



EQUIPMENT



CONSTRUCTION
CHEMICALS



ROCK
REINFORCEMENT



SERVICES



DEFINING THE FUTURE UNDERGROUND

SAFETY | SUSTAINABILITY | INNOVATION | PARTNERSHIP

NORMET.COM

normet

ABOUT NORMET

Normet is a fast growing and innovative company with a mission to lead the transformation into a safer and more sustainable tomorrow. We specialise in technologies and solutions for underground mining, tunnelling and civil construction. We provide our customers with safe, high quality equipment, services, construction chemicals and rock reinforcement solutions for projects around the world.

UNDERGROUND EXPERTISE

We support our customers with process expertise gained from working on thousands of underground mining and tunnelling projects all over the world. To date we have delivered more than 13,000 purpose-built underground machines, while improving safety and productivity through our range of construction chemicals and rock reinforcement products. We also offer a range of services and support for our customers, and we employ over 1400 professionals globally, with more than 43 locations in 29 countries.

CONTINUOUS DEVELOPMENT

We constantly develop new equipment, technologies and chemicals to provide additional value for our customers' underground processes. Our development teams consist of world-class experts who use the latest methods and tools. We use our own laboratories to develop our construction chemicals and perform field tests for the whole of our offering in real-world environments. In all our work, we aim to enhance safety and reduce environmental impact.



*We have delivered more than
13,000 purpose-built
underground machines.*



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DEFINING THE FUTURE UNDERGROUND

Normet defines the future underground by leading the transformation into digitalised and sustainable underground mining and construction. We work with our customers and partners to continuously improve their processes, increase the safety and productivity of their underground activities, and improve the sustainability of their operations.

SECURING A SAFE AND SUSTAINABLE FUTURE

At Normet, a safe workplace is our first priority. We continuously develop new solutions that enable you to work more safely and sustainably, and minimise your impact on the environment. We commit to exceeding industry standards.

INNOVATING FOR PERFORMANCE

We use leading-edge solutions and technologies to benefit our customers. In addition to innovations that improve our products and services, we also aim to improve our customers' processes continuously. Our commitment to innovation gives you clear results with improved performance and higher productivity.

PARTNERING FOR LIFETIME VALUE

We are committed to long-term partnerships and our whole team is dedicated to helping you reach your goals. Our expert cooperation, effective solutions and pro-active problem-solving gives you superior lifetime value and lets you focus on your own business.

SAFETY IS OUR PRIORITY

Safety is our first priority in everything we do. It's the foundation of our way of working. We always evaluate safety and potential risks, and whenever we see a risk, we take corrective action.

Our goal is to help our customers sustainably increase their safety, while improving their productivity and profitability. We offer complete technical solutions, as well as training courses, that create value by saving costs and shortening process cycle times. We develop each solution considering the safety and welfare of people, as well as its impact on the environment.

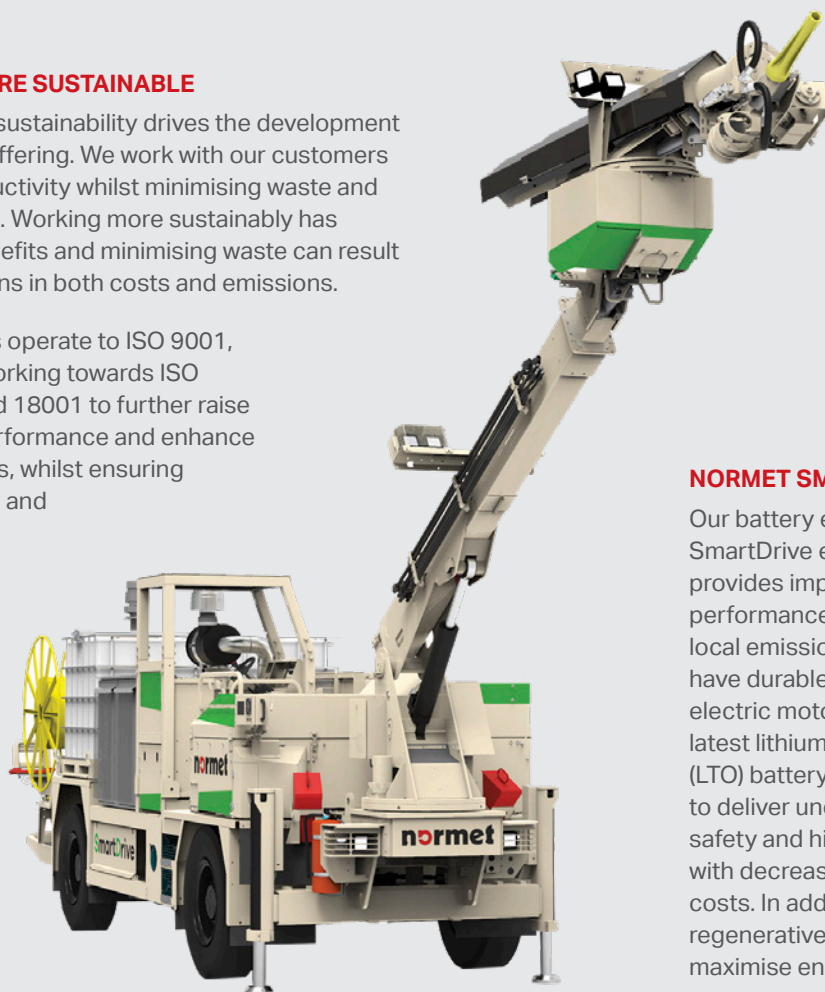


*Our goal is
to help you
improve safety,
performance
and profitability.*

WORKING TO BE MORE SUSTAINABLE

Together with safety, sustainability drives the development of our products and offering. We work with our customers to improve their productivity whilst minimising waste and environmental impact. Working more sustainably has multiple business benefits and minimising waste can result in significant reductions in both costs and emissions.

