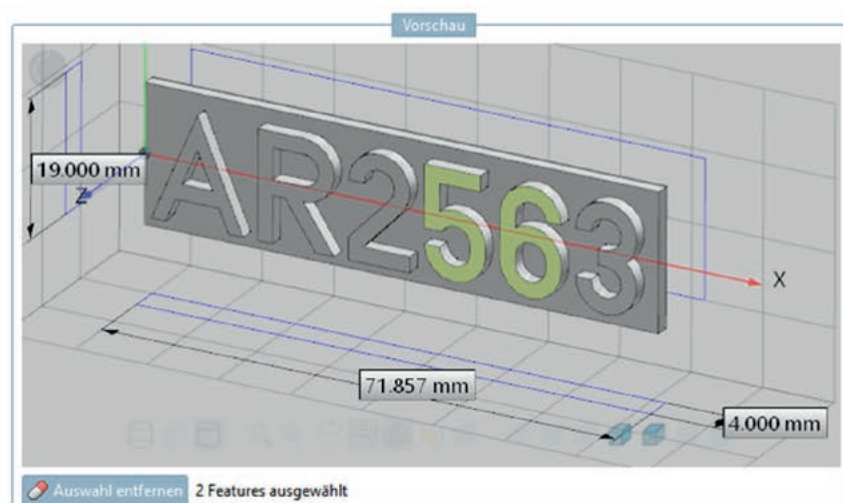
Your benefits

- Detailed search according to a pre-defined shape in other components and assemblies
- Reuse of designs and work procedures
- Helpful when reducing the amount of different tools
- No CAD needed at the workstation

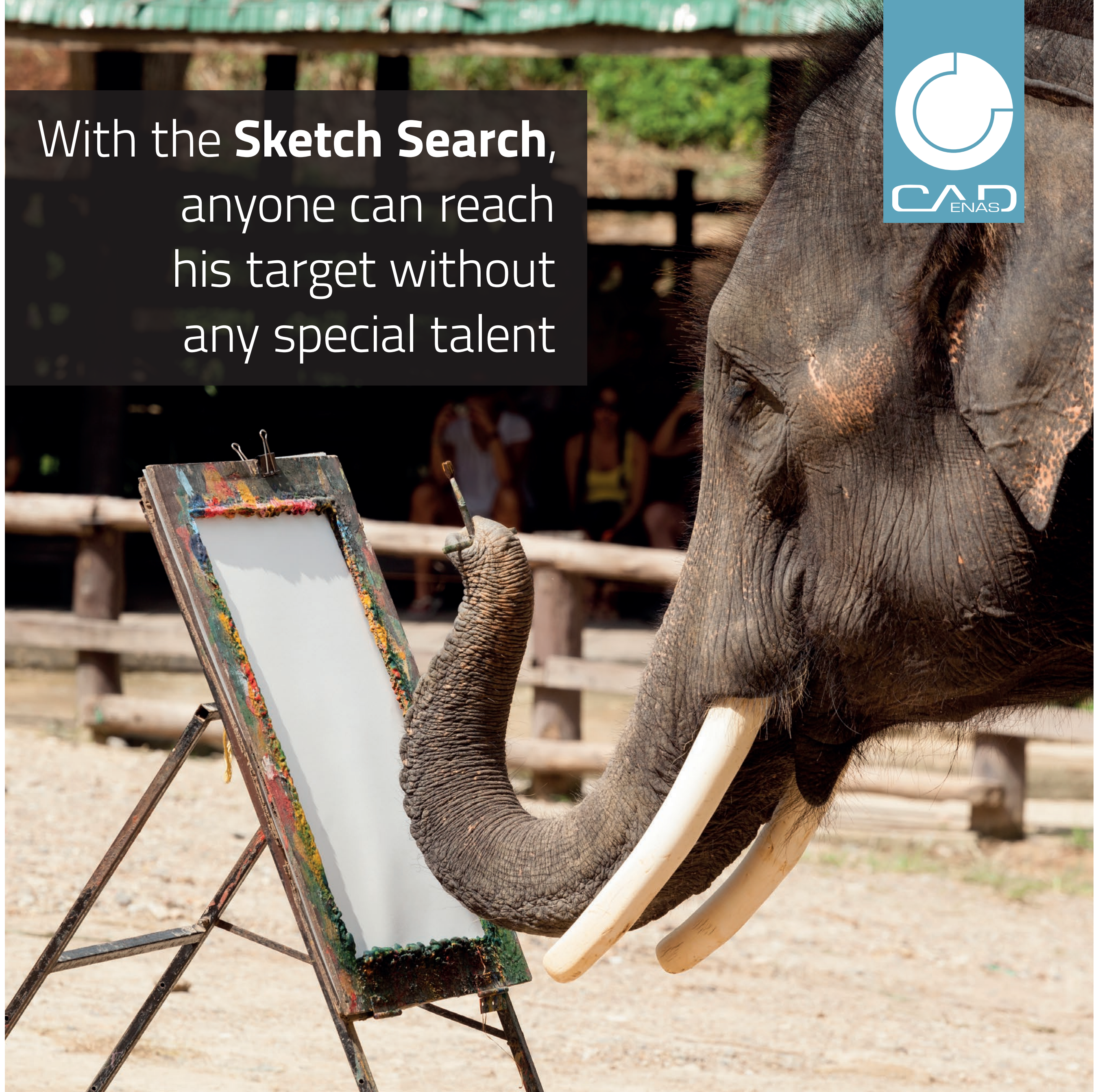


In practice

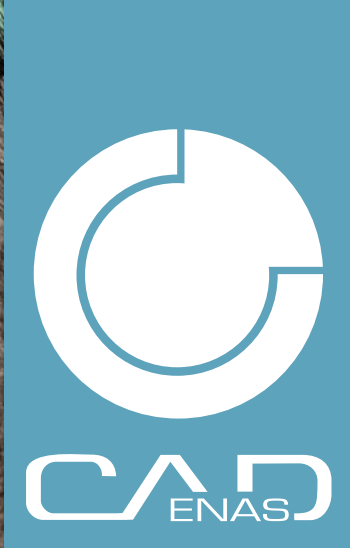
Define certain features, sections or segments of the component as a search reference. Here, for example, the number "56" is defined as the leading search segment.



www.cadenas.de/en/products/partsolutions/finding-information/intelligent-finding/partial-search-3d



