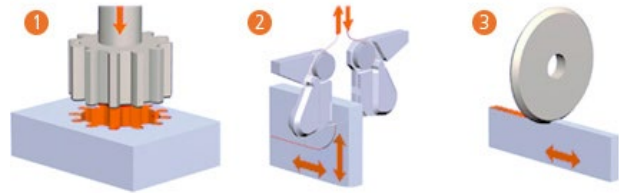


There are basically three types of eroding process:
Die sink erosion, wire erosion and disc/rotary erosion.

HOSO only made die sinking erosion electrode and disc/rotary erosion electrode. The material type is HOSOCU®201, HOSOPM®075, 080 and HOSOPM®170,175 to cover all of the different applications. Choice the right erosion electrode material is the key factor to make the high precise and efficiency working.



1: die sinking erosion 2: wire erosion 3: rotary erosion

Major electrode material properties:

	HOSOCU®201	HOSOPM®070	HOSOPM®075	HOSOPM®080	HOSOPM®170
Density (g/cm ³)	8.9	14.1	14.6	15.3	15.3
Hardness (HRB)	70	85	95	98	90
electrical conductivity (%IACS)	85	50	45	30	45

Electrode choice table:

workpiece properties and machining spec.				electrode material		
mold type	machining type	workpiece	requirement	HOSOCU®600	HOSOCU®201	HOSOPM®0
plastic mold die casting mold	die sinker	steel	surface roughness 5-10µm Rmax	+	++	+++
			10-20µm	++	++	+++
			20-30µm	++	++	+
			30-50µm	++	++	-
			50-100µm	+	+	x
			100-200µm	-	-	x
forging die		steel	surface roughness 10-20µm	+	++	+
			20-30µm	+	++	-
			30-50µm	+	++	x
			50-100µm	-	+	x
			100-200µm	-	-	x
press mold	through hole die sinker	steel	rough machining	++	+	-
			side clearance 0.02µm	-	-	+++
			0.02-0.05µm	++	++	+++
			0.05µm -	++	++	+++
		cemented carbide	rough machining	+	+	+++
			finished process	-	-	+++
powder metallurgy dies		steel	rough machining	++	++	++
			finished process	-	-	+++
		cemented carbide	rough machining	-	-	+++
			finished process	x	x	+++

* above just for your reference which is base on our customer's experience, it is not the gurranty to work properly in your factory

copper tungsten EDM electrode application table:

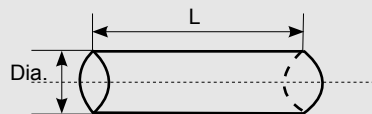
	HOSOPM®070	HOSOPM®075	HOSOPM®080
Spark erosion of complex geometries in steel	+	++	
Spark erosion of hardmetals (general)	+	++	
EDM drilling of small holes in hardmetals		++	+++
EDM removing of drills and tips		++	+++
EDM drilling of small holes in steels		++	+++
PCD tools disc erosion sharpen		+++	++

copper tungsten round rod			
HOSO code	size (mm)	HOSO code	size (mm)
RD05100	Dia. 0.5x100	RD12200	Dia. 12x200
RD06100	Dia. 0.6x100	RD14200	Dia. 14x200
RD07100	Dia. 0.7x100	RD14300	Dia. 14x300
RD08100	Dia. 0.8x100	RD16200	Dia. 16x200
RD09100	Dia. 0.9x100	RD16300	Dia. 16x300
RD1200	Dia. 1x200	RD18200	Dia. 18x200
RD2200	Dia. 2x200	RD18300	Dia. 18x300
RD3200	Dia. 3x200	RD20200	Dia. 20x200
RD3300	Dia. 3x300	RD20300	Dia. 20x300
RD4200	Dia. 4x200	RD25200	Dia. 25x200
RD4300	Dia. 4x300	RD30200	Dia. 30x200
RD5200	Dia. 5x200	RD35200	Dia. 35x200
RD5300	Dia. 5x300	RD40200	Dia. 40x200
RD6200	Dia. 6x200	RD45200	Dia. 45x200
RD6300	Dia. 6x300	RD50200	Dia. 50x200
RD8200	Dia. 8x200	RD55200	Dia. 55x200
RD8300	Dia. 8x300	RD60200	Dia. 60x200
RD10200	Dia. 10x200	RD10300	Dia. 10x300

copper tungsten square bar			
HOSO code	size(mm)	HOSO code	size(mm)
SB375200	3x75x200	SB1575300	15x75x300
SB375300	3x75x300	SB2020200	20x20x200
SB675200	6x75x200	SB2020300	20x20x300
SB675300	6x75x300	SB2075200	20x75x200
SB88200	8x8x200	SB2075300	20x75x300
SB88300	8x8x300	SB2525200	25x25x200
SB875200	8x75x200	SB2525300	25x25x300
SB875300	8x75x300	SB2575200	25x75x200
SB1010200	10x10x200	SB2575300	25x75x300
SB1075200	10x75x200	SB3030200	30x30x200
SB1075300	10x75x300	SB3030300	30x30x300
SB1212200	12x12x200	SB4040200	40x40x200
SB1212300	12x12x300	SB4040300	40x40x300
SB1515200	15x15x200	SB5050200	50x50x200
SB1515300	15x15x300	SB5050300	50x50x300
SB1575200	15x75x200		

copper tungsten plate			
thickness	width	length	code example
1-50	100	100	PL1100200
	100	200	PL10100200
	200	400	PL10200400

Rod diagram:



Square bar diagram:

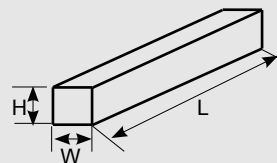
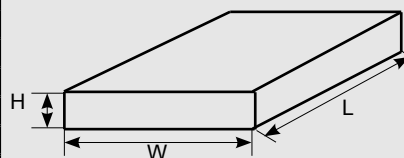
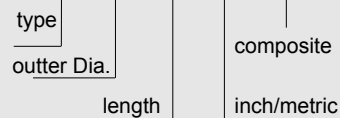


plate diagram:



how to use HOSO code

RD 25 200. 2 . 075



Additional notes:

It is very important to pay attention to the recommended polarity of various electrode-workpiece combinations. The wrong polarity can have significant implications on speed, wear, and stability. It is best to consult the specific power supply technology documentation for polarity recommendations.

electrode to workpiece	electrode polarity
copper on steel	positive
copper tungsten on steel	positive
copper tungsten on cemented carbide	negative

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