



160 years of locomotives know-how
Digitalization and decarbonization of
railways for the responsible industry

EXPRESS SERVICE ES3000 battery locomotive – a sustainable and efficient approach to railway shunting. Carbon- and maintenance-free future of industrial railways.





Express Service in brief:

- Family company with BG professionals' capital
- Business based on 160 years of traditions and know-how
- New buildings, machines, and equipment, constant innovations
- 250+ skilled personnel and 15600m² covered area in Ruse
- Unique locomotive repairs equipment and machinery
- Railway transportation license, own traction fleet
- For first time in Europe – 100% carbon-neutral railway shunting guaranteed by own solar plant



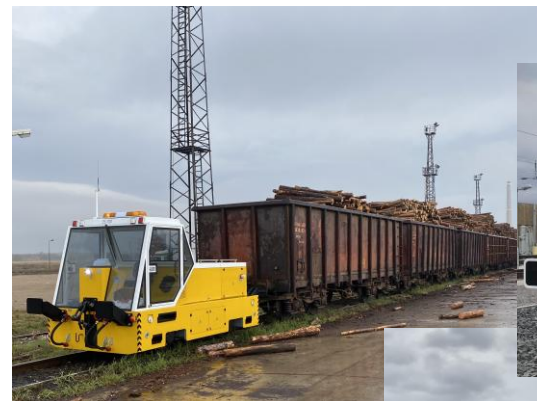
2026 – 1866 = 160 years
Locomotive industry in Ruse



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New Locomotive Types

EXPRESS SERVICE new locomotives - overview



Battery technology – emissions free,
maintenance free, low operator expertise



Diesel technology – economic, Stage V
engines, low maintenance cost.



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ES3000 battery shunter

ES3000 – proudly presenting our best-seller in Europe



ES 3000

In railway facilities tasks



ES 3000

In aggregates industries



ES 3000

In metallurgical plants

ES3000 – *heavy battery shunter for every industrial application!*

Brief **technical presentation** of ES3000 battery shunter

	ES3000
Own mass	48t.
Tractive force	150kN
Towing capacity	3000t.
Battery capacity	220kWh
Max. charge time	5,5h
Battery life in cycles	>1800
Max. speed*	10km/h

- **Rigid welded frame** construction of 100m solid steel plates
- **Solid steel traction wheels** – locomotive industry at its best
- **Heavy and robust machine** with low center of gravity
- **Durable batteries** for industrial applications and optimized for extreme temperatures
- **Charging** is easy and possible anytime, no special infrastructure needed
- **Maintenance efforts** – close to zero



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Features and options

ES shunters are strong and robust



ES3000 deals with 25+ full wagons even in unfavorable environment.



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Features and options

ES shunters are offered in both 1435 and 1520mm versions – we are committed to energy and shunting independence of both Europe and former USSR





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ES3000 logistics

Easy logistics – design fit for
standard road truck + easy rail
transport

Easy lifting + battery replacement.

Special platform wagon by ES



Battery technology is **energy efficient**



Even not moving, old locos work idle with diesel fuel expenditure of 20l/hour.

IDLE BATTERY LOCO SPENDS 0!

- ✓ No idle working costs
- ✓ Full battery charge price is max. €40,00 (@ € 0,20 per kWh)
- ✓ Total energy consumption is < 20000kWh / year
- ✓ No need of winter heating, no freezing parts
- ✓ No need of complex diesel fueling procedures
- ✓ Regeneration when stopping (recharging battery)
- ✓ No thermal waste of energy



Battery technology is clean, emission free, low noise for the responsible industry of tomorrow

- ✓ The only solution for covered spaces, warehouses;
- ✓ Zero environmental impact on surrounding environment;
- ✓ Totally emissions-free solution;
- ✓ Very low noise pressure on men at work;
- ✓ Silent operations;
- ✓ Great improvement of surrounding industrial environment.
- ✓ Energy for battery shunters of Express Service is backed by roof solar production of our factory



Wherever there is environmentally and socially responsible industry – we are there to help with our solutions.

Battery technology is **maintenance-free**

No need of expensive and lengthy repairs of diesel engines.

No complex transmissions, hydraulics and expensive mechanics.

ES vehicle are virtually maintenance-free with only few moving parts that drastically reduces maintenance.

Daily inspections are done within a minute, no monthly or annual revisions needed.

All important components are industrial electronics that is widely available.

All costs for consumables for 1yr. of maintenance are < €200



Battery technology optimizes **shunting manpower**

- ☐ Radio Remote Control allows one operator action
- ☐ No full shunting crew needed for coupling, switches, driving
- ☐ No heavy locomotive legislation applicable
- ☐ Training certificates issued by manufacturer
- ☐ Very intuitive and safe human-machine interface

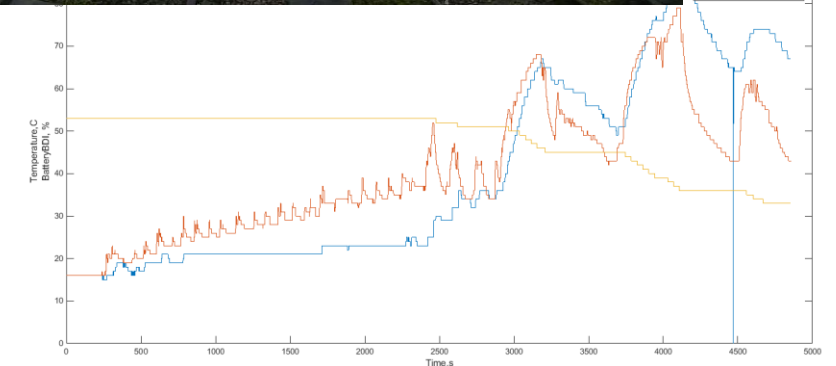
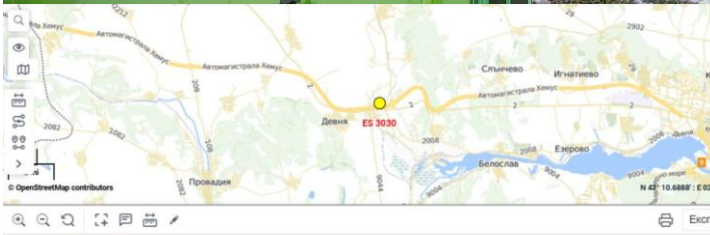




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ES3000 Telemetry app

ES3000 is **connected and digital**. Telemetry and CCTV on board – real time transmission for decision makers and managers. **ES3000 is part of Industry 4.0**



CASE STUDY:

3xES3000 shunters delivered in **metallurgical factory Aurubis Bulgaria**

In 2021 Aurubis Bulgaria was equipped with 3xES3000 battery shunters. They replaced 3 old diesel locomotives. Shunting work at slag cooling there is 24/7 – one ES3000 is always on charge, two are always working.



Old diesel locos were spending 800l. of diesel every day = €288,000 annual cost. There were also big oil, labor, and maintenance expenses.

All ES3000s electricity costs per year are just €12,000 and maintenance is negligible. 3 loco drivers were freed.



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**ES3000 battery shunters for safer, greener,
energy-saving last-mile industrial operations.**

**ES3000 for responsible industry.
Contact Express Service or local
representatives for details.**

