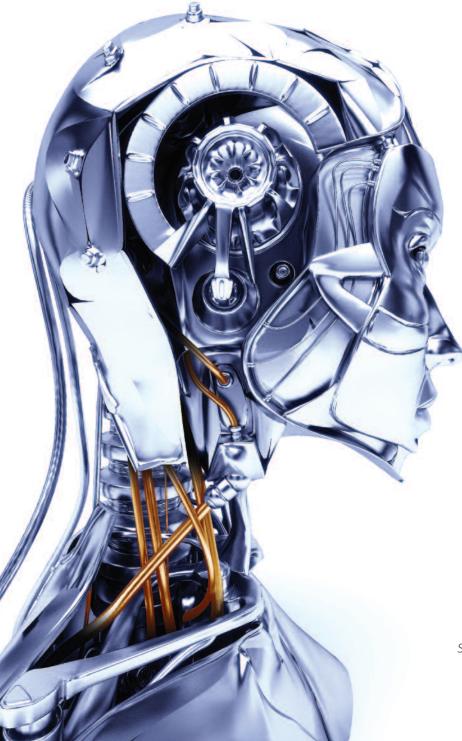


a revolution in metalworking fluids





soluble & neat metalworking fluids



smart engineering solutions

Metalworking fluids are one of the most complex liquids owing to their chemistry and the environment in which they have to perform. The wide range of materials and applications means that it is not possible to develop one formulation that fits all requirements. It is therefore essential to offer a wide product range so that customers can confidently choose the metalworking fluid best suited to their process and application.



Complex chemistry, new materials and difficult applications require smart engineering solutions.

As well as performance requirements, we recognise our customers' commercial needs. By offering a range of high performance products we can help the customer balance criteria such as surface finish, the severity of the working environment and productivity, against cost. High performance chemistry comes at a higher price; for example, the machining of aerospace titanium compared to steel, requires smart and different engineering solutions.

Human Health Gun Drilling High Speed Quality Multi Material **Environment** Cast Iron Reduce Coolant Usage Skiving Multi-application Training CGI Low Residue Magnesium ISOTRGS 611 Low Foaming Water Quality Roller Burnishing Value Added Proposition Increase Tool Life Assurance Inconel Aerospace Aluminium **Brass Legislation Reduce Operating Costs** Non Staining **Titanium** Low Misting Equipment Turning Low Odour Boring **Steel Financial Savings** Tungsten Carbide Cost Calculator Milling Sawing Production Efficiency Surface Finish Technical Service Aluminium Nickel Extended Solution Life Innovation



Innovation in materials and engineering techniques must be matched by innovation in metalworking fluids.

On the following pages, the table and graphs will help you identify candidate products in the Q80ils range. You can verify then your choice by referring to our data sheets which give a detailed profile of each product. Alternatively, you may request a visit from a Q80ils product specialist to discuss your requirements in more detail (see back page).

Please visit www.Q80ils.com for more information on Metalworking Fluids ranges.



Q8 Brunel

is a superior range of high performance soluble metalworking grades which are developed to challenge the demands and meet the needs of advanced engineering applications. The range which has an advanced safety profile is fully compliant with environmental and chemical legislation, free from Boron, Boric Acid, Formaldehyde, Chlorine and Secondary Amines, the range is also suitable for use in both hard and soft water.



Q8Oils Field Service Technicians are specialists in finding solutions, or improving existing performance.

	Applica	ition	Materi	als											0		10	
Q8 Brunel Product Type	Machining	Grinding	Copper Alloys	Cast Iron	Steel	Stainless Steel	Aluminium	AA 6000	AA 7000	Titanium	Inconeil	Carbide	Emulsion appearance	Density (20°)	pH @5% in 400 ppm	Refractomer Factor	Corrosion IP 125	Corrosion IP 287
Semi-synthetic																		
Q8 Brunel XF 111	1	✓											Translucent	1.018	9.1	2.10	2.5%	4.0%
Q8 Brunel XF 132	1	/											Translucent	1.044	9.4	1.50	2.0%	4.0%
Q8 Brunel XF 263	1	/											Semi-translucent	0.991	9.0	1.20	2.0%	4.0%
Q8 Brunel XF 343	1												Semi-translucent	0.992	9.2	1.30	3.0%	5.0%
Ester-based																		
Q8 Brunel XF 280	1												Tight milky	0.954	9.6*	0.90	3.0%	6.0%
Q8 Brunel XF 450	1												Semi-translucent	1.000	9.2	1.60	2.0%	4.0%
Synthetic																		
Q8 Brunel XF 527		1											Transparent	1.100	9.6*	1.50	2.0%	3.0%
Q8 Brunel XF 442	1	1											Yellow straw fluid	1.045	9.2	2.40	3.0%	5.0%
Q8 Brunel XF 530	1	1											Transparent	1.079	9.4	1.50	2.0%	2.0%
Q8 Brunel XF 575		1											Transparent	1.065	9.3	2.00	2.0%	2.0%
				Recomme	ended		Cons	ult Q80ils					*D.I water					

Q8 Berlioz

is a range of soluble metalworking grades which are developed to be Formaldehyde Free, TRGS 611 compliant, Chlorine free and Secondary Amine free, tolerant to both Hard and Soft water.



