




**DRS Class 68 Technical Overview:**

Feature	Benefit
4 stroke engine featuring advanced CAT common rail fuel system	Significant fuel savings, maximum performance & minimum emissions, a critical feature on sensitive route
3805 HP engine with 319 kN of TE and State of the art inverter control system	Significantly enhanced haulage capability with advanced adhesion control systems and superior power to weight ratio.
AC electrical machinery	Significant savings in raw materials and consumables over existing DC electrical machinery.
Full dynamic braking	Significant operational cost reductions.
Up to 5600 Litre Fuel tank	Combined with improved fuel efficiency this significantly extends range.
Resiliently mounted crash compliant cab	Offers superior driver comfort and wins the support of driver unions.
Remote telemetry	Ship to shore communications allows Locomotive to transmit real time performance data and potential faults to depots and engineering staff helping to eliminate failures and reduce downtime of maintenance outages.
100 MPH top speed	Makes provision for use on passenger services and as a rescue Locomotive. Provides an element of future proofing against the introduction of higher speed freight trains and a faster rail network.
Electric Train Supply	Provision of 500KW of electric train supply in conjunction with enhanced speed rating offers potential market penetration into high speed rail environment.

**Proven Technology:**

**Caterpillar C175 Diesel Engine**  
7.5 million running hours in aggressive applications



**ABB AC Traction**  
4 high torque motors mounted on two bogies for dependability




safe secure reliable

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**DRS Class 68  
Next Generation  
Diesel-Electric  
Locomotive**

safe secure reliable



# The Next Generation Diesel-Electric Locomotive has Arrived

The DRS Class 68 locomotive is a highly efficient and powerful locomotive specifically designed to meet the demands of both UK Rail-Freight and Passenger Operators.

Developed in partnership with Vossloh of Germany and manufactured at their Valencia Plant, the DRS Class 68 benefits from Vossloh's engineering expertise and DRS's knowledge of the specific needs of the UK's rail operators. Creating an entirely new class of locomotive for the UK, providing the opportunity to introduce a range of innovative features that combine to offer industry leading performance.

At the heart of the Class 68 is a powerful and highly reliable 16 cylinder Caterpillar C175 diesel engine. This is coupled with 4 individual axle inverter drives providing exceptional traction and 4 levels of redundancy. In the highly unlikely event that one, two or even three inverter drives fails, the locomotive will still be able to complete its journey.

Consultation with drivers and ASLEF have helped create an exceptional driver environment that is quiet, air conditioned and with a well laid out dashboard to aid safe and efficient operation.

The initial fleet of 25 Class 68 locomotives will be introduced throughout 2014/15 and will lay the way for the even more innovative DRS Class 88 dual power locomotives that will offer both Electric and Diesel Electric operating modes.

## The Class 68 Advantage

This new Locomotive is set to deliver a significant performance benefit for both DRS and its clients. As a true mixed traffic locomotive it can haul both freight and passenger services.

### Faster

100 mph top speed, for both Passenger and Freight operations.

Importantly this supports High Speed Freight, helping to further realise the full potential of the UK rail network.

### More Powerful

Capable of hauling 1600Te intermodal trains on UK mainlines maximising loads per movement & track capacity.

### Greater Efficiency

The Class 68 brings a new standard of fuel efficiency further reducing operating costs.

### Cleaner

Reduced exhaust emissions; an important factor for clients on sensitive routes.

### Maximum Reliability, Minimum Downtime

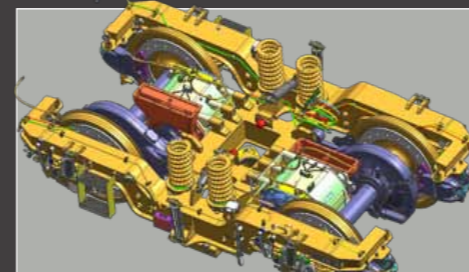
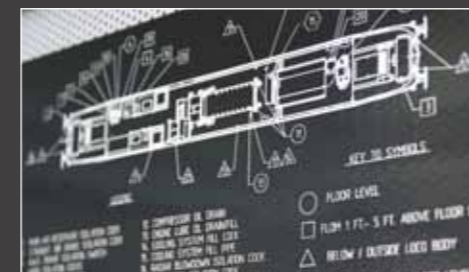
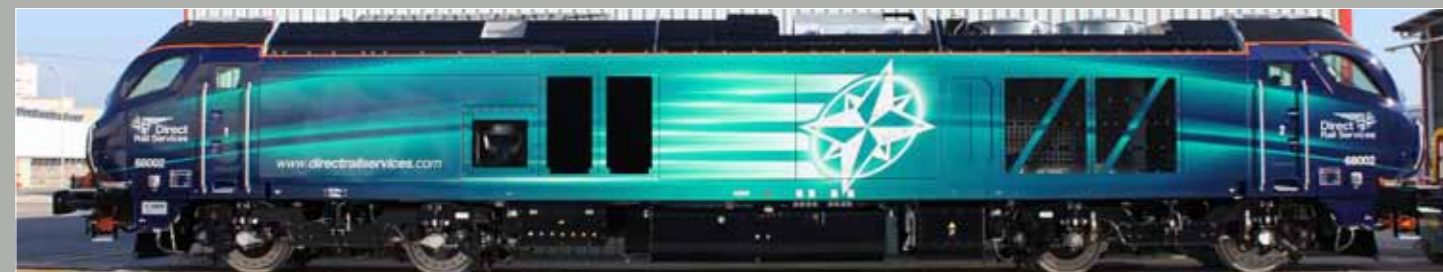
Extended maintenance intervals and minimum routine consumables, reduce costs and downtime. High levels of built in redundancy and proven technologies maximise resilience and reliability.

### Operational across the network

Offering high power with a light axle load ensures that the Class 68 can operate as effectively on secondary routes as it can on mainlines.



# Step into a 21<sup>st</sup> Century Driving Environment



Innovative design features including regenerative braking and individual axle inverter drives providing 4 levels of redundancy and superior reliability.

