TERRA NOVA - DHL 1260 HP
Diesel-Hydraulic locomotive for heavy shunting and light line service
Diesel Hydraulic locomotive for shunting operations and light line service 1260 HP TERRA NOVA

Having a tradition in repairing and maintenance of locomotives, RELOC S.A. is entering a new market through creating a brand new diesel hydraulic shunting locomotive. In partnership with Caterpillar, Terra Nova has 2 engines which produce 1260 HP, being capable of conducting shunting and light line rail freight transports.

The Terra Nova locomotive was officially launched in May 2014, and it is designed for export, with expectations to fill orders throughout Europe and beyond in the coming years.

It is a versatile locomotive and was designed to run on narrow gauge, medium and large railways, being easily adaptable to different markets and operating conditions depending on specific characteristics. Terra Nova has equipments of latest technology and meets the most recent environmental protection and safety standards. The materials used for manufacturing guarantee a long service life and functionality in proper conditions.

The ergonomical and modern driving post enables easy reach of all technical equipments, delivering a comfortable and safe operation. The locomotive has all the necessary equipments mounted in the driver’s cabin, however, a large variety of optional equipment is available for fitting according to the needs of the customers.

This new locomotive is a 1260 HP machine powered by two Cat C18 Engines with Cat TR43 Locomotive Transmission packages. Built for short-line (20-30 miles) railroad operations or shunting procedures, Terra Nova locomotive is ideal for making line switches and organizing cars within a rail yard.

Terra Nova is unique because is fitted with two diesel engines and two transmissions, which means that it can adjust the delivery of power according to the tractive effort which needs to be generated. For light loads, one engine can be used for optimum fuel economy. If the locomotive comes to a steep grade, the second engine can be turned on and the transmission is engaged before losing speed. The locomotive incorporates eight wheel drive to eliminate wheel slip for most operating conditions.

Cat engines and transmissions are worldwide known for their reliability, efficiency, and environmental friendliness, Terra Nova being thus an innovative product which can deliver both increased tractive effort and low consumption of resources, making it compatible with different working environments and tailored on the needs of the customers.

RELOC S.A. is a rail vehicle modernization and repair company in Romania and is part of the Grampet Group, a conglomerate of rail freight and logistics companies located throughout Europe. Terra Nova was designed in collaboration with ELECTROPUTEERE VFU from Craiova, also part of Grampet Group. ELECTROPUTEERE VFU Craiova has produced more than 8,000 locomotives over the past 50 years.
Diesel hydraulic locomotive for shunting and light line service. 1260 HP TERRA NOVA

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**OPTIONS**

- Broad gauge bogies
- Crash energy absorbers
- Tired wheels
- Pressure refuelling
- Fuel gauge in driver’s cab
- Extended diagnosis system
- Display at driver’s desk
- Tachograph
- Central data management system
- Diagnostic software
- Remote data transfer for teleservice
- Constant speed control
- Shunting coupler
- Multiple traction
- Radio remote control
- Available for left and right hand traffic
- Heated front windows
- Air conditioning unit
- Thermobox
- Auxiliary heating driver’s cab
- Clean emission module
- Spring parking brake
- Rear mirror electric-pneumatic drive
- Monitoring video system

**Technical Specifications**

- Locomotive weight: 70 t
- Engine power: 2 x 630 HP (1 - tractive effort wheel rim)
- Engine power: 1 x 650 HP (2 - tractive effort wheel rim)
- Adhesion limit: G - adhesion limit characteristic

**Graph**

The graph shows the relationship between tractive effort wheel rim and running speed v [km/h].
## TECHNICAL DATA

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel engine output</td>
<td>1260 (2 x 630) HP</td>
</tr>
<tr>
<td>Diesel engine</td>
<td>CAT C 18</td>
</tr>
<tr>
<td>Diesel engine speed</td>
<td>1800 rot/min</td>
</tr>
<tr>
<td>Axle arrangement</td>
<td>B’B’</td>
</tr>
<tr>
<td>Track gauge</td>
<td>1000 ÷ 1600 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>70 t</td>
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<tr>
<td>Length above buffer</td>
<td>14740 mm</td>
</tr>
<tr>
<td>Height</td>
<td>4500 mm</td>
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<tr>
<td>Width</td>
<td>3070 mm</td>
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<tr>
<td>Wheel diameter new/worn</td>
<td>1100/1020 mm</td>
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<tr>
<td>Maximum speed</td>
<td>100 km/h</td>
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<tr>
<td>Transmission</td>
<td>CAT TR 43</td>
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<tr>
<td>Starting effort with 17.5 t axle load</td>
<td>230 kN</td>
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<tr>
<td>Minimum unrestricted curve radius</td>
<td>90 m</td>
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<tr>
<td>Diesel fuel capacity</td>
<td>3000 l</td>
</tr>
</tbody>
</table>

RELOC S.A. - ELECTROPUTERE VFU CRAIOVA, Romania

Address: 109, Decebal Boulevard, 200746, Craiova, Dolj county;
Phone: +40.251.438.754;
Fax: +40.251.437.854;
E-mail: office@relocsa.ro;
web-site: www.relocsa.ro;
https://www.facebook.com/relocsa