Our production plants operate to ISO 9001, and we are actively working towards ISO 45001, ISO 14001 and 18001 to further raise our environmental performance and enhance safe working practices, whilst ensuring we have a sustainable and ethical supply chain.



NORMET SMARTDRIVE

Our battery electric SmartDrive equipment provides improved performance with zero local emissions. They have durable high-torque electric motors and the latest lithium titanate oxide (LTO) battery technology to deliver uncompromised safety and high productivity with decreased operating costs. In addition, they use regenerative braking to maximise energy efficiency.



MARKET-LEADING EQUIPMENT

Our wide product offering includes equipment for concrete spraying and transport, explosives charging, scaling, lifting & installation and for underground logistics.

EQUIPMENT AND TECHNOLOGIES

Normet is the leading equipment and technology provider in the industry and we have extensive process expertise. Our high quality products enhance our customers' success and improve their productivity. We work closely with our customers to develop equipment and technologies to meet and exceed even their most challenging requirements. All our equipment and technologies are designed for safe operation, reliability and cost-effective performance over their full life cycle.

TECHNOLOGIES

We continuously develop equipment and technologies to meet or exceed your needs. Our latest innovations include battery-electric SmartDrive architecture for zero local emission operation and the SmartScan 3D laser scanning system to validate the thickness and quality of sprayed concrete. Our boom automation technology, SmartSpray, is the next step towards fully automated concrete spraying, which enhances spraying quality and cost-efficiency.

*Our SmartCare solution uses
IoT technology to monitor
connected machines for
maximum availability.*

In addition, we have also developed a concrete spraying simulator for safe and cost-effective operator training. We have seen that operators of all skill levels can improve the quality of their work with simulator training. The improved quality means optimal layer thickness and less waste and rebound in the process.

NORMET DIGITAL TECHNOLOGIES – SMARTCARE

Our SmartCare solution contains service plans & schedules for Normet machines, which enables you to predict and plan your upcoming service requirements and spare part needs. This ensures that you have parts available at the right time and it enables your maintenance staff to diagnose and correct problems proactively, before they occur. This improves safety, productivity, and equipment utilisation.



CONSTRUCTION CHEMICALS AND ROCK REINFORCEMENT



CONSTRUCTION CHEMICALS



ROCK REINFORCEMENT

We offer construction chemicals, rock support systems and bolting technology for safer, more productive mining and tunnelling.

SPECIALIST PRODUCTS AND EXPERTISE

Our wide product range supports your needs, from rock reinforcement, ground support and sprayed concrete solutions to tunnel boring machine (TBM) chemicals. We have the expertise to help you and we can tailor our products to meet your project needs. At Normet, we are proud to produce all our products in-house.

WORK SAFELY UNDERGROUND

Thanks to our long experience in the industry, we understand the importance of safely stabilising ground and rock. Our construction chemicals are designed to provide instant support and stabilise all types of rock and soil excavation methods, including TBM, drill and blast and mechanical.



*Our wide product range includes construction **chemicals**, as well as technical solutions like **bolting systems** and **anchors**.*



SERVICES



**Support for the
whole life cycle
of your equipment.**

LIFE CYCLE SERVICES

With Normet Services, we maximise the productivity and safety of your operations by keeping your equipment running at its best throughout its life cycle.

SERVICES THAT SUPPORT YOUR BUSINESS

We can provide everything from individual spare parts to personnel training and full-service agreements for your entire fleet. With our global service network, we support you at Normet facilities around the world, as well as on-site, at your location.

Our services cover the whole life cycle of your equipment including:

- Start-up and commissioning
- Genuine spare parts
- Upgrades and modification
- Remanufacturing
- Rental and leasing
- Field services

SERVICE AGREEMENTS

With a service agreement, Normet manages your fleet with guaranteed availability and agreed costs, giving you transparency for your life cycle costs, annual operational budget and fleet uptime. This lets you focus on your core operations.

Each service agreement is built and customised to meet the individual customer's needs from our portfolio of services. Depending on the level of service agreement you need, you can choose anything from basic technical support for an individual machine all the way up to services for your entire fleet, as well as process performance.

The four service levels we offer are:

- Parts Availability
- Fleet Support
- Fleet Availability
- Process Performance

The content of a service level can be tailored to meet your particular requirements.



**See Normet Services case study
Hindustan Zinc Ltd Cost Per Hour
(CPH) service contract**



We can standardise your costs, reduce your risks and make project planning easier.

GENUINE PARTS

Genuine parts from Normet Services ensure that you always have the highest quality parts available to keep your equipment up and running. Depending on your needs, we can offer everything from individual parts to complete parts contracts, and our professionals around the world have the experience to ensure that you have the parts you need when you need them.



SERVICES

END TO END SERVICES

We offer service contracts tailored to your exact needs, which standardise costs for your entire fleet, including all services and support. This standardisation reduces your risks and simplifies project planning.

EVERYTHING YOU NEED IS INCLUDED

We can provide everything you need for sprayed concrete in mining and tunnelling applications, both underground and on the surface. This includes project specification, technical expertise, process optimisation, equipment, construction

