

# ARCTEC® FLEXTUNG 700 Spherical

## GENERAL CHARACTERISTICS:

ARCTEC® FLEXTUNG 700 Spherical is a flexible tungsten carbide hard facing rod for use with the oxy-fuel brazing process. This rod consists of a nickel core wire coated with spherical cast tungsten carbide particles in a Ni-Cr-B-Si matrix. The deposit has extreme abrasion resistance. Machineable by grinding only.

## APPLICATIONS:

ARCTEC® FLEXTUNG 700 Spherical is particularly suited for hard facing of oilfield drill bits, drill stems, augers, asphalt plant mixer blades and other applications subject to severe abrasion and moderate impact.

## WELDING PROCEDURE:

Clean the weld zone free of oil, grease, rust and other contaminants by grinding if necessary. **IMPORTANT:** Pre-spray cleaned surface with nickel powder to prevent oxidation during the brazing process. Apply with oxy-acetylene torch using a neutral flame. Large tip sizes that require high pressures may impede the uniform (homogeneous) distribution of tungsten carbide particles in the matrix. Preheat of large pieces is recommended prior to starting the brazing process. Allow the weld deposit and surrounding area to cool slowly.

## MECHANICAL PROPERTIES:

Hardness	
Matrix:	40-45 RC
Carbide:	2950 HV

## OPERATING PARAMETERS:

WELDING PROCESS: OFB

Melting Temperature: 1050°C (1920°F)

Available Diameters:			
	Inch	mm	Particle Size
FLEXTUNG 700 Spherical	5/32" on a Spool	4.0 on a Spool	2/3 of carbides are 0.4 to 0.6 mm 1/3 of carbides are 0.1 to 0.2 mm
FLEXTUNG 700 Spherical	3/16" on a Spool	5.0 on a Spool	2/3 of carbides are 1.0 to 2.0 mm 1/3 of carbides are 0.1 to 0.2 mm
FLEXTUNG 700 Spherical	1/4" on a Spool	6.0 on a Spool	2/3 of carbides are 1.0 to 2.0 mm 1/3 of carbides are 0.1 to 0.2 mm
FLEXTUNG 700 Spherical	5/16" on a Spool	8.0 on a Spool	2/3 of carbides are 1.0 to 2.0 mm 1/3 of carbides are 0.1 to 0.2 mm

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