

VITaI news

Special events newsletter

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Transport & Logistic



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SIEMENS

SIEMENS

FIT locs. FIT cars. This is VIT.

Our shops take maintenance seriously. The highest levels of safety, performance, and reliability at minimum downtime. We work hard to put your equipment back on track. VIT keeps your stock FIT.

Servicing supplied from six different centers across Slovenia plus an emergency call out service to handle any breakdowns in the field. With a proven track record, we work closely with you to provide long-term solutions to your servicing needs.

Got a challenging case on your hands? Come visit our booth so we can find a solution that makes your equipment fit again.

Fit to run. Fit to prosper. VIT.

Dušan Žičkar
CEO

On the right track

It is almost halfway through 2019, and the past year's business performance is still a hot topic. With operating revenues and expenses totaling EUR 122.7m and EUR 122.5m, respectively, SŽ – VIT concluded the 2018 financial year in the black, achieving an operating result of EUR 245 thousand.

An important indicator of SŽ – VIT business performance is revenues from international operations. These are mostly comprised of maintenance services, which account for more than half of total revenues. In maintenance, 79,25% of revenues were generated from services supplied to our two main clients, the passenger operator SŽ – Potniški promet and freight operator SŽ – Tovorni promet, with the remaining 20,75% made up of other clients in Slovenia and abroad.

The company reported a year-on-year increase of 2.2% in international revenues. Services on international markets and to clients outside SŽ Group exceeded the planned target, accounting for EUR 12m, or almost 21% of all revenues in maintenance. Relations with foreign clients were strengthened and, in some cases, expanded, so additional international orders are expected later this year. Maintenance of freight wagons and wheel-sets reached the maximum volume of orders, with shops operating at capacity.

The largest 2018 project with respect to revenues was level IS3 wheel-set reconditioning, followed by a major project for the supply of TSI wheel-sets, which is currently still in progress. While most revenues on international markets are still generated in wheel-set maintenance and overhaul, there is enough demand for other services in our portfolio, also. In recent years, a steady increase was noted in maintenance of freight wagons operating on Slovenian rail network, which are serviced at six different locations (i.e. Dobova, Ljubljana, Maribor, Ptuj, Divača, and Koper).

The shops at Dobova and Ptuj are practically at capacity this year, with things looking similar at Ljubljana and Maribor, which is currently working on a project to repower engines on shunting locomotives and a project for modernization of diesel multiple units. Moreover, Ljubljana Center plans to expand business to international markets, and has already completed first overhauls for a foreign client.

2019 sees all our regular clients continue doing business with us and even more would join if it was not for capacity restraints. Similar to previous years, our largest international market is Germany, followed by France and Austria.

Additionally to Transport Logistic, you can also find us at events held by VPI and CRSC and in various rail media advertisements. Staying proactive is key on any market, and so we will keep reaching out to potential clients to forge new partnerships.



Maintenance functions certificate renewed and expanded

In November 2018 the Swiss certification body Scornrail carried out, in line with Commission Regulation (EU) No 445/2011, an assessment to renew SŽ – VIT's maintenance functions certificate and expand it to cover tractive and trailing stock other than freight wagons and wheelsets.

The current certificate for freight wagon maintenance, which was obtained back in 2012 and was one of the first certificates delivered to a maintenance supplier in Europe, was re-assessed and successfully renewed. In second part, the assessment involved a first-time check of the key process compliance with respect to locomotives, powered passenger vehicles (trainsets and multiple units), carriages, self-propelled maintenance vehicles and engineering trains, and was focused on safety and on the compliance of SŽ – VIT's processes with safety requirements.

The certification allows for important parameters, which are typically set high especially in regards to safety, to be implemented in good time. In addition, it boosts SŽ – VIT's competitiveness and grants us a competitive edge in regards to the upcoming EU directive on trailing stock. Successfully passing the assessment puts SŽ – VIT to the very top of ECM-certified shops in Europe.