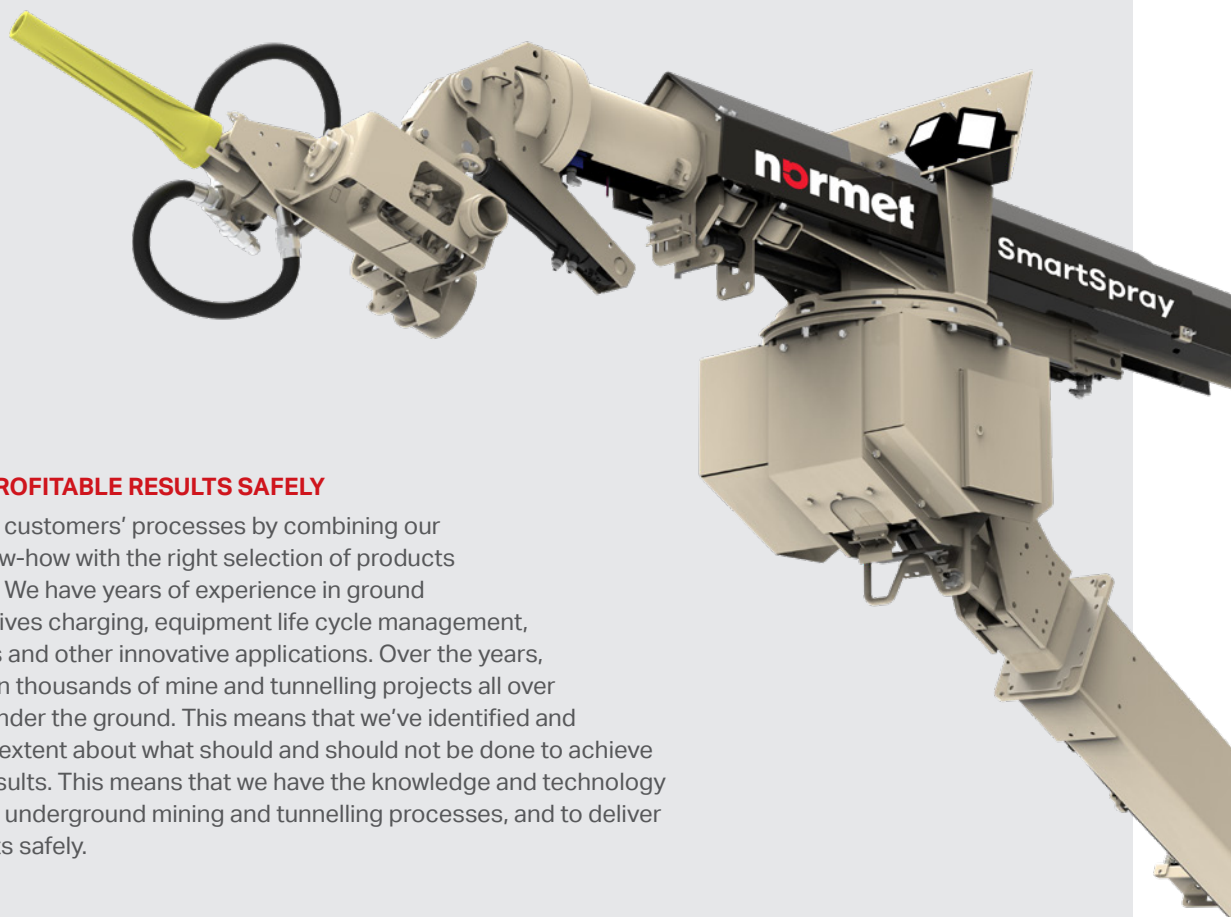
chemicals, underground logistics and on-site services. We use our expertise to ensure you get reliable mixes of fibres, additives and accelerators, while working to improve your concrete properties and matching them to the requirements of your location and application.

WE SUPPORT YOUR PROCESSES

At Normet, we have the in-depth understanding and expertise needed to support your processes. We come from the industries you work in, we speak your language and we recognise your objectives. We understand the specialized processes our technologies are used in – and how we can improve them for your benefit. We know how to turn this expertise into benefits you can measure in efficiency, productivity and safety.



*We know
how to turn
expertise
into benefits
you can
measure in
raw materials,
results and
money.*



WE DELIVER PROFITABLE RESULTS SAFELY

We support our customers' processes by combining our specialised know-how with the right selection of products and equipment. We have years of experience in ground support, explosives charging, equipment life cycle management, TBM operations and other innovative applications. Over the years, we've worked on thousands of mine and tunnelling projects all over the world and under the ground. This means that we've identified and learned a great extent about what should and should not be done to achieve the optimum results. This means that we have the knowledge and technology to improve your underground mining and tunnelling processes, and to deliver profitable results safely.



Our mobile sprayers are the result of 50 years of experience and all Spraymec models are available in either an electric- or diesel-hydraulic configuration.

SPRAYED CONCRETE

Normet provides everything you need to get the best results with sprayed concrete for mining and tunnelling applications, both underground and on the surface. Our offering includes concrete spraying equipment, transmixers and agitators for concrete transportation, construction chemicals, supporting technologies and operator training programs. In addition, we provide you with support, problem solving and technical advice as your expert partner throughout the entire spraying process.

HIGH-QUALITY RESULTS

With our complete process know-how, we can ensure consistent, high quality mixing, efficient concrete transport and minimized rebound. This gives you the results you need, with strong, high quality sprayed concrete linings and improved operating efficiency, reduced operating costs and maximized productivity.

SPRAYMEC MOBILE SPRAYERS

Our offering of self-propelled mechanised and automated spraying systems delivers superior operator safety, high productivity and outstanding quality. Our mobile sprayers are the result of 50 years of experience and development, and all Spraymec models are available in either an electric- or diesel-hydraulic configuration. Over the decades we have sold hundreds of these durable units worldwide, and most of them are still in use today. Even many of our older models are still operating reliably!



See Normet
Spraying expertise
animation



You can depend on Normet chargers for low lifetime costs and safe, reliable operation.



CHARGING

Our purpose-designed, mechanised charging systems improve the safety and productivity of your underground blasting. Our charging product range, called Charmec, includes equipment for charging with ANFO, water gel and emulsion bulk explosives in tunnels and faces of different sizes and heights. In addition to handling charging duties, our equipment also has built-in storage spaces so you can transport explosives and detonators to the work site safely.