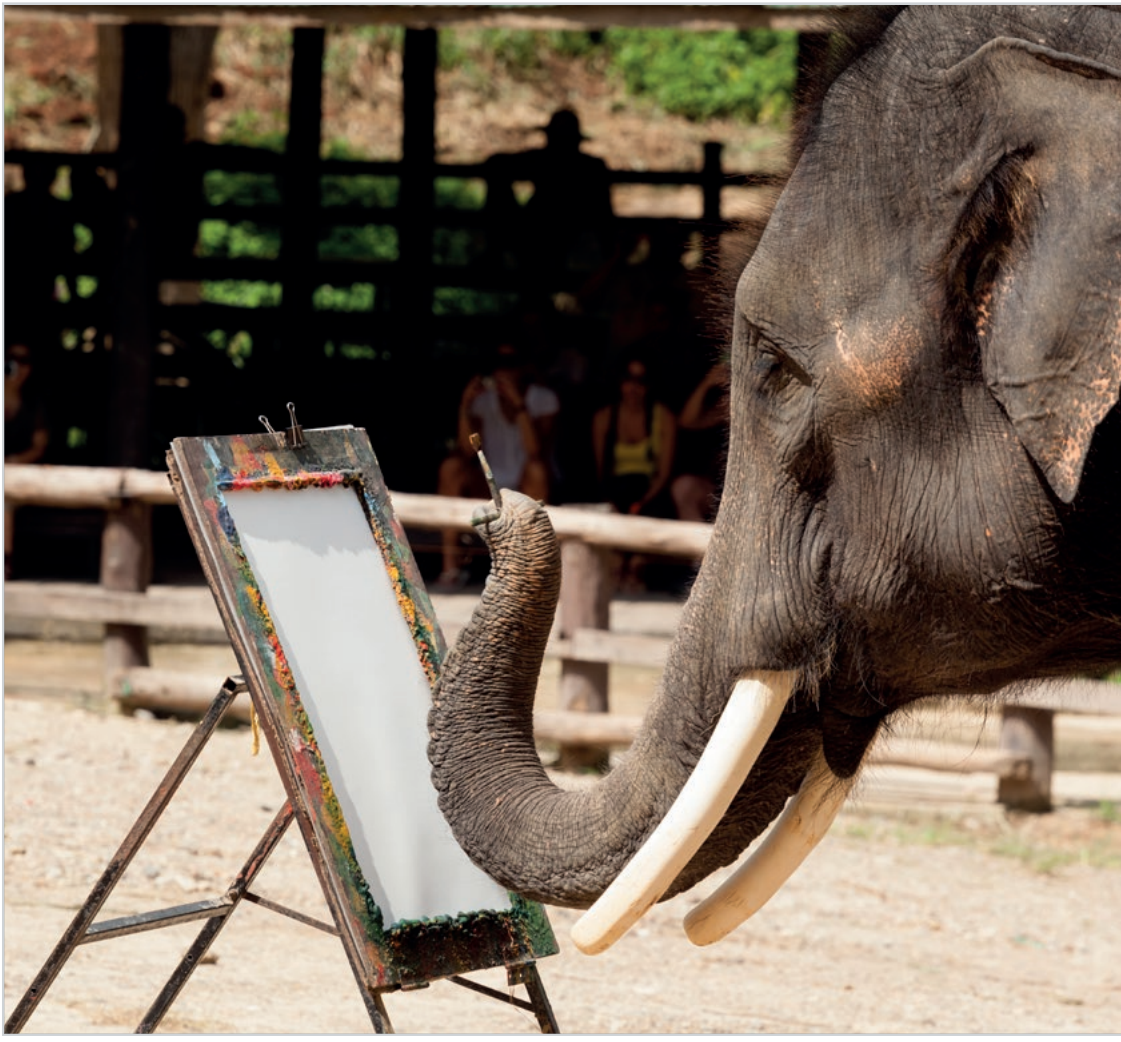
With the **Sketch Search**,
anyone can reach
his target without
any special talent



MAY

MO	TUE	WED	THU	FR	SA	SUN	CW
	Labor Day 1	2	3	4	5	6	18
7	8	9	Christ's Ascension 10	11	12	Mother's Day 13	19
14	15	16	17	18	19	Pentecost Sunday 20	20
Pentecost Monday 21	22	23	24	25	26	27	21
28	29	30	Corpus Christi* 31				22

* not nationwide



**With the Sketch Search,
anyone can reach his target
without any special talent**



Did you know?

Videos of elephants painting colorful patterns, flowers and trees or even self-portraits, fascinate and irritate. Actually, elephants paint pictures in the parks of Thailand. Still, the videos and images convey a false impression of the ability and artistic comprehension of elephants. The result actually depends on the elephant guide (Mahut): They indirectly steer the brushstroke with their hand on the tusk. During public performances, the Mahut prefers to stand at the elephants side with their back to the audience. Thus the communication between human and animal is hidden to the spectators.

Search by Sketching

Engineers and purchasers know what they are looking for, but they often do not know what it is called. In order to find the required part, it may sometimes be easier to sketch it instead of describing it.

A picture says more than 1,000 words!

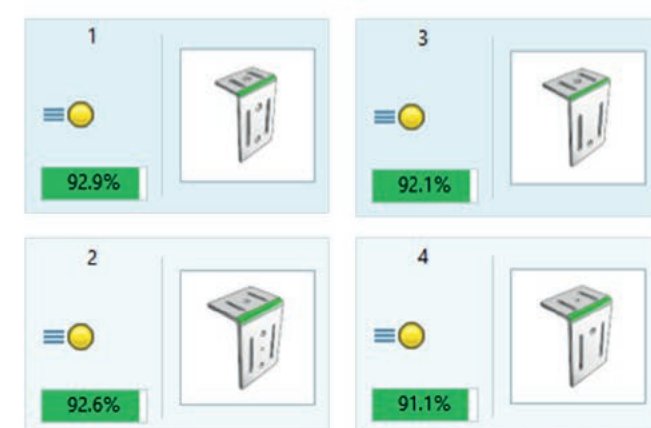
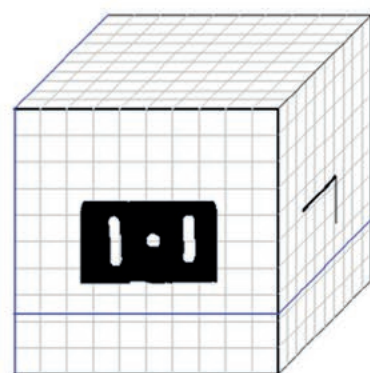
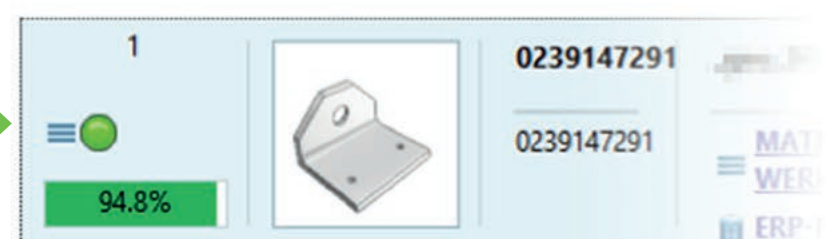
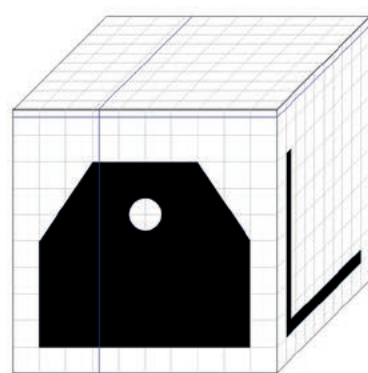
Search by sketching or image based CADENAS' Geometric Similarity Search quickly guides engineers and purchasers to the right component, even if they do not know the right article description.

There is no need for a CAD system, with a simple 2D sketch you can draw the component you are looking for and immediately receive all relevant results.

