



**PART**  
SOLUTIONS

# STRATEGIC PARTS MANAGEMENT AT SNCF

CASE STUDY



# PARTsolutions REDUCES MULTIPLICITY OF BOLTED CONNECTION FASTENERS AT SNCF

**700 users in train maintenance centers, engineering services, procurement and logistics teams**

With 700 users in train maintenance centers, engineering, procurement and logistics all over France, SNCF has been centralizing parts for rolling devices in a single parts database called RNAS for a long time.

This database has grown tremendously due to the addition of components by designers. Many duplicates appeared and the number of suppliers increased, thus consequently reducing the effectiveness of the purchasing department.

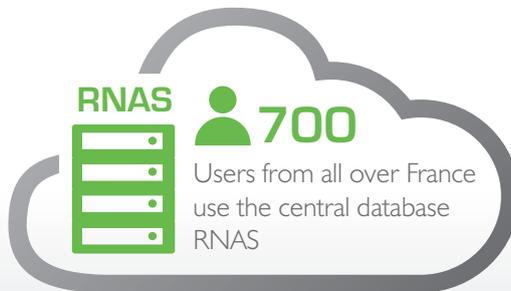
The bolted connections committee therefore decided to implement a solution to standardize and regulate the fasteners.

“We focused on fasteners as this is the category for which we have the most numerous items in the database, that is to say the parts we need the most to be standardized and streamlined,” explains Jérôme Mercier, project manager at SNCF.

SNCF chose the Strategic Parts Management PARTsolutions by CADENAS to consolidate and standardize the fasteners used for bolted connections on all of its maintenance centers. The web-based solution used by 700 people has helped to reduce the number of parts by 15% in only one year.



## More efficiency with PARTsolutions



**October 2013**

Implementation of the information platform PARTsolutions at SNCF

**10,000**

Components were checked for duplicate copies

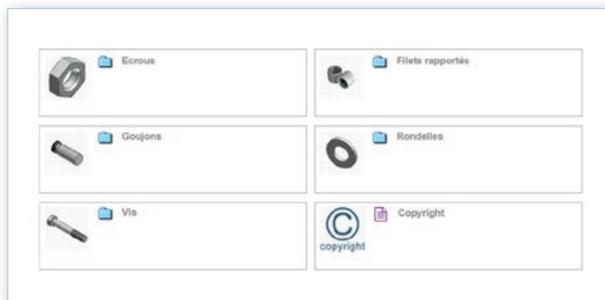
**15%**

Reduction of parts in only one year

### More than 10,000 parts to streamline

The aim of the project is to limit the creation of new components in the parts database, to identify and eliminate duplicates and to encourage designers to reuse the fasteners defined as “standard” by the committee.

As a first step the project focuses on the fasteners used for bolted connections. More than 10,000 screws, nuts, washers and studs were scrutinized.



### Decision for PARTsolutions

Looking for a relevant tool for this project, SNCF finally chose the software PARTsolutions by CADENAS.

Up until 2012 tests were held at the Bischheim train maintenance center to evaluate the software, especially how it could communicate with the RNAS parts database.