THE NO. 1 CHARGING SYSTEM

Over the past 50 years we have delivered hundreds of mobile Charmec systems to hard rock mines and civil tunnelling projects worldwide. They meet the highest safety, productivity and quality requirements in the industry and ensure that your bulk explosive charging processes are cost-effective. You can depend on Normet chargers for low lifetime costs and safer, more reliable operation and maintenance, as well as a consistently high resale value.

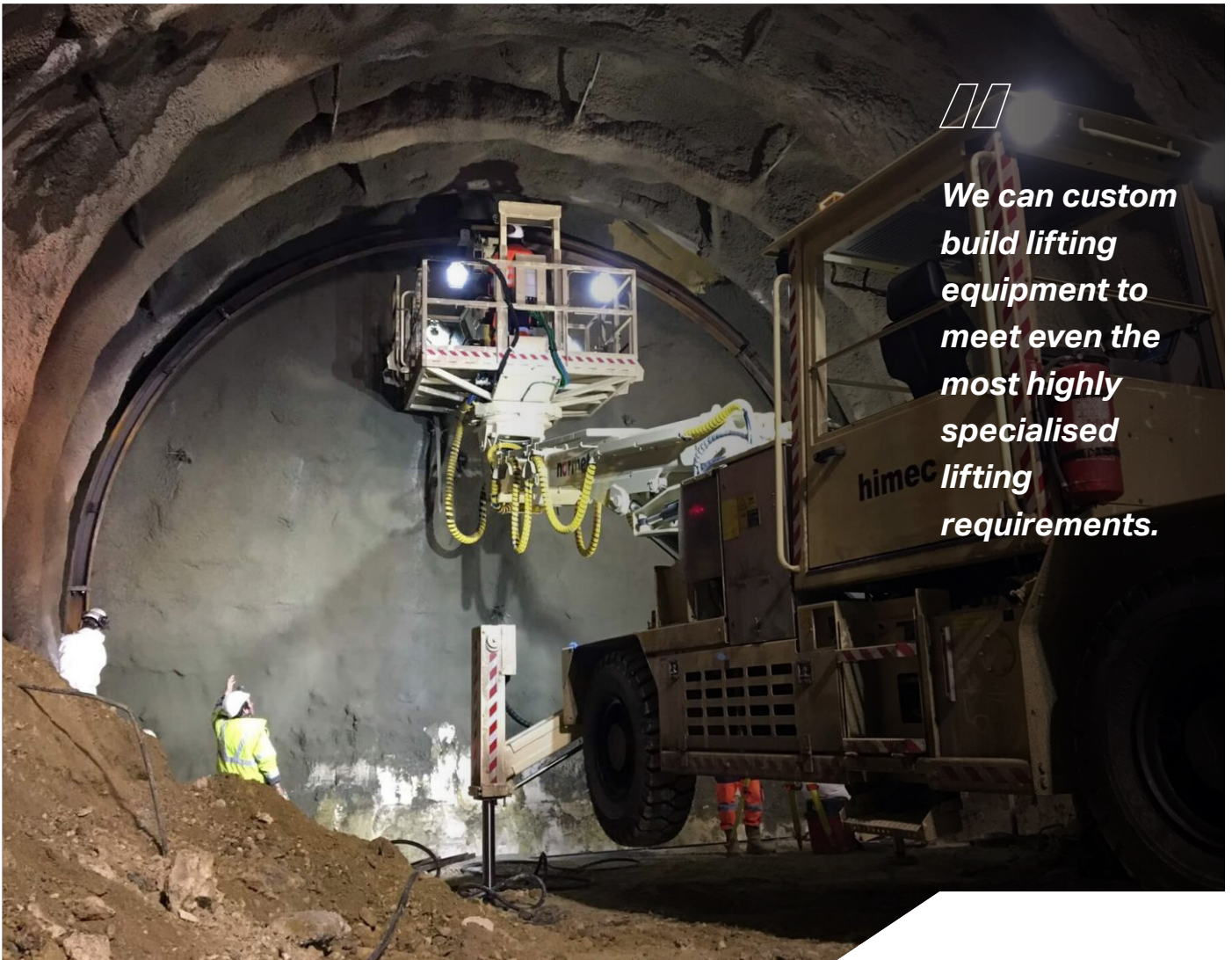
CLOSE EXPLOSIVES INDUSTRY COOPERATION

In modern emulsion and water gel charging processes, the explosive is sensitised on the charging unit. Because



Normet Charmec LC 605

authorities usually regard such units as explosives factories, we have developed our charging concepts in close cooperation with explosives manufacturers.



We can custom build lifting equipment to meet even the most highly specialised lifting requirements.

LIFTING AND INSTALLATIONS

Normet gives you everything you need to lift people and materials as safely as possible in mines and tunnels. Our lifters are easily adaptable, giving you the flexibility to handle a range of lifting and installation applications, including roof reinforcement, explosives charging and installation of cables, pipes and ventilation.

THE OPTIMUM REACH FOR ALL ENVIRONMENTS

Whatever your load is, from medium to heavy-duty, Normet has the equipment you need to get the job done. We have products suitable for most locations, including mines and tunnels with different profiles, even low-profile tunnels, and conditions including soft and hard rock environments.

UTILIFT AND HIMEC

Our wide product range includes Himec boom lifters and Utilift scissor lifters. All our products are available with a range of standard options and accessories to meet



Normet Utilift LF 330

your particular needs. We can also custom build lifting equipment to meet even the most highly specialised lifting requirements.



The Scamec 2000 scaler family has three interchangeable boom versions to provide optimum boom reach and coverage.



SCALING

Our mechanised scaling systems eliminate the need for dangerous and inefficient manual scaling. They improve the quality of your scaling work, as well as enhancing safety, productivity and effectiveness, throughout your entire excavation process.

SCAMEC 2000 MOBILE SCALING MACHINES

The Scamec 2000 scaler family has three interchangeable boom versions to provide optimum boom reach and coverage. This lets you use the right boom for the dimensions of the underground space, reducing the need for repositioning and minimising non-productive time.

