


# ES 1000 BATTERY-ELECTRIC SHUNTING VEHICLE

**VEHICLE HIGHLIGHTS:**

- ✓ Heavy and robust construction;
- ✓ Greatest power on the market;
- ✓ Strong secure braking;
- ✓ Air braking compatible with all trains;
- ✓ Maintenance-free vehicle;
- ✓ Concentration on safety;
- ✓ Strong battery for 3 to 4 shifts operation;
- ✓ Only 5,5 hours recharge time;
- ✓ Easy to operate by any operator

**SAFE,**

**RELIABLE,**

**EASY,**

**CHEAP**

**OPERATION**

## SPECIFICATION ES1000 SHUNTER

Battery-powered and radio remotely controlled rail locomotive for safe moving and exact positioning of EMU/DMU/Locomotives/wagons.

| | |
|---|---|
| **Gauge - mm** | 1435 |
| **Traction force - kN** | >100 |
| **Drive system** | 2 driven axles |
| **Drive AC electric motors** | 2x30kW |
| **Nominal work capacity in tons** | 1000 on straight+level track |

| | |
|---|---|
| **Weight - kg** | 27 000 |
| **Dimensions LxWxH - mm** | 4080x2300x2700 (w/o coupler) |
| **Wheels, dia. in mm** | Solid steel, ϕ660 |

| | |
|---|---|
| **Operating power - V** | 24 |
| **Main power supply - V** | 80 |
| **Battery capacity - Ah** | 1400 |
| **Battery charger** | Built-in (on board) - high frequency, air-mix system integrated |
| **Max. recharge time - hours** | 5,5 |
| **Battery life - full charge cycles** | >2000 |

| | |
|---|---|
| **Work speed - m/min** | 0-100 |
| **Single travel speed - m/min** | 0-160 |

| | |
|---|---|
| **AC motor controllers** | Curtis Instruments - USA |
| **AC motor controllers water cooling** | (option - used at heavy duty) ① |
| **AC motor controllers user-programator** | (option - laptop or hand-held) ② |

| | |
|---|---|
| **Brakes locomotive** | Regeneration, electromagnetic parking brakes, spring-applied emergency brake, pneumatic brake (option) ③ |
| **Brake train** | Pneumatic brakes (option) ③ |
| **Sanding** | On all 4 wheels (option) ④ |

| | |
|---|---|
| **Braking distance - single travel - m** | <6 |
| **Braking distance - shunting work - m** | <3 depends on load |
| **Braking distance - emergency - m** | <2 |

| | |
|---|---|
| **Air compressor type** | Screw |
| **Air compressor capacity** | 2000l/min |

| | |
|---|---|
| **Radio remote control range** | 300m at open space |
| **Radio remote control range - extended** | High frequency module (option) ⑤ |

| | |
|---|---|
| **Quality management system** | EN ISO 9001:2015 |
| **Environment management system** | EN ISO 14001:2015 |
| **Locomotive construction weldings** | EN ISO 15085 |