### Three key factors were decisive in the choice of PARTsolutions:

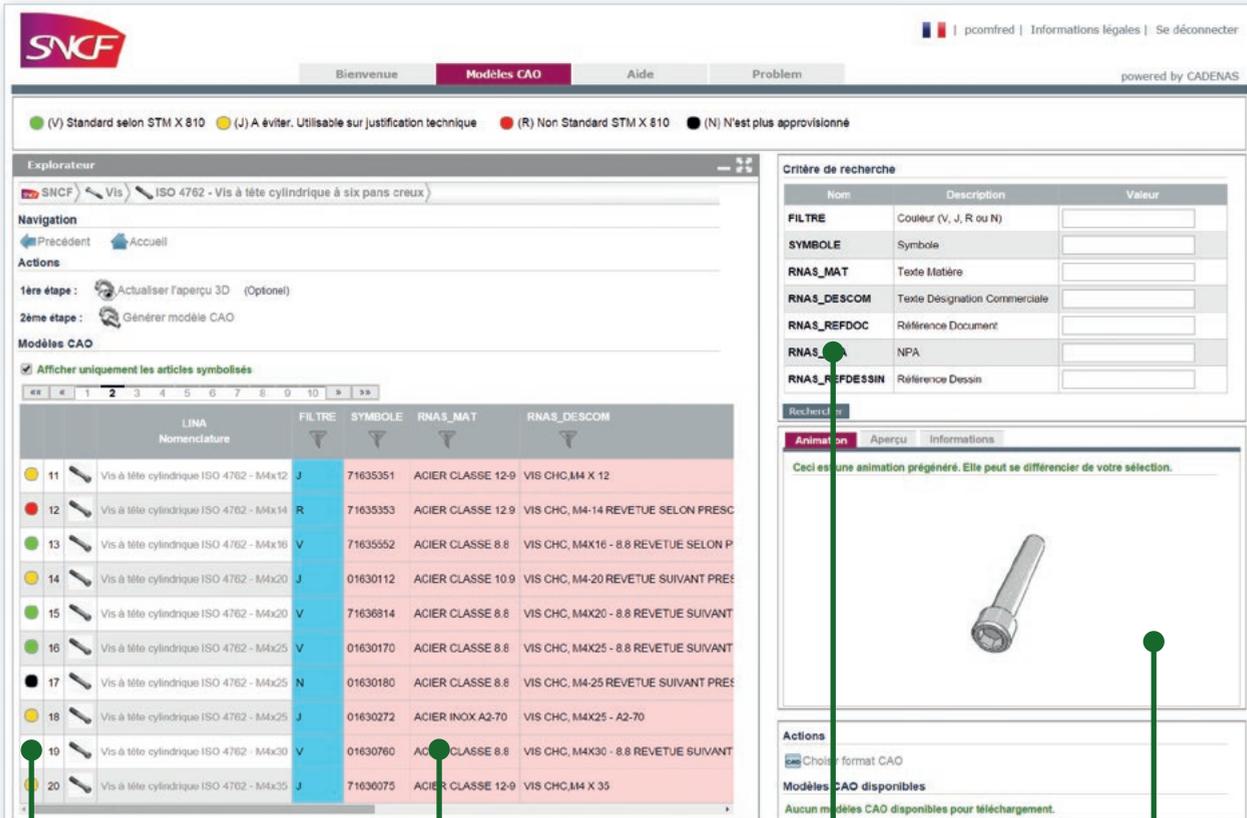
- 1** PARTsolutions has a library of over 9,000 relevant standard parts for SNCF, giving access to hundreds of thousands of 3D CAD models in native CATIA format.
- 2** The software connects easily with existing databases such as RNAS.
- 3** The web version provided by CADENAS allows the limitation of the number of local installations of the software, and simplifies the maintenance needed.

The objective of SNCF is to create a library with all relevant information for designers: SNCF's internal information (internal part number, technical documentation, materials, standardization level), official standard information (description, dimensions, etc.) and the 3D CAD models. After a successful test phase, the new information platform was implemented in October 2013 for all users working on rolling devices.

### An incentive to choose standard parts

It was necessary to encourage engineers to choose parts identified as standard by SNCF and to facilitate the search of these parts. A color code system has therefore been introduced:

-  → Standard part
-  → To avoid, but can be used upon technical justification
-  → No standard part
-  → No longer kept in stock, CAD export not allowed



Legend:

- (V) Standard selon STM X 810
- (J) A éviter. Utilisable sur justification technique
- (R) Non Standard STM X 810
- (N) N'est plus approvisionné