The Scamec range of machines is also easy to adapt for different types of rock. They can be equipped with hydraulic impact hammers for scaling in hard rock, or with a pick unit for primary scaling in soft and stratified



Normet Scamec 2000 S

rock and for secondary scaling in all underground excavations. All Scamec machines are easy to operate and provide high quality scaling for a safer work environment.



Transport resources to your work site reliably, efficiently and safely.

UNDERGROUND LOGISTICS

Our underground transport vehicles are designed to ensure efficient logistics and high productivity in underground mines and tunnel excavations. They are highly configurable and let you safely and reliably transport a wide range of resources to work sites, including personnel, materials and fluids.

UTIMEC – DEDICATED CARRIERS

Utimecs are tailored for specific purposes, so they offer high productivity with leading features and simple, robust structures. Our Utimec product range can be used for any underground transportation purpose

MULTIMEC – MULTI-FUNCTIONAL CARRIERS

Our Multimec slide-on/slide-off cassette system is the ideal solution for mines that need carriers which can quickly change function and handle a wide variety of transport requirements. With one Multimec carrier and the right choice of cassettes, each for a specific purpose, you have a safe and economical underground



Normet Multimec MF 100

transport system for personnel, materials, concrete, fuel and so on. Normet offers three different sizes of Multimec carriers, and a series of cassettes for different purposes. With our hydraulic cassette handling system, these cassettes can be swapped on and off the carrier in a couple of minutes.



Reduce risk while increasing productivity and saving time and costs.



ROCK AND GROUND SUPPORT

At Normet, we offer a range of innovative solutions for safe and effective rock support for tunnels and mines, as well as general soil consolidation and stabilisation applications. We have the know how to help you reduce risk while increasing productivity, and saving time and costs. Our portfolio includes our D-Bolt® deformable bolts, self-drilling dynamic bolts and self-drilling anchors, as well as chemicals for rock reinforcement, ground support and bolt anchor grouting.

IMPROVE SAFETY, INCREASE PRODUCTIVITY AND REDUCE RISK

Our specialised products are designed to improve the stability and maintain the load bearing capacity of rock near to the boundaries of an underground excavation. Whatever your application, we can provide a safe, reliable and efficient solution for you. This includes everything from stabilising coal, soft and hard rock strata to consolidating fractured rock, sands and gravels, as well as sealing large rock fissures and stabilising slopes and soil.





*Solutions to
control water
above and
below ground.*

WATER CONTROL

We manufacture a complete range of specialist, high performance polyurethane, acrylic and cement-based systems for water control. Our fast reacting, high expansive polyurethane resins have been designed to provide optimum sealing in high water pressure and volume applications. Our low viscosity polyurethane and ultra-low viscosity acrylic gels are typically used to seal leaking construction defects. Normet's range of pre-injection specialist cements are used extensively to reduce rock hydraulic conductivity in tunnel and mining applications prior to excavation. In addition, we also supply a full range of accessories including pneumatic and electrically driven pumps and a full range of mechanical and inflatable injection packers.