On-site inspections were carried out at SŽ – VIT HQ, all shop centers (Ljubljana, Divača, Dobova, Ptuj, and Maribor), and worksites (Zalog, Nova Gorica, Novo mesto, Celje, and Tezno). The assessors were satisfied to see that key processes were carried out in an acceptable manner despite the differing types of vehicles under maintenance at each respective location. Other than the shops and sites in charge of freight wagon maintenance, which have previous experience with ECM, the centers and worksites under assessment were completely new to taking on ECM duties.

Concerning the assessment of maintenance functions for locomotives, powered passenger vehicles, carriages, self-propelled maintenance vehicles and engineering trains, the principle is similar to the assessment in freight wagon maintenance with the difference that Regulation No 445/2011, which was previously limited to freight wagons, was adjusted accordingly so as to be applied to the tractive and trailing stock concerned. The relevant certificate was delivered on 18 March 2019 and is valid up until 10 February 2024.



DECLARATION OF CONFORMITY for the MAINTENANCE FUNCTIONS following the COMMISSION REGULATION (EU) No 445/2011 of 10th May 2011

* The audit was based on the framework of the RE 445/2011 the rules of which were applied in the general sense

1. ASSESSED ORGANISATION

Legal designation: SŽ - Viteza in servis, d.o.o. Zvešča cesta 217 1000 Ljubljana, Slovenia	Abbreviations of workshops: Lj, Nv, Pt, Dv, Nv, M, C, Te
National registration number: 122561000	UID No.: 599181703

2. ASSESSING BODY

Organisation: SCORNRAIL AG, Zuercherstrasse 41, 8400 Winterthur, Switzerland

3. DECLARATION OF CONFORMITY INFORMATION

This is a new declaration of conformity renewed declaration of conformity updated declaration of conformity

Identification number of this declaration of conformity: 10 02 2024

Validity from: 18.03.2019 to: 10.02.2024

Type of company: (special maintenance supplier, railway undertaking, infrastructure manager, etc.) Maintenance supplier

The maintenance activities cover:

- traction units (electrically and thermally operated)	<input checked="" type="checkbox"/>
- passenger carriages	<input checked="" type="checkbox"/>
- EMUs and DMUs	<input checked="" type="checkbox"/>
- Mobile railway infrastructure construction and maintenance equipment ("Yellow Machines")	<input checked="" type="checkbox"/>

4. MAINTENANCE FUNCTIONS

Maintenance development	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Partly <input type="checkbox"/> No
Fleet maintenance management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Partly <input type="checkbox"/> No
Maintenance delivery	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Partly <input type="checkbox"/> No

5. ADDITIONAL INFORMATION

Basic of the declaration is the SCORNRAIL audit report No. ECM-12017 Scope of inspection see page 2.5

Issue date: 18.03.2019

Internal reference number: ECM-7260-1

Signature: H. Gemroth

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Quality and energy management at the heart of our business

In 2018 SŽ – VIT successfully passed a recertification audit to verify the conformity of its quality management system against ISO 9001:2015 along with a pair of initial audits to achieve certification to ISO 14001:2015 and ISO:50001. The company has a fair deal of experience with quality management under its belt; our processes have been in line with ISO 9001 for many years, and the most recent audit demonstrated compliance also with the latest requirements. Because our business inevitably affects the environment and uses up a fair deal of energy, attention is also paid to the reduction of environmental impacts and to energy efficiency. When SŽ – VIT made responsibility towards the environment one of its core values – together with a vision to sustainable development – it was but a matter of time before these vows would gain official recognition in the form of certificates.



The recertification audit to the new ISO 9001:2015 standard was conducted by an accredited certification body Bureau Veritas. This latest version of ISO 9001 has a number of advantages compared to the previous versions including a process-oriented and risk-based approach and a high-level structure that integrates with other standards, such as ISO 14001:2015 for environmental management. Processes are planned in a sustainable manner to incorporate both market and environmental aspects with emphasis on social responsibility.

