



# DESIGN AWARDS 2015

## OVERVIEW

Triumph Design Awards is an exciting new design competition created by Triumph with the aim of inspiring the Design Engineers of the future.

We're committed to encouraging young people to innovate and get excited by the thought of an idea evolving into a real life product. We want young design engineers to develop their engineering potential, and recognise that engineering is an exciting and useful career that has helped shape the world we know.

More information & details of prizes available online at: <u>www.triumphmotorcycles.co.uk/triumph-design-awards</u> Contact: <u>TriumphDesignAwards@triumph.co.uk</u>

# DESIGN AWARDS 2015

## THE BRIEFS

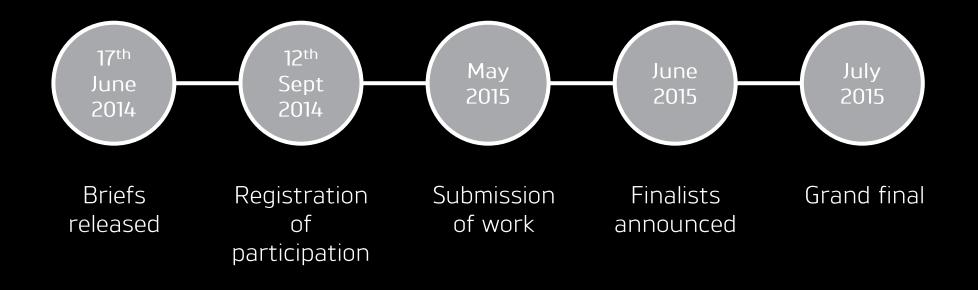
We've created a range of design briefs to get you started, each of which identifies a different challenge - some local and some global - which we invite you to explore.

Choose one that excites you, and use your Design and Technology coursework as an opportunity to tackle a real world design brief.



## TIME SCALE





# DESIGN AWARDS 2015

## THE PRIZES

#### **Overall Winner**

- A 2 week paid design internship at Triumph Motorcycles Ltd.
- £500 towards educational course materials.
- Triumph Design Award trophy.
- The opportunity to be sponsored on a suitable degree course together with paid periods of work at Triumph.

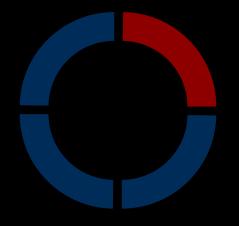
#### **Individual Brief Winners**

- £250 towards educational course materials.
- The opportunity for 1 week work experience at Triumph Motorcycles Ltd.
- + Further prizes for all entries TBC



#### I is for Innovation

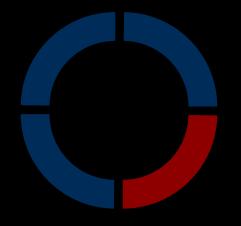
We want you to show us how you have developed an original proposal throughout your project - whether creatively and graphically or by coming up with a novel way to solve a problem. The judges will be looking for something that distinguishes your project from all other applications. We want ideas that make us say "Wow!".





#### E is for Engineering

You should demonstrate that your concept will work in the real world. Consider how your proposal will be produced, how it will work efficiently in the application and that existing products and solutions have been researched and analysed. Engineering involves everything from initial concepts, development and testing of your ideas, to constant evaluation, refinement and detail design for manufacture.





#### R is for Responsibility

We are looking for you to consider the social, environmental and ethical impacts of your design. Consider the stakeholders involved in the production, use, and end of life disposal of your product, and ensure your product does not negatively affect these.





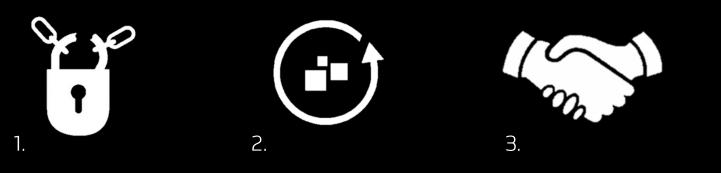
#### C is for Commercial

With any great idea, however big or small, it needs to be commercially viable. This means being financially viable but ultimately it must be something customers would buy. This part of the judging criteria encourages you to consider the commercial side of your product and how you might change its design to improve profitability or reduce cost to the customer. Do you have any exciting ideas about a potential business that might arise from the sale of your product?

## THE BRIEFS

Click to read...