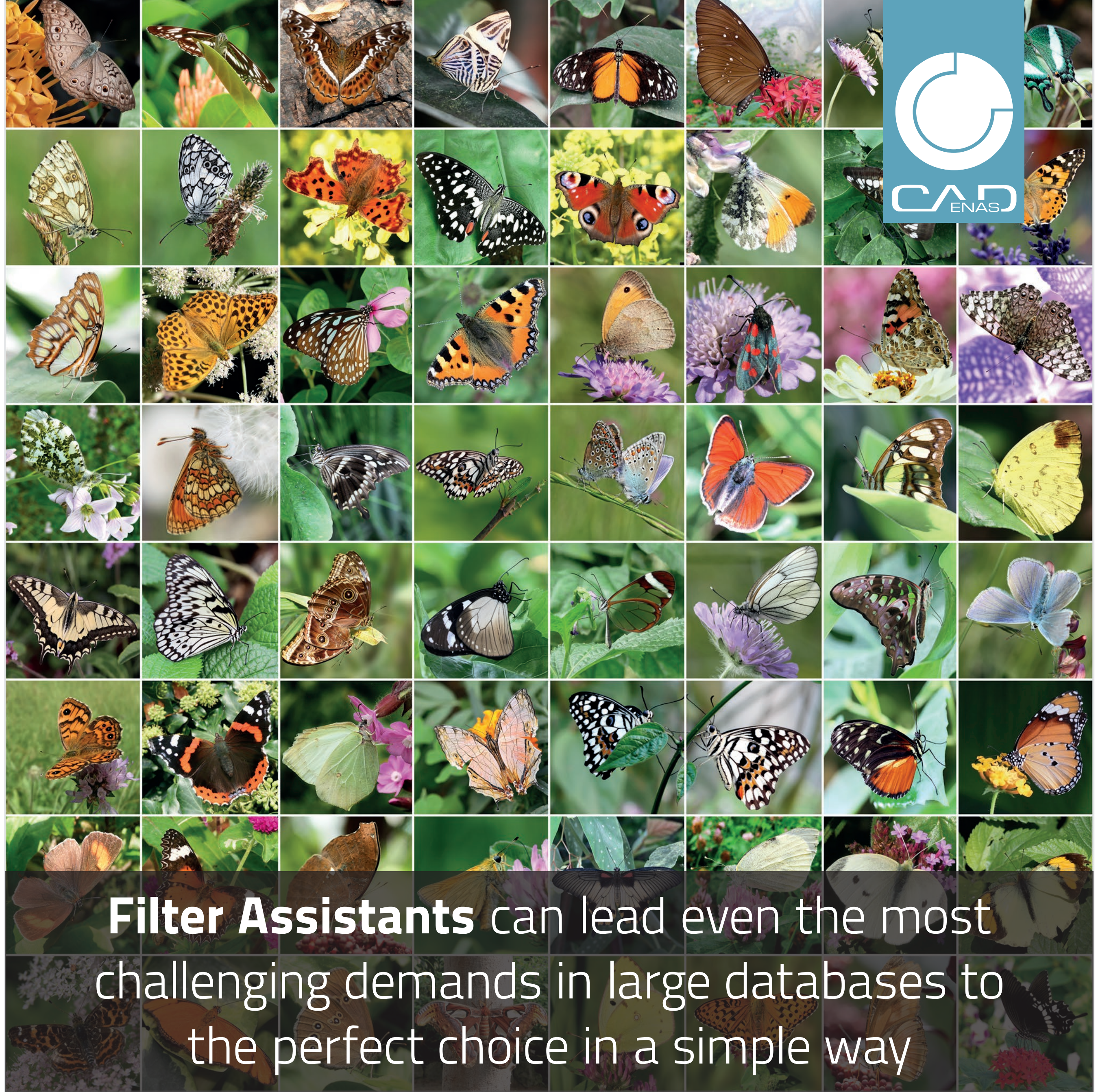


In practice

No matter if you sketch the component you're looking for by hand or using an image, the Sketch Search supplies you with suitable results even without a CAD system.

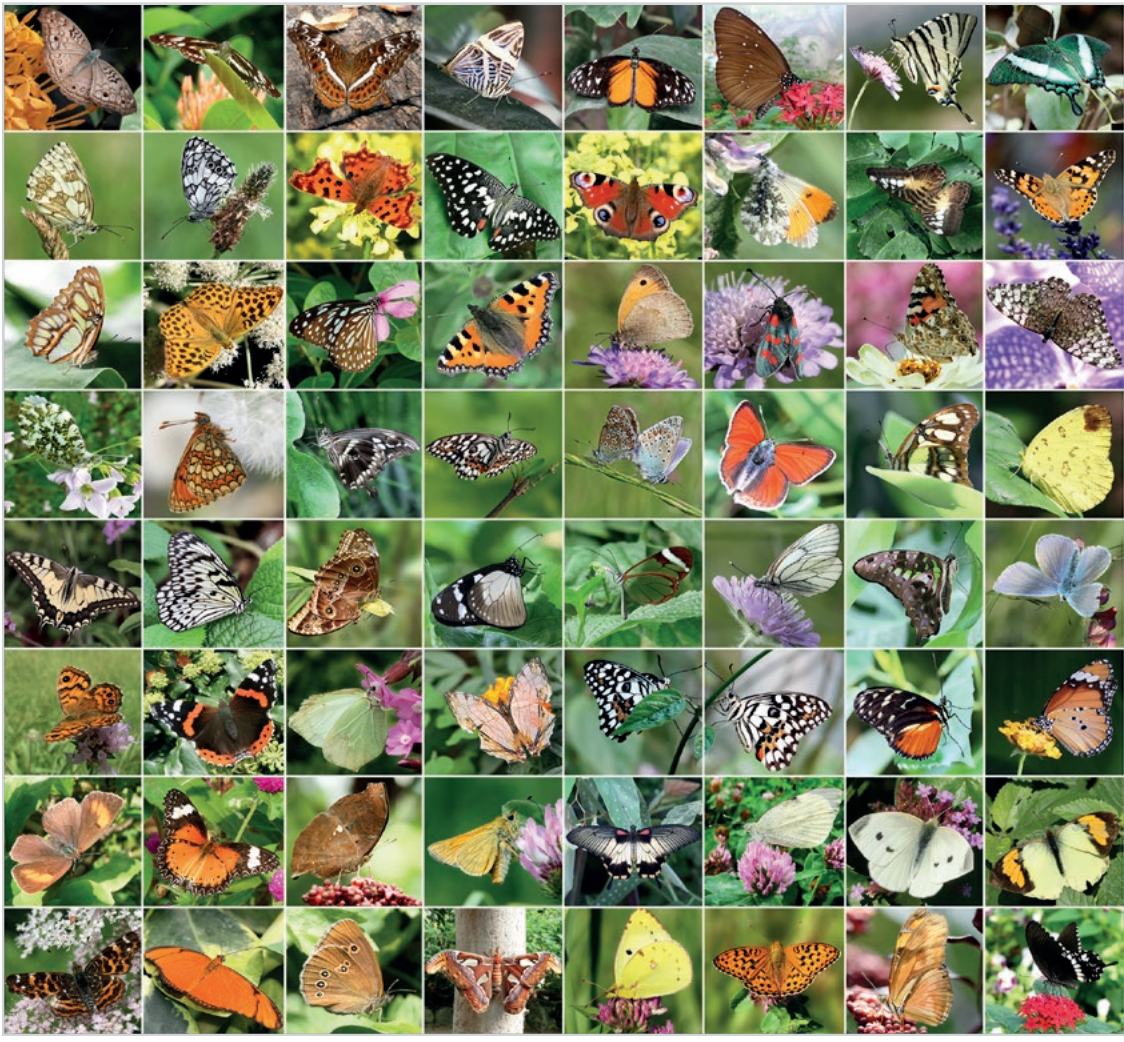


www.cadenas.de/en/products/partsolutions/finding-information/intelligent-finding/search-by-sketching-2d



JUNE

MO	TUE	WED	THU	FR	SA	SUN	CW
				1	2	3	22
4	5	6	7	8	9	10	23
11	12	13	14	15	16	17	24
18	19	20	Summer Begin 21	22	23	24	25
25	26	27	28	29	30		26



Filter assistants can lead even the most challenging demands in large databases to the perfect choice in a simple way



Did you know?

