



www.rimstock.com

RIMSTOCK Corporate Profile



Excellence in British design and engineering

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team
Dynamics
ALLOY WHEELS

team
Dynamics
RACING

Lotus-Elise S Cup R equipped
with Team Dynamics PRO
FORGED ultralight wheels

MISSION STATEMENT

To provide our customers with quality products and superior services so as to create a lasting relationship, provide growth and opportunities for our employees and generate consistently stable returns on our investment.

Our core principles

- Promotion of teamwork throughout the organisation
- Development of all employees to their full potential
- Continuous improvement in all areas
- Prevention of errors not detection
- Mutual trust at all levels of the business

Steve Lane, Managing Director / CEO, Rimstock PLC.

WHY RIMSTOCK?

RIMSTOCK is the premier producer of aluminium wheels in the United Kingdom, having the largest and most advanced design and manufacturing facilities of any wheel producer in the UK.

Fast reaction

Rimstock offers ultra fast reaction times to its OEM clients, with as little as a six week turn around from conception of a brand new design to finished production and supply.

UK based & flexible

Located in the West Midlands - the industrial heartland of Great Britain - we are ideally located close to major motorways and city links which benefits reaction time and delivery schedules throughout the UK and central Europe.

Quality Assurance

Our mission is to provide our customers with quality products and superior services. We achieve these goals through organisation-wide commitment to quality, professional management, sound business practices and teamwork, whilst working to major industry quality standards.

Modern paint facilities

RIMSTOCK is the ONLY company in the UK to have an acrylic powder clear coating system, as well as an 11 stage immersion tank pre-treatment anti-corrosion process operating to the SAM7 system.

Single source supply

RIMSTOCK offers what others cannot - it is a one-stop shop for the commercial supply of wheels and tyres, offering not only this but ultra fast reaction times to every client's needs, no matter how small or large.

Independent UK test facility

Rimstock has the biggest independent wheel test facility. We provide complete test house facilities, certified to German TÜV Road Traffic Act standards, incorporating corner fatigue, radial fatigue, impact, kerb strike, salt spray and humidity testing giving complete analysis and 100% peace of mind.

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ACCREDITATIONS

We are certified as complying with the international Quality and Environmental standards of TS 16949 and ISO 14001, which meet the requirements of modern Original Equipment Manufacturers in the automotive industry.

We have held accreditation through the TÜV Rhineland Group since 2008, and prior to implementing TS16949 we had been certified to ISO 9001 and QS 9000 standards since 1998.



ISO/TS 16949-2002



ISO 14001-2004

ISO/TS 16949-2002 is designed to help companies to implement effective and robust Quality Management Systems relating to the design, development, production, installation and servicing of all automotive related products. It offers the following benefits:

- Improves product and process quality, reducing overheads, waste and error
- Increases on-time delivery
- Ensures absolute consistency throughout the supply chain
- Satisfies automotive mandates of International Automotive Task Force (IATF) members around the world
- Eliminates the need for compliance to multiple third party registrations in different countries
- Increases competitiveness in global markets.

ISO 14001-2004 is the established ISO standard to confirm companies are meeting their environmental obligations and that they are working with the local authorities regarding the control of waste, emissions, noise etc. ISO 14001 provides a host of benefits as detailed below:

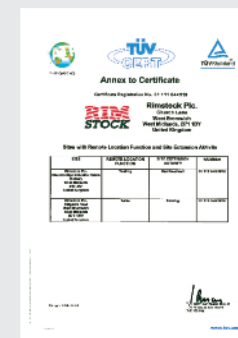
- ISO 14001 monitors and reduces our waste
- Reduces our company's carbon footprint
- Enables us to allocate time and resources more effectively and increase overall efficiency
- Keeps us up to date with the company's environmental impact
- ISO 14001 puts the environment at the heart of corporate culture
- Lowers our environmental liability, consistently adhering to regulation by improving environmental policies and objectives
- Provides customer confidence that we are committed to improving the environment and are willing to work with our customers to support them in their own environmental policies.