Through measures implemented or pending implementation in maintenance, traction and technical services, a number of environmental goals will be achieved such as reducing emissions and carbon footprint, conserving natural resources and using them in a sustainable manner, making energy and water usage more efficient, increasing the use of renewables, reducing the pollution, restoring ecological systems and their regenerative faculties, improving material efficiency in production and consumption (this translates to smaller amounts of power and material per unit of product or service), and phasing out and replacing dangerous substances.

As part of responsibility to the local community and compliance with applicable environmental regulations, SŽ – VIT contributes to environment protection and sustainable development through raising employee awareness on such topics. This goes beyond mere information spreading – it is a long-term effort to change deeply-rooted behaviors.

With such mindset, the company obtained in the second half of 2018 an acknowledgement of certification to ISO 50001 for efficient energy management. Energy cost has

been a consideration in various investment, rehabilitation, and upgrade projects so far. While the standard is largely focused on the business value of implementing energy management systems, it takes a step further to introduce a transparent and systematic approach to solving energy issues.

Through energy performance monitoring, ISO 50001 allows businesses to recognize opportunities for energy savings. At SŽ – VIT, an audit of the energy management system is currently on-going at Ljubljana Center, with the findings report to be issued by the end of December. This report will include data on the energy usage (i.e. electrical power, thermal, and compressed air) and water consumption along with recommendations and measures for improvement. Slovenske železnice set a goal to achieve a 3% reduction in energy costs by 2022 compared to the 2014-2016 situation, and the first results are already in. In early December a new, more efficient 45kW compressor was purchased to replace the previous one, which operated at 90kW power. Heat loss in the winter was reduced by installing new roller shutter doors, and energy efficiency is given priority when purchasing new appliances and machines. Moreover, the staff are encouraged to save energy at work.

Certificates to ISO 9001, ISO 50001 and ISO 14001 share a connection to other system management standards achieved at SŽ – VIT, with each standard complementing each other. Eco-friendly business practices translate to efficient use of energy, and vice versa. Because each improvement or measure impacts a number of different areas, every step has to be planned with utmost care. More than 50 evaluations were conducted in 2018 by our international clients to verify that all processes were free from non-conformities.

ISO 9001
ISO 14001
ISO 50001

BUREAU VERITAS
Certification



TSI-compliant manufacturing of wheel-sets expanded

In 2015 SŽ – VIT became TSI-certified for the manufacture of BA 004 and BA 314 wheel-sets. The stage one audit was completed on 10 February 2015, and in the following years our wheel-set manufacture processes were successfully verified for compliance at annual surveillance audits. Because of popular demand, the decision was made later on to expand the certificate to BA 303 wheel-sets.

The audit for BA 303 wheel-set manufacture under TSI certification was conducted mid-2018 at the wheel-set maintenance shop in Ptuj. In the evaluation, all applicable documents were reviewed and the entire production process was inspected together with the associated measuring tools and machinery.

The certificate was issued on 21 June 2018 and – like with BA 004 and BA 314 wheel-sets – stays valid for two years. Achieving TSI certification for BA 303 quickly secured orders for new wheel-sets, which can be mounted to both new and existing TSI wagons. This latest addition strengthens our presence on the market for wheel-set rebuilds, which, albeit small, is anything but negligible given the added value it brings in to our company.



- IL, IS1, IS2, IS3
- New wheelsets according to TSI
- Replacement of wheel tyres
- Underfloor wheel reprofiling lathe
- Non-destructive testing (VT, UT, MT)



**THERE ARE NO SAFE VEHICLES
WITHOUT SAFE WHEELSETS**

VIT keeps them FIT

Major overhaul of Siemens Desiro EMUs



In April this year, our Ljubljana workshop completed a major overhaul of Siemens Desiro EMUs owned by the passenger operator SŽ-Potniški promet. The works, which took two and a half years to complete, started on 13 September 2016 when the first unit entered Ljubljana Center's shop, and involved a total of 30 major revisions – 10 on two-car units and 20 on three-car units.

