
BRIDGING
Tactical Military Systems
KNDS

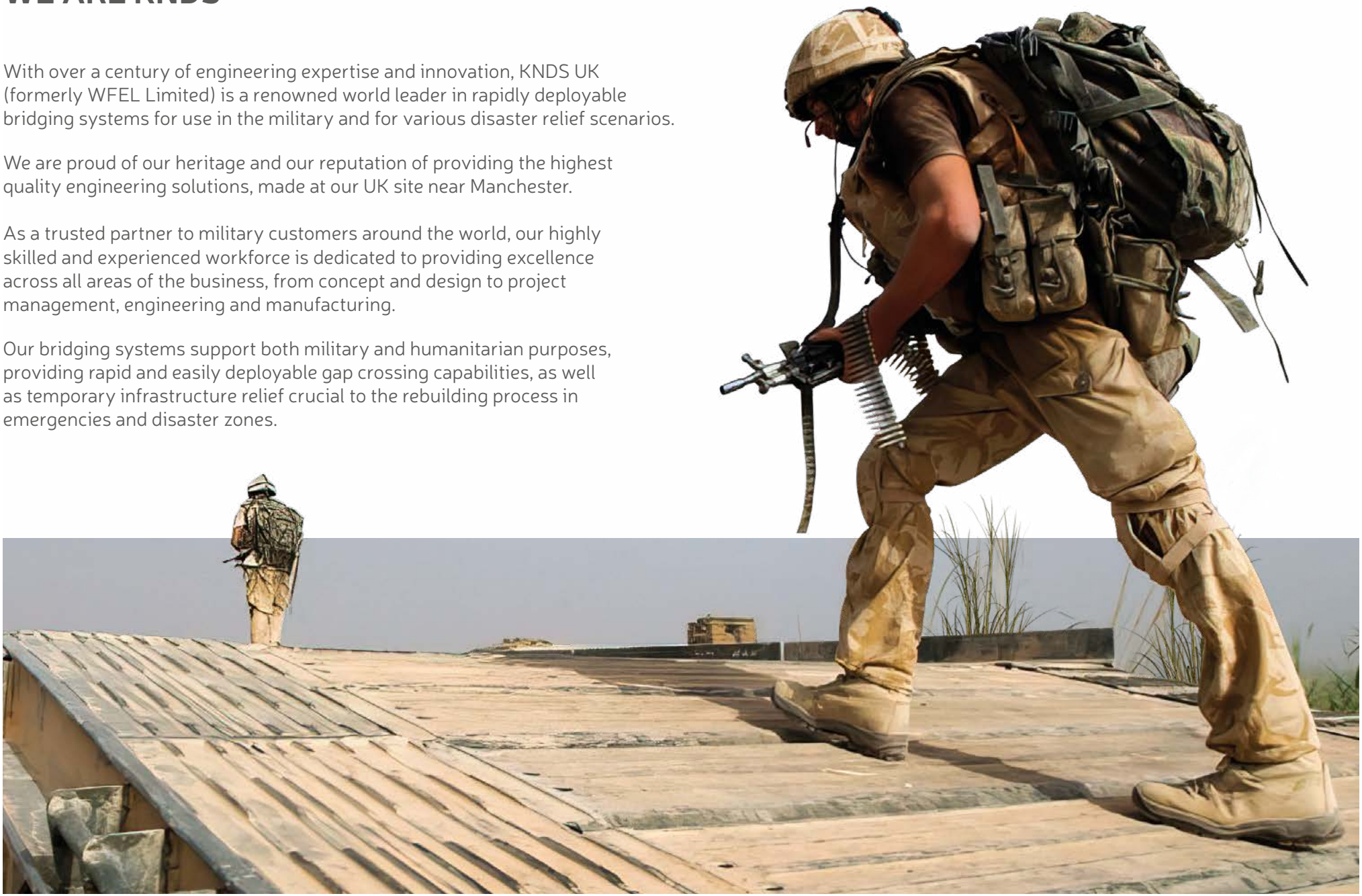
WE ARE KNDS

With over a century of engineering expertise and innovation, KNDS UK (formerly WFEL Limited) is a renowned world leader in rapidly deployable bridging systems for use in the military and for various disaster relief scenarios.

We are proud of our heritage and our reputation of providing the highest quality engineering solutions, made at our UK site near Manchester.

As a trusted partner to military customers around the world, our highly skilled and experienced workforce is dedicated to providing excellence across all areas of the business, from concept and design to project management, engineering and manufacturing.

Our bridging systems support both military and humanitarian purposes, providing rapid and easily deployable gap crossing capabilities, as well as temporary infrastructure relief crucial to the rebuilding process in emergencies and disaster zones.