TÜV CERT ISO 14001:2004



TÜV CERT ISO/TS 16949:2002



TÜV approval



_FORGED: CONCEPT

Working alongside premier car manufacturers and designers, we manufacture special one-off sets of concept car wheels for many major motorshows including New York, Geneva, Frankfurt and Paris. We manufacture for marques such as Jaguar Land Rover, Lotus, Toyota, Nissan and Ford, plus leading design studios.

_Concept wheel design

Close liaison with contemporary design departments allows us to use state-of-the-art design and manufacturing processes to complete any design required, with very few limits to what designs are achievable.

Designs can be validated through benchmarking and Finite Element Analysis once completed into solid model form. Equipped with Silicon Graphic Pro-Engineer and Catia V5 3D modelling systems, Rimstock has complete compatibility with all its technical partners.

Pro-MECHANICA stress analysis, WINCAST FEA and casting solidification simulation programs enable computer simulation of mould filling, solidification and cooling, with FEA package for impact and corner fatigue testing. Using CATIA and Pro-ENGINEER workstations, IGES files can be imported with ease to bring your design ideas a step closer to becoming the next show-stopper.

Whether it be large scale production or one-off concept car prototypes, Rimstock's research and design facility offers unrivalled reaction time and speed of delivery with innovative concepts.



Jaguar-XKR-S GT



_Conception of design

Utilising leading designers from around the globe, Rimstock ensures it stays at the forefront of this fashion led environment, by introducing exciting new concepts and designs on a regular basis.

Transforming ideas from concept to reality is done with state-of-the-art Silicon Graphic Pro-Engineer and Catia V5 3D modelling systems, supported by desktop publishing software. The Design Department generates CGI three-dimensional models, which can produce resin prototypes of each product.

This enables our customers to see an initial three-dimensional computer image and even touch a physical three-dimensional prototype model. This makes it much easier to visualise a wheel style on the vehicle and allows clients to make design input prior to the final approval of the styling.

_Design, Tooling & Manufacture

Advanced quality planning activities, combined with the Pro Engineer and Catia V5 systems, ensure Rimstock has complete compatibility with all of its major clients' systems.

We ensure tooling designs are produced quickly and efficiently, meeting each customer's needs and requests, aided by the communication of the design centre to the high technology CNC fixtures located in our in-house toolrooms.

Pro Mechanica stress analysis is also utilised in the design process to provide optimum weight saving efficiency, whilst ensuring superior strength characteristics of each casting.



Rimstock Forged Shop machining



Aston Martin Vanquish Forging

_FORGED: MOTORSPORT

Aluminium forged and billet machined wheels are a very popular engineering favourite for combining weight optimisation, strength and durability. The Team Dynamics Pro Forged range can be manufactured for complete Championships like Australian V8 Supercars looking for ultimate performance in a cost effective manner to GT and Sports Prototype racing where performance is sought like the holy grail.



V8 Supercars, Red Bull Motorsports



Bathurst 12 Hour Endurance - V8-powered Focus Focus



Time Attack: Roger Clark Motorsport, The Gobstopper 2

One of the most sought after ingredients for modern car designers is minimising the weight of the wheel and unsprung weight of the vehicle, whilst maximising strength and durability which is required at higher levels in current and future performance cars. Reducing unsprung weight has a dramatic influence on the dynamics and performance of any vehicle. The higher the mass, the more energy is required to rotate and decelerate the wheel and tyre.

Aluminium forged and billet machined wheels combine weight optimisation, strength and durability"

With forged aluminium, weight saving in excess of 30% can be achieved compared to similar designs of cast alloy wheels, whilst achieving even greater stiffness in the component. Therefore, significant weight reduction and increased component stiffness can be achieved through the research and development of a forged wheel programme. This in turn puts a whole new light on the direct benefits to acceleration, handling, braking and suspension wear and tear.



The Team Dynamics PRO FORGED ULTRALIGHT wheel ensures maximum strength whilst maintaining very light weight properties.