Compared to mid-life overhauls, a major overhaul comprises more repair work on the converters of the auxiliary equipment, traction power converters, the underframe, the brakes, interior equipment, and – what is easy to notice – application of an anti-graffiti coating over the entire body, which improves the general image of the trains and is significantly faster and more environmentally friendly than redoing the whole paintwork. Additionally to the overhaul works, degraded parts of traction motor insulation were renewed, loose window panes were replaced, and a prototype retractable thread board was retrofitted onto one of the EMUs for testing.

The thread board is mounted under the train's sliding door and automatically slides in position when the door opens to ensure that passengers are able to enter and exit a train with safety at stations with excessively large platform gaps. To achieve optimal functionality, the concept is based on applicable standards, with appropriate components selected as to facilitate the production and installation onto the train. The boards were manufactured and tested at Divača Center. Before installation, a vehicle modification blueprint had to be prepared, which included mechanical processing, welding, assembly, and testing.



In the winter from late 2017 through early 2018, a solution was finally found to the issue concerning snow-related breakdown of high-voltage insulation in traction motor windings. Characterized by fine snow crystals, which pass right through the filters, this type of 'cold' snow caused several cases of stator windings' insulation breakdown in the past, with more than half of traction motors knocked out in some winters. To counter the issue, custom-made covers with filters were installed on a total of ten motors. The measure turned out to be effective, as no charges were reported in the winter of early 2019. Moisture-resistant filters were installed first, but had to be changed too frequently, so the testing was cancelled and then resumed in summer once new filters were installed. Currently two types of filters are in use, one for summer and one for winter season. A total of 34 traction motors, or 28% are currently fitted with said covers, which is high enough a number of testing units to be able to assess the filters' effectiveness come winter. It is expected that the entire EMU fleet will be fitted with the covers. The covers are a SŽ – VIT design, and were produced entirely at our workshops.

Coming back to the overhaul, the works on the list went according to plan and were on schedule, with no additional unit downtime. Night and weekend shifts were introduced to handle the increase in workload so that the trains could be returned to operation when scheduled for service.

The next such revision is planned in 2024. Meantime, things are sure to stay lively as these trains typically require plenty of routine servicing. Moreover, a project is currently on-going to install WiFi and GSM-R on the EMUs, along with preparations to welcome a new set of units recently ordered by the passenger operator SŽ-Potniški promet.

Major overhaul of Fiat pendolino EMUs



Ljubljana Center has been in charge of servicing pendolino EMUs (also known as SŽ Series 310), a type of high-speed tilting trains by the Italian manufacturer Fiat Ferroviaria (now Alstom), ever since three units from this family of trains first joined Slovenske železnice's train fleet. Operated by the passenger division of Slovenske železnice SŽ-Potniški promet, the trains receive both routine and unscheduled maintenance at the shop in Ljubljana. Routine works include inspections and also overhauls, which are performed once every eight years and are classified – based on the scope of works – into mid-life and major overhauls. The latter has been performed for the first time recently on SŽ 310-001/002.

The 310-001/002 is made up of three cars, each with a pair of two-axle bogies. The pair of bogies at the front and rear end of the train is each powered by a single traction motor while the two bogies in the center run unpowered. The tilting system is a particular characteristic of this train type – the pendolino is designed for speeds up to 200kph, although commercial services on Slovenian network run at maximum 160kph due to line restrictions.