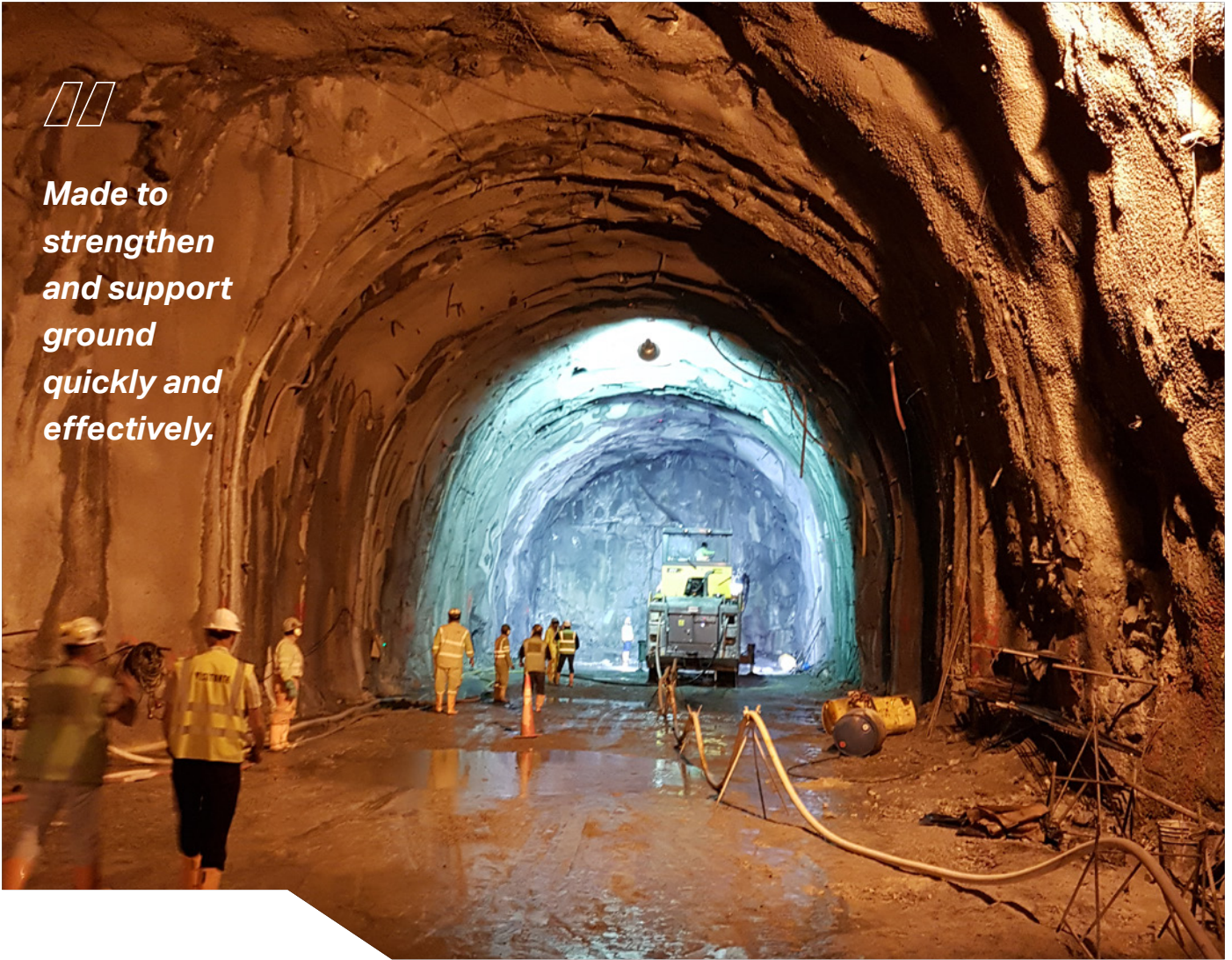
OUR ENVIRONMENTAL COMMITMENT

One of the most important considerations in the use of our technology for water control applications is the environmental impact. Normet is fully committed to the manufacturing of eco-friendly chemicals, and our resin foam and cement grout technology has been developed to have no negative impact on the environment.





*Made to
strengthen
and support
ground
quickly and
effectively.*



GROUND ENGINEERING

With over 40 years of experience and a comprehensive range of specialist products, Normet is recognised as a market leader in ground engineering. Our products have been used extensively on major projects throughout the world and continue to play an important role in re-leveling construction, underpinning, void filling and general soil and rock improvement in the mining, civil engineering and building sectors. Complementing our chemical materials, we supply an extensive range of grout injection packers and accessories designed with performance and safety in mind. All of our packers and accessories are thoroughly tested and certified for use in high pressure applications.

GEOTEK RESINS AND GROUTS

Our range includes resins, cement grouts and equipment for permeation grouting, void filling, underpinning and re-leveling. Our technology has been specially formulated for these applications, providing materials that deliver optimum performance, efficiency and reliability





We continuously develop technology to reduce environmental impact.

TBM TECHNOLOGY

We provide efficient tunnel boring machine (TBM) chemistry combined with expert advice to give you maximum operational efficiency and the optimum TBM advancement rates through both soft ground and hard rock. We have the know how to support whichever TBM system you use, from EPB TBM to Slurry TBM, Single TBM and Gripper TBM systems.