Regardless of the material, machining environment or application, we have a product for the task.

	Applica	Application			Materials										0		2	7
Q8 Berlioz Product Type	Machining	Grinding	Tube	Copper Alloys	Cast Iron	Steel	Stainless Steel	Aluminium	AA 6000	AA 7000	Titanium	Inconeil	Emulsion appearance	Density (20°)	pH @5% in 400 ppm	Refractomer Factor	Corrosion IP 125	Corrosion IP 287
Mineral Based											'	'		•			•	
Q8 Berlioz XMR	1												Milky	0.893	9.8*	0.90	2.0%	4.0%
Semi-synthetic																		
Q8 Berlioz XAD	1	1	1										Semi-translucent	1.007	9.4	1.50	2.0%	3.0%
Q8 Berlioz XVP	1	1											Transluc. Emulsion	1.017	9.3	1.60	2.0%	4.0%
Q8 Berlioz XVH	1	1											Tight milky	0.968	9.1	1.00	3.0%	4.0%
Q8 Berlioz XMA	1	1											Semi-translucent	1.000	9.3	1.30	2.5%	4.0%
Q8 Berlioz XRC	1	1											Translucent	1.037	9.5	2.30	2.0%	3.0%
Synthetic																		
Q8 Berlioz XRS		/											Transparent	1.082	9.6	2.30	2.0%	3.0%
					Recomme	ended		Cons	ult Q80ils				*D.I water					



Q8 Bach

is a range of neat cutting fluid, developed for use with a broad selection of machining applications and materials. Q8 Bach range should support you in production, optimise work piece surface finish, and maximise tool life. All products in Q8 Bach range are free from chlorinated hydrocarbons.



Q8 Bach uses base oils which makes them very oxidation stable, so maintaining viscosity and product integrity, leading to longer service life.

Q8 Bach Product Type	Description	Operation	Cutting Performance	Sulphur	Viscosity 40°C (mm ² /s)	Flash point COC (°C)	Copper Strip (3h)
Q8 Bach XNRG 44	Extreme performance non-active, mineral oil and chlorine free, cutting	Gear hobbing, broaching and very severe operations		Inactive	44	304	1b
Q8 Bach XNRG 25	fluids for machining of cast iron, carbon steel and high alloy steels, like stainless steel and heat resistant type of steels, aluminium, copper and	General machining, gear hobbing, broaching and very severe operations	4	Inactive	25	253	1b
Q8 Bach XNRG 15	copper-alloys.	Drilling & deep hole drilling		Inactive	12	200	1b
Q8 Bach XAH 10	Extreme performance active cutting oil for deep hole drilling	Deep hole drilling		Active	11.2	165	4a
Q8 Bach XAS 42	5. 6	Extreme severe operations		Active	41	210	4a
Q8 Bach XAS 24	extreme performance active cutting oil for machining of cast iron, arbon steel, high alloyed steels, stainless steel and heat esistant steel alloys	General machining, broaching and gear shaping		Active	24.2	204	4a
Q8 Bach XAS 16		General machining, broaching and gear shaping		Active	16	144	4a
Q8 Bach XAR 20	High performance active neat cutting oil for severe and critical cutting operations of high alloy steels, like stainless steel and high nickel steel	Severe operations like broaching, hobbing and shaping	a l	Active	19	180	4a
Q8 Bach XNF 36		Broaching & gear hobbing	eas	Inactive	36.2	202	1b
Q8 Bach XNF 28	High and an artist of the said	General machining for more severe operations	Increase	Inactive	27.6	196	1b
Q8 Bach XNF 15	High performance non-active cutting oil for machining of light and medium alloyed steels and non-ferrous metals	General machining		Inactive	15	186	1b
Q8 Bach XNF 10		Deep hole drilling		Inactive	9.5	130	1b
Q8 Bach XNF 6		Grinding & drilling		Inactive	5.5	126	1b
Q8 Bach XND 31		Severe operations		Inactive	30.3	198	1b
Q8 Bach XND 22	Optimum performance non-active cutting oil for machining of non-ferrous metals	General machining		Inactive	22	180	1b
Q8 Bach XND 12		Drilling & deep hole drilling		Inactive	12	166	1b
Q8 Bach XNK	High performance low viscosity cutting fluid	Honing and Superfinishing		Inactive	4.7	132	1b
Q8 Bach MQL 20	High performance Minimum Quantity Lubrication fluid	Sawing, cutting and forming of aluminium and steels bymicro-spraying or drip-lubrication		Inactive	18.5	190	1b

