



E.I. – Energokom d.o.o.

za projektiranje i izvođenje postrojenja i trgovinu

Zagreb, HR, 01/01/2016

TO WHOM IT MAY CONCERN

Dear sirs/madams,

Let us introduce to you our company E.I.-Energokom. Our company is registered as limited liability company, based in Zagreb, Croatia (HR). Our company is registered at Trade court in Zagreb within category of unspecialized wholesale trade and installation projects for electrical & mechanical plants. Company was first registered in 1994, so we have 20 years of work experience. In these 20 years company has always been solvent and with good cash flow, it never took any bank loans and according to local market researchers, company results are within 5% best results among Croatian companies in same category.

Based on business results from last 6 years (2009-2014), company has:

- 2 full time employees,
- average sales (sales revenue) of around 400k € (450k USD) ,
- ROI index around 15% and
- nett worth (nett assets) of company around 300k € (350k USD) at end 2014.

Mainly our business is organized in 2 segments:

1. Trade representation – import/export mainly with EU countries and ex-Yugoslavia countries which are within CEFTA trading area. Also we had a number of projects with end users in CIS countries like Russia & Kazakhstan and India.

We have sales agent/partner agreement with Motortech – Germany and Nugent filters – USA. Our main customers-buyers of trade goods are within Oil&gas, Telecommunications and Energy/Power generation industries. Our principals have a large worldwide network of dealers, so it is possible to have cooperation on projects in many countries in the world.

2. Installations and start-ups, service and upgrade works – our hands-on work experience with many installations of generating sets, diesel and thermoelectric, gas engines, container sets, with installed power from 10 kW up to several MW. We have been outsourcing expert technicians and service workers for installation works and for start-ups (commissionings) we have been employing principle's specialist engineers and also less complex projects we have been starting-up by ourselves.

On the next pages, let us show to you some of our most important projects of our company..



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Our company has delivered, installed and commissioned and done service works with sales of over 300 gensets, over the past 20 years, with domestic & export projects to Slovenia, Montenegro, Kazahstan, Russia, also working for some of biggest companies in Croatia (like INA, oil&gas company, OIV), Slovenia (SI Telecom), Kazahstan (KZ-China gas pipeline), Russia (Gazprom gensets in containers), Montenegro (Porto Montenegro hotel gensets) ...

Around 50% of our annual turnover is export oriented and also around 50% of our projects is solutions, not just plain sales, but sales with additional value.

- 7 gensets 22 kVA installed in containers



- 2 units 550 kVA for a hotel project abroad



- 1 unit 450 kVA canopy with upgrades of spring anti-vibration mounts, control panel and remote monitoring for a finance building project abroad



- 12 units 22 & 65 kVA installed in containers for Emerson-export to Gazprom Russia



- 6 units 800 kVA prime/900 kVA stand-by with PLC control and Siemens Sivacon S8 TSs for Prompt - Slovenian Telecom main building, Ljubljana, Slovenia



- 4 units 165 kVA with special generator 433 V, for Koncar KET project in Chennai, India



- Gensets for OIV, transmitter stations on top of mountains in Croatia



- Various projects in Croatia & abroad ...





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- spare parts for TEGs for INAGIP offshore oil rigs
- supply of base oils from Mobile to INA national oil & gas company
- upgrades of gas engines for STSI & PSP, Croatia
- service and upgrade of gas turbines for INA: 501 KB to Motortech ignition system
- reconstruction of base fixings for INA: KVR 616 4,5 MW gas power engines



- TEG systems for Emerson, Croatia in Kazakstan, commissioning and service/maintenance of systems comprising of 3+1 TEGs and GPRS (gas pressure reducing station) on gas pipeline



Case studies:

1. Installations of small gensets in containers

(FG Wilson sets power 15, 16.5, 22,65 & 88 kVA with Perkins engine, Leroy Somer generator)

Customer: Emerson, HR

Years: 2007 – 2014

Number of gensets installed: over 100 sets

Location of installation: Croatia, container manufacturer plant and Emerson, HR facility

Location of end user: Russia (Gazprom), Sweden, Finland (IP Only)

This project was commenced with partners from Slovenia and Croatia, with container layout & equipment sourced by Emerson, Croatia. Our company was elevated as Emerson partner for sourcing diesel gensets to be installed inside compartment inside containers with 2.000 liter bulk tank, temperature sensitive louvres and extended service interval (oil top-up tank) and basic remote monitoring & control via volt-free relay contacts.