- 7.
- Innovation in Security 1.
- Reduce Reuse Repeat 2.
- З. New Beginnings
- **Open Brief** 4.

4.

- Safer Roads 5.
- 6. In the Limelight
- Tomorrow's Vehicle 7.

#### **OVERVIEW**



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## BACKGROUND



It is estimated that for every car or motorcycle in the world, there are two bicycles, yet in Europe alone, less than one in ten people use one as a regular mode of transport. With the average journey in the UK being 7 miles almost half of all trips could be cycled in under half an hour, reducing emissions and improving congestion on the roads.

One of the major problems identified with people not using a bicycle as a viable method of transport is a worry of theft or vandalism. More than 1250 bikes are stolen every day in the Netherlands and in the UK a bike is stolen on average every minute. With over half a million minutes in a year, a large percentage of current cyclists are not encouraged to continue riding after their bike has been taken, or parts bent and buckled because of the likelihood of further offences being carried out against their property. Walking a bicycle home with a missing wheel is not an experience most people want to repeat.

Motorcycle riders often face a similar problems with trying to prevent damage or theft of their bikes. As motorcycles are compact, making them easy to park in towns and offer good fuel economy, they can offer significant benefits to cars for quick trips, however they are much more vulnerable to vandals and thieves.



## DETAILED BRIEF



Your task is to develop a method to reduce the theft of and/or vandalism to, bicycles or motorcycles in any way you can think of. Consider in detail what prevents people from securing two-wheeled vehicles, or limitations with existing methods. You should consider ease of use with the aim to encourage users to protect their bike or specific components with your proposal.

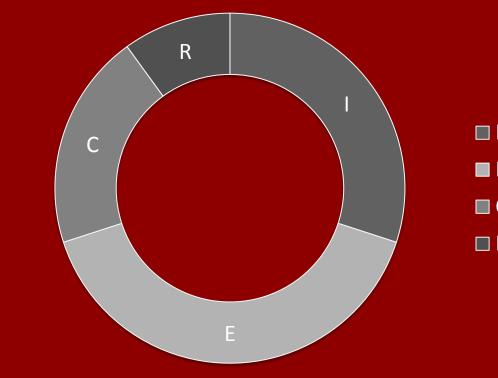
You could work to improve an existing product in the market, look at places to secure bikes in towns or at home or consider something completely innovative.

Take a look in the online workshop for some inspiration and more facts and figures.



...don't forget to keep checking the online workshop for more information to help you throughout the year! <u>http://www.triumphmotorcycles.co.uk/triumph-design-awards</u>





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#### OVERVIEW





#### 2. REDUCE REUSE REPEAT

Develop a desirable and appealing product or range of products using waste materials from Triumph as a raw material, which would otherwise have been recycled.

#### BACKGROUND

In our growing world of diminishing resources, the importance of waste management in industry has never been stronger. Unsurprisingly, designing and producing motorcycles results in lots of waste to manage, and whilst manufacturers such as Triumph will always aim to reduce the amount of waste created, there will always be waste to deal with responsibly. More often than not, this is recycled, and whilst this is an excellent method of waste disposal, the recycling process still requires energy and will often result in carbon emissions.

Lansink's ladder gives the order of preference for waste management, with reduce, reuse, recycle being listed in order of benefit to the environment. Commercially, there are benefits to reducing unnecessary material consumption and recycling scrap material, and there are established systems in place which make these easy to achieve. The process of 'reuse' is not fully explored by many companies, yet if this has the potential to be of greater benefit to the environment, is there potential for us to challenge convention and transform the overlooked 'reuse' step into a viable business option?







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#### DETAILED BRIEF

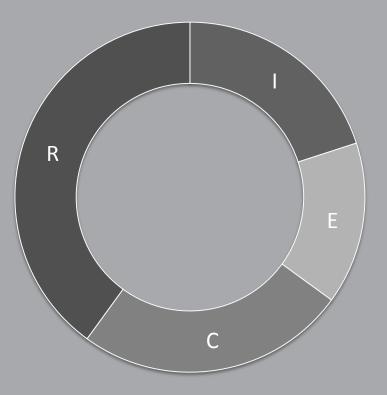
We challenge you to see if our waste material can be 'reused' to create new products **before** being recycled. Is it possible to transform our waste into viable and desirable new products and give the material a second life before it is finally disposed of responsibly?