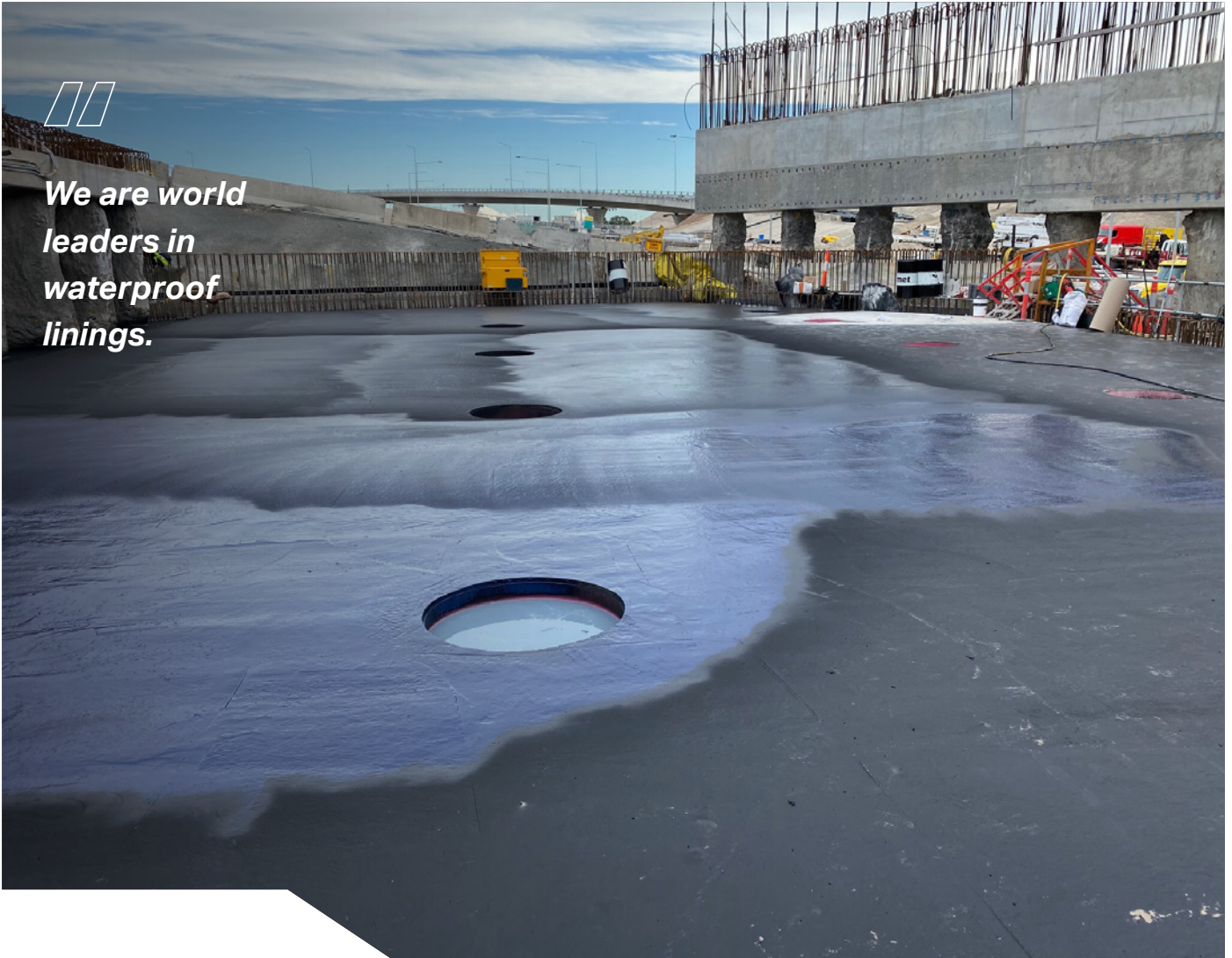
NEXT GENERATION PRODUCTS

Our range of products includes soil conditioning foams and polymers, anti-dust and anti-wear additives, tail sealants, and main bearing greases and annulus grouts. In addition, we are continuously working to minimise our environmental impact and to help our customers operate in an environmentally responsible way. As part of this work, we have developed a new generation of plant oil-based tail sealants, as well as biodegradable tail seal greases.



See Normet
TBM Technology case study
River Humber Pipeline
United Kingdom





*We are world
leaders in
waterproof
linings.*

WATERPROOFING

Our range of high specification waterproofing technology offers you solutions for new-build and refurbishment projects in civil engineering, commercial and residential applications. We provide expert advice and innovative products for all your waterproofing requirements, maintaining the quality of your project and assets, and protecting them from potential water damage.

CONTINUED INVESTMENT AND DEVELOPMENT

With over 40 years of continued investment in all aspects of waterproofing, our portfolio is second to none. We use our expertise to help you select the right solution for your needs, from individual final coatings to comprehensive solutions with composite layers that ensure the best adhesion and performance. Our range includes integral treatments, surface applied penetration agents, liquid applied coatings, sheet membranes and construction and movement joint systems.



See Normet
Waterproofing case study
Caldecott Station
Singapore





*We can provide
technical
solutions that
meet all your
project needs.*

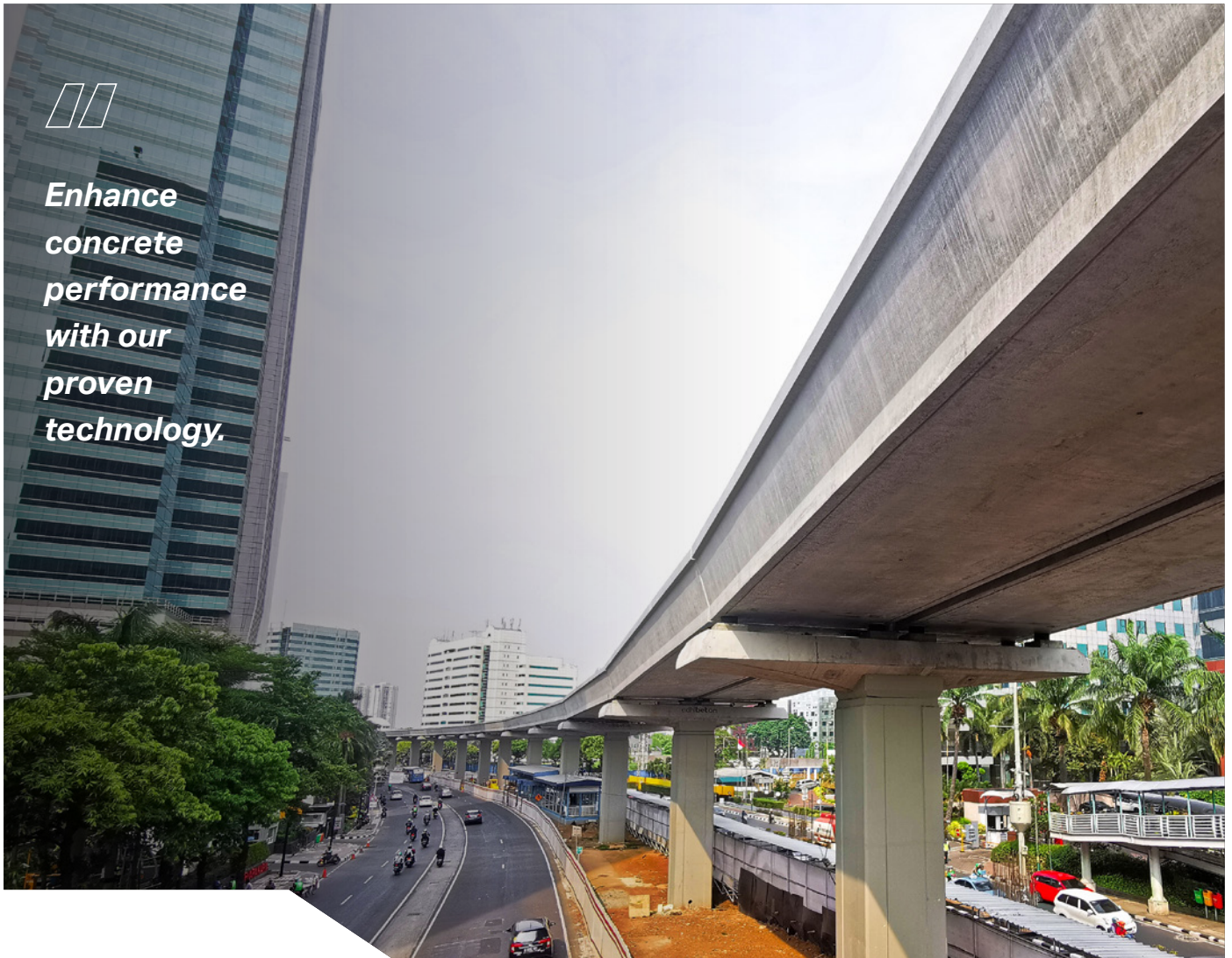
CONSTRUCTION AND REPAIR

For over forty years, our comprehensive range of repair materials has been used to prolong, protect and enhance the life of structures throughout the world. Normet is recognised in the industry as a technology leader, providing benchmark systems that are innovative, sustainable, user-friendly and most importantly, have no negative impact on our environment. We provide everything you need for repair applications in the mining, civil engineering and general building industries.

