

# High Speed Coated Wires



## AC CUT XCC - Copper core coated wire with a thick layer of zinc diffused

- AC Cut Xcc has been specially developed for AgieChamilles machines to boost machining speed
- Associate to a machine equipped with the CC generator more than 500 mm<sup>2</sup>/min cutting speed can be achieved
- Particulary recommended for machining mechanical applications by units or in serie and for high parts
- AC Cut Xcc is the optimal solution when machining speed is the priority

## AC CUT XS – Copper core coated wire with a double layer of zinc gamma diffused

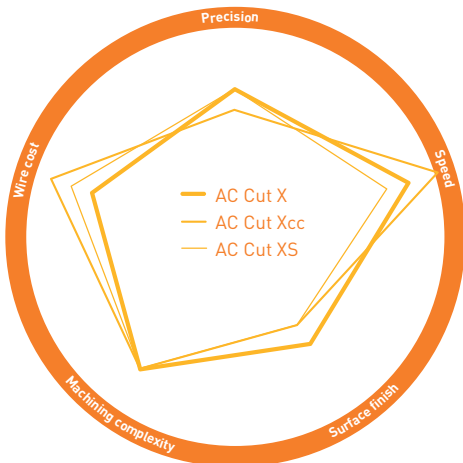
- AC Cut XS is a new generation of X wire that combines speed and precision with the best ratio price/performances
- AC Cut XS is 30% faster than standard brass wires
- Perfectly compatible with AC Cut X technologies
- AC Cut XS is the best compromise for fast delivery at a reasonable cost

### Specifications

Wire Type	Material	Coating	Tensile	Elongation	Conductibility
AC CUT XCC	Cu	Thick layer of Zinc Diffused	500 N/mm <sup>2</sup>	2%	65% IACS
AC CUT XS	Cu	Double layer Zn Gamma Diffused	450 N/mm <sup>2</sup>	1%	70% IACS

### Diameters (mm)

Spool Type	XS/XCC	XS/XCC	XCC
K125 (4kg)			
K160 (8kg)			
K200 (16kg)	0.25	0.30	0.33
K250 (25kg)			



# High Quality Coated Wires



## AC CUT AH - Brass coated wire with special zinc alloy - gamma diffused

- AC Cut AH is a new generation of “A” wire that combines perfect surface quality and part cost reduction
- Perfect surface homogeneity and fine surface roughness Ra 0.05 µm
- Highest precision on geometrical details and part parallelism
- Associate to the performances of the latest series of generator it enables to obtain part cost reduction up to 20%
- Particularly recommended for top quality punches and dies in steel or carbide

## AC CUT A900 - Zinc coated brass wire

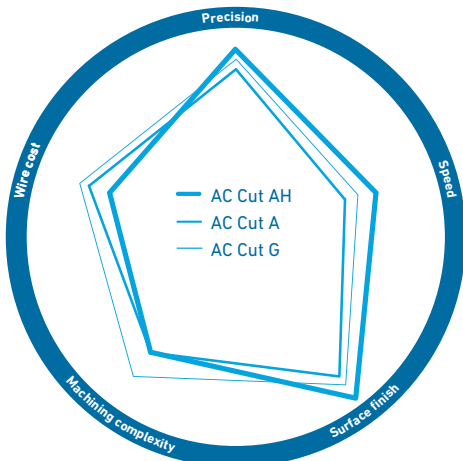
- AC Cut A900 is the benchmark wire in the area of very high quality machining
- Perfect surface homogeneity and fine surface roughness < Ra 0.1 µm
- Highest precision on geometrical details and part parallelism
- Recommended for a large range of application including moulds, cutting tools and general mechanic, requiring very high precision and excellent surface finish