We want you to demonstrate outstanding creative ability by looking at 'waste' in a new light, and not letting the original function of the material or product limit the scope of your ideas. The former life of the material in your product(s) may be obvious and provide a unique selling point for your new and functional product, but could it be so seamlessly integrated or reprocessed that no one would guess its history? Additional materials and components can be used to increase function or appeal, but end of life disposal of your product(s) should be carefully considered.

Your proposal does not have to be motorcycle themed, but you may wish to use styling cues or subtle Triumph branding if you feel it could be appropriate for your chosen product and customer.







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## WORKSHOP



## Materials to choose from include (but are not limited to):

- Motorcycle tyres
- Electrical cable
- Paper (all sizes up to AO)
- Cardboard
- Oil
- Motorcycle components
- Polymer bags (from small to motorcycle sized!)
- Nuts and bolts
- Plastic bottles, Drinks cans
- Oil drums



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#### **OVERVIEW**





#### **3. NEW BEGINNINGS**

How can the feeling of success, excitement and reward of getting a dream job at Triumph continue during the communication of essential information to new employees before they arrive on their first day at work?

Design an exciting and relevant 'experience' by revolutionising the way in which we communicate information to new employees at Triumph.

## BACKGROUND



Starting a new job can be a big experience in anyone's life. Perhaps it is your dream job, your first job, maybe a job in your favourite company. It is likely that the process of applying to the company took many hours of preparation, a process which some may find stressful.

Whilst the success of being offered and accepting the job can be very rewarding, the experience rapidly evolves into an administration exercise, with the employer sending essential yet uninspiring information to new employees. It is easy to see how a new employee could feel overwhelmed, confused and like a cog in the wheel of a large machine.



## DETAILED BRIEF

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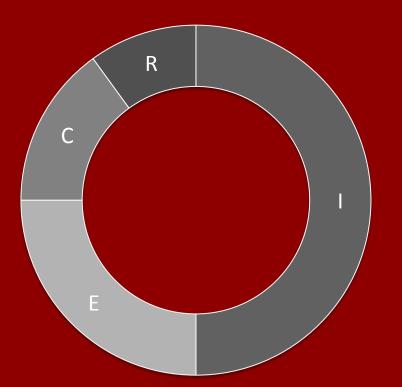
This brief encourages you to think about the emotions of getting that dream job after years at school, university and the wider working world. Imagine the sense of pride, excitement, and anticipation you would have. We want you to kindle this excitement and ensure all new Triumph employees arrive on day one already feeling like part of the team. We want to ensure the first interaction new starters have with Triumph as an employee is a memorable and motivating experience.

The information which could be communicated is listed in the online workshop on our website with a brief overview for each part. You may choose to add or remove information or elements you feel would be relevant for a new starter, but avoiding 'information overload' is key. As such, the entire presentation of your proposal should avoid the feeling of being overwhelmed. Try and make your proposal a genuine experience, whilst ensuring the information can easily be found. You may wish to research how information is communicated in different areas of life to create a positive experience out of an otherwise mundane task. What is it that makes it engaging? Can you incorporate some of these aspects?

Your proposal can be a physical product, print based, IT based or an innovative combination of them all, using whatever technologies you feel are appropriate. Your proposal should be designed to communicate and remain true to Triumph's brand values. As such, you should carefully follow the brand guidelines laid out in the online workshop.







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## WORKSHOP



Information you may or may not choose to include and should not be limited to, includes:

- History of Triumph
- Uniform selection
- Important policies
- Health and Safety statement
- Directions to Triumph
- Where to report to on your first day
- Places to live/ stay/ eat
- Induction agenda
- Introduction to the team

...don't forget to keep checking the online workshop for more information to help you throughout the year! <u>http://www.triumphmotorcycles.co.uk/triumph-design-awards</u>



#### OVERVIEW





#### **4. OPEN BRIEF**

Use the power of design to solve a real world problem, and improve the lives of others.

Design an innovative new product that makes others say 'why has no one thought of that before'. This could be a completely new product or a re-design of an existing product.

# DESIGN AWARDS 2015

#### DETAILED BRIEF

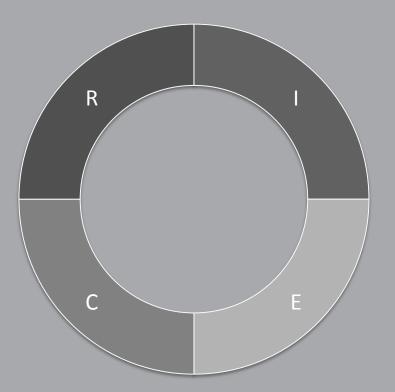
Research and identify a real world problem of your choice, and show the world how design has the ability to improve the lives of others. Immerse yourself in the world of the user and fully understand their needs and their core aspirations. Then, let your imagination and creativity run wild as you create something innovative, something feasible, and something beautiful.

