TECban systems SAS- Presentation & Products Overview

Presentation of TECBAN SAS

« LEADER IN RAILWAY TEST & MAINTENANCE SYSTEMS »

TECban Systems is an increasingly important player in the engineering of transport and maintenance and railway safety. The company is present in a niche of this sector: The development, design, manufacture, and sales of highly innovative equipment's and systems and related services for the diagnostic and maintenance tests of embedded systems with high added value such as braking systems, air production, HVAC, doors, auxiliary systems, pantographs, on board electronics, etc.

Job description

Today, the European railway sector is facing an unprecedented evolution: the liberalization of transport and interoperability. Moreover, railway market prospects are drawn politically in western countries by considerations of availability and security, while in developing countries; rail is often an effective means of accelerating trade in large areas or in areas with high urban density.

A large number of manufacturers in the railway sector are in favor of liberalization. They focus mainly on maintenance services for railway operators; where profit margins are the most profitable (gross margins above 60%) and especially where market recurrence is greatest.

In the coming years, TECban aims to become a key player in its global presence and high technological expertise.

The company mainly realizes its turnover with overseas countries (export is about 70%).

The company TECban SAS





TECban was founded in March 2001 to provide reliable, innovative, modern and flexible equipment's and systems for the testing of braking and auxiliary systems in the railway transport industry.

Since its creation, TECban has:

- Obtained in 2002 the 1st prize of the competition "Tremplin Enterprises" under the aegis of the French Senate and the ESSEC. Prize awarded by the Prime Minister, after a selection of almost 330 innovative projects.
- Developed a wide range of test benches to cover up to 90% of the needs of a railway maintenance workshop, whether in France or abroad.
- Developed a wide range of universal and multi-brand test benches to test the braking systems developed by FAIVELEY TRANSPORT, KNORR BREMSE, WABTEC, DAKO, MZT etc.
- Developed a wide range of universal test benches to test HST, EMU DMU, LOCO/FRET and METRO/LRV.
- Successful to become the main supplier to major accounts like SNCF, RATP, ALSTOM, SBB, ONCF, Ned train etc.
- Successful to convince foreign customers (in India, Taiwan, Sweden, Switzerland, Luxembourg, Norway, Germany, Mauritania, Panama, etc.) to adopt its systems and technology.
- Filed a patent (08-10-2002) in the field of traceability / traceability by radiofrequency electronic chips with memory (electronic tags).
- Filed a patent (07-12-2007) in the field of remote electronic measurement of loading of railway vehicles.
- Developed a wide range of modular and flexible test systems for maintenance workshop and railway production.
- Developed a service offer, such as preventive maintenance, predictive maintenance, and calibration of test systems, remote troubleshooting, training, maintenance technical documentation, spare parts, etc.
- Developed partnerships with quality suppliers, and even our customers.
- Certified ISO 9001: 2008 since July 2009.
- Developed (in progress) the first portable, autonomous rail control system to generate its own "green" energy (ECOdesign)
- Developed (in progress) the first "wind turbine" for railway vehicles.
- Developed (in progress) the only innovative and intelligent systems "NAVIban" allowing traceability, geolocation, and predictive monitoring of railway vehicles.

- Developed (in progress) the first wireless sensors "SENSOban" high speed, long distance, synchronized, using high performance the software communication protocol developed by TECban.
- Developed (in progress) the first remote system to remotely control and measure the loading of freight wagons, whatever is their geographical location.
- Developed a range of tools and special measuring devices (brake force sensor, etc.).
- Etc.

TECban managing team

The success of TECban lies largely in its management team. The founders of the company, who form the current team, are all involved in management. They are highly qualified in railway technology (brake control, Bogies, air production, etc.) and their skills are complementary:

TECban value Offer

The products developed by the company TECban are unique: universal, automatic, modern, and filed proven by several applications worldwide.

TECban aims to offer a unique offer as:

- A global player in the railway industry,
- Specialist in testing equipment,
- Specialist in high-value rail systems such as braking.

The product line of the TECban offer is divided into two families:

- Static test systems and test benches for railway components and systems,
- Mobile and portable testing systems for rail vehicles,
- Traceability and monitoring systems (RFID, GPRS)
- Tools and special measures

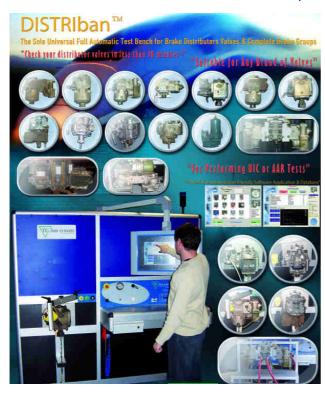
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Associated Services:

Within delivery of its equipment's, TECBan provides services such as:

- spare parts
- additional training
- updates (software and / or hardware)
- annual contract for remote assistance
- preventive maintenance contract
- calibration contract
- 1- The family of static test benches is mainly intended for the maintenance and validation of railway systems once removed from the vehicles. They can be pneumatic or hydraulic. This product line already exists and is gaining market success; It enables TECban to introduce itself to decision-makers in the workshops.