Major overhauls require a fair number of works be performed, and so take a while to complete. Work on the body comprised a brake overhaul, which was done in Italy by Faiveley (the braking equipment of the bogies was overhauled at our shop), cleaning the electrical components, renewing the interior, flooring and windows, checking the air-conditioning system, and applying new paintwork. The bogies were disassembled on a bogie press, and worn-out parts such as ball joints, monobloc wheels, bearings and reduction drives duly replaced. The reduction drives were inspected in Italy by Alstom, with new monobloc wheels supplied by Lucchini. Since last year, Ptuj Center is also able to shrink fit wheels for pendolino trains, however these are used with non-driven wheelsets, while driven wheelsets are being supplied by a partner from Italy until the shop purchases the device needed to perform tests on driven wheelsets before returning them to operation (the purchase is planned in the near future). Additionally to the overhaul work, the 310-001/002 was retrofitted with LED headlights.

Ljubljana Center carried out a major revision also on the remaining two EMUs, i.e. 310-003/004 and 310-005/006, with the former requiring additional works to repair the damage sustained in a collision with fallen rock.

Carriage refurbished for motorail service



As part of an overhaul, Ptuj Center refurbished a carriage planned to run motorail service on the Soča line, a special kind of train which lets passengers take their vehicles with them on the train journey. In addition to the overhaul work, the team at Ptuj completely redesigned the carriage's interior, replacing both flooring and upholstery.

The changes involved modifying the hand brake in line with the EC system, installing oil-burning air heaters, and retrofitting roller doors. One of the sanitary facilities was converted into bicycle space. LED lights were installed to replace the previous lightning equipment, and limited power outlets were retrofitted for charging mobile phones and laptops, while the exterior paintwork was redesigned.

Once refurbished, the carriage was returned to the owner in May 2017 shortly before the start of the peak motorail season. According to the passenger operator Potniški promet, which ordered the work, the new image and functionality of the carriage were well received by the passengers. For some extra spice, the carriage also features an on-board exhibition hosted by Gorenjski muzej ("Gorenjska Museum") about the life and work of engineer Maks Klodič, who built the Bohinj rail line and tunnel at the start of the 20th century.



Overhaul of on-track motor vehicles



In 2017 Divača Center, which supplies maintenance to tractive units running on the south-west section of Slovenian rail network and repairs to freight wagons of various operators, added overhauls of on-track motor vehicles to their services.

The overhaul work is done on Class 911, Class 915 and Class 916 heavy-duty track motor vehicles, and comprises P1, P6 and P18 inspections, mid-life and major overhauls, and repairs pursuant to the national Rules on the maintenance of railway vehicles. Our main clients include the infrastructure manager SŽ-Infrastruktura and construction company Tegrad.

Divača handles all major maintenance and repair work, while minor servicing and repairs can also be supplied at Nova Gorica. Additionally, minor repairs can also be supplied in the field.

In the said year, Divača completed a total of four overhauls of track motor vehicles for SŽ-Infrastruktura and two mid-life overhauls for Tegrad. The overhaul work continues in 2019, with three units returned to service so far and an additional two planned by the end of the year.

Slovenske železnice's rolling stock fitted with GSM-R



When the Global System for Mobile Communications-Railway (GSM-R) was deployed on Slovenian network at the end of 2017, the next goal was to fit the rolling stock with the associated cab radios as quickly as possible. Slovenske železnice made a decision to equip a total of 217 vehicles of 14 different types.

In a public tender, Iskratel was selected as the contractor, with MESA26 radio units to be supplied by Funkwerk and fitted to the vehicles by SŽ – VIT. The project was launched at the end of 2018, starting off with a pilot installation of the radio units on Class 643-015 diesel locomotive and Class 813-110 DMU, with the remaining vehicles to be fitted in the course of the project. The next phase will involve static and dynamic testing, approval of the project documents, and obtaining vehicle authorization for each type of stock. At the time of writing, a total of ten pilot installations were completed. Serial installation will start once the pilot installations are approved. With six vehicles to be equipped each month, the project is expected to finish by November 2021. The fitting will be done in Ljubljana Center and Maribor Center.