### Specifications

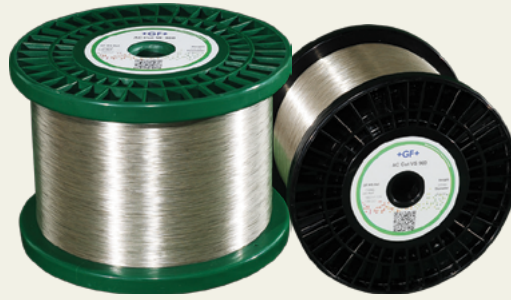
Wire Type	Material	Coating	Tensile	Elongation	Conductivity
AC CUT AH	CuZn	Special Zn Alloy Gamma Diffused	900 N/mm <sup>2</sup>	1.5%	21% IACS
AC CUT A900	CuZn	Zn	900 N/mm <sup>2</sup>	1.5%	22% IACS

### Diameters (mm)

Spool Type	AC CUT AH / AC CUT A900					
K100 (1.8kg)						
K125 (4kg)	0.07	0.10	0.15	0.20	0.25	0.30
K160 (8kg)						
K200 (16kg)						



# High Productivity Coated Wires



## AC CUT VS 900 - Brass wire coated with gamma diffused zinc

- AC Cut VS 900 is the latest generation of brass coated wire that combines productivity and part cost reduction
- Increase production of parts up to 25% compare to standard brass wires
- Reduce part cost up to 20% compare to standard brass wires
- AC Cut VS 900 is the optimal answer to the needs of most of mould, punch and die and general mechanic applications that require precision and productivity

## AC CUT VE 900 - Brass wire coated with gamma diffused zinc

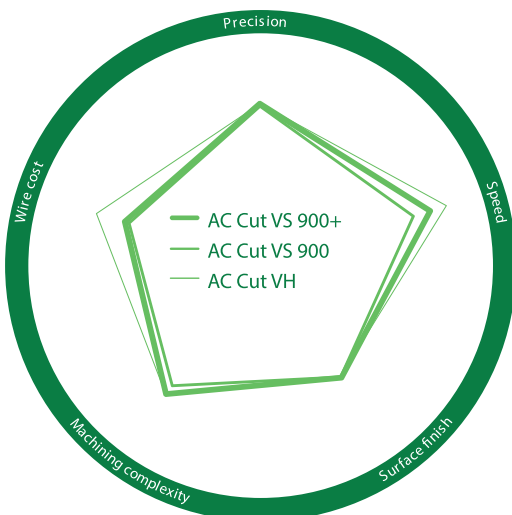
- AC Cut VE is the latest generation of brass wire coated with gamma diffused zinc for greater productivity and lower part costs
- Increase the machining speed and the production of parts up to 20% compared to standard brass wire
- The optimal answer to the needs of most mold, punch and die and general mechanic applications excellent surface finish

### Specifications

Wire Type	Material	Coating	Tensile	Elongation	Conductibility
AC CUT VS/VE 500	CuZn	Zn Gamma Diffused	450 N/mm <sup>2</sup>	11%	24% IACS
AC CUT VS/VE 900	CuZn	Zn Gamma Diffused	875 N/mm <sup>2</sup>	2%	20% IACS

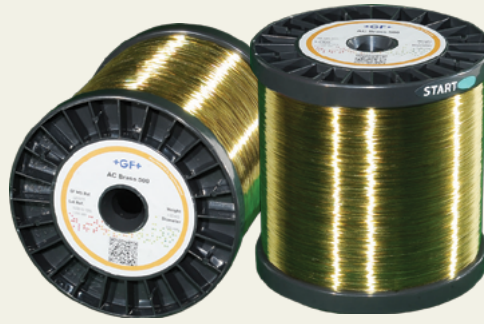
### Diameters (mm)

Spool Type	AC CUT VS 500/ AC CUT VS 900 / AC CUT VE 900			
K125 (4kg)				
K160 (8kg)	0.20		0.25	0.30
K200 (16kg)				
P5 (5kg)				



\*All information was accurate at time of printing. However, specifications and details are subjected to change without notice.

# Exclusive Brass Wires



## AC Brass / AC Brass LP

The AC Brass / AC brass LP wires draw their properties from high grade alloy. The excellent geometry of these wires, as well as the exceptional surface property, improves significantly the cutting precision.