RANGE OF PNEUMATIC TEST BENCHES (Non-exhaustive list)





"DISTRIBUTOR VALVES TEST BENCHES

"ABCban" UNIVERSAL BRAKE CYLINDER / CALIPERS/ TREAD BRAKES TEST BENCHES

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"MULTIban" UNIVERSAL BRAKE COMPONENTS & BOU BRAKE PANELS TEST BENCHES



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RANGE OF HYDRAULIC TEST BENCHES (Non-exhaustive list)



"HPUban" & "CLRban"
UNIVERSAL TEST BENCHES
FOR BRAKE HYDRAULIC
UNITS & HYDRAULIC
CALIPERS

2- Traceability and monitoring systems (RFID, GPRS)





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3- Measuring systems and special tools (Non-exhaustive list)



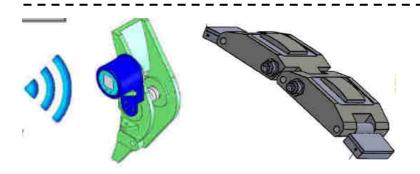




RANGE OF PNEUMATIC AUTOMATIC VARIABLE AIR VOLUMES & FIXED AIR VOLUMES







"BFMban" PORTABLE DIGITAL LOAD PIN & PORTABLE COMPACT EMBEDDED BRAKE SHOE

To measure the braking force on railway rolling stock





BRAKE INDICATORS & LOAD INDICATORS for Freight wagons



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4- The family of mobile and portable test benches is mainly intended for the final test of railway vehicles before they goes into service.



RANGE OF MOBILE &
PORTABLE BRAKE
TEST UNITS FOR
RAILWAYS ROLLING
STOCK.
Approved UIC, VPI, etc.



MOBIban PTU: "The lightest brake test unit Universal & Automatic for rail vehicles " nBekka Page 9 Doc. NB/S34-2017 date: 25/08/2017

5- A range of "low cost" test benches. (Non-exhaustive list)



MANUALLY OPERATED TEST BENCHES FOR UIC BRAKE TESTS DIRECT ON RAILWAY VEHICLES BOGIES





MANUALLY OPERATED TEST BENCH FOR SLACK ADJUSTER UNITS



MANUALLY OPERATED TEST BENCH FOR BRAKE CYLINDERS

6- "GENEban Manager" railway Brake test generator

Automatic code generator for creating rail brake test programs. It allows our customers to be autonomous with ease. Can only be used with TECBAN test benches.



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The Market

The offer is addressed in particular to the following actors:

- Manufacturers of new railway rolling stock (car builders),
- Rolling stock maintenance operators
- Operators / Networks
- Railway equipment manufacturers
- Testing laboratories

Buyers are therefore construction or maintenance workshops; The two product families are complementary and offer a synergy in terms of commercial strengths.

The rolling stock concerned by the TECban control systems are freight wagons, passenger trains (high speed or not), metros, trams, etc.

TECban's export activity since 2001



In only a few years, TECban has established itself as an essential partner in the field of services oriented towards the maintenance, development, design and manufacture of railway control systems.

Our products are in service worldwide.

The distribution network

TECban's strategy has been to rely on a well-established network of partners in the railway sector. It is evident that the majority of the ties woven to export, were thanks to the professional career of the current leaders of TECban.

We are constantly looking for partners to diversify our customers.

Below you will find the list of geographic areas on which TECban has a distributor, or agents.

- France, EEC, and other European countries: TECban
- South Korea
- Belgium
- Taiwan
- Algeria, Maghreb, Africa
- South Africa
- India
- Thailand
- Serbia / Montenegro / BALKANS
- Turkey
- Morocco

Why our customers choose TECban / Our strengths

- ❖ TECban offers and guarantees to its customers a certain "independence and a great autonomy" against brake systems manufacturers such as Knorr Bremse or Faiveley Transport. Thus, they can carry out their maintenance by their own means
- TECban systems equipment's are running worldwide, with an excellent feedback
- 1. TECban team have skills in railway technology (for LRV-metro-tram, rapid trains, coaches, locos, wagons) and automation technology (pneumatics, hydraulics, mechanics, electronics, software design)
- Knowledge of railway products (Faiveley Transport, Knorr Bremse, Wabtec, Dako, etc.), norms
- ❖ After sales services (remote services, assistance, etc.) proven by our field experience.
- We provide "turnkey" test benches
- We provide "customized" test benches (testers)
- We provide cost effective solutions and equipment's
- Reactivity and flexibility
- Ability to manage complex projects
- We have a service philosophy

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Reference List:

They have placed their confidence in TECban ability to serve them:

- TRA Taiwan railways
- Flourishing transportation Taipei (Taiwan)
- SNCF French railways, all sites
- ❖ CEGELEC
- ❖ BOMBARDIER
- ALSTOM Worldwide
- RATP Parisian Metro, all sites
- Stockholm Metro
- FAIVELEY Transport Worldwide
- TCDD Railways of turkey
- CFS Syrian railways
- CFL Luxembourg railways
- CFL Technics Luxembourg
- SBB CFF FFS Swiss railways
- ❖ Decoufle
- ❖ KNORR BREMSE
- Metro of Grenoble
- Metro of Santiago (Chile)
- ❖ MANTENA (Norway)
- ETF
- STVA (freight wagons owner)
- ❖ GEPOR
- ❖ NEDTRAIN (Netherlands)
- ❖ TISSEO
- Panama Metro

- Rolanfer
- > RSK, Netherlands
- > Bucarest metro
- Logerail
- > VTS val trans service
- > Italthai Thailand
- > Dassault aircraft military division
- > SEGI
- > SARI
- > FERIFOS
- Atlas Copco
- > KEOLIS
- ➢ ONCF Morocco
- > SNIM Mauritania
- DB Germany
- > SNCFT Tunisia
- > Metro of Santo Domingo
- > TSO
- > RENFE (Spain)
- > SETRAG, Gabon
- > ERMEWA Group
- ➤ COLAS Rail
- > STIB, metro of Brussels
- ➤ BOUYGUES E&S
- > ABH workshop
- > Etc.