

DEMAND

Design & Manufacture for Disability



**Helping disabled people
live life their way**

Registered Charity No. 1008128



Overcoming barriers

We believe good design can make anything possible

We work with disabled people to help them overcome barriers to independence and inclusion.

Our designer makers create special equipment from scratch...

...that helps people explore new opportunities in their lives.

We're here to help people overcome barriers to inclusion, participation and independence using the power of design and engineering.

We work with disabled people, their families and caregivers to help them overcome challenges with personal care, accessing education and employment, social isolation, to regain skills after life-changing injuries and to engage in therapy, sports and leisure activities.

Nearly 400,000 disabled adults in the UK who experience challenges in their lives would like to see improvements to the availability of special aids and equipment available for them.*

Please help us make changes for the better together.

* Removing barriers, raising disabled people's living standards - May 2014

Ways we help

Our work helps in all walks of life



Designing custom products

If there is nothing suitable available on the market we will design and manufacture kit that helps people overcome challenges.

Signposting

We are on hand to share our knowledge of products and services offered by other organisations and give information about disability equipment that is available to buy.



Sheena is able to keep her independence thanks to a height-adjustable trolley to move food and drinks around her kitchen safely.



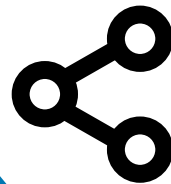


Adapting existing products

Everyone is different and has different needs, so we tailor and adapt people's own kit to make it work better for them when there's no suitable alternative on the market.

Angel would injure her arms on the hard metal bed head. Now custom made padding is keeping her safe.

Developing designs



We develop designs and bring new disability products to market that fulfil unmet needs and share blueprints so more people can benefit from them.

School children across the UK, and even in Australia are benefiting from the sensory sanctuary of our rocking chair.





Opportunities for inclusion and equality

Our custom designs help people enjoy the things they value most along with their peers.

Reduced risk of injury

Harm, and the resulting costs for medical treatment, from using unsuitable equipment and unsafe coping techniques is easily avoided by providing equipment that is fit for purpose.

Access to therapy

Engagement in sport

Increased independence

The right tools help people achieve their goals without assistance and feel dignified doing so.



Outcomes for the people we worked with in 2017



Reduced dependency on carers

Reducing the burden on carers, whether family members or employed staff leaves them free to care in other important ways.

Increased comfort

Being comfortable can greatly affect our mental and physical wellbeing. When equipment is causing discomfort and distress, a simple adaptation can make all the difference.

Access to education and training

Our user centred approach helps people overcome specific challenges so they can get the most out of school, college, university and training programmes.

Reduced social isolation

The impact of custom made equipment can go much further than simply being able to complete day to day tasks. It can mean the difference between isolation and being able to leave the house, socialise and be part of a group of like-minded individuals.



Play it your way


Helping everyone explore the world around them through play

Play, both with toys and musical instruments, is an integral part of every child's development. Through individual and group play, children learn vital skills that go on to shape their interests and abilities throughout their school careers and lives beyond.

Playing music helps children to explore their inherent creativity and is a great outlet for self-expression that helps children grow in confidence and self-esteem.

Toys are very effective in helping children explore decision making, cause and effect, communication, cooperation and coordination, but all too often, children can be excluded

because of their physical or cognitive abilities. We work with children, their families, schools, health and care professionals to find creative solutions that ensure no child is excluded from these activities that are key to their healthy development.



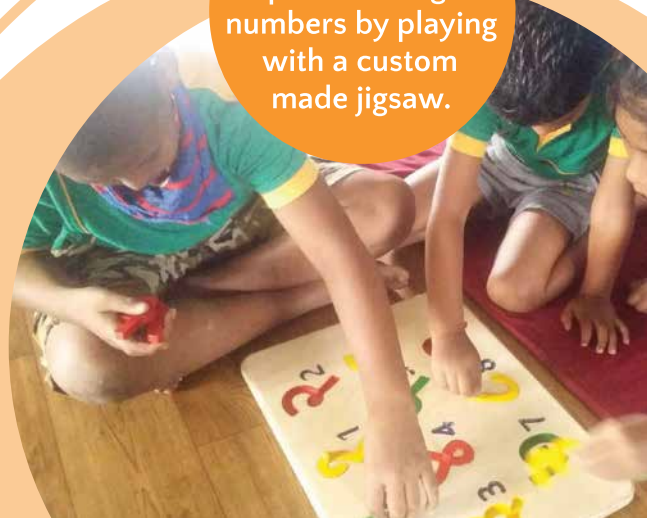
Oscar, who is 5 and has cerebral palsy, was frustrated waiting for Mum to bring different toys to his tray. Now he is free to play at his rotating table, which keeps all his toys within reach!