LINA	FILTRE	SYMBOLE	RNAS_MAT	RNAS_DESCOM
11	J	71635351	ACIER CLASSE 12-9	VIS CHC, M4 X 12
12	R	71635353	ACIER CLASSE 12-9	VIS CHC, M4-14 REVETUE SELON PRESC
13	V	71635552	ACIER CLASSE 8.8	VIS CHC, M4X16 - 8.8 REVETUE SELON P
14	J	01630112	ACIER CLASSE 10.9	VIS CHC, M4-20 REVETUE SUIVANT PRES
15	V	71636814	ACIER CLASSE 8.8	VIS CHC, M4X20 - 8.8 REVETUE SUIVANT
16	V	01630170	ACIER CLASSE 8.8	VIS CHC, M4X25 - 8.8 REVETUE SUIVANT
17	N	01630180	ACIER CLASSE 8.8	VIS CHC, M4-25 REVETUE SUIVANT PRES
18	J	01630272	ACIER INOX A2-70	VIS CHC, M4X25 - A2-70
19	V	01630760	ACIER CLASSE 8.8	VIS CHC, M4X30 - 8.8 REVETUE SUIVANT
20	J	71630075	ACIER CLASSE 12-9	VIS CHC, M4 X 35

Color code to see the part's release status at a glance

Information from SNCF internal RNAS database:

- internal part number
- link to technical documentation
- material, ...

Search filters by:

- release status
- part number
- material, ...

3D preview of the part before downloading in CATIA V5 format



### Color code system supports the use of standard parts

The designer can search for required part on the basis of the release status or search for an internal part number, standard reference, material etc.

“PARTsolutions links each component to a color code that enables designers to select the parts we have defined as standard, both in terms of design and in terms of procurement,” adds Jérôme Mercier.

Once the part is selected, the designer can download the corresponding CAD model in native CATIA V5 format. In addition to the dimensional and assembly information each CATIA model contains information from RNAS database such as the material, the internal part number etc.

### The number of parts dropped by 15% in only one year

PARTsolutions by CADENAS accumulates all fasteners used by the train maintenance centers, engineering services, procurement and logistics teams, with the aim of favoring NF, EN and ISO standards. PARTsolutions also contains parts from suppliers such as: Böhlhoff and Nord-Lock.

With simple and powerful search methods, SNCF engineers are more willing to reuse existing parts and therefore help to avoid the creation of new components. Streamline teams also detect duplicates in a more efficient way.

“The search methods provided by CADENAS are significantly more powerful than what we get in our RNAS database,” confirms Jérôme Mercier.

Every two weeks CADENAS receives an excerpt from RNAS database with new and deleted items, for updating the online library. In this way confidential information is protected while ensuring data consistency in both, internal and online systems.

Starting with 10,000 parts, SNCF reduce the number of parts to 8,500 in only one year. A decrease of 15% that leads to savings in terms of procurement, storage and maintenance.

### Regulating other parts is currently being considered

“We have many other parts that could be streamlined the same way,” concludes Jérôme Mercier.

# COMPANY DESCRIPTIONS

## SNCF

Present in 120 countries, SNCF is a world leader in mobility and logistics. Its total workforce of 250,000 generated revenue of 32.2 billion euro in 2013, with over 25% from markets outside France.

A public sector group dedicated to public service, SNCF builds on its foundations in rail to offer a broad range of services, delivering seamless door-to-door mobility for transport and logistics operators, passengers and the regional and local governments that are its organizing authorities.

[www.sncf.com](http://www.sncf.com)



## CADENAS GmbH

CADENAS is a leading software developer in the areas of Strategic Parts Management and parts reduction (PARTsolutions), as well as Electronic Product Catalogs (eCATALOGsolutions). Included are also the numerous innovative search functions, like the Geometric Similarity Search GEOsearch, which is offered as alternative or supplement to the traditionally classified parts master under the term of intelligent finding. With its customized software solutions, the company acts as a link between the component manufacturers with their products and the purchasers. In doing so, the company serves more than 10,000 customers in 40 countries.

With its 300 employees at 17 international subsidiaries, the name CADENAS (Hispanic: process chains) has been standing for success, creativity, support and process optimization since 1992.

For further information about the company, please visit our website:

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