Unlike the butterfly, the caterpillar can be quite choosy. In Germany there are over 9,500 plant types, some native butterflies (peacock butterfly, small tortoiseshell, admiral and map) filter the flora so closely that only one fodder plant per offspring is possible: The nettle. That's not the only criteria, so the selection for the location is refined. The caterpillars of the small tortoiseshell are the gourmets of the butterflies and only like nettles in full sun. Peacock butterflies, maps and admirals, in contrast, prefer nettles in places with semi-shade and shelter from the wind but also in dampness. For all who are choosy and wish to search their large database for the perfect part in a simple manner, there are our Filter Assistants.

Filter Assistants

The Filter Assistants available in the Strategic Parts Management PARTsolutions help engineers and purchasers to find a part type throughout all the manufacturer catalogs. With only a few clicks the user filters the entire parts database and gets all available components and manufacturers as result.

Your benefits

- Components that are frequently searched for can easily and effectively be located
- An individual, intuitive interface with slide controls and selection fields can be easily generated
- The personal Filter Assistants can be saved and made available to other users on the team and for Classification 2.0
- With the help of the functionality for automatic Filter Assistants, catalogs from the systems are scanned for certain variables. Subsequently, PARTsolutions creates Filter Assistants with the most common variables and the respective minimum and maximum values.



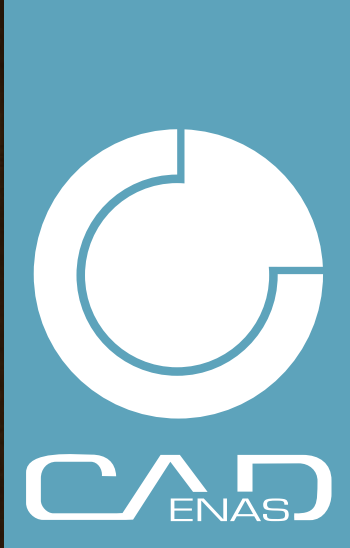
In practice

The Filter Assistants help to narrow the results for possible purchased and company parts out of millions to what is needed at the moment, quickly and easily.

Classification 2.0: With the option of selecting a reference part and limitation based on certain parameters, the effort for the manual allocation of parts into a classification system is reduced.



www.cadenas.de/en/products/partsolutions/finding-information/intelligent-finding/filter-assistants



With the **Geometric Similarity Search**,
don't let a cuckoo's egg in the nest

JULY

MO	TUE	WED	THU	FR	SA	SUN	CW
						1	26
2	3	4	5	6	7	8	27
9	10	11	12	13	14	15	28
16	17	18	19	20	21	22	29
23	24	25	26	27	28	29	30
30	31						31



With the Geometric Similarity Search, don't let a cuckoo's egg in the nest



Did you know?

As a parasite bird, the cuckoo lays its eggs in the nests of other birds. Even with the differences in size and similarity, the cuckoo cleverly fools the „surrogate parents“: After the cuckoo chicks toss the eggs of the competition out of the nest, they imitate the cry of the entire brood and successfully pretend to be the offspring of the original parents. This is the only way the cuckoo chicks are able to be completely provided for by the parents. Only the cuckoo knows which egg was snuck into your design, so keep your eyes open or better yet, make use of the Geometric Similarity Search...

Geometric Search

The Geometric Similarity Search GEOsearch from PARTsolutions by CADENAS searches and compares parts according to the respective CAD geometries.

Find the cuckoo's egg

Beginning with a reference part (Catalog part, self-designed part, reused part or factory standard) or the rough sketch of a 3D CAD model you can, just like search engines, browse the whole database for CAD components.

The result is a ranking list of the geometrically most similar 3D CAD parts, which are displayed visually.

Application Example

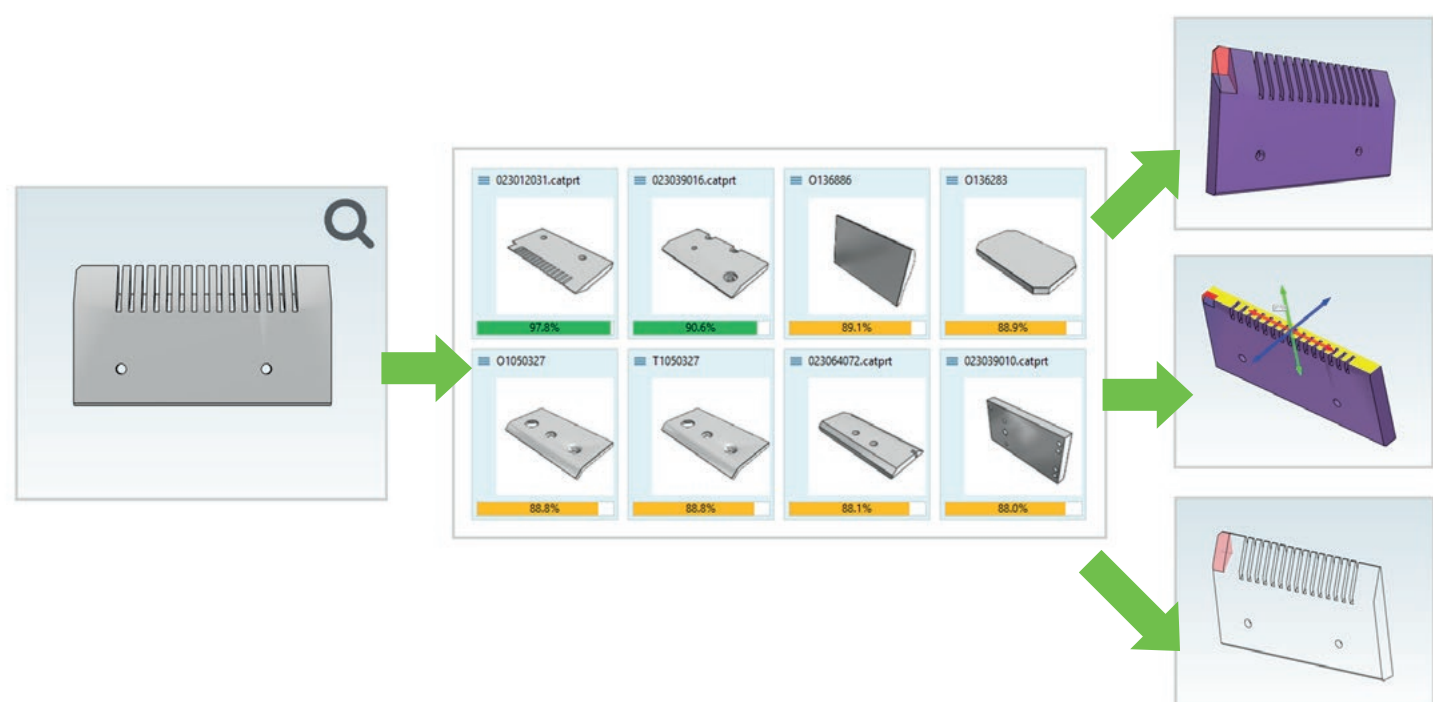
Comparing		Coverage
Company part	Company part	Increase in reuse rate Reduction in duplicates Increase in standardization
Company part	Purchased part	Increase in usage of standard components
Purchased part	Purchased part	Possibility to compare suppliers



