



Astra Vehicle Technologies LTD 2016

- Wheelbase alterations
- Chassis repackaging
- Dual controls conversions
- Dual fuel system conversions
- ADR & SLP conversions
- Axle installations
- Mini artic conversions
- CLOCS compliance products
- Specialist exhaust systems



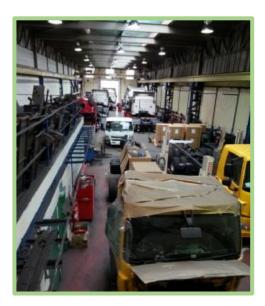




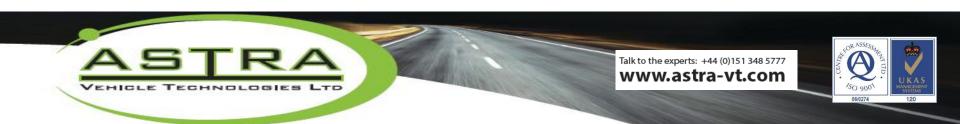
VEHICLE TECHNOLOGIES LTD

Company Overview

- Customs bonded site with 24 hour secure parking for up to 30 Vehicles
- Privately owned since 2005
- 17 Strong team
- Solid Works 3D CAD/AutoCAD 2012 2D
- Chassis Engineering
- Auto Electrical Systems Engineer (Cambus Systems)
- Time Served Cab Trim / Interiors specialist
- 17000Ft Factory
- Sage Line 50 and MRP Manufacturing Control
- FARO Portable 3D Co Ordinate Measuring





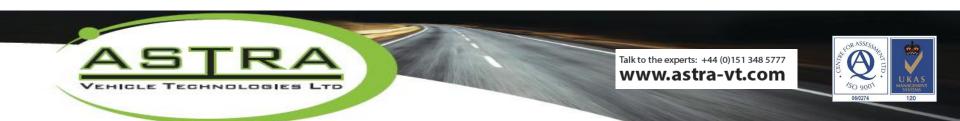


Quality products from a quality company

- ISO9001:2008 accredited quality management system.
- Accredited March 2006
- Recertified April 2012 no non conformities
- Mercedes Benz UK audited quality partner for chassis engineering
- Our SVE team objective: "to produce a result that is hard to tell that work has been done".
- Where commercially possible use OE supplier parts
- Similar brake & electrical fittings
- Correct chassis steels & profiles

"Astra is committed to providing an unequalled quality of product & an honest service"





Exhaust & Air Intake products

Astra exhaust products include:-

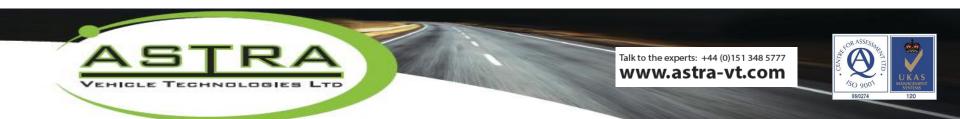
- Custom designed exhaust system sub assemblies
- Components for both truck or bus
- Vertical stainless steel stack systems
- Vertical discharge systems
- low level silencer
- Customised low level systems
- Air filter relocations
- Engine overspeed protection systems
- "Pet Reg" systems for tankers
- Relocated DPF & catalyst systems











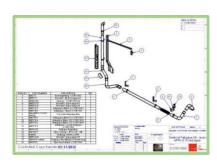
Exhaust Products for Truck and Bus

Astra exhaust kits are suitable for installation by Astra, bodybuilders, or dealers and include:

- Isometric diagrams
- Picking lists
- Fitting instructions
- Fastener kits

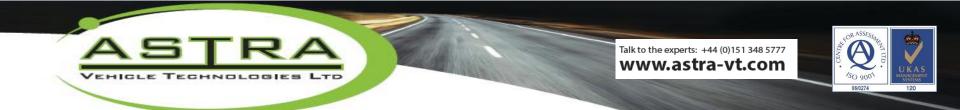








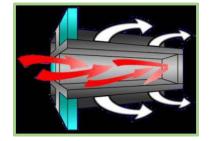


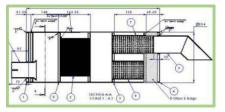


Emission Control Products

Astra emission control products include:-

- Diesel oxidation catalysts
- SCR selective catalytic reduction catalysts
- Adastra FBC regenerated diesel particulate filters On & off highway Gen set
- Adastra cCRF catalysed continuously regenerating filter systems On highway trunking applications







Astra cCRF Diesel particulate filtration systems (catalysed continuously regenerating filter, for higher ave temp, mixed use duty cycles)

•Audited by TfL & approved for supply to the London Low Emission Zone (LEZ) •A VCA approved technology for retrofit to Euro III vehicle technologies

Adastra TM FBC DPF Diesel particulate filtration systems (low ave temp, start/stop duty cycles)

•Award winning environmental technology – North West Business awards - 2004 •Audited by TfL & approved for supply to the London Low Emission Zone (LEZ) – LEC approved

•A VERT approved technology, achieving a minimum 80% TPM reduction and no increase in unregulated emissions (uncatalysed)

•A VCA approved technology for retrofit to Euro III or older technologies to achieve RPC scheme reduced VED

•More than 1000 installations



Specialist Vehicle Engineering

Astra provides a "one stop shop", with the expertise necessary for Euro 5/6 exhaust system repackaging / relocation together with a wide range of chassis modification services including:

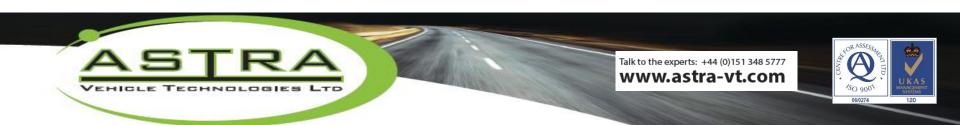
- Wheelbase alterations
- Additional axles (lift / steered tag or mid)
- Air suspension systems
- Mini artic conversions
- ADR, fire screens & "pet reg."
- Dual steer installations
- Upgraded cab tilt mechanisms
- "Buddy seat" installations
- Additional fuel tank, catwalk & heavy haulage conversions

AVT work closely with their clients to provide the very best solutions tailored exactly to their individual needs.