The form and/or function of your design should be well resolved, but a consideration of design for manufacture, sustainability and materials selection should be shown too.

We want you to demonstrate that you have the ability to identify and analyse real world problems, and provide a viable, innovative solution through excellent design.







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#### **OVERVIEW**





#### **5. SAFER ROADS**

Design a product that improves the safety of motorcycle riders and/or cyclists in urban areas

## BACKGROUND



Road safety is an extremely important aspect of automotive engineering and over the years cars have benefited from the introduction of key features such as seatbelts, airbags, crumple zones and crash avoidance systems. These all minimise the injuries suffered by occupants and, to an extent, pedestrians who are involved in an accident.

Along with legislation, voluntary programmes such as Euro NCAP - which gives star ratings to vehicles reflecting their safety - allow consumers to purchase vehicles based on how safe they are. This further drives manufacturers to prioritise safe design. However, safety features for motorcycles and bicycles are not developing as notably as with other vehicles, despite being the most vulnerable of road users.

This is especially the case in urban areas, where many vehicles are required to navigate around each other and complex road systems in tight spaces. As such, there are regular news articles of riders being knocked off their bike, often with the reasoning that they were not noticed by the other road user involved in the collision.



## DETAILED BRIEF



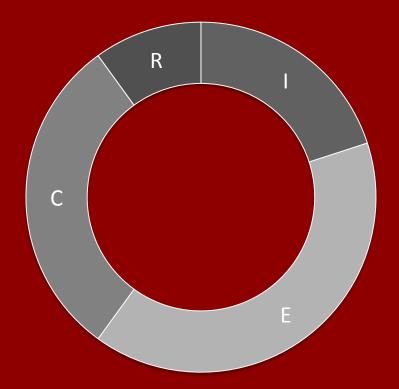
Develop a product that improves the safety of motorcyclists and/or bicyclists when sharing the road with other road users.

Your proposal may better protect a rider in the event of a collision, but could it somehow prevent one altogether?

Remember, your product needs to be appropriate value for money, and something users would be prepared to purchase. You should ensure your product does not have a significant negative impact on the riding experience.







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#### OVERVIEW





#### 6. IN THE LIMELIGHT

Design an environment to exhibit Triumph Motorcycles' brand and products to the public.

## BACKGROUND



Motorcyclists can be very passionate about bikes, with many prepared to travel great distances to attend events and places where we, at Triumph, can show off ours. These are great opportunities to convince a customer that they really want a Triumph. As a result, we spend a great deal of time developing exciting and informative environments for the customer.

We take many opportunities to engage with the public, from the obvious motorcycle shows that are held around the world, to the not-so-obvious events, such as Triumph Live. Each of these events has a purpose, and that's not always to simply promote the motorcycles themselves. In many cases promoting the brand itself in order to improve familiarity and to make it desirable is the key motivation behind participation in a public event.



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#### DETAILED BRIEF

Choose an event or location where Triumph has a presence and develop a customer-orientated environment that is exciting and attractive. Your design should have the ability to provide information about the bikes and the brand to give the best customer experience possible.

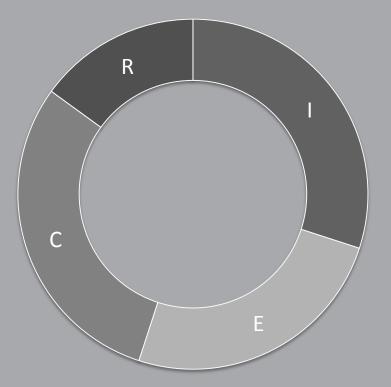
Typical features include display motorcycles, posters and banners, and branded clothing/accessories. You may choose to include these, but we encourage you to be creative in order to provide something truly innovative. You may wish to focus on providing visually stimulating features or interactive activities to help engage customers.

Remember, in some cases we want to provide something for everybody, such as children or non-riders. If appropriate for your choice of event, how can you engage these people if not directly through the virtues of the bikes?