In practice

Besides searching for similar parts manually, the Geometric Similarity Search can also display similar parts automatically.

Here are also numerous methods of comparison possible such as superimposition, cross section or difference. This way the difference or similarities of the part found can be determined precisely.



www.cadenas.de/en/products/partsolutions/finding-information/intelligent-finding/geometric-search-3d



PURCHINEERING – The early bird catches the „worm“

AUGUST

MO	TUE	WED	THU	FR	SA	SUN	CW
		1	2	3	4	5	31
6	7	Peace of Augsburg* 8	9	10	11	12	32
13	14	Assumption Day* 15	16	17	18	19	33
20	21	22	23	24	25	26	34
27	28	29	30	31			35



PURCHINEERING – The early bird catches the „worm“



Did you know?

Pretty much everyone knows the saying “The early bird catches the worm”. The saying refers to the better chance for the bird to catch worms at dawn when they venture onto the surface of the ground still wet with dew. The saying has its origin in England and was translated into German. The original German saying, “Morgenstund hat Gold im Mund” indicates that an early start is worth gold.

PURCHINEERING

How purchasing comes into play early on

Often there are different opinions in the departments about which component is the best: While the purchasing department prefers a product with a favorable price, an engineer chooses the best technical product.

In practice, an early involvement of purchasing happens far too seldom. Engineers develop a product on the basis of the required technical specifications. Afterwards a parts list is handed over to production planning. In consequence, the job of the purchasing department is only to procure the defined components for the best price.

Who controls the parts, that are created by the engineer?

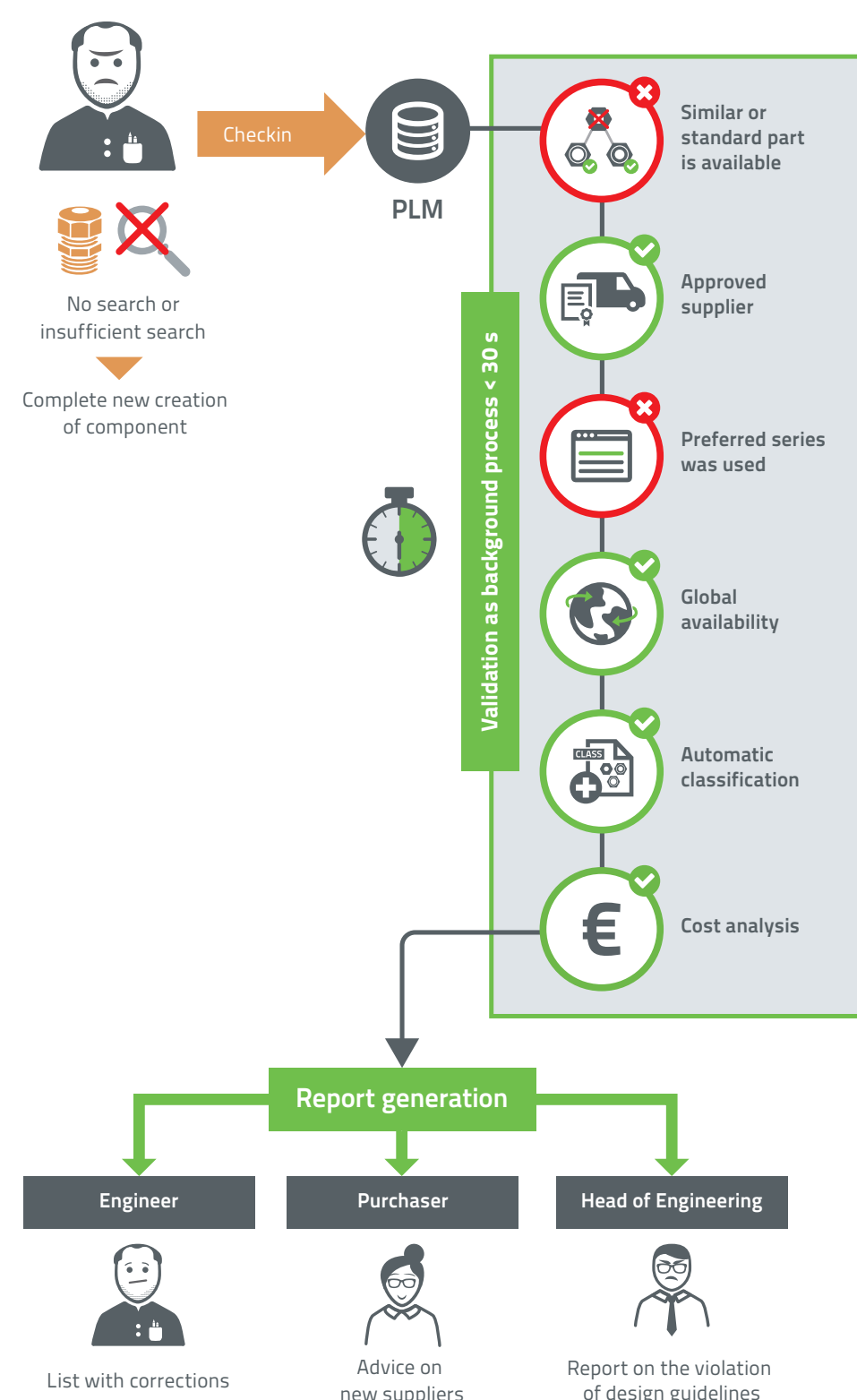
If intelligent search methods are available to the engineer, the conditions are ideal for standard parts or parts preferred by purchasing are to be within the design.

But what happens if the engineer does not search or only searches superficially? The parts and supplier diversity increases, self-designed parts are developed instead of using supplier parts available on the market and preferred suppliers with existing framework contracts are neglected.

To trust is good, but to check is better!

With PURCHINEERING 2.0, an automatic service in the background monitors all parts that are newly checked in and examines whether the part really has to be created anew. If the new creation was unjustified, a report is generated over night and sent to the engineer concerned.

If desired, it is also possible to define different escalation levels: For instance, a report can be sent to the direct superior in case of triple misconduct.