Students at Birchwood school in Hertfordshire are now playing an active part in the classroom band thanks to some simple adaptations to their instruments.



Children in Chitwan, Nepal learn English numbers by playing with a custom made jigsaw.



At home and away

How we help people live well at home and explore the world beyond



James is 5 and was born with a rare and life limiting genetic condition. Having outgrown his old playpen, a bespoke taller and stronger version made using our CNC router is helping to make sure he's safe and happy at home.

James' mum Sarah told us: "**James has no awareness of danger. He needs a safe space where he is away from switches, sockets and anything he could choke on. If there is only one adult in the house with him, we cannot leave to make him tea, grab a new toy, or even answer the door. James having his own space to play again definitely makes him happier - we're able to go back to normal life in the house.**"

Maggie and her husband are avid musicians who perform all over the world. Following a traumatic injury, Maggie lives with pain in her hips and legs, which is exacerbated by sitting with her feet off the floor. She told us **“I have coped somehow in the past with my husband’s help but I want to be able to be independent.”**

An adaptation to a folding footstool means Maggie can go out and travel confidently, enjoying playing music without the concern that she will end up in unmanageable pain while away from home.



Residents at **Abbeyfield** care home are encouraged to live as independently as possible. They run errands and make visits to the shops as and when they like, but something simple was stopping them – a door handle! With a 3D printed adaptation, the door is now much easier to open and close, even for the residents who have arthritis and reduced strength and everyone can now enjoy their independence once more.

Learning and working

Creative solutions helping people in school and at work

Alice is 9 and was having trouble sitting on her chair at school. Her prosthetic leg does not have a knee joint, as is the case with all childrens lower limb prosthetics supplied by the NHS. The weight of her leg made it uncomfortable and tiring to sit during lessons. A stand to rest her prosthetic leg is working wonders, helping Alice to stay attentive in class without the distraction of discomfort.

47%
of people who benefit
from our custom
designs are school
age children

35%
are working
age adults

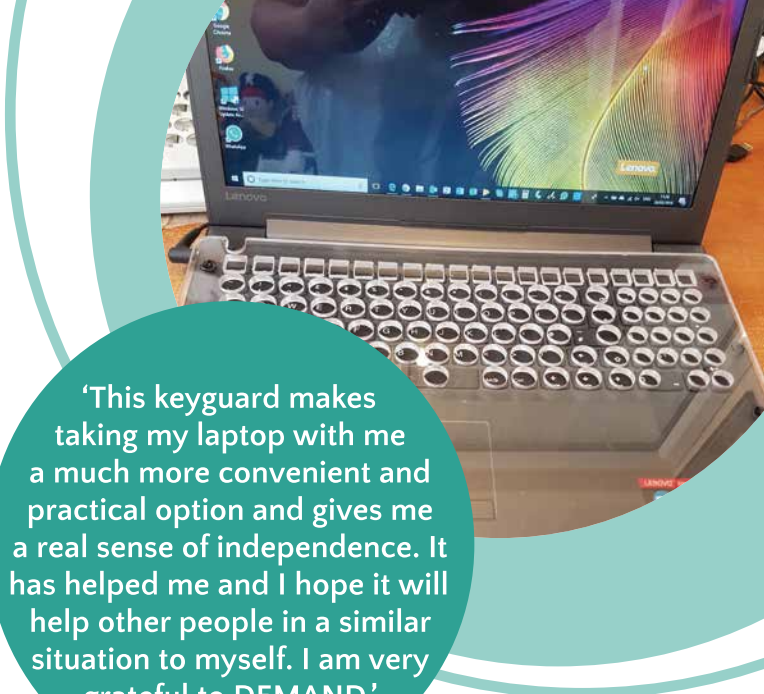


Brian was born with cerebral palsy and reached out to our team looking for help to use his laptop. His laptop is essential for taking notes in meetings and giving presentations, but needed to be used with his bulky desktop keyboard and keyguard, which enables him to target the keys and press only one key at a time. Brian told us:

‘Often, the effort and inconvenience of having to take both my laptop and separate keyboard meant that I didn’t take either and asked someone to take notes for me. What I have wanted for so long is to have a keyguard which is light and easy to carry in a laptop bag. This allows me to use my laptop wherever I am and gives me the independence to take my own notes at meetings.’

In order to maximise the impact of this project, we shared the digital design files used to manufacture the keyguard on our open-source

platform so anyone can view, customise and download the design to make their own keyguard using makerspace facilities or with help from our team. Visit Cracked-it.org/solutions to view and download the design.