Examples of events that you may wish to choose include Triumph Dealerships, Triumph Live, a Triumph Visitor Centre based at our Leicestershire Factory, or the Motorcycle Live show at the NEC. Details for each of these events are shown in the Workshop.







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#### WORKSHOP



#### **Triumph Live**

Every two years, Triumph hold a festival which, amongst other things, will this year include a selection of marquees to allow visitors to relax and learn more about the motorcycles. More information can be found at <u>http://www.triumph-live.com/whats-on</u>, including what the themes of the marquees are. You may wish to choose one of these to design, or perhaps a brand new idea for Triumph Live 2016.

#### Dealerships

Triumph has dealerships all across the world, including many in the UK. You may like to design the layout of a new dealership. Such a place focuses on selling new and used motorcycles, along with clothing and accessories in a more permanent setting than the other examples, but is there something more that you can do with the area to encourage visitors?





#### WORKSHOP (continued)

#### **Motorcycle Live**

Held every year in November at the NEC near Birmingham, Motorcycle Live is arguably the UK's biggest motorcycle show. Featuring most of the major motorcycle brands from around the world, the Triumph show stand needs to stand out from the crowd to attract the attention of customers. Unlike with dealerships or Triumph Live, where customers are already interested in Triumph, at these shows visitors may not intend to consider the brand. This is, therefore, an opportunity to introduce new people to our motorcycles. There are other motorcycle shows around the world, can your design be adapted or reused? Perhaps you want to design for a different show. Motorcycle Live is held this year from 22/11/14 to 30/11/14 and more information can be found here: <u>http://www.motorcyclelive.co.uk/</u>

#### Visitors' Centre

Triumph give tours around the Hinckley based factory, but there is no visitors' centre with which to book the tours. You could design a visitors' centre that acts as a gift shop, café, dealership or even a hang-out spot for motorcyclists.





#### WORKSHOP (continued)

You may find it helpful or interesting to visit your chosen event, but this is far from necessary as your design should be original, rather than relying on what's already been done. A visit may, however, give a feel for the type and number of visitors that attend and what is necessary to attract them. Feel free to incorporate innovative features to your design to help make the experience unique to visitors and stand out from the competition.

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#### **OVERVIEW**





#### 7. TOMORROW'S VEHICLE

Design a personal vehicle concept that considers the priorities and requirements of society 10 years from now.

## BACKGROUND



For millennia, mankind has strived to find ways of getting places quicker and more easily. Horses have historically proven the popular choice in many civilisations, either being ridden or used to tow wheeled vehicles. It was not until the 18th century when mechanical engineers started to produce self-propelling vehicles. These were powered by steam engines and, later, the internal combustion engine that now powers virtually every road vehicle in the world. Modern internal combustion engines, typically fuelled by diesel or gasoline, are significantly more efficient and environmentally-friendly than those from the past.

However, the sheer number of engines in the world right now means that there are serious concerns over the reserves of fuels and the overall effect the emissions have on the environment. That's not to mention that the number of new vehicles introduced to the world's roads each year is increasing.

If trends continue, 10 years from now congestion will be worse than ever, emissions will continue to climb, and we will be even more reliant on fuels produced from non-renewable resources. Automotive manufacturers have to consider these points, all while meeting a consumer expectation for faster, cheaper and safer vehicles.



## DETAILED BRIEF



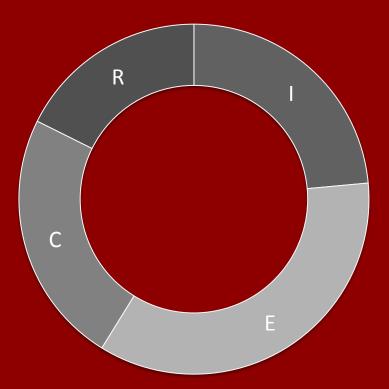
This is where you come in. Your job is to produce a concept for a method of personal transport for a decade from now, which is designed with a focus on minimising emissions, consumption of non-renewable resources and congestion, whilst remaining an attractive product for customers.

Your concept vehicle can be presented however you like, be it drawings, CAD and/or models, but you should show how your concept meets each of the requirements you will have identified.

Don't forget to consider the things that make a vehicle sell, such as aesthetics, speed, power, low running costs or anything else you can think of. Some of these selling points may work in hand with what you're trying to accomplish from an environmentally or socially responsible point of view, whereas others may need to be compromised. Be sure to justify any decisions you make.







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