[www.cadenas.de/en/products/
partsolutions/purchineering](http://www.cadenas.de/en/products/partsolutions/purchineering)



Color Search: When specific colors matter

SEPTEMBER

MO	TUE	WED	THU	FR	SA	SUN	CW
					1	2	35
3	4	5	6	7	8	9	36
10	11	12	13	14	15	16	37
17	18	19	20	21	22	Autumn Begin 23	38
24	25	26	27	28	29	30	39



Color Search: When specific colors matter



Did you know?

Bower Birds can only be found in Australia and New Guinea. The majority of males decorate their nests with colored objects. When choosing objects these birds show a preference to certain colors. This Bower has collected and draped an estimated 200 deep-blue objects around his nest. Opinions vary as to why certain birds prefer certain colors. Some researchers believe that colors which stand out most noticeably in the birds natural environment are preferred. While others are of the simpler opinion that color choice is based on female reactions. The females of different species have been observed to react differently to each color and have of course their own color preference.

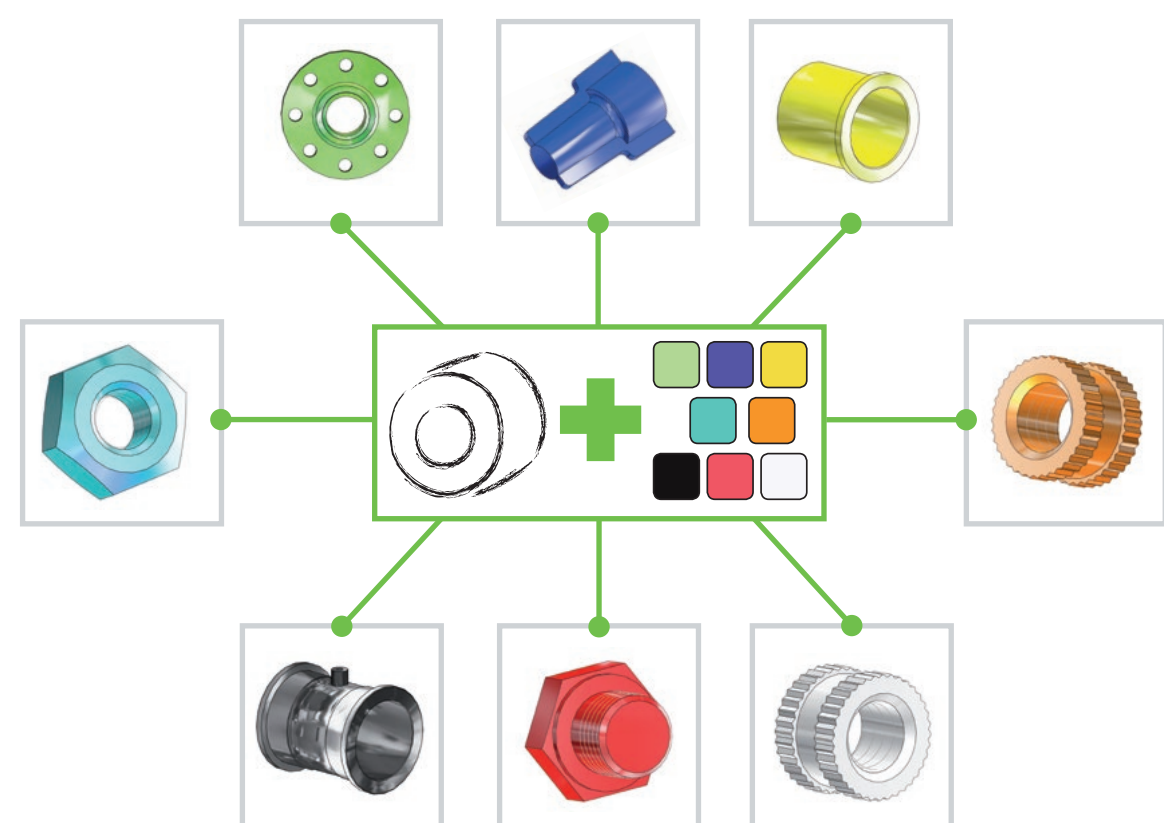
Color Search

The Color Search enables engineers and purchasers to look for components within a parts library by selected colors.

This search method demonstrates its full potential if one of the numerous innovative search methods by CADENAS has been applied previously.

Your benefits

- Combine several colors within one search query
- Search for precise color values possible
- Colors can be extracted from components and included in the color palette



In practice

The color search enables engineers and purchasers to filter components within a parts library based on selected colors.

Search according to color combinations is also possible.

200M1200 Springs Medium Duty 28.06.17 INCH 100.0%	H3BP26L-B 21.09.17 mm 100.0%	100M0175 Springs Medium Duty 28.06.17 INCH 100.0%
K-07302485 Schlauchbruchsicherungen 23.10.15 mm 100.0%	MOL-16-SPCR 07.08.17 mm 100.0%	9921 NIS-Dose mit Klappeckel 1x1 08.09.17 mm 100.0%

RM3-020-10 RM Minischieber mit optionaler P... 18.04.16 mm 97.1%	RS560753110 RS Hydraulik-Schieber, doppelt wi... 18.04.16 mm 97.0%
RSV81503012 RS Hydraulik-Schieber, doppelt wi... 18.04.16 mm 93.5%	RSV92005112 RS Hydraulik-Schieber, doppelt wi... 18.04.16 mm 92.8%
1897-649M Schwenkspanner Flanschführ... 18.04.16 mm 90.6%	1897-643M Schwenkspanner, Flanschführ... 18.04.16 mm 90.5%



www.cadenas.de/en/products/partsolutions/finding-information/intelligent-finding/color-search



With the **Mounting Part Search**, you will always find the right piece to the puzzle

OCTOBER

MO	TUE	WED	THU	FR	SA	SUN	CW
1	2	Day of German Unity 3	4	5	6	Harvest Festival 7	40
8	9	10	11	12	13	14	41
15	16	17	18	19	20	21	42
22	23	24	25	26	27	Adoption of Wintertime 28	43
29	30	Reformation Day* 31					44

* not nationwide



**With the Mounting Part Search,
you will always find the right
piece to the puzzle**



Did you know?

Birds build their nests in various ways. Besides grass, stalks, branches, moss and even their own feathers, birds can also use pieces of paper, small pieces of bark or even animal hair to build their nests. Not only by pure instinct, but also experience helps the bird to build its nest so artistically. To ensure a home that's safe and secure for the little ones, it's important to choose the attachments wisely. In this manner, several hundred single parts are processed to build the nest.

Mounting Parts Search

With the Mounting Part Search, quickly comb through your company parts inventory during the construction phase. This way mounting parts such as brackets, cross-pieces and crosslinks, amongst others, can be found and integrated into your construction.

Through selecting the features within the CAD system the search pattern can be defined by, for example the drill holes. The search results are available in seconds to be seamlessly integrated in CAD. With just one click, the right mounting part can be opened in the CAD construction and positioned accordingly.

