

bedraEDM

HIGH-TECH SOLUTIONS FOR SPARK EROSION

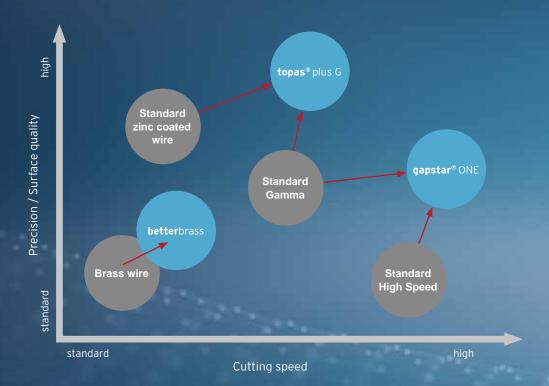


bedraEDM

Since the beginnings of spark erosion, we have participated with great success in the continuing development of the technology and the associated improvement in manufacturing processes in the area of mold and tool making. With the functional coatings we've developed for EDM wire, enormous increases in the

removal rate can be achieved. The resulting increase in productivity is significantly: In tough everyday use, this can lead to 30 percent shorter machine running times. And this does affect production costs. The use of coated wire in spark erosion has the potential to reduce production costs by up to 20 percent.

Comparison of performance



Manufacturer's compatibility

OEM

Application	Type of wire	Fanuc	GFMS	Makino	Mitsubishi	ONA	Seibu	Sodick	Vollmer
Standard	better brass ONE.9	•	•	•	•	•	•	•	
	topas® plus G		•						
Very high precision / very good surface quality	cobracut® Type A		•						
	cobra cut®								•
Highest precision /	cobracut® Type G		•						
Best surface quality	megacut® Type A	•		•	•	•	•	•	
	topas® plus H		•		•				
High cutting rate /	megacut® plus	•		•	•	•	•	•	
high precision	topas® plus X		•						
	bronco cut® Type X		•						
Highest cutting rate / high precision	gapstar® ONE.9		•	•	•		•		
	gapstar® ONE.5	•	•	•	•	•	•	•	
	gapstar® ONE.4	•	•	•	•	•	•	•	
Taper machining	cobra cut®		•						
	cobracut® Type G		•			4			
	better brass ONE.5	•	•	•	•	•	•	•	
Fine wires	microcut® CCA	•	•	•	•	•	•	•	
	microcut® SF	•	•	•	•	•	•	•	
	microcut® MF2A	•	•	•	•		•	•	

HIGHLIGHTS

betterbrass

betterbrass delivers a performance never seen before in a brass wire

- Extremely reliable performance
- Plug-and-Play on all machine types
- Cuts up to 10% faster than traditional brass wire
- This electrode utilizes innovative and efficient production processes to deliver performance never seen before in a traditional brass wire
- betterbrass is available in 2 versions that differ from each other only in tensile strength - and thus also in elonglation:
 - **better**brass ONE.9 (900 MPa)
 - **better**brass ONE.5 (500 MPa)

gapstar® ONE

The new EDM high performance wire with the bedra TRIMPAC technology

- Unprecedented cutting performance for a wide range of applications
- Uncompromising precision and surface quality
- gapstar® ONE is available in 3 versions that differ from each other only in strength- and thus also in elongation:
 - gapstar® ONE.9 (900 MPa)
- gapstar® ONE.5 (500 MPa)
- gapstar® ONE.4 (430 MPa)

topas® plus G

Special electrode that combines high cutting performance with highest precision

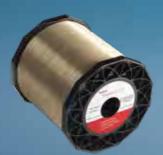
- Gamma phase EDM wire with high tensile strength
- Excellent surface quality and precision in contour and parallelism
- Up to 10% higher cutting speed as compared to zinc coated wire.