_FORGING PARTNERSHIPS

Modern high performance vehicle manufacturers look ever deeper for performance and economy with modern styling. With their forged wheel technology Rimstock is able to design and manufacture components to help them achieve that goal.

WORLD LEADERS...

Rimstock is a world leader in manufacturing niche production forged alloy wheels. The manufacturing facility is one of the largest 3 and 5 axis machining facilities of any wheel manufacturer in Europe, making it a first choice for most of the top car manufacturers and tuners. Good location and a first class design and manufacturing base enable Rimstock to offer rapid response times as well as cutting edge technology, designs and products.

Modern vehicle manufacturers are under increasing pressure every year to increase performance and economy, whilst decreasing braking distances and emissions, which is no small task. To do this they need cutting edge products supplied by reliable partners with weight, performance and styling key elements looked for. Reducing unsprung mass by looking for lighter wheels is an obvious focus point for vehicle engineers with the benefits being so great, which is why they turn to specialist companies like Rimstock.



The Roger Clark Motorsport 900Hp Subaru Time Attack car, Goodwood Festival of Speed Winner. Equipped with Team Dynamics Pro Forged 18 x 11 wheels.



Aston Martin Vanquish Volante Forging



Rimstock Advanced Machining Facility



Overfinch Osprey finished in tungsten with a diamond turned face



The Aston Martin V12 Zagato equipped with Team Dynamics lightweight forged aluminium 19" alloy wheels. The Aston Martin V12 Zagato was released in 2011 to mark the 50th anniversary of the iconic Aston Martin DB4 GT Zagato.

_STRONGER

By closing up the grain structure of the alloy in the manufacturing process giving a denser grain structure means a forged alloy wheel is approximately 30% stronger than its cast alternative and can be machined to be 30% lighter while still giving high strength and good ductility in the component.



The Lotus Evora S Sports Racer equipped with Team Dynamics forged alloy wheels in 19 (front) and 20-inch (rear) diameter.



5-axis machining equals unrivalled finishes



5-axis machining aided by latest coolants and programming reduces machining & production times



5-axis machining allows designs to extract more material and give lighter product



5-axis machining working closely with machine & tool manufacturers ensuring Rimstock stays at forefront of engineering

_CAST WHEEL PRODUCTION & SUPPLY

A large part of Rimstock's business is the manufacturing and supply of cast aluminium wheels, producing products for target markets where quality and supply are key factors. From OEM customers, to motorsport, defence and its own aftermarket ranges under the Team Dynamics brand, Rimstock manufactures high quality, lightweight and optimised cast alloy wheels.



F1 ace Kamui Kobayashi helped develop the eye popping Caterham 620R



Car manufacturers use Rimstock as a supply source for their alloy wheel requirements because the company has key attributes required in today's environment:

Mission

To design, develop and produce innovative, modern, contemporary designs both cost effectively and to the highest industry standards.

Fast reaction times

Being able to react to an OEM's needs with pace and precision, offering immediate solutions to any problem.

Service & Versatility

Because of its location Rimstock is able to offer a service far exceeding its competition with just-in-time delivery, tyre fitted & balanced units, ultra fast reaction times and an unrivalled service.

Quality

Adhering to the highest quality standards in the industry, Rimstock's plant and products shine above the competition.

Reliability

If any technical questions arise, Rimstock can have a trained wheel engineer with you, same day, to answer questions and supply solutions to any requirements.



Carlsson Mercedes incorporates latest styling for body and wheels



Lotus Elise S Cup 4. The most powerful road-going Elise ever built and it comes with everything you need for a fun-filled weekend at the races. The Y-type lightweight wheels measuring 16 inches up front and 17 inches on the rear.

Using the finest materials supplied from the world's most renowned smelters, Rimstock ensures only the highest quality, prime material is used to produce a wheel. Through every process, from design and tool rooms through to every stage of production, Rimstock ensures complete control and traceability in the manufacturing process.

We have designed, developed and built our very own in-house, low-pressure die casting machines. These are fitted with fully automated process control systems, which allow remote control of every aspect of the casting process. All this helps Rimstock to ensure it has the latest technology to produce a more integral, high quality casting.