GSM-R train radio system MESA26 consists of the following components: CR26 central unit, MMIC operating device (i.e. the display), loudspeakers, handset, and the antenna. The central unit is fitted to the vehicle, with the MMIC, loudspeakers and handsets installed in the driver's cab. The antenna is fitted to the vehicle's roof. Class 643, Class 643, and Class 732 shunting locomotives are additionally fitted with gooseneck microphone and foot switch with PTT.

Maintenance of the radio units will be supplied by SŽ – VIT's technicians from Ljubljana and Maribor, who were trained specifically for this purpose. Additionally to performing tests with complex equipment, the maintenance work will also require opening up the device, adjusting the settings, as appropriate, and reading diagnostics. Moreover, our previous experience with an older version of MESA23 by the same manufacturer should make for an easier start of the maintenance work.

Repowering Class 642/643 shunting locos



At SŽ – VIT, we have been working to modernize Slovenske železnice's rolling stock for a number of years now, which included, amongst other, upgrading and repowering Class 642 and 643 locomotives. In an effort to increase vehicle availability, cut maintenance costs and lower emissions, the locomotive's owner SŽ-Tovorni promet decided on a project to repower and modify a total of 12 units at our Maribor workshop, which is specialized in maintaining diesel vehicles.

The project to repower the locomotives was prepared by an American locomotive manufacturer and maintenance supplier NRE. Work under this large-scale and complex endeavor comprised:

- Replacing the SACM-MGO / WARTSILA diesel engine with a modern MTU diesel engine in compliance with the current EU Stage IIIB emission standard at an ambient temperature of 25°C and retrofitting the cooling system with a new variable frequency drive inverter for cooling fan;
- Replacing the main DC generator and auxiliary generator, and Statody alternator for battery charging with MARATHON alternator, which has two AC outputs to generate electrical power for use in shunting operations and auxiliary device charging;
- Replacing the auxiliary drive belt system with KONČAR AC electric motors;
- Rebuilding the driver's cabin with new control panels and switching control elements for enhanced operation and use of the locomotive, along with sound and cold insulation;
- Upgrading the brake equipment manufactured by WABTEC MTZ Skopje with newer pneumatic block assemblies to increase safety and simplify the use of locomotive-fitted elements (the main changes were done on direct brake

controls, sanding controls, horn controls, operating components of the intermittent train protection (PZB, or Indusi), deadman's handle, and on the hand brake, which was replaced by parking brake cylinders and an air brake system.

Steering and monitoring of the above-mentioned assemblies is done using NRE's NForce control module and MTU - Engine Condition Monitoring along with PC Panel local display units installed on each control panel, with data saving and diagnostics enabled. The new HMI/LDU (human-machine interface) is more user-friendly and offers better insight into locomotive inputs and outputs. The new HMI also offers additional functionality such as control of the reversers, power contactors, relays etc.

Additionally, the machine and device protection was improved, while a fuel consumption monitoring system was fitted to the main 3000 liter fuel tank.

In the course of the project, the high-voltage equipment of the traction circuit, low-voltage electrical equipment of the auxiliary and safety devices, the pneumatic gear, and the brake system had to be repositioned, which called for a redesign of certain assemblies such as the battery, low-voltage rectifier with power converters, and the air reservoirs under the body frame. The new opening and securing system for side covers allows easy equipment and assembly access in the short part and engine section.

The modification work mentioned above is a result of careful and zealous planning done in collaboration with SŽ-Tovorni promet. Modern rail technology introduces a number of advantages in operating a refurbished locomotive, demonstrating that old and worn-out equipment can be reworked into like new locomotives, which has always been one of our goals at diesel unit maintenance.