Machining Operation	Operation Severity	Cutting Speed	Cutting Fluid Activity High		
Broaching, internal	High	Low			
Pipe threading					
Tapping					
Broaching, surface					
Forming & thread grinding					
Threading, general					
Gear shaping, rotary					
Thread rolling, rotary					
Gear shaping					
Reaming					
Deep drilling					
Drilling, boring					
Thread rolling, rack					
Hobbing, gear spline					
Milling					
Turning					
Band and hand sawing	Low	High	Low		

The table left identifies the performance level required from the metalworking fluid in relation to the severity of the operation.

As the severity of the machining operation increases, the speed of operation decreases and the need for antiwear and EP protection increases.





Q80ils product range

Our metalworking fluids are the result of more than 100 years of product development and application experience. Our chemists and product engineers take a unique, innovative and progressive approach to developing different grades for different applications. We develop smart products that extend tool life and significantly reduce operating costs, while staying a step ahead of the new demands arising from higher fluid pressures, faster cutting speeds, new materials and tool technologies.



Ensuring a healthy environment for the machine operator is a key consideration in our product and service philosophy.

To achieve this we constantly seek new components to improve chemical and biological stability, including biodegradable and synthetic esters. Combined with the latest active and non-active chemistry our products have excellent wetting, anti-wear and EP properties. They maximise cooling, resist foaming, improve tool life and eliminate corrosion and staining to ensure excellent component surface quality. Our products are formulated to resist attacks from micro-organisms such as bacteria and fungi. They perform equally well in hard or soft water, maintain machine cleanliness and ensure operator safety. With low misting, low evaporation and low odour, Q80ils products also improve the workshop environment.

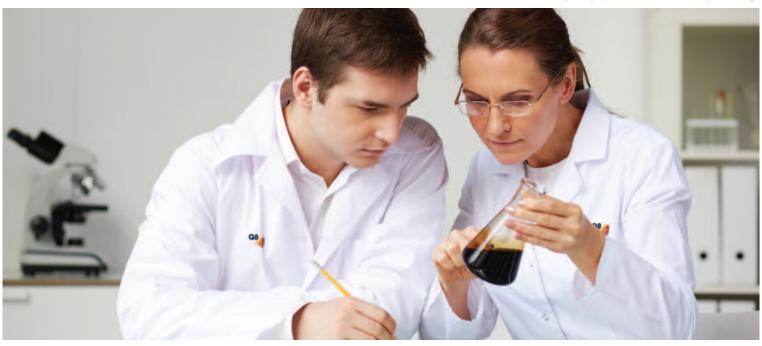


Confidence in our products, services and people, has been a key factor in establishing Q80ils reputation as a trusted partner.

There are four product families in the Q80ils portfolio. Selection depends on the type of chemistry required:

- Q8 Berlioz: soluble fluids that are free of Formaldehyde, Chlorine and Secondary Amine.
- Q8 Bach:
 neat metalworking oils.
- Q8 Brahms: neat forming oils.
- Q8 Brunel: Soluble fluids that are free from Boron, Boric Acid, Formaldehyde, Chlorine and Secondary Amines.

Product research & development is the foundation of superior performance and customer productivity.



Q80ils extensive research & development facilities carry out a full range of testing in order to develop superior products, including: torque tapping test TTT microtap, Cameron plint, four ball weld, Reichert, corrosion, Falex EP, material compatibility, oxidation, emulsion, quenching and many more.

about Q80ils

Q80ils is part of the Kuwait Petroleum Corporation (KPC), one of the world's largest oil companies. With 120 years of known reserves and crude oil production levels of 2.9 million barrels per day, it is ranked the seventh largest oil producer in the world. KPC's business spans every segment of the hydrocarbon industry: on and offshore exploration, production, refining, marketing, retailing, petrochemicals and marine transportation.

> Backed by the significant corporate resources of our parent company, Q80ils is a fully integrated lubricants organisation. Using high quality base oils we manufacture an extensive range of oils in our own blending plants and have established state of the art European laboratories for development and technical support work. Today, Q80ils metalworking fluids are used by customers in more than 80 countries around the world.



International Office:

Petroleumkaai 7, B-2020, Antwerp, Belgium. Tel: +32 (0)3 247 38 11 Email: metal@Q80ils.com www.Q80ils.com

UK Office:

Marian House, Colton Mill Bullerthorpe Lane, Colton, Leeds LS15 9JN Tel: +44 (0) 113 235 0555 Email: Marketing@Q80ils.com www.Q80ils.co.uk

Technical Help Desk: Tel: +32 (0) 32473879 -0080078645787 Email: palub@Q80ils.com