Soldier crossing Medium Girder Bridge in Afghanistan

Highly skilled workforce

Dry Support Bridge

Disaster relief

DSB
DRY SUPPORT BRIDGE

The Dry Support Bridge is the latest generation of military bridging, made from a specially manufactured lightweight aluminium alloy under licence to KNDS.

With interoperability a key priority, precision engineering and manufacturing techniques ensure that each DSB is compatible with any other DSB in service, which allows the sharing of resources during NATO and other joint operations worldwide. The DSB is deployed in minutes with minimal manpower and is currently used by 4 Armed Forces with a further 3 on contract, including the British Army.

Designed to provide compact transportation, the DSB's modules neatly fold away when stowed. When stacked, two modules can be loaded on to a STANAG flatrack, carried on most PLS/DROPS or 6 metre flat bed vehicles eliminating the need for specialist transportation. Each loaded flatrack can also be transported by air as well as by rail. In all configurations, trucks can be used instead of trailers if required.

DSB deployed

DSB in Korea

DSB Technical Specifications

Maximum clear gap	46 metres
Span range	Up to 46m in 6m increments
Military Load Classification	Normal 80 (T)/96 (W) at 46m Maximum 120 (W) at 46m
Road width	4.3m
Bank heights	+/- 3m at 40m
Build crew	8 personnel
Launch time	90 minutes
Parallel module	Stowed (Length/Width/Height): 5.9m x 2.44m x 1.1m Deployed (LWH): 5.9m x 4.3m x 1.19m Weight: 4,417kg
Ramp module	Stowed (LWH): 5.95m x 2.44m x 1.1m Deployed (LWH): 5.96m x 4.3m x 1.19m Weight: 4,080kg
End beam	(LWH): 2.5m x 0.37m x 0.56m Weight: 357kg
Approach ramp	(LWH): 2.5m x 0.37m x 0.56m Weight: 86kg
Decking and kerbs	Integral, part of the bridging sections
Vehicles and trailers for 40m bridge	Launch vehicle with trailer and 2 x support vehicles with trailers
Vehicles and trailers for 40m bridge (US Army specification with added capability to build two smaller bridges)	Launch vehicle with trailer and 3 x support vehicles with trailers
Vehicles and trailers for 46m bridge	Launch vehicle with trailer and 3 x support vehicles with trailers
Launcher environmental tolerances	Operating air temperature: -29°C to +49°C Storage air temperature: -46°C to +71°C Relative humidity: 3% to 95% non-condensing
Bridge environmental tolerances	Operating air temperature: -46°C to +49°C Storage air temperature: -46°C to +71°C Relative humidity: 3% to 95% non-condensing

MGB
MEDIUM GIRDER BRIDGE

Our Medium Girder Bridge is a classic example of high quality precision military engineering that stands the test of time. In operation since 1971, there are currently over 500 MGB systems in use by over 40 armed forces around the world.

Constantly in use, significantly enhanced and increasingly in demand for both military and disaster relief operations, today's MGB is the most trusted and versatile bridging systems available.

MGB units are adaptable, lightweight, easily transported and can be constructed by hand for deployment with minimum manpower.

With a range of configurations, the MGB can be constructed as either Single Storey, Double Storey or as a Double Storey with Link Reinforced Set (LRS), with different span lengths achieved by varying the number of bays used.

MGB Technical Specifications

	Single Storey		Double Storey		Double Storey LRS	
Military Load Classification	**Span** (metres)	**Bridge weight** (tonnes)	**Span** (metres)	**Bridge weight** (tonnes)	**Span** (metres)	**Bridge weight** (tonnes)
100 (Wheeled)	9	5.84	25.4	19.01	31.1	23.69
90	9	5.84	25.4	19.01	36.5	28.51
80	9	5.84	25.4	19.01	36.5	28.51
70	9	5.84	29.1	21.33	36.5	28.51
60	9	5.84	29.1	21.33	46.2	35.79
50	9	5.84	32.8	23.59	46.2	35.79
40	10.8	6.56	36.4	25.9	46.2	35.79
30	14.4	8.02	40.1	28.21	46.2	35.79
20	18.1	9.46	45.6	31.68	46.2	35.79
16	21.8	10.93	47.4	32.84	46.2	35.79

			Planning time (minutes)		**Best time** (minutes)	
Personnel	**Span (metres)**	**Configuration**	**Day**	**Night**	**Day**	**Night**
1 + 8	9	Single Storey	12	35	30	45
1 + 16	21.8	Single Storey	40	65	60	75
1 + 24	29.1	Double Storey	40	70	75	120
2 + 32	46.2	Double Storey with LRS	86	-	180	210

KNDS

MADE IN THE UK,
TRUSTED AROUND THE WORLD.

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