Eas and Eaos wagons refurbished



Back in 2012, the freight operator SŽ-Tovorni promet decided to have their Eas and Eaos wagons refurbished to extend their service life, which was coming to an end due to wagons' age and, mostly, because of high utilization rates and the associated mileage (measured in gross tonne kilometers), which had reached the limit value. The order for refurbishment was placed with Dobova Center, and called for a complete replacement of the worn-out body.

The side walls were replaced in compliance with the standard documents of the manufacturer selected in a tender. The dimensions of the new body are identical to the original. The first batch, which comprised 43 units and was refurbished in 2012, retained the original body design with the folding end doors and the series number Eas 595/594.

In contrast, the present design, which was introduced in 2016, features a reinforced top edge with side walls welded onto the end wall board to achieve a sturdy and solid structure. The side walls were reinforced with 8mm and 4mm thick plate metal at the bottom and top, respectively. For greater sturdiness, the folding end doors were replaced by fixed end boards and each side was fitted with one door only. To prevent floor breaking and the associated wagon downtimes, the wooden floor was replaced with a steel plate 6 mm thick. Next to better performance, these upgrades also translate to lower maintenance costs. So far, a total of 62 wagons were redesigned in this manner, with the series changed from Eas 595/594 to Eaos 530.

The refurbished wagons feature, as mentioned, lower maintenance costs, better performance and more transport safety, so it is expected that SŽ-Tovorni promet will place additional orders for modification of their Eas to Eaos in order to enhance the quality of its transport services. At the time of writing, a total of 105 wagons had their body replaced, with additional 80 to 100 units planned in the next two years.

Customer statement

SŽ-Tovorni promet's fleet is serviced by SŽ – VIT, with the units ranging from state-of-art multisystem locomotives to various types of freight wagons. In an effort to help our freight business stay effective, their technicians work hard to provide quick and quality inspections and repairs, and the results of their work make us very satisfied. The company can be relied on not only for routine maintenance and overhauls, but also for various modification (retrofitting) and modernization services. SŽ – VIT proved to be the right choice of partner also in our most recent project to modernize our rolling stock, which is intended to boost the quality of our freight services and will largely extend the service life of our fleet.

Mag. Melita Rozman-Dacar
CEO



Maintenance of STVA's Laes and Laaeprs wagons



For years, the French automotive logistics company STVA has been our client in the maintenance of Laes and Laaeprs, a type of flat wagons used in car transport. Major repairs of the wagons are supplied at our shop in Dobova while routine servicing is done at Koper.

In March 2015, Dobova shop also started carrying out overhauls according to owner's instructions, with more than 70 wagons overhauled at the time of writing.

Overhaul and new paintwork on Regmms



In 2016 our workshop in Dobova finished a first-time overhaul of Regmms, a type of Class R flat wagons intended for container transport and timber haulage, for the Czech client LOKO TRANS s.r.o. A total of twelve units were delivered to the shop for a G4.0 overhaul, new paintwork, and a redesign of the exterior image for the end user from Italy. The wagons were additionally equipped with sidewall panels, with the wooden floor replaced with metal boards.

As a VPI- and ECM-certified shop, we were able to supply a quality solution which successfully met the expectations of the end user. Following a positive feedback, LOKO TRANS s.r.o. decided to deliver another batch of wagons two years later, which are arriving to the Dobova shop for overhaul this year.