Core	CuZn40 special alloy
Tensile strength	900 MPa/ 130000 PSI (ONE.9), 500 MPa/ 72500 PSI (ONE.5)
Elongation	> 1% (ONE.9), > 10% (ONE.5)
Color	Pvrit gold



Core	CuZn37
Coating	TRIMPAC
Tensile strength	900 MPa/ 130000PSI (ONE.9), 500 MPa/ 72500PSI (ONE.5), 430 MPa/ 62300 PSI (ONE.4)
Elongation	> 1% (ONE.9), > 10% (ONE.5), > 30% (ONE.4)
Color	Amber Brown



Core	CuZn37
Coating	special layer
Tensile strength	900 MPa / 130000 PSI
Elongation	> 1%
Color	Grey-gold

mm	0.20	0.25	0.30
K160: 8kg	•	•	•
K200: 16kg		•	•
K250: 25 kg		•	
K355: 45 kg		•	•
P5: 5 kg	•	•	
P10: 10 kg		•	•
P15: 20 kg		•	•

mm	0.20	0.25	0.30
bedra8: 8kg	•*	•	••
bedra16: 16kg	•*	•	•*
K250: 25 kg		•	•*
K355: 45 kg		•	•*
P5: 5 kg	•*	•	•
P10: 10 kg	•*	•	•
P15: 20 kg	•*	•	••

* only ONE.9

mm	0.20	0.25
bedra8: 8kg	•	•
bedra16: 16kg	•	•
K250: 25 kg	•	•



Technical data

VERY HIGH PRECISION / VERY GOOD SURFACE QUALITY

cobracut® Type A

Hard zinc-coated EDM wire for highest precision

Technical data

Core	CuZn37
Coating	Zn
Tensile strength	900 MPa / 130000PSI
Elongation	> 1%
Color	Bright silver

Delivery program

mm	0.15	0.20	0.25	0.30	0.33
bedra4: 4 kg	•				
bedra8: 8 kg	•	•			
bedra16: 16 kg		•	•	•	
K250: 25 kg		•	•	•	
K355: 45 kg			•	•	

cobracut®

Soft zinc-coated EDM wire for taper cutting

Core	CuZn37
Coating	Zn treated
Tensile strength	500 MPa / 72500 PSI
Elongation	> 15%
Color	Light-grey

mm	0.15	0.20	0.25	0:30	0.33
bedra4: 4 kg		•	•		
bedra8: 8 kg		•	•		
bedra16: 16 kg		•	•	4	
K160: 6 kg		•	•		
K250: 25 kg		•	•		

HIGHEST PRECISION / BEST SURFACE QUALITY

cobracut® Type G

For highest precision, even for steep taper cutting on AGIE-machines with toroid guide

Technical data

Core	CuZn37
Coating	Zn treated
Tensile strength	900 MPa / 130000 PSI
Elongation	> 1%
Color	Light-grey

Delivery program

mm	0.15	0.20	0.25	0.30	0.33
bedra8: 8 kg	•	•	•	•	
bedra16: 16 kg		•	•	•	
K250: 25 kg		•	•	•	
K355: 45 kg			•	•	

megacut® Type A

For highest precision on Japanese machines

Core	CuZn37
Coating	Zn treated
Tensile strength	900 MPa / 130000 PSI
Elongation	> 1%
Color	Light-grey

mm	0.15	0.20	0.25	0.30	0.33
bedra8: 8 kg	•	•	•	•	
bedra16: 16 kg		•	•	•	
P5: 5 kg	•	•	•	•	
P10: 10 kg		•	•	•	
P15: 20 kg		•	•	•	





HIGH CUTTING RATE /HIGH PRECISION

topas® plus H

High speed cutting wire for AGIE and all standard Japanese machines

Technical data

Delivery program

Core	CuZn37
Coating	Gamma brass
Tensile strength	800 MPa / 116000PSI
Elongation	> 1%
Color	Grey-gold

mm	0.15	0.20	0.25	0:30	0.33
bedra8: 8 kg		•	•	•	
bedra16: 16 kg		•	•	•	•
K250: 25 kg		•	•	•	•
K355: 45 kg			•	•	
P5: 5 kg		•	•	•	
P10: 10 kg		•	•	•	
P15: 20 kg		•	•	•	

megacut® plus

High cutting performance and precision on Japanese machines.