### Specifications

Wire Type	Material	Tensile	Elongation	Conductivity
AC Brass 400	CuZn	450 N/mm <sup>2</sup>	25%	26% IACS
AC Brass 500 / AC Brass LP 500	CuZn	500 N/mm <sup>2</sup>	20%	25% IACS
AC Brass 900 / LP 1000	CuZn	1000 N/mm <sup>2</sup>	15%	22% IACS

### Diameters (mm)

Spool Type	AC Brass 400			AC Brass 500/AC Brass LP 500			AC Brass 900/ AC Brass LP 1000		
K125 (4kg)									
K160 (8Kg)	0.20	0.25	0.30	0.20	0.25	0.30	0.20	0.25	0.30
K200 (16Kg)									
P5 (5Kg)									

# Premium Brass Wires



## Brass Cut / Gold Cut

The Brass Cut/Gold Cut wires are made from very pure alloy in standard applications in order to guarantee consistent quality and performances for universal machining.

### Specifications

Wire Type	Material	Tensile	Elongation	Conductivity
Brass Cut / Gold Cut	CuZn	550 N/mm <sup>2</sup>	15%	25% IACS
Brass Cut / Gold Cut	CuZn	1000 N/mm <sup>2</sup>	>0.4%	22% IACS

### Diameters (mm)

Spool Type	Brass Cut			Gold Cut		
K125 (3.5kg)						
K160 (8kg)	0.20	0.25	0.30	0.20	0.25	0.30
K200 (15kg)						
P5 (5kg/6kg)						

# Ultra Fine Wires For Special Applications



Special wires suitable for micro electronics tooling and other fine wire applications.

## Specifications

Wire Type	Material	Tensile
Tungsten	99.9% W	3000 - 3300 N/mm <sup>2</sup>
SP	Steel Core	2300 N/mm <sup>2</sup>

## Diameters (mm)

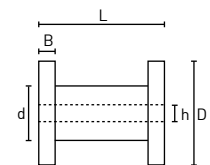
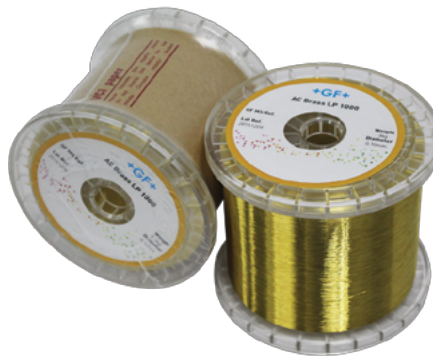
Spool Type	TUNGSTEN / SP		
K100	0.03	0.05	0.07
P3			

## Spool Dimensions

Spool Type	Flange "D"	Core "d"	Length "L"	Flange Thickness "B"	Bore Hole "h"	Spools Per Carton
K100	100	63	100	10	16	1
P3	130	80	110	10	20	1

Available in length of 5,000, 10,000 & 20,000 meters per spool

# Fine Brass Wire



## Specifications

Wire Type	Material	Tensile	Elongation	Conductivity
AC Brass LP 1000	CuZn	>980 N/mm <sup>2</sup>	>0.4%	>20% IACS