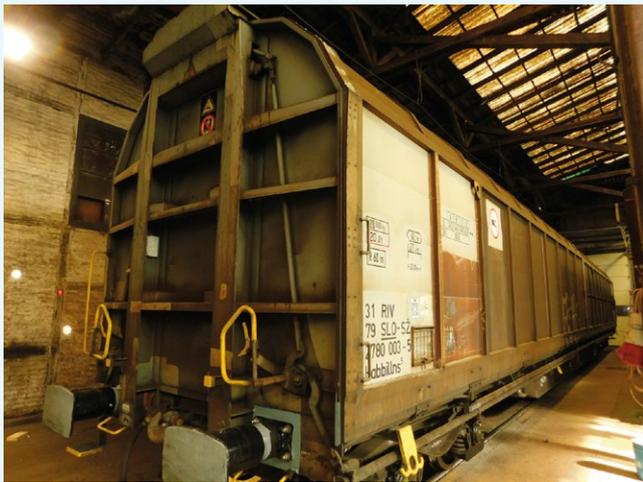
Customer statement

We were very satisfied with the work done on the Regmms wagons. The wagons are in operation without any technical problems so far. The wagon production was characterized by good quality that comply with the regulations and requirements. The company SŽ – VIT always tries to comply with our request regarding technical specificities of wagons. Due to high-quality work, we look forward to cooperating with the company again in the future.

Mgr. Adéla Hasalová
Assistant Director of Sales and Technical
Department



Maintenance of Class H covered wagons



In October 2018 SŽ – VIT started a project for the supply of maintenance of Habbilns and Habbins wagons to its client from Hamburg, TRANSWAGGON. Amongst other, the wagons are rented by the freight operator SŽ-Tovorni promet to run service on Slovenian network, which makes Dobova Center a convenient choice for keeping them in running order.

The servicing comprises VPI-compliant Level G4.2 overhauls and corrective maintenance. Wagons can also be fitted with trackers and repaired for damage sustained on route. Around twenty to twenty five wagons are currently planned for maintenance, and efforts are made that quality work will lead to additional orders for maintenance of this wagon type in the future.

Customer statement:

The TRANSWAGGON group started a project for the supply of maintenance of Habbilns and Habbins wagons with SŽ – VIT in October 2018. Since October 2018 Dobova Center SŽ – VIT proved itself as a reliable partner. The quality of the work is safely and well. Questions are answered quickly and given instructions are applied quickly too. The servicing comprises VPI and AST compliant Level G4.2 overhauls and corrective maintenance in application of all instructions from TRANSWAGGON. The TRANSWAGGON group is satisfied with the quality and quantity. TRANSWAGGON will continue to work with Dobova Center in the future.

i. V. Thomas Zander
Deputy Department Manager Technic Hamburg/
Teamleader Operating Hamburg

Overhaul of Kgs-z



After entering the Italian market for rail maintenance some years ago, SŽ – VIT is steadily establishing its presence as a maintenance supplier. When Railoc, an Italian provider of rail machinery, purchased a number of second-hand freight wagons with expired overhaul period from SŽ-Tovorni promet last year, SŽ – VIT was selected to overhaul the units. First talks on the project date back to August 2018, with the overhaul work officially starting at the end of November following the wagons' arrival to the workshop in Dobova. The project was completed in January this year when the wagons were returned to the owner.

The works comprised a G4.0 overhaul according to the VPI and replacement of worn-out buffers along with new paintwork tailored to the client's request.

Additional orders by Railoc are expected to arrive in the future, with the goal to further expand the partnership.

Customer statement:

We are pleased to confirm to you that our cooperation has been successful and that we have been working together very well.

Francesca Tioni
Account Manager

Our Customers

- Repairs and revisions of all types of tank wagons (excluding gas transport wagons)
- Maintenance of bogies
- Maintenance of wheelsets and of draw and buffing gear
- Renewal, installation, and testing of brake devices
- Non-destructive testing
- Repairs and removal of wagon damage and defects (e.g. cracks on welded joints, tank cracks, cracks due to fatigue, bogie cracks etc.)
- Pressure testing of tanks (also for transport of dangerous goods according to RID)
- Washing and cleaning of wagon inner side (including petrol, crude oil, mazut (fuel oil), benzene and chemical substances) and outer side
- Painting of the whole wagon

We are accredited to carry out pressure testing of equipment and have a certificate for the performance of non-destructive testing (NDT) as well as all the authorizations required in rail vehicle and component welding.

DOBOVA – A ONE STOP SHOP FOR TANK WAGONS

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