Core	CuZn37
Coating	Gamma brass
Tensile strength	900 MPa / 130000 PSI
Elongation	> 1%
Color	Yellow-gold
mm	0.20 0.25 0.30 0.33

mm	0.15	0.20	0.25	0:30	0.33
K160: 8 kg	Ц		•		
P5: 5 kg			•		
P10: 10 kg			•		
P15: 20 kg			•		

topas® plus X

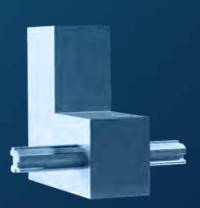
High speed cutting wire for Charmilles machines with X-technology

Technical data

Core	Cu
Coating	Zinc rich brass, double layer
Tensile strength	500 MPa / 72500 PSI
Elongation	> 1%
Color	Brown

Delivery program

mm	0.15	0.20	0.25	0:30	0.33
bedra8: 8 kg			•	•	•
bedra16: 16 kg			•	•	•
K250: 25 kg			•	•	•
K355: 45 kg			•	•	•
P10: 10 kg			•	•	
P15: 20 kg			•	•	



broncocut® Type X

Fast and precise EDM wire, recommended for Charmilles machines

Core	Cu
Coating	CuZn50
Tensile strength	520 MPa / 75420 PSI
Elongation	> 1%
Color	Brown

mm	0.15	0.20	0.25	0:30	0.33
bedra4: 4 kg			•		
bedra8: 8 kg			•	•	
bedra16: 16 kg			•	•	
K125: 3,5 kg			•		
K250: 25 kg			•	•	
K355: 45 kg			•	•	
P5: 5 kg			•	•	
P10: 10 kg			•	•	
P15: 20 kg			•	•	

FINE WIRES

microcut® CCA

For high demands in microerosion

Technical data

Core	CuZn37
Coating	Zn treated
Tensile strength	1000 MPa / 145038 PSI
Elongation	> 1%
Color	Grey

Delivery program*

mm	0.07	0.10
bedra4: 10,000m		
bedra4: 20,000m	•	•
bedra4: 30,000m	•	•
bedra4: 60,000m		•

^{*} other dimensions upon reques

microcut® MF2A

For ambitious micro erosion applications requiring a even higher tensile strength

Technical data

Core	Copper-cladded steel		
Coating	Gamma brass		
Tensile strength	2400 MPa / 348090 PSI		
Elongation	> 1%		
Color	Grey		

- an

mm	0.0	0.0	0.1
bedra4: 5,000m	•	•	
bedra4: 10,000m	•	•	1
bedra4: 20,000m		•	•
bedra4: 30,000m		•	•

^{*} other dimensions upon request

microcut® SF

Gamma-phase fine wire for economical machining in micro erosion

Core	Special alloy
Coating	Gamma brass
Tensile strength	1200 MPa / 174045 PSI
Elongation	> 1%
Color	Grey-gold

mm	0.07	0.10
bedra4: 20,000m	•	•
bedra4: 30,000m	•	•
bedra4: 60,000m		•

^{*} other dimensions upon request

microcut®

For sophisticated processing in microerosion

Core	Copper-cladded steel		
Coating	Beta brass		
Tensile strength	2000 MPa / 290075 PSI		
Elongation	> 1%		
Color	Gold		

mm	0.03	0.05	0.07	0.10
BK100: 5.000m	•	•	•	
BK100: 10.000m	L.	•	•	
bedra4: 20,000m			•	•
bedra4: 30,000m			•	•

^{*} other dimensions upon request

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