## Diameters (mm)

Spool Type	AC Brass LP 1000		
P3 (3kg)	0.10		0.15

## Spool Dimensions

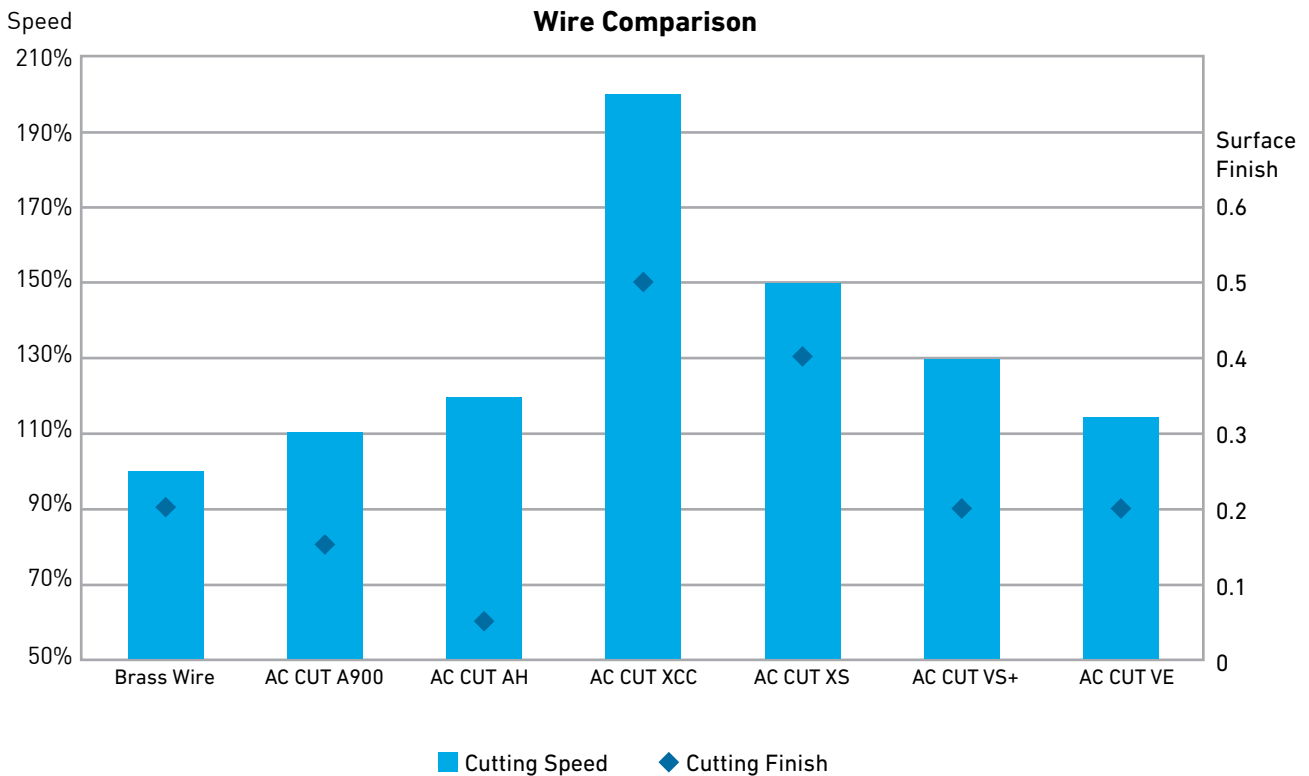
Spool Type	Flange "D"	Core "d"	Length "L"	Flange Thickness "B"	Bore Hole "h"	Spools Per Carton
P3	130	80	110	10	20	6

# Wire Performance Comparisons



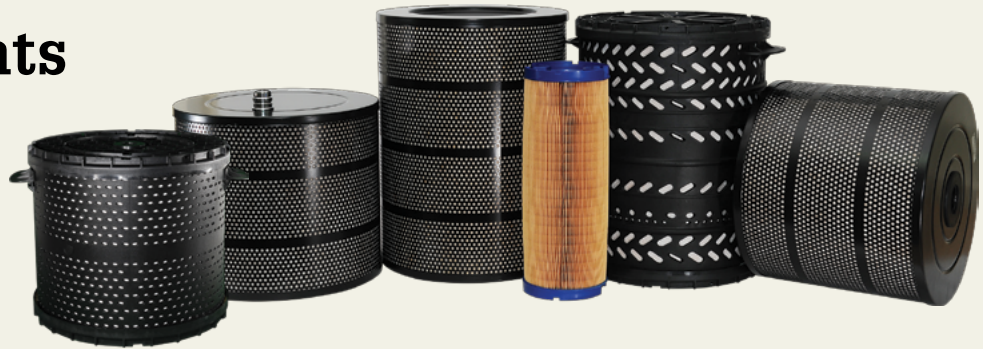
	Cutting Speed	Surface Finish (ra)	Precision	Suitable for
Brass Wire	100%	0.20 $\mu\text{m}$	★★★	All WEDM Machines
AC CUT AH	120%	0.05 $\mu\text{m}$	★★★★★	All WEDM Machines if technologies available and automatic threading
AC CUT A900	110%	0.15 $\mu\text{m}$	★★★	All WEDM Machines if technologies available and automatic threading
AC CUT XCC	200%	0.50 $\mu\text{m}$	★★★	GF AC FIXXX / Cut X00
AC CUT XS	150%	0.40 $\mu\text{m}$	★★★	GF AC FIXXX / Cut X00
AC CUT VS+	130%	0.20 $\mu\text{m}$	★★★	Most WEDM Machines
AC CUT VE	115%	0.20 $\mu\text{m}$	★★★	Most WEDM Machines

