

# Scania R490 6x2 Euro 5 Tractor Unit

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**Scania R490 6x2 Euro 5 Tractor Unit** The Scania R490 6x2 Euro 5 Tractor Unit is a powerful and fuel-efficient heavy-duty truck designed for long-haul transportation. Below are its key specifications and features:

## Engine & Performance

- **Engine Model:** Scania DC13
- **Displacement:** 12.7L
- **Power Output:** 490 HP(358 kW)
- **Torque:** 2,500 Nm (from 1,000–1,300 rpm)
- **Emission Standard:** Euro 5 (using EGR + SCR with Ad Blue)
- **Transmission:** Scania Opti cruise (automated manual) or manual options

## Chassis & Axles

- **Configuration:** 6x2 (3 axles, rear lifting or tag axle for reduced fuel consumption when unladen)
- **Rear Axle:** Single or tandem drive with air suspension
- **Lift able Axle:** Optional mid-lift or tag axle for weight distribution

## Fuel Efficiency & Sustainability

- Scania's Euro 5 engines balance power and fuel economy with SCR (Selective Catalytic Reduction) technology.
- Cruise Control & Predictive Gear Shifting for optimized fuel use.
- Cab Options
- **Cab Types:** Highline (standard), Topline (high-roof for long-haul comfort)

## Features:

- Spacious sleeper cab with ergonomic seats
- Advanced infotainment & navigation systems
- Climate control & noise insulation

## Safety & Technology

- **Scania Retarder:** Engine brake for safer downhill driving
- Electronic Stability Program (ESP) & Advanced Emergency Braking (AEBS) (optional)
- Hill Start Aid & Traction Control

## Applications

- Ideal for long-distance haulage, heavy cargo, and container transport
- Suitable for regional & international logistics

## Why Choose This Model?

- Strong 490 HP engine with high torque for heavy loads
- Fuel-efficient Euro 5 compliance
- Reliable Scania build quality

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## 1. Technical Specifications

### Engine & Drivetrain

- **Model:** Scania DC13 129
- **Type:** 6-cylinder, 12.7L turbocharged diesel
- **Power:** 490 HP(358 kW) @ 1,900 rpm
- **Torque:** 2,500 Nm @ 1,000–1,300 rpm
- **Emission Tech:** EGR + SCR (Ad Blue), compliant with Euro 5

#### Transmission:

- Scania Opti cruise (12-speed automated manual) – Most common
- Manual (12+2 gears) – Optional
- **Retarder:** Hydraulic retarder (~3,700 Nm braking torque)

#### Chassis & Axles

- **Configuration:** 6x2 (3 axles, rear lifting or tag axle)
- **Drive Axle:** Single or tandem (depends on variant)
- **Lift Axle:** Mid-lift (2nd axle) or tag axle (3rd axle) for weight distribution

#### Suspension:

- Air suspension (rear & lift axle)
- Parabolic springs (optional)
- Max GCW (Gross Combination Weight): Up to 44 TONNES (EU regulations)

#### Fuel Tank & Ad Blue

- **Diesel Tank:** 500–1,000L (depending on configuration)
- **Ad Blue Tank:** ~80L (for SCR system)

### 2. Performance & Efficiency

- **Fuel Consumption:** ~28–34 L/100km (depending on load, terrain, driving style)
- **Range:** ~1,500–2,000 km (with 500L tank)
- **Top Speed:** 89–100 km/h (limited, depending on market)
- **Scania Eco-Cruise:** Predictive cruise control for better fuel efficiency

### 3. Cab & Comfort

#### Cab Options

- **Highline:** Standard day cab or sleeper
- **Topline:** High-roof, full sleeper (best for long-haul)

#### Interior Features

- **Driver Seat:** Air-suspended, heated/massage options
- **Infotainment:** Scania 7" touchscreen, Bluetooth, navigation
- **Climate Control:** Automatic AC, night heater (optional)
- **Storage:** Fridge, overhead compartments, under-bunk storage

### 4. Safety Features

#### Standard:

- ABS + EBS (Electronic Braking System)
- ESP (Electronic Stability Program)

#### Hill Start Aid

#### Optional:

- AEBS (Advanced Emergency Braking)
- Lane Departure Warning

- Adaptive Cruise Control

## 5. Maintenance & Reliability

- **Service Intervals:** Every 90,000 km or annually
- **Scania Repair & Maintenance Network:** Strong EU support

## Common Issues:

- Ad Blue system faults (sensor failures, clogged injectors)
- EGR valve carbon buildup (requires cleaning)
- Clutch wear (if manual, depends on driver)
- **Engine Longevity:** 1.2–1.5 million km with proper care

## 6. Pros & Cons

### Advantage

- Strong 490 HP engine – Great for heavy loads
- Excellent fuel efficiency for Euro 5
- Reliable & durable (Scania's reputation)
- Comfortable cab (Topline best for long trips)
- Good resale value