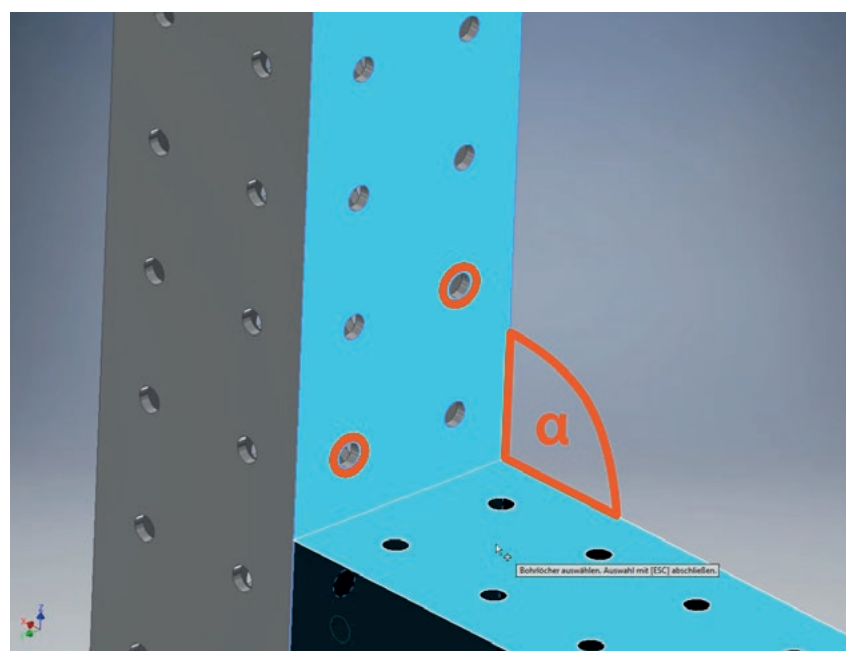
Your benefits

- Seamless integration in the existing CAD system
- Promotes parts re-usage
- Instantaneous attachment parts search
- Supports numerous search patterns: linear, brackets and circle patterns of drill hole gaps including tolerances of distances and diameter



In practice

Suitable attachments can be found quickly by simply selecting search parameters, such as hole patterns or even angles.



The fine-tuning of tolerances is also possible.

Anbauteile Suchen

Bitte markieren Sie mindestens zwei Bohrlöcher. Nach dessen Abstand Sie suchen möchten. Die Eingabe mit [ESC] beenden.

Toleranzen

1x Abstand = 25.0 mm

1x Abstand = 35.4 mm

1x Abstand = 17.7 mm

Toleranz Abstand:

-0.5

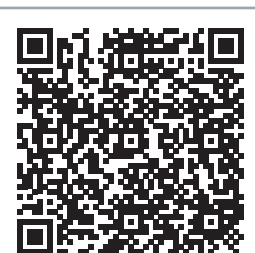
0.5

4x Durchmesser = 5.0 mm

Toleranz Durchmesser:

-0.3

0.3



www.cadenas.de/en/products/partsolutions/finding-information/intelligent-finding/mounting-part-search



The **Unmachined Part Search** always lets you know exactly what you're getting out of it.

NOVEMBER

MO	TUE	WED	THU	FR	SA	SUN	CW
			All Saints' Day* 1	2	3	4	44
5	6	7	8	9	10	St. Martin's Day 11	45
12	13	14	15	16	17	Remembrance Day 18	46
19	20	Day of Repentance* 21	22	23	24	Sunday in commemoration of the dead 25	47
26	27	28	29	30	31		48

* not nationwide



The Unmachined Part Search always lets you know exactly what you're getting out of it



Did you know?

The poodle's fur is not subject to change of season. It keeps on growing and can really be a blessing: Since its fur is more like sheep's wool, the poodle doesn't lose hair on the car seat or in the home. It does need regular clipping, however. The origin of clipping poodles has to do with its history as a hunting dog, which was also kept busy in water: In order to protect lungs and heart from the cold of the water while at the same time ensuring maximum room for the rear legs, the dogs were shorn in the middle of the back.

Unmachined Part Search

The Strategic Parts Management offers a search for raw parts that enables you to find the matching unmachined part on the basis of a finished part within the existing data base. The software checks if the finished part is at all dimensions smaller than the unmachined part, so that the finished part can be created by removing material from the raw part.

Report about necessary loss rate and overlapping display

CADENAS' Unmachined Part Search additionally calculates how much material has to be removed, that a finished part can be developed from a raw part. In an overlapped display the finished part can be compared visually to the unmachined part.

A report informs you about the available stock and the application fields of the unmachined parts.



Your benefits

- Supports standardization of parts through unmachined parts
- Overlapping display of finished part and unmachined part
- Calculate the accruing cuttings
- Finished parts are automatically allocated to unmachined parts
- Searching the other way around is also possible: Which finished parts can be created from an unmachined part?
- Applicable for castings that are reprocessed



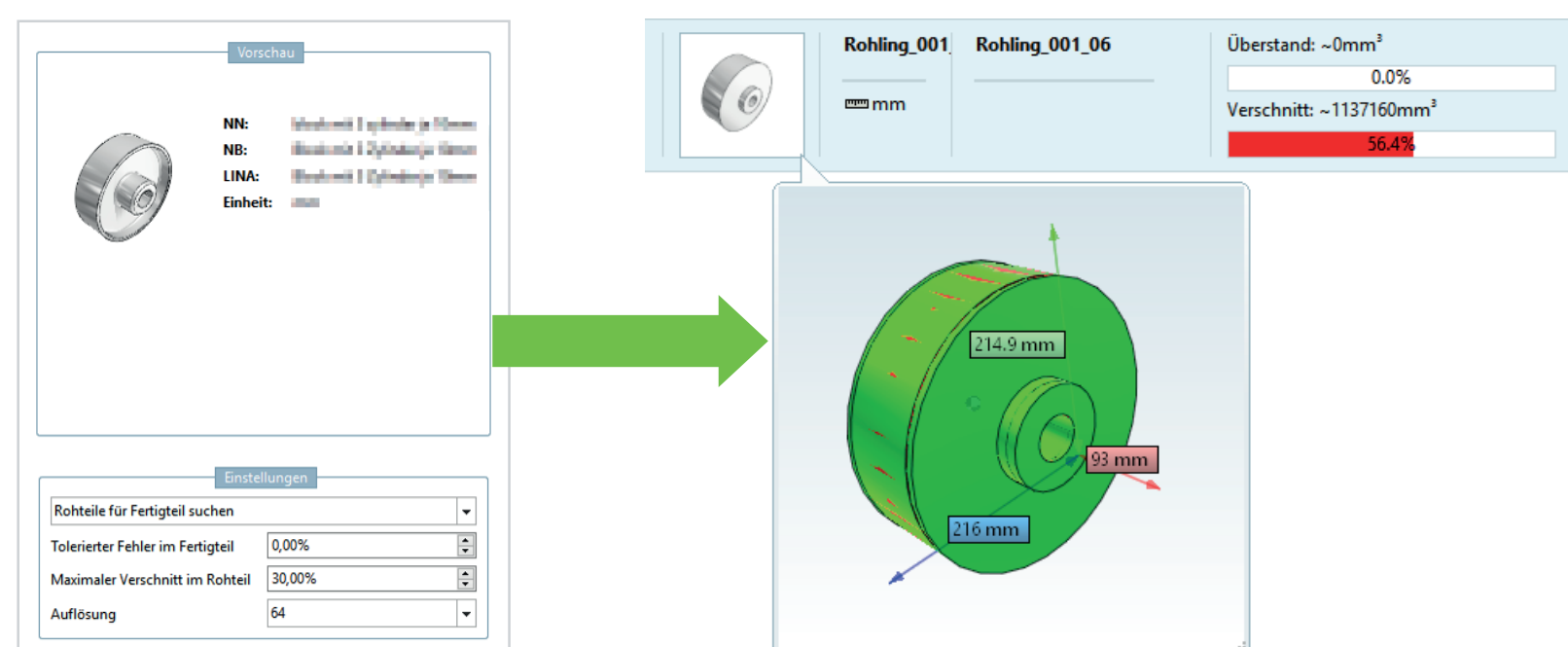
www.cadenas.de/en/products/partsolutions/finding-information/intelligent-finding/unmachined-part-search



In practice

An unmachined part is looked for from which, e.g. a roll can be milled.