\*Actual machining performances will vary dependent on the machine models and cutting profiles



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# Filter Elements for Wire EDM Machines



Good filtration of dielectric fluids used in EDM processes is essential for the machining of high quality parts. Our filters benefit from large filter surface and very high dirt holding capacity to offer excellent filtration performances and enable long service life.

## Features:

- Availability of corrosion-proof materials
- Long service life with increased filtering surface area
- Available with various filter fineness

## Specifications

Item No	Filtering Surface (cm <sup>2</sup> )	Dimensions (mm)			Filtering Fineness (µm)	Admission (Direction of Flow)	Pieces Per Carton
		d1	d2	h			
909314006	31000	150	32	375	3-5	Outside =>Inside	4
909314008	27000	150	32	375	3-5	Outside =>Inside	4
909314028	145000	340	47.5	450	3-5	Inside =>Outside	1
909314030	206000	340	47.5	450	3-5	Inside =>Outside	1
909314035	148000	340	26	300	1-2	Inside =>Outside	2
909172009	32000	150	31	375	5-7	Outside =>Inside	8
909172001	133200	340	46	300	5-7	Inside =>Outside	2
909172002	95200	300	29	500	5	Inside =>Outside	2
909172003	50800	260	46	280	5-7	Outside =>Inside	2
909172004	128400	340	46	450	5-7	Inside =>Outside	2
909172006	148300	300	58	500	5	Inside =>Outside	2
909172007	201000	340	46	450	5-7	Inside =>Outside	2
909172008	127800	340	46	300	5-7	Inside =>Outside	2
909172012	150000	340	46	300	1-3	Inside =>Outside	2
909172013	150000	340	46	300	1-3	Inside =>Outside	2
909172014	150000	340	46	300	1-3	Inside =>Outside	2
909172063	133200	340	46	300	5-7	Inside =>Outside	2
909172064	133200	340	46	300	5-7	Inside =>Outside	2

# Filter Elements For Die-Sinking EDM Machines



## Specifications

Item No	Filtering Surface (cm <sup>2</sup> )	Dimensions (mm)			Filtering Fineness (µm)	Admission (Direction of Flow)	Pieces Per Carton
		d1	d2	h			
909314011	45000	150	32	375	3-5	Outside =>Inside	4
909172010	80000	150	31	355	3-5	Outside =>Inside	4
909172015	24500	150	72	450	15	Outside =>Inside	6
909172018	19000	150	35	355	15	Outside =>Inside	6
909172019	27600	260	46	280	15	Outside =>Inside	2
909172020	72000	300	46	330	10	Inside =>Outside	2
909172021	47000	260	29	340	10	Inside =>Outside	2

# Dielectric Oil For Die-sinking EDM Machine

DIEL MS 5000 can be used generally for rough machining as well as finishing operations. DIEL MS 7000 is used for semi-finishing and finishing operations for complex shapes with very accurate dimensions. DN CUT HL 25-S is specially formulated with synthetic base oil to give unsurpass performance.