Through 'real time' x-ray monitoring, to confirm casting perfection, then in to the modern machine shops fitted with CNC turning centres and drilling fixtures.

Each and every process is controlled using statistical process techniques. Rimstock's super advanced paint and treatment facility houses fully automated wet and powder lines, with robot handling systems, all enclosed in a controlled air movement atmosphere. The use of complete water based, environmentally compliant coatings is also a policy of Rimstock.

The anti-corrosion pre-treatment system is fully automated, also allowing compatibility with modern ecological legislations. These systems guarantee that not only are wheels produced to superior standards in quality, but are fully compatible with all contemporary environmental issues.



The Prodrive GT1 cast alloy wheel. Finite Analysis was extensively used to optimize the strength and stiffness in the design for the minimum weight.



The Ariel Atom 3.5 equipped with Team Dynamics ultra lightweight cast alloy wheels

“Only the highest quality prime material is used to produce a wheel by Rimstock”

_DYNAMICS IN MOTORSPORT

Established as a strong, reliable race wheel manufacturer, Rimstock has had a strong technical partnership with Team Dynamics Motorsport for over 20 years and is behind the Team Dynamics Pro Race and Pro Forged brands of high performance wheels. They are the wheel supplier chosen by many national and international teams and race car constructors.

_Cast Race Wheels

For teams looking for cost-effective performance or where regulations dictate, Rimstock has its comprehensive 'Pro Race' ranges. Cast heat-treated alloy available in a vast range of sizes and fitments, meaning Team Dynamics Pro Race wheels are chosen and relied on for performance by the best in the business.

PRO RACE enquiries contact:
prorace@rimstock.com

_Forged Race Wheels

The 'Pro Forged' program is used by the best in the business. Rimstock is proud to have a technical working relationship with one of the biggest and best Championships in the World with Australian V8 Supercars using Team Dynamics forged wheels.

Individual requirements are dealt with on a direct basis with each customer having their individual needs catered for.

PRO FORGED enquiries contact:
proforged@rimstock.com



Ultra-light: Team Dynamics PRO RACE



British Touring Car



V8 Supercars



Ginetta Racing



World Touring Car



Time Attack



FIA Formula 4

“ The cast alloy, heat treated PRO RACE 1.2 - one of the lightest wheels on the market - inspired from a rich motorsport heritage, developed for the track, used for the road. The catalyst for the PRO RACE range as used by race teams across the globe”

_BEAD LOCK / HIGH LOAD WHEELS

Specifically designed for the Defence & Security Market

_The Tyron R4

Developed to exceed the INTERNATIONAL FINABEL STANDARD, the R4 wheel, tyre and extended runflat assemblies have exceeded 50km with all four tyres deflated - the only system in the world to achieve this.

With a load capacity of 1600kg per wheel, the ingenious beadlock system is designed for armoured 4x4 and Military Off Road applications. The bead lock system allows the run flat system to be fitted easily, without the potential to damage the tyre bead, unlike other extended run flat systems.

_Partner:

TYRON INTERNATIONAL introduced the world's first bulletproof two-piece Rubber (ATR) run flat, which outperforms all other run flat systems when combined with the R4 wheel. Rimstock also manufactures a range of other light commercial and high load wheels.

Exploded view of the Tyron R4 fitted below to a Land Rover



Land Rover Defender fitted with the 16 x 6.5 high load wheel



Image courtesy of Hobson Industries



Land Rover Defender fitted with high load wheel

_High Load Alloy Wheels

A super strong and super lightweight wheel, this is the only wheel available to the Land Rover market which has been rated at a massive 1400 kgs per rim and passed the stringent TUV test approval at this weight. Designed to give your Land Rover the maximum wheel track while still complying with British MOT standards.



Land Rover Defender high load wheel available in 16" or 18"

_PSV Vehicles

Established German manufacturer of specially-protected vehicles with armour for all levels of protection whilst still placing great emphasis on vehicle dynamics and handling. PSV has worked with Rimstock developing lightweight solutions for various projects, the PSV Land Cruiser SHIELD Ambulance being just one of these.



