

#### The deugro Service Portfolio Rail Rolling Stock Industry



#### Rail Rolling Stock | Agenda



- 1. deugro group Introduction
- 2. Quality, Health, Safety, Environment and Security (QHSES)
- 3. Compliance

- 5. Rail Rolling Stock Services
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- 7. Transportation and Handling
- 8. Project References

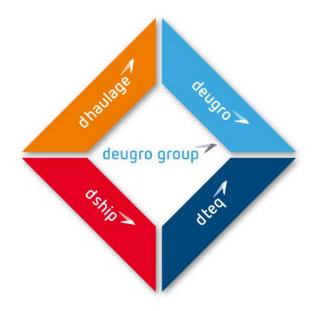


#### Cooperation within the deugro group



#### Introduction | deugro group





#### dhaulage | Specialized transportation assets

dhaulage provides an extensive and comprehensive range of heavy haul and heavy lift equipment for any specialized or challenging project.

#### dship | Global ocean transportation

A global provider of ocean transportation services, dship Carriers manages and owns a fleet of modern and reliable multi-purpose vessels.

## deugro | Project freight forwarding

deugro is a highly specialized freight forwarder with a strong focus on turnkey logistics solutions for industrial projects.

## dteq | Transport engineering solutions

dteq provides tailor-made transport and marine engineering solutions, as well as port captain, surveying and supervision services, and project consulting.

#### Quality, Health, Safety, Environment and Security (QHSES)





All group companies operate according to the highest QHSES. Our approach:

- Planning and implementing
- Project-specific QHSES implementation
- Continuous reporting and collection of data
- Results review, reaction and further measures
- Subcontractor management

#### Compliance





All group companies operate according to the highest compliance standards, and with a comprehensive global compliance and business ethics program based on:

- Code of Ethics and Compliance (CoEC)
- Anti-Corruption Compliance Policy (ACCP)

- Frequent in-person and online training
- Local Ethics Officers (LEO) in all branches
- Permanent screening of our Enterprise Resource Planning (ERP) system against applicable international sanction lists



# >> Expect the best, plan for the worst, and prepare to be surprised.<</pre>

Denis Waitley, motivational speaker, writer and consultant

a company of the deugro group

#### Rail Rolling Stock | Services





deugro has successfully executed rail rolling stock projects around the world.

We are experienced in all aspects of rolling stock logistics for original equipment manufacturers, owners and operators themselves. Our scope for projects consists of:

- Supporting feasibility studies and conducting detailed surveys
- Creating cost-effective transportation concepts for the client
- Designing transportation saddles and handling equipment
- Performing ocean, road, and rail transportation of locomotives and car shells
- Obtaining rail clearances to ensure feasibility of rail transportation
- Ordering special train services and expediting rail movements
- Tracking and tracing of rail shipments
- Providing project consultancy

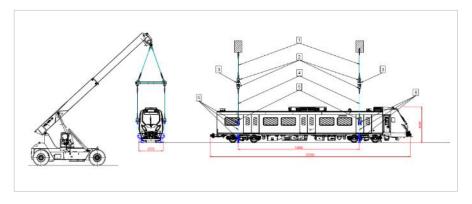
#### Rail Rolling Stock | Transport Engineering Solutions

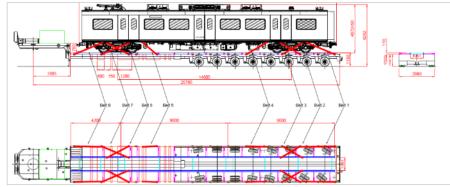


To solve and overcome all the challenges of moving rolling stock vehicles of several kinds, our experts leverage decades of specialized engineering knowledge and experience.

We provide tailor-made engineering solutions:

- Method statements
- Risk assessments
- Lifting design and calculations
- Lashing design and calculation
- Ocean voyage stowage plans
- Ramp design for trailer offloading





#### Rail Rolling Stock | Transportation and Handling





Vessel load and discharge activities



Road transportation in convoy



Positioning lifting shoes on the car (client-specific)



Winching metro car off ramp



Direct discharge onto tracks



Jacking and skidding used for heaviest rail cars



# **Project References**

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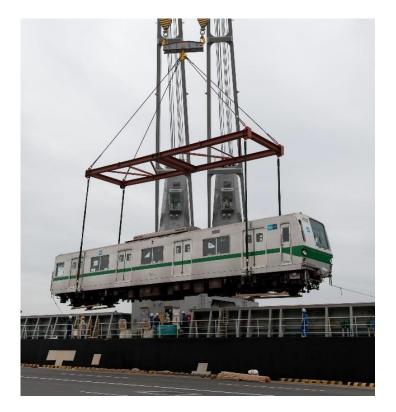




#### **Stadler / Caltrain Project** Stadler Rail

- End client: Caltrain
- Origin: Altenrhein, Switzerland
- Destination: Salt Lake City, UT, USA
- **Scope:** deugro was in involved in design, procurement and engineering of lifting equipment and saddles, as well as the full transportation scope, covering road, barge, ocean and rail transportation
- Volume: 133 car shells / 26 x 3 x 4.6 m / 49,000 FTR
- Year: 2018–ongoing





#### P.T. KCJ Commuter Line

- Origin: Tokyo Metro Depot, Japan
- **Destination:** Depok Depot, Indonesia
- Scope: Supply and delivery of used EMU 6000
- Volume: 20 units
- Years: 2017–2018







#### P.T. KCJ Commuter Line

- **Origin:** Yokohama, Japan
- **Destination:** Manggarai, Indonesia
- Scope: Supply and delivery of used EMU Jr 205 Series
- Volume: 176 units
- Year: 2014