## Features:

- High flash point promote better work safety
- Excellent oxidation and thermal stability
- Clear transparent fluid enables excellent visibility during machining
- No or low odour and non-toxic
- Low evaporation rate minimize oil loss

## Specifications

Product Type	Viscosity	Flash Point	Distillation Range	Packaging
DIEL MS 5000	4.1 @ 40°C	>135	260/302	200L drum
DIEL MS 5000	4.1 @ 40°C	>135	260/302	18L pail
DIEL MS 7000	2.4 @ 40°C	103	230/270	200L drum
DIEL MS 7000	3.4 @ 40°C	103	230/270	18L pail
DN CUT HL 25-S	2.874 @ 40°C	92	206/256	200L drum
DN CUT HL 25-S	2.874 @ 40°C	92	206/256	20L pail



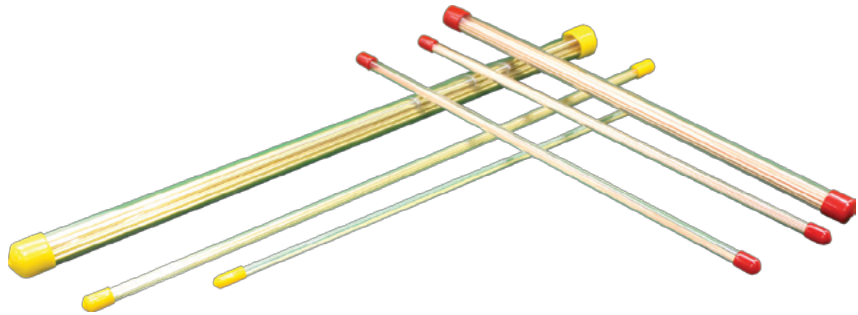
# Dielectric Oil For Super Drilling Machines



## Specifications

Product Type	Packaging
Vitol KS Dielectric	20L pail
Vitol KN Dielectric	20L pail

# Electrode Pipes For Super Drilling Machines



## Specifications

Product Type	Diameters (mm)	Length (mm)	Packaging
Brass Electrodes	0.2 to 0.3	200mm for $\varnothing 0.3\varnothing$ to $\varnothing 3.0$	20 pieces per tube
		300mm for $\varnothing 0.3\varnothing$ to $\varnothing 3.0$	
		400mm for $\varnothing 0.3\varnothing$ to $\varnothing 3.0$	
Copper Electrodes	0.2 to 0.3	200mm for $\varnothing 0.3\varnothing$ to $\varnothing 3.0$	20 pieces per tube
		300mm for $\varnothing 0.3\varnothing$ to $\varnothing 3.0$	
		400mm for $\varnothing 0.3\varnothing$ to $\varnothing 3.0$	

\*Available in single hole & multi-channel types

# Wear Parts For Wire Cutting Machines



We offer a wide and affordable selection of alternate wear parts for Japanese wire cut machines that are crucial to your daily operational needs. One-stop shop contact for your machine fleet

# Deionization Resin



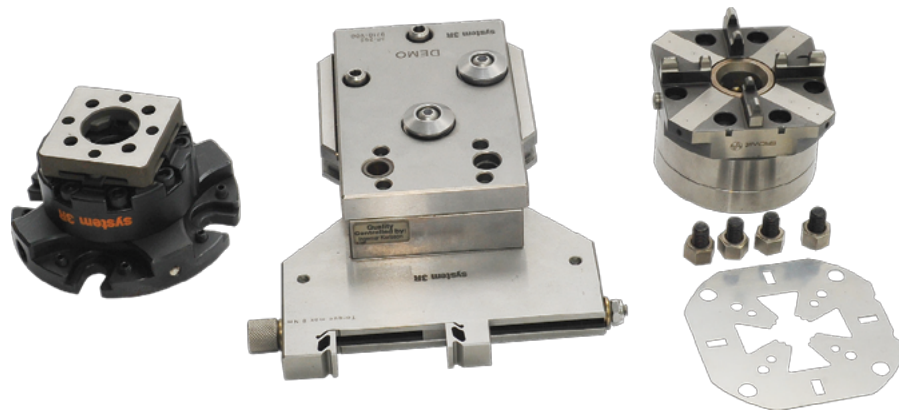
A complete range of mixed - bed resins consisting of strong acid cation (H+) form and strong base anions (OH-Form) to ensure the achievement of very high quality deionized water required for WEDM processes