The modified Toyota Land Cruiser

_WHEEL TESTING FACILITY

Rim Technologies is the largest recognised independent wheel test facility in the UK, providing services not only for Rimstock, but also vehicle manufacturers and other wheel companies around the globe.

_Independent and Consultancy Wheel Testing Facility

Fully approved and able to test to all international standards, ensuring products meet the modern technical specifications required of each application.

- Any wheel material - aluminium, magnesium, carbon fibre.
- Any size - 10" to 24".
- Any combination - Passenger Car, Commercial, Motorcycle, Race Car, Defence Sector.
- Any fixing - Centre lock or Multi-Stud PCD fixing.
- Any scenario - whether testing new development or appraising accident damage.
- Any standard - German TUV, JWL, including tailored packages.
- Certification endorsed and supplied.

- | | |
|--|--|
| ■ 1_Radial Fatigue Cost to set up and test first sample Cost to test repeat samples Cost per day after 500,000 cycles | ■ 5_Dye Penetrant Crack Detection |
| ■ 2_Cornering Fatigue Cost to set up and test first sample Cost to test repeat samples Cost per day after 500,000 cycles | ■ 6_Additional Technician Support |
| ■ 3_Impact Tests - Front Flange or Rear Flange Cost per sample Cost to test repeat samples | ■ 7_Paint Stripping |
| ■ 4_Torsional Fatigue Cost to set up and test first sample Cost to repeat samples | ■ 8_Spectrograph Analysis of Alloy |
| | ■ 9_Hardness Test of Alloy |
| | ■ 10_1000 Hour Neutral Salt Spray Test Additional cost per 500 hours |
| | ■ 11_Humidity Test |
| | ■ 12_CMM Dimensional Checks |

In addition, accident damage analysis is available on POA basis.



Impact Testing machine



Corner fatigue test



Test laboratory



Finite measurement and analysis

_PRODUCT SHOWCASE

Enjoying association with the high-tech, high profile motorsport industry, Rimstock utilises this relationship to further develop its products for the benefit of its production and customers with an impressive portfolio...



The Lotus Evija LFI Limited Edition has gold 17" front and 18" rear cast alloy wheels. The black and gold centre badge completes this unique wheel assembly.



The Victoria Beckham Special Edition extends its character in a new direction through understated, restrained colour and detail changes. A year and a half helping to create the interior aspects of the new model.



The Jaguar XKR-S GT isn't your average gentleman's V8 coupe. This is the most extreme road-going Jaguar ever: a supercharged, 542bhp powerhouse fitted with bucket seats, a roll cage, and massively uprated suspension, brakes and aerodynamics to give a look and feel totally alien to any other Jaguar. The sensational Jaguar XKR-S GT is the first model to come out of Jaguar's new Engineered To Order (ETO) division, and it distils all the manufacturer's racing know-how into one intense package.



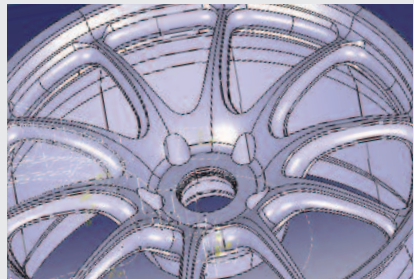
Aston Martin V12 Vantage S: An all new lightweight forged wheel creates a striking side profile as more of the brake caliper and carbon ceramic disc are displayed. Over 1kg lighter than the standard V12 Vantage wheel, the reduced unsprung mass provides better turning response.



_MANUFACTURING FACILITIES

Rimstock's state-of-the-art UK based manufacturing facilities represent the best technology available for the manufacture and finishing of aluminium road wheels in the UK.

_Design
Rimstock designers work with the latest software to enable full integration with each OEM. Catia V5, Pro Engineer Wildfire Solid & Advanced surface modelling + Pro Mechanica FEA stress analysis & fatigue testing.