Parameters such as production tolerances and maximum cut can be flexibly defined.





A **Combination of Search Methods**
helps avoid questionable matches

DECEMBER

MO	TUE	WED	THU	FR	SA	SUN	CW
					1	1 st Advent 2	48
3	4	5	St. Nicholas' Day 6	7	8	2 nd Advent 9	49
10	11	12	13	14	15	3 rd Advent 16	50
17	18	19	20	Winter Begin 21	22	4 th Advent 23	51
Christmas Eve 24	Christmas Day 25	Boxing Day 26	CADENAS Company Holidays 27	CADENAS Company Holidays 28	29	30	52
New Year's Eve 31							01



A Combination of Search Methods helps avoid questionable matches



Did you know?

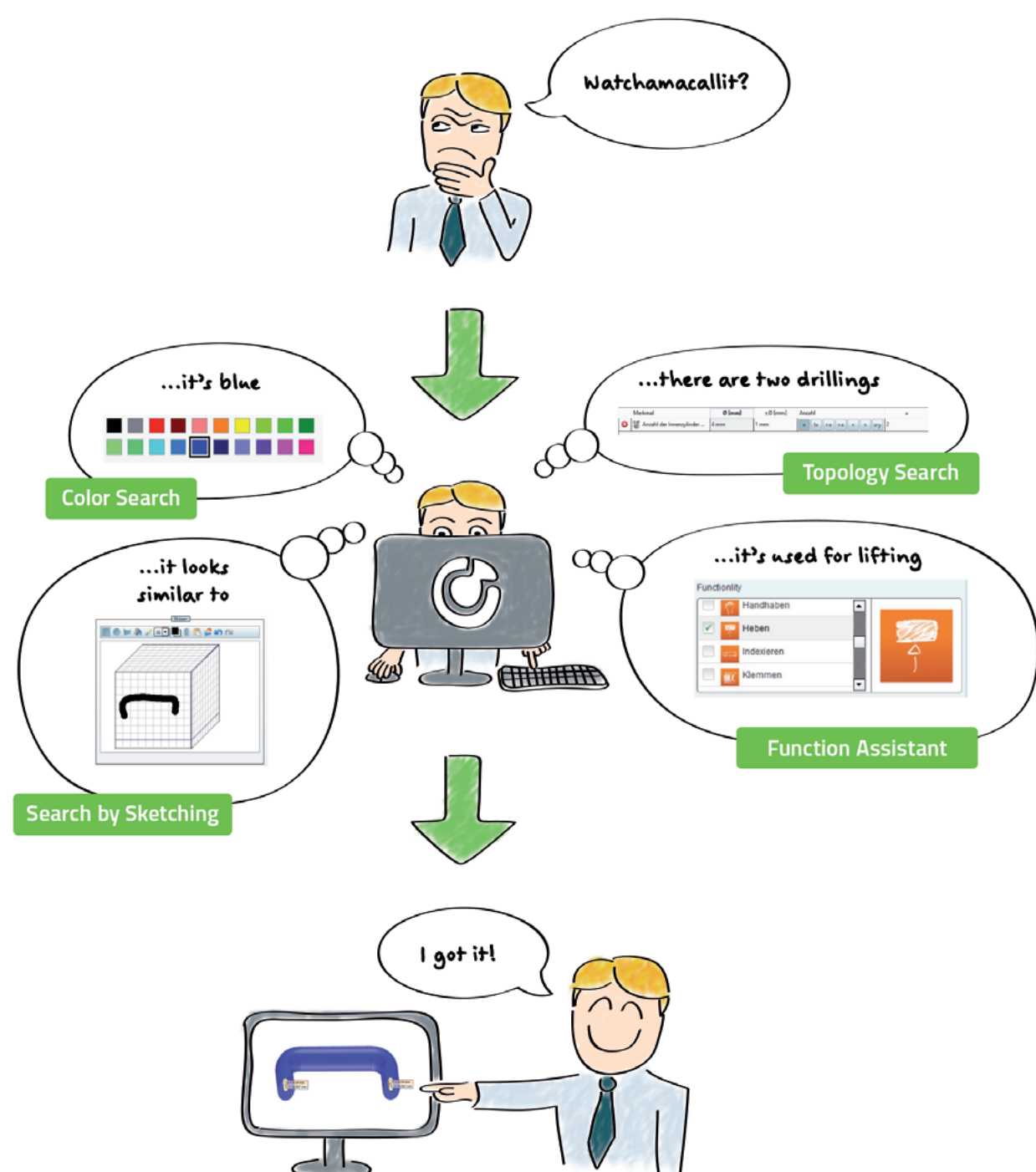
"We all make mistakes," said the hedgehog as he climbed down off the brush... The mating ceremony of our prickly four-legged friends is called "hedgehog carousel", as the male circles the female for hours. At first, the female boxes the male away with raised quills on her forehead. She finally gives in and mating takes place. The quills themselves are actually restructured hair. They are hollow and, with an adult animal, they are 2 to 3 cm long and 2 mm thick. Each quill is moved and raised by its own individual muscle. Full-grown hedgehogs have around 8,000 quills.

Find the right components even without the right description

The daily worklife of engineers and purchasers can seem as a „guessing game“:

A component that's blue is searched for, with which something can be lifted and it has two drillings of 4 mm diameter. What's the name of that part again and how do I find it in the parts database?

The Strategic Parts Management PARTsolutions offers a multitude of intuitive search functions that can be combined in cascade, such as the Geometric Similarity Search, Search by Sketching, Topology Search, or Color Search. This speeds up the design process and standard, purchased and company parts can be found effectively.



Your benefits

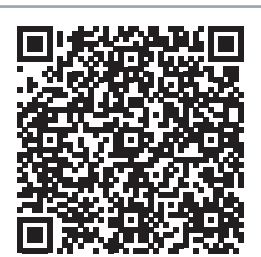
- Combination of Full Text Search, Search by Sketching, Geometric Similarity Search, Topology Search, etc.
- No class system necessary



In practice

Within PARTsolutions, use the Sketcher for a simple 2D sketch of a component and receive a list of matches that might be too extensive for your purposes.

What you do know is that the component is bigger than 60 mm or has several drillings of a certain diameter. Shorten your list of matches with help of the Topology Search from CADENAS.



www.cadenas.de/en/products/partsolutions/finding-information/intelligent-finding/combination-of-search-methods