## Properties

Ionic form as shipped	H+ / OH-
Structure	Gel type beads

Available in a carton of 5 x 5L bags

# Tooling Systems



We offer complete range of clamping, holding & measuring tools as well as automation solutions from manufacturers like system 3R and Erowa

# High Performance Cleaning Agents

High Performance Cleaning Agents For Removing & Preventing Rust While Protecting Metal Surfaces



## Properties

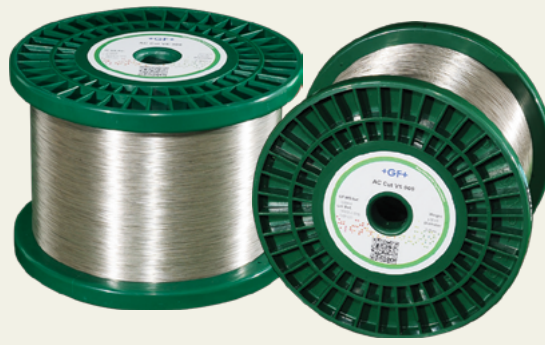
Product Type	Packaging
HYP-R1S Rust Remover	6L container
HYP-R2S Rust Remover	6L container
HYP-AD3 Anticorrosive Additives	6L container
Savan RHV 600 Anti Rust Agent	3L container

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AC Cut VS 900+

# Brass wire coated with a zinc-based alloy



## Specifications

Material	Coating	Tensile	Elongation	Conductibility
Brass CuZn37	$\beta$ and $\gamma$ special alloy diffused	875 N/mm <sup>2</sup>	2%	22% IACS

**Boost productivity what ever your machine is.**

### AC CUT VS 900+ - Latest generation of brass wire coated with gamma diffused zinc

- AC CUT VS 900+ allows you to significantly increase your cutting speed application up to 40%
- Optimal answer for applications that require precision and productivity also in bad flushing conditions
- Reduce part cost up to 25% and wire consumption by 25%
- Fits to all GFMS machines with AC CUT VS and AC CUT VS + Technologies and most wire-cut machines
- Gain production time for additional revenues

## Comparative test

	AC Brass Ø0.20 mm	AC Cut VS 900+ Ø0.20 mm	Gain compare to Brass
1 part Machining time	45 min	34 min	25% Faster
Wire cost per part	\$0.75	\$1.19	
Wire length per parts	496 m	374 m	25% less wire
Part cost including wire	\$7.65	\$6.40	16% cost reduction
Additional machining time per year	0	562 h	

## Part

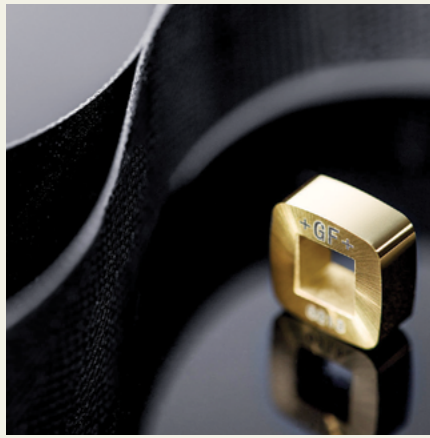
Steel Z160 CDV 12

Part high 60 mm

3 finishing cut



# Original Wear Parts From your Expert Partner



Creating the best possible environment for precision machining ensures optimal results for your business and your customers.

That's why GF Machining Solutions, a machine tools pioneer offers a complete range of certified original wear parts for your wire-cutting EDM machines.

Our certified original wear parts are designed by our expert Research & Development team with highest attention to ensure the highest parts' materials, manufacturing processes and qualities.

The result: Wear parts that fit perfectly together and guarantee the optimal performances of your GF Machining Solutions machines. That is a promise that only we can make and keep.

With our Customer Services' life cycle approach to ensuring your successes, you will be able to work with confidence throughout the lifetime of your wire-cutting EDM machines.

