



PT-MAT™ Flexible rope.

PT-MAT™ -Flexible rope for oxyacetylene welding is made by extruding a mixture of tungsten carbide / NiCrBSi powder around a solid nickel wire core.

The welded coating will contain roughly 65% tungsten carbide and 35% matrix alloy.

The tungsten carbides will be angular cast tungsten carbides (FTC at about 2300 HV_{0.1}) or spherical fused tungsten carbide (SFTC at about 2900 HV_{0.1}).

The NiCrBSi alloy will melt at a lower temperature (1850° F average) while encapsulating the hard tungsten carbide and will leave a clean surface

PT-MAT™ - Flex is available in different diameters either with FTC or SFTC, other custom compositions can be made to order.

Hardness :

PT-MAT™ Flex is recommended for wear protection on oil drilling parts such as stabilizers, fixed cutter bits and in other industries on mixer components, processing screws.

Most austenitic and ferritic carbon steels can be readily overlaid, proceed with caution on stainless steel alloys not recommended on cast iron.

Hardness :

Matrix : 40-45 HRc.

Fused / cast tungsten carbide (FTC) : 2100-2400 HV_{0.1}

Matrix : 40-45 HRc.

Spherical fused tungsten carbide (SFTC) : 2600-3500 HV_{0.1}

Product Availability

Tungsten carbide specification			Available diameters			
particle size	particle size	Carbide type	5/32" (4mm)	3/16" (5mm)	1/4" (6.4 mm)	5/16" (8mm)
170-40 mesh	90-425 µm	SFTC	Flex-4NS	Flex-5NS	Flex-6NS	
170-20 mesh	90-850 µm	SFTC	Flex-4LS	Flex-5LS	Flex-6LS	Flex-8LS
170-40 mesh	90-425 µm	FTC	Flex-4N	Flex-5N	Flex-6N	
140-20 mesh	106-850 µm	FTC	Flex-4L	Flex-5L	Flex-6L	Flex-8L
140-16 mesh	106-1180 µm	FTC	na	na	Flex-6VL	Flex-8VL

Custom products with carbide type and size combination are possible.

Packaging :

On plastic spools 22 lbs (10 kg) or 44 lbs (20 kg).