‘This keyguard makes taking my laptop with me a much more convenient and practical option and gives me a real sense of independence. It has helped me and I hope it will help other people in a similar situation to myself. I am very grateful to DEMAND.’



See the Special Olympics
riders in action by visiting
DEMAND.org.uk/our-stories

More than just horsing around

Enabling people of all abilities to enjoy the benefits of riding

Riders at the Special Olympics St. Albans equestrian programme are enjoying riding now that they can safely mount their horses using a custom made mounting block. The riders were in need of a taller mounting block with sturdy handrails and enough room for carers to give appropriate assistance.

Many of the riders have reduced mobility, coordination and balance, so the new mounting block can accommodate two carers or instructors who assist the riders to mount their horses. Being able to safely get on the horses helps the riders to develop their self-confidence, all the while getting exercise that develops their core strength and posture.

“What a magnificent end result which has made such a difference as our riders, all of whom have a learning disability. All of them are finding it so much easier to mount the horses which has greatly improved their confidence.” Sue Thurgood, Special Olympics St. Albans Coordinator

Could you change lives in
your local community?

We are always looking for corporate sponsors who want to make an impact. If you're looking to do good in your local community please get in touch to find out about similar projects on our waiting list.

Helping one, helping many

How we maximise the impact of our work designing for individuals

Every design starts with a challenge presented to us by an individual, family or health and care professional. We work with each person on an individual basis to get a full understanding of their challenge. We use CAD modelling, mock ups, prototypes, in-house tests, client trials, evaluation and iteration to help us create a product that is fit for purpose, manufacturable, and solves the challenge at hand.

But why stop there when our designs can do even more good? We can share design blueprints on our open-source web platform, Cracked-it.org. This ensures the time and resources we invest solving a challenge for

one individual can actually benefit many more. Anyone who experiences a similar challenge can view the designs, ask our team to manufacture them or commission a local craftsman and get help wherever they are.

We can also bring new products to market so that anyone can access the opportunities our designs offer. When we receive repeat requests for a custom product, we invest in developing the design and bringing the product to market. Although these products are not commercially viable for mainstream manufacturers, we invest in making them because we believe real needs should be met. You can see our range of specialist disability products at DEMAND.org.uk/shop.



CrackedIt!

to shareable solutions...

Sharing our custom design blueprints online means anyone can access and manufacture the products we've designed, so our hard work goes even further!

From designs for one...

A custom design for one individual requires a great investment of resources to understand the challenge and find a workable solution.



and products available to all!

Designs like our Instrument Stand, our boccia ramps and our Sensory Shell Chair are providing new opportunities for disabled people in the UK and beyond!

A global impact

Where our work has had an impact in 2017

DEMAND is committed to helping people in the UK to live their lives as fully as possible using the power of good design. In today's connected world, our news travels much further than good old Blighty, and the impact of our work can be seen around the globe.

[Cracked-it.org](https://cracked-it.org), our open-source platform, is enabling the open sharing of blueprints for assistive devices, providing new ways for people to access disability equipment that can be tailored to their individual needs.

Products made by us, including our range of specialist sports equipment, are providing people with new opportunities the world over.



Boccia ramps designed and made by DEMAND are enabling people to learn and play boccia on every continent, except Antarctica!

Services like ours are few and far between. When we receive an enquiry from overseas, and there isn't a service in their location, we do all we can to help, using video calling to communicate and work together.



Help spread the
goodness further afield
by sharing our stories in
every way you can.

Making every penny count

How we use resources efficiently to maximise our impact

We receive no statutory funding so it is thanks to you, our supporters and customers, that we can keep the wheels of our workshop whirring. We work as efficiently as possible to reach new supporters and are proud of our 447% return on fundraising investment.

Skilled on-site volunteers and remote micro-volunteers working online help us to meet the demands of our growing workload, while life-enhancing disability products we sell also make an invaluable contribution to the revenue of the charity.

At a time of increasing economic uncertainty we are determined to adapt to the changing environment to ensure that we will continue to be here for whoever needs us for years to come.

For every £1
we spend on
fundraising, we raise
£4.47



Your support helps...

76%
...to provide custom solutions that empower people to overcome barriers to inclusion and independence

10%
...to supply equipment for re-use

8%
...to make specialist products available

6%
...to support education and outreach initiatives

Planning for an inclusive world

Our plan for sustainability and long term impact

Since DEMAND's founding in 1980, the charity has supported education initiatives in the fields of engineering and design with university bursaries, design awards and challenges, apprenticeships, student placements and work experience opportunities. We believe that a world with more designers and engineers who have gained first hand experience designing for disability can only be a more inclusive one.