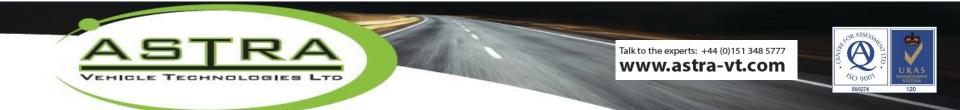






Astra provides chassis modification services to a wide range of Vehicle OEM's including:





Mercedes SVE applications

- AC0929 Atego 15.23 rear steer brewery spec
 AC1286 Atego 15.29 mid lifting/steering axle & cab modifications
- •WBME1001 Axor w.base modification 4.22m to
- 3.62m, rear windows, vertical tailpipe exhaust
- •WBME9001 Axor w.base modification 3.9m to 4.2m









Mercedes Atego

Mid lifting steered axle providing additional manouverability and uprating a 15t chassis to 21.7t on an overall track width of 2400mm for an urban RCV application

Features:

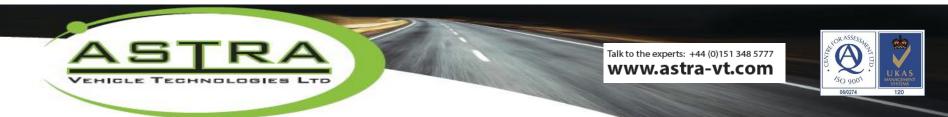
- Overhang reduction
- PTO driven hydraulics
- Tecma axle with Knorr Bremse brake system
- Granning air suspension with auto raise/lower and speed/time related traction control
- Mobile Elektronics steering control system
- Secondary steering angle pre-programmed and speed dependent
- Manual override of lift control











Fleet Prep

•AC1258 - DAF XF105

Bracket supports

• customised cat walk infill assembly





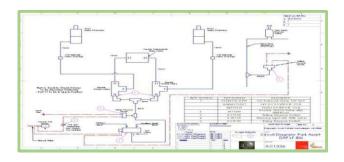






Park assist system

- For builders merchant delivery vehicles with rear mounted crane.
- Crane has stabilizing legs, which when applied to the rear of the vehicle potentially reduces the effectiveness of the parking brake.
- Astra developed park assist system additionally applies air to front brakes when a combination of PTO and parking brake is selected.







ADR conversion for safe load pass (tanker loading)

- 1st UK certified SLP for an Iveco Euro 6 vehicle
- Astra developed battery isolation system designed to work in conjunction with OEM purge processes of Euro 6 exhaust aftertreatment
- Shielded exhaust
- Battery master switch
- Relocated batteries & Fire screen









Mini Artic & Trailer and Trailer Conversion

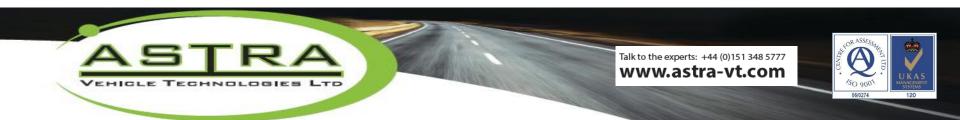
Features:

- •Wheelbase & overhang modification
- Fabricated sub frame
- •Bolted 5th wheel flitch plates
- •George Fischer 6t, cast 5th wheel c/w run up ramps
- •Aluminium cat walk, with side step, grab handle, side protection , mud wings & spray suppression
- •Enclosed ventilated Gast compressor with 20 litre air tank (pressure controlled cut in/out)
- •ABS & compressor warning light
- •2 line air & elec's and ABS, suzies & storage
- Pressure gauge, with ABS & compressor indicator lights
- •LED rear light cluster









Heavy Haul

- Front tow assembly
- •rear tow assemblies
- •Air & electrical connections
- •Heavy duty 5th wheel and striker plate
- •3D CAD design















Hydraulic Kit System/Wet Kit

- Relocated batteries
- •Astra vertical stainless steel exhaust tailpipe
- •Side mounted hydraulic tank











Euro 6 and Previous Models Dual controls

•European Whole Vehicle type Approval testing underway •Astra developed AKIS – "automatic key insertion system" Insert the key to select drive side

- •Manual with single or dual gear change
- Chassis repackaging options







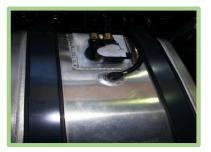




Astra chassis repackaging and LNG Dual Fuel installation Scania R440

- Stobart one of largest UK fleet operators with ~3500 prime mover units, across 11 divisions
- Part of UK Gov't funded trials programme, for dual fuel now operating 25 Volvo's & 15 Scania's
- Approx 42% displacement of diesel for LNG
- Net fuel savings equate to £350 per month per vehicle
- Payback in 29 months after Gov't grant from TSB/ Low carbon Vehicle Partnership















Thankyou for your time



FIRST CALL FOR SPECIALIST VEHICLE ENGINEERING (CHASSIS MODIFICATION & VEHICLE CONVERSIONS)