Whether following a strict remit or providing a flash of design inspiration, Rimstock's design team can supply a solution to any requirement.



_Foundry
12 semi automatic plc controlled Low Pressure Die Casting Machines give a casting capacity of 10,000 12" to 23" cast wheels per week.



_Machine Shops
Five linear Cincinnati CNC Production Cells plus one fully automatic Fanuc production cell service cast wheel production.



_Forged Unit
Twelve 3-axis, seven 5-axis and five vertical turning lathes make Rimstock's forged wheel m/c facility one of the most comprehensive in Europe.



_Heat Treatment
EFCO In house heat treatment system enables seamless supply and full control monitoring of heat treatment process.



_Pre-Treatment
An 11 stage immersion tank pre-treatment system working to SAM7 (Self Assembly Molecular Technology) giving full corrosion resistance whilst adhering to all modern environmental requirements.



_Paint Facilities
Purpose built to exceed OEM quality standards and supply. Acrylic clear coat, controlled air circulation and robot handling systems ensure water crystal finishes are supplied.

_ALLOY WHEEL REFURBISHMENT

Rimstock is the only UK company currently providing high quality refurbishment with certified OEM treatments and paint finishes. This sector has grown to be an established and large category in Rimstock's portfolio.

_Commercial Alloy Wheel Refurbishment

Team Dynamics alloy wheel refurbishment: the only British company to offer Original Equipment standards to restore your alloy wheels to a high standard.

Rimstock is the only UK company able to offer a fully certified service to the modern OEM. We convert corroded and kerbed OE wheels to first-class standard with complete service. Working with head offices and direct with dealers in the network, we offer a complete Alloy Wheel Refurb solution to lessen the pain for the dealer and the consumer, ensuring everyone has the best service possible.

No job is too small or large. We work with unique priceless collectors cars, private individuals, vehicle manufacturers and importers who want large scale solutions for refurbishment and logistics, plus race car manufacturers and teams who require complete technical inspection for high value products.

Examples of work:



BMW Z4 refurb



Ferrari refurb



Porsche refurb



BMW M5 refurb

A selection of refurbished wheels. From one piece to multi-component rims, any wheels can be accommodated. Any finish and colour can be achieved, from one off custom wheels to full sets.

_Motorsport Alloy Wheel Refurbishment

All sizes and makes of motorsport wheel can be inspected and renovated including Touring car, GT, sports prototype, single seater, drifting, rallying, rallycross, historic, single make championships, auto test, track day & more...



Touring



Le Mans



A1 GP



Rally



www.rimfurbish.co.uk / www.alloyxchange.co.uk

_SALES & DISTRIBUTION

From our purpose built warehouse facility we supply retailers with the largest choice of wheel styles available from one supplier.

_Sales & Warehousing

Controlling average stock levels between 50,000 and 100,000 wheels, products can easily be stored, located and readied for dispatch with bar code identification systems. This is all-important in efficiently meeting all our customers' worldwide specific technical and packing requirements. Three designated sales teams are based at the UK Sales and Distribution Facility - Original Equipment, Overseas and UK Aftermarket Sales. These dedicated teams ensure customers' requests and requirements are recorded and promptly forwarded to the designated packing and dispatch areas.



_Tyre Sales & Fitting Service

Our on-site, purpose built tyre-fitting and balancing facility ensures manufacturers or tuners can receive units fitted, balanced and ready to go. The best service with least stress for each of our customers' requirements. Such is Rimstock's relationship and buying power that super competitive pricing can be sourced with most major tyre manufacturers.

For high performance wheel and tyre combinations, we can offer variable force analysis on our latest addition to this facility.

_Meeting delivery demands

With its central UK location, Rimstock is perfectly placed to service real time customer needs, able to work and react with each customer and market place.



_AT THE HEART OF THE UK

The Rimstock Plc Group of companies is a worldwide organisation supplying high quality products to a global customer base. Its manufacturing facilities operate from five production installations extending to 350,000 sq ft, all of which are located in the West Midlands area in the industrial heartland of Great Britain.