Later installations included control panel upgrade, remote communications with Modbus/SCADA, fuel tank valves integrated with fire alarm system.

Our company successfully installed the gensets and all additional equipment, tested and commissioned over 100 of these systems.

Some installation photos are below:





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2. Installations of TEG (thermoelectric) generators (Global TEG model 8550)

Years: 2009 – 2010

Customer: Emerson, HR

Number of TEGs installed: 7 systems each with 4 TEGs (N+1 configuration)

Location of witness testing & production: Canada, manufacturer's facility

Croatia at Emerson, HR facility

Location of end user: Kazakhstan, along gas pipeline to China

This project was commenced with Emerson, Croatia who had won a project of supplying small hybrid power containers and outdoor installations along a gas pipeline from Kazakhstan to China with KSS-Kazstroy Service. Small power system would be able to switch on and off big pipeline valves and pig valves on 7 locations.

Emerson elected our company to find a low power solution with very long service intervals and no need to supply fuel to locations frequently. Our company established contact with Global TE company in Canada, manufacturer of thermoelectric generators (TEGs), which are non-rotating, with long service intervals and fuel supply is gas directly from pipeline, with a gas pressure reduction system (GPRS) installed with every system.

Each TEG has 550 W power, so one system would supply 1650 W of power, with one TEG in hot stand-by redundancy. Since TEGs need 24 VDC for starting-up and remote control, another container with auxiliary measuring and DC power with solar and battery power (hybrid power) was accompanying each site.

Solution was witness tested first in Canada, then in Croatia and then on-site tested at each end user location in Kazakhstan. All systems are working up till today with spare parts and service being done by customer.

Some witness test photos are below:





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3. Installations of gensets for Telecoms & Communications providers

(FG Wilson with Perkins engine, Leroy Somer generator)

Customer: Emerson, Prompt SI

Years: 2007, 2010

Installed power & number of gensets: around 4 MW of power and 10 gensets 100-800 kVA prime power

Location of installation: Croatia, container manufacturer plant and Emerson, HR facility

Location of end user: SI Telekom, Ljubljana, SI main building &

OiV Transmitters & Communications broadcast towers located on top of 3 mountains in Croatia

This 2 projects were commenced with partners from Slovenia and Croatia who got big contracts with telecom companies.

First one in 2007, when Emerson got a contract upgrading stand-by power system for Croatian communications & broadcasting provider OiV company on 3 sites. These sites were located on top of mountains in Croatia, with unstable mains grid power, no remote communications and with requirement for synchronising between sets and mains power.

Our company was elected to supply 4 gensets – 2x 100 kVA, 1x 350 and 1x550 kVA prime power.

Largest system went on a mountain Velebit between mainland and the coast, location frequently hit by thunder storms and winds. Installation included dismantling old power system, transportation and installation of 2 new gensets (350 & 550 kVA working in parallel and in parallel to mains grid), paralleling to mains transfer switches, remote communications (which was one of first worldwide implementations of Netbiter solution by FG Wilson) and integration into customer transfer switching panels. Specialist engineer from manufacturer was invited to perform start-up and fine-tuning of the system and after several visits systems were complete and ready-to-go. After initial trouble shooting caused by local thunders, which at one point burned some of customer older equipment and the new equipment worked all right and it still operating today.





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Second project took place in 2010 in Slovenia, where our long term partner Prompt won a big contract with biggest Slovenian mobile, fixed and internet network provider SI Telekom. End user company intended also to upgrade completely its power supply system , cooling systems , ...

Our partner elected us to work with on this huge project and task for our company was to supply 3 systems comprising of 2 generating sets, synchronising equipment (set to set and both sets to mains grid) and remote communications for all sets-control & monitoring.

We have supplied to our customer and partner 6 gensets 800 kVA prime power (6x 640 kW) with Siemens Sivacon S8 air-circuit breakers, Woodward Easygen controllers, PLC panel for each system and Netbiter modules for each genset.

Our partner made most of the installations and our final spot was to commission the systems, what was done in 3 phases by FG Wilson specialist engineer.

Systems are working up till today with minor faults caused by Perkins 4000 series engines which have been serviced and running in stand-by to mains grid, in basement floor of the main building of the end user.