SOLUTIONS FOR EVERY REPAIR PROJECT

With our in depth understanding of the technology and its practical applications, and a complete range of repair materials and systems, we provide technical solutions that meet all your project demands. Our comprehensive portfolio of repair materials and systems includes high-build polymer modified mortars for concrete repair, epoxy resins for crack injection, spray mortars, epoxy mortars and a full range of injection resins for water control.





*Enhance
concrete
performance
with our
proven
technology.*

READYMIX & PRECAST

Our range of high performing and innovative admixtures helps you to produce high specification concrete, improving all round performance such as pumpability, strength, durability and appearance. With continued research and investment in technology, we stay at the cutting edge of innovation, allowing us to provide you with sustainable, high specification solutions for all your concreting needs.

PROVEN AROUND THE WORLD

Our extensive range of materials has been approved and used in some of the world's largest projects in the civil engineering and building sector, where they have delivered the long-lasting performance our customers expect.





MANUFACTURING AND PRODUCTION

At Normet, we invest a great deal in our production methods, equipment, and professional skills, to ensure safety, quality and customer satisfaction, as well as our long-term success.

*Our main
equipment
manufacturing
facility and
R&D centre
is located in
Iisalmi.*



Our main equipment manufacturing facility and R&D centre is located in Iisalmi, and we also have manufacturing facilities in Sweden, Chile and India, as well as a joint venture in China. In addition, we have production plants for construction chemicals

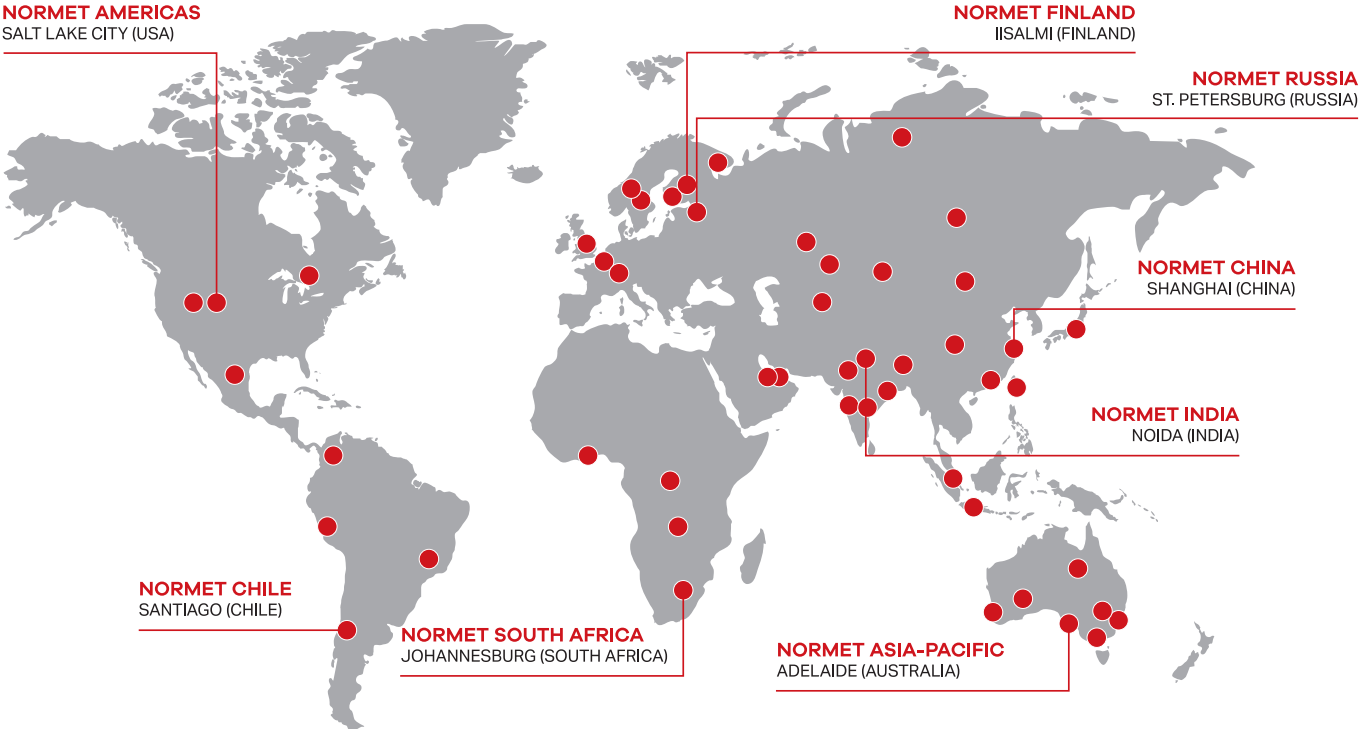
in all our main market regions. We further support our customers through our R&D Global Centre in the UK, and satellite R&D activities worldwide, as well as with our state-of-the-art logistics solutions.



Find our
success
stories



GLOBAL PRESENCE LOCAL SUPPORT



NORTH AMERICA Canada Mexico USA	SOUTH AMERICA Brazil Chile Colombia Peru	EUROPE Finland France Norway Russia Sweden Switzerland United Kingdom	AFRICA Democratic Republic of Congo Ghana South Africa Zambia	ASIA China Hong Kong India Indonesia Japan Kazakhstan Mongolia	Qatar Russia Singapore Taiwan United Arab Emirates Uzbekistan	AUSTRALASIA Australia
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DEFINING THE FUTURE UNDERGROUND