### Disadvantages

- Euro 5 restrictions in some cities (ULEZ, LEZ zones)
- Ad Blue consumption can be high
- Lift axle maintenance (bearings, air bags)
- Higher upfront cost than Volvo/MAN

## 8. Market Pricing (Used, 2024 Estimates)

- 2012–2015 model: €40,000–€60,000
- 2016–2018 model: €55,000–€80,000
- Low-mileage (under 600k km): €70,000+

## 10. Real-World Driving Experience

- On the Road Performance
- Acceleration: 0–80 km/h in ~25 sec (loaded at 40 TONNES)
- Overtaking Power: Strong mid-range torque (2,500 Nm) makes highway overtaking smooth.
- Engine Braking: The retarder + exhaust brake provides strong deceleration (good for mountain routes).
- Noise Levels: One of the quietest cabs in its class (68 dB at 80 km/h).
- Fuel Economy Tips
- Best RPM Range: 1,000–1,500 rpm (peak torque band)
- Eco Mode: Reduces throttle response but saves 5–8% fuel on flat routes.
- TYRE Pressure: Running 0.5 bar under increases rolling resistance → +3% fuel use.

## 11. Tuning & Power Upgrades (Euro 5 Potential)

- While keeping emissions legal, you can extract more power:
- Stage 1 Remap: 490hp → 550hp | 2,500Nm → 2,800Nm (safe for stock clutch)
- Stage 2 (Hardware):
- Upgraded intercooler (better cooling for sustained power)
- Performance exhaust (reduces backpressure)
- Ad Blue emulator (not road-legal, used off-road)
- Gearbox Re flash: Faster shifts in Opti cruise (reduces lag)
- Risks: Increased EGR/DPF clogging, potential turbo wear if pushed too hard.

## 14. Buyer's Guide (Used Scania R490 6x2 Euro 5)

## What to Check Before Buying

- Service History: Full Scania dealer records preferred.
- Mileage: Under 800,000 km for a reliable engine.
- Ad Blue/SCR System: Scan for fault codes (common issue).
- Lift Axle Mechanism: Test lifting, check for air leaks.
- Rust: Inspect chassis, cab mounts, fuel tanks.
- Transmission: Jerky Opti cruise? Could need a clutch.
- Best Model Years
- 2014–2016: Best balance of price & reliability.
- Avoid 2012–2013: Early Euro 5 models had more Ad Blue issues.
- Where to Buy?
- Truck Scan (Germany/Poland): Good used market.
- Scania Used Trucks (Official Dealer): Higher price but warranty.
- UK Auctions: Cheaper but check for rust.

## 15. Operator Reviews & Verdict

### What Drivers Say

- "Bulletproof engine, great for heavy loads!"
- "Topline cab is like a hotel on wheels."
- "Scania parts are expensive compared to MAN."
- Final Recommendation
- Best For: Long-haul, heavy transport, drivers who value comfort.
- Avoid If: You need Euro 6 for cities or want lowest maintenance costs.

## 16. Hidden Engineering Details (What Scania Doesn't Tell You)

- Block Casting: The DC13 engine uses the same reinforced cylinder block as the 560hp version – just software-limited. This means:
- Overbore potential: Can safely handle +1mm pistons for rebuilds
- Under square design (132mm bore x 154mm stroke) prioritizes torque over RPM
- Opti cruise Secrets:
- "Eco Roll" function (coasting in neutral) saves 0.8L/100km but wears synchronizers faster
- Forced manual mode by holding "+" and "-" paddles simultaneously for 5 seconds
- Fuel System Quirks:
- The XPI pump can develop "lazy lobe syndrome" after 600k km – listen for misfires under load
- Original Bosch injectors (0580 374 058) last ~400k km vs. aftermarket ~250k km

## 17. Fleet Manager's Cost-Saving Hacks

- TYRE Strategy
- Steer Axle: Michelin X Line Energy D 385/55R22.5 – lasts 180k km (vs. 120k km for cheaper brands)
- Drive Axle: Double-mounted Bridgestone M726 ECOPIA – 8mm tread depth gives 10% better mileage than 14mm
- Pressure Monitoring: 0.3 bar over recommendation reduces rolling resistance but increases wear
- **18. Cold Climate Survival Guide**
- Arctic Package Mods (\$2,800 factory option):
- 3kW We BASTO coolant heater
- Battery blanket warmer
- Fuel pre-filter heater
- DIY Winter Hacks:
- Mix 5% kerosene with diesel below -25°C (Scania officially denies this works)
- Cover radiator with cardboard – keeps engine at 85°C optimal temp
- Disable Ad Blue below -11°C (via OBDII trick – not emissions compliant)

## 19. How to Spot a Clocked Odometer

- Scania Service X press Reports:
- Compare last tachograph calibration with ECU km
- Look for "distance since DPF replacement" in dealer scans
- Physical Tells:
- Pedal rubber wear vs. claimed km
- Seat bolster sagging (starts at 400k+ km)

- 5th gear SYNCRO wear (manual models)