Our dream of creating a more accessible world, where more people are better equipped to change and influence the products in it, is at the core of our plan to open an inclusive makerspace. Essentially an 'open workshop', our makerspace will be fully accessible and

provide new opportunities for people to learn and engage with all forms of creative 'making'. With classes and open-access machinery of all kinds, visiting our makerspace will be, for many people their first opportunity to engage with creative arts, design and engineering.

Over the next year, we will be putting into action our plans to open our workshop to the community. The makerspace will become a source of sustainable revenue and help to ensure our core work of custom disability design can continue long into the future.

If you would like to learn more about our plans and how you can become a makerspace partner, get in touch.

Community building

Makerspaces are active community hubs. Ours will help us build and engage with a wider and more diverse community and develop a stronger supporter base.

Breaking new ground

Advances in digital manufacturing mean there are more opportunities for 'hands-off' prototyping and manufacturing than ever before. The true extent to which these technologies can be utilised by disabled people has not been fully explored, and our accessible makerspace will be the perfect place to experiment.



Up-skilling

Our makerspace will enable people to learn and explore new skills, from photography to 3D printing and welding. For some, these skills could simply form hobbies, for others they could help to shape careers and business ventures.



Diversifying Income

Income generated from our makerspace will help make **DEMAND** more sustainable and resilient, ensuring we can continue to benefit disabled people for many years to come.

How you can help

Your support will help change lives

Hear the latest news and super stories from people we help. Sign up online at [DEMAND.org.uk/newsletter](https://demand.org.uk/newsletter).

Support our fundraising events with sponsorship or simply come along for a great time! Visit [DEMAND.org.uk/events](https://demand.org.uk/events) for tickets.

Leave a gift in your will and ensure DEMAND can continue to help people for many years to come. Get in touch to find out more.

Sponsor a local project and do something great for your community. Get in touch to find out what we're working on in your area.

Partner with us and do more good as part of our Corporate Partner Network.

Fundraise and spread the word! You'll help transform life for even more disabled people.

Donate and change someones life. We're a charity, so the more you help us, the more great things we can do together!

Give online at [DEMAND.org.uk/donate](https://demand.org.uk/donate) and arrange a regular or one-off gift.

Send a cheque and use the form overleaf to Gift Aid your donation.

Donate by bank transfer or standing order email [info@DEMAND.org.uk](mailto:info@demand.org.uk) or call us on 01923 681800 for details.

Depending on complexity, custom design projects can reach costs totalling anywhere from £50 to £15,000. Every pound we have makes a real positive difference.



Change a life today

Give a regular or one-off donation online at DEMAND.org.uk/donate

Alternatively, you can donate with a cheque made payable to DEMAND, using this form if you'd like to add Gift Aid and make every £1 you give worth an extra 25p at no cost to you.

Full name _____

Email _____

Home Address _____

Postcode _____

Signature _____

☐

giftaid it **I would like to Gift Aid my donation.** I am a UK taxpayer and understand that if I pay less Income Tax and/or Capital Gains Tax than the amount of Gift Aid claimed on all my donations in that tax year it is my responsibility to pay any difference.

☐

I'd like to hear about news, exciting fundraising events and stories from the people my donations help in an occasional email newsletter. You can change your mind at any time by clicking 'Unsubscribe' in any of our emails. Find out how we look after your data online at DEMAND.org.uk/privacy-policy.

Please return to: DEMAND Design & Manufacture for Disability, The Old Chapel, Mallard Road, Abbots Langley, Hertfordshire, WD5 0GQ.



Exciting times ahead

A note to close from our Chair

The past year has not all been plain sailing, especially having had to say farewell to several great colleagues with the closure of our operation in Yorkshire. The dedication, hard work and determination of the remaining team has put us in a great place from which to shape the next phase of our development.

We are very excited to be working on plans for a wonderfully inclusive and accessible makerspace designed to help as many people as possible explore their creativity in art, craft and technology and which, along with our custom equipment service, will significantly extend our reach and impact.

Turning the charity into a more community accessible resource, removing barriers to inclusion, participation and independence, is a big challenge and with your generous support and encouragement we will succeed. In the meantime, we would be delighted for you to visit us and experience a little bit of magic happening every day.

Anthony Soothill
Chair of Trustees

A handwritten signature in black ink, appearing to read 'A. Soothill', with a stylized flourish at the end.

Thanks to our Chair Anthony Soothill along with our team of Trustees; Lady Hermione Grimston, Robert Mankin, Thomas Mercer, Morag Reavley, The Hon. Clare Renton, William Sietz, Katherine White and Russell Willcox.



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