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#### Amtrak Project Alstom Transport France

- End client: Amtrak
- Origin: Alstom Savigliano, Italy
- Destination: Hornell, NY, USA
- **Scope:** FOT Savigliano, Italy to FOT Hornell, NY
- Volume: 252 car shells / 54,090 FRT
- Year: 2018–ongoing







#### **Sydney Metro Project** Alstom Transport France

- End client: Northwest Rapid Transit (NRT) consortium
- Origin: Alstom Sri City, India
- Destination: Sydney, Australia
- **Scope:** FOT factory up to DAP destination depot
- Volume: 22 trains of 6 cars each, metropolis train type
- Year: 2017-2018











PRASA Rolling Stock X'Trapolis Mega Alstom Transport France

- **End client:** Passenger Rail Agency of South Africa (PRASA)
- Origin: Sao Paulo, Brazil
- **Destination:** Wolmerton, South Africa
- **Scope:** FOT factory to DAP destination depot
- Volume: 20 trains of 6 cars each (total of 120 cars / 33,000 FRT)
- Heaviest item: 38.5 MT
- Year: 2015-2017





#### **CAF USA Import Project** CAF

- End client: CAF USA
- Origin: Spain
- **Destination:** Elmira, NY, USA
- **Scope:** Ocean transportation, port handling, transfer to trailer at POD, transport to final destination
- Volume: 189 car shells / 16,300 FRT
- Year: 2016









#### **Taiwan Tram Project** CAF Spain

- Origin: CAF Spain
- **Destination:** CAF Taiwan
- Scope: FCA factory to DAP destination
- Volume: 9 CAF trams
- Year: 2014-2015







#### Sao Paulo Metro Line 4 Siemens

- **Origin:** Masan, South Korea
- **Destination:** Santos, Brazil
- Scope: FCA POL to DAP job site
- Volume: 20,000 FRT
- Rolling stock: 14 trains / 84 cars
- Heaviest item: 14 trains of 235.4 MT (each)
- Year: 2009–2010











#### **Navajo Mine Locomotives** GE Transportation

- End client: Navajo Mine
- Origin: Erie, PA, USA
- Destination: Fruitland, NM, USA
- **Scope:** On-rail transportation, transfer to truck, setting onto rail
- **Cargo :** 2x diesel locomotives, 22.5 x 3.0 x 4.9 m each
- Heaviest item: 194 MT
- Year: July 2017









#### **Roy Hill Locomotives** UGL

- End client: Roy Hill
- Origin: Erie, PA, USA
- **Destination:** Port Hedland, WA, Australia
- Scope: Ex-works Erie to DAP, placed on rail
- Volume: 23.5 x 3.25 x 4.85 m
- Heaviest item: 180 MT
- Year: 2014–July 2016









**Rio de Janeiro Metro Line 4** Consorcio Linha 4 Sul Odebrecht / Metro Barra SA

- **Origins:** Schwanau, Germany / Dalian, China
- **Destination:** Rio de Janeiro, Brazil
- **Scope:** Ex-works/FAS to DAP metro yard
- Volume: 35,000 FRT and 60 TEU
- **Highlight:** Tunnel boring of 11.5 m in diameter
- Heaviest item: 182 MT
- Year: 2013-2015







#### GE Domestic Locomotives

**GE** Transportation

- Origin: Erie, PA, USA
- **Destination:** USA, Canada, Mexico
- Scope: FCA origin to CPT destination
- Outlay funds to the railroads
- Order Special Train Service if required

- Expedite Track and Trace the "Trains" from origin to destination
- Coordinate delivery with receivers
- Highlights: 950 locomotives, 350 FRT each
- Rail method: Dead in tow
- Year: 2017



#### **GE International Locomotives**

**GE** Transportation

- Origin: Erie, PA, USA
- **Destination:** South America, Asia, Europe, Australia, Africa
- **Scope:** FOT Erie to FAS Port of Norfolk
- Highlights: 650 locomotives, 350 FRT each
- Year: 2017











#### Vale Locomotives Vale SA

End client: Vale SA Origin: Toronto, Canada Destination: Itaqui, Brazil Scope: Project management, trucking and rail at origin, ocean freight Volume: 7,900 FRT Highlights: 7 locomotives, 127 MT each; 14 boogies, 27 MT each Year: 2012

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#### **Colas Locomotives Project** GE Transportation

- End client: Colas Rail UK
- Origin: Erie, PA, USA
- **Destination:** UK
- Scope: FOT Erie to FAS Port of Norfolk
- Volume: 7 locomotives shipped on railcars / 1,603 FRT









#### Vale Nacala Locomotives Project GE Transportation

- End client: Vale
- Origin: Alstom Savigliano, Italy
- **Destination:** Nacala-à-Velha, Mozambique
- Scope: FOT Erie to FAS Port of Erie
- Volume: 30 locomotives shipped on railcars / 11,760 FRT









#### **From French TSO** Saudi Railways Organization

- Receiving locomotives on rail tracks in the Port of Rotterdam, the Netherlands
- Lifting and stowage of locomotives on board of vessel, lashing and securing on board, ocean voyage to Saudi Arabia
- Placing rail tracks on trailer bed, lifting locomotives on trailer-mounted tracks
- Lashing of locomotive, transportation to site







#### From Spanish Copasa

Saudi Railways Organization

- Receiving locomotives on rail tracks at a port in Spain
- Lifting and stowage of ballast-distributing and profiling machine, as well as leveling lining and tamping machine and dynamic track stabilizer machine on board vessel
- Lashing and securing on board, ocean voyage to Saudi Arabian east coast port
- Discharging and delivery to site



# Thank you for your attention.

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