



SelectWear M7

Description

SelectWear M7-MCG is an iron based, martensitic, high molybdenum high speed tool steel alloy. It offers high hardness (Rc60-65) with a good balance between abrasion and impact resistance. **SelectWear M7-MCG** is an excellent choice for components that are required to maintain a sharp edge. The deposit is magnetic, will not cross check and is not readily machinable. **SelectWear M7** is a metal cored wire to be used with shielding gas as specified below.

Alloy Group

Molybdenum Bearing Martensitic High Speed Tool Steel

Applications

SelectWear M7-MCG is for use on hot and cold dies, shear blades, tire shredders, cutting and shaving knives as well as other applications where maintaining a sharp edge is required.

Deposit Properties

Alloying: C, Mn, Si, Cr, Mo, W levels similar to AISI M7

Hardness: (2 layers): 60-65 Rc

Not machinable, grinding only; Will not cross crack

Recommended Welding Parameters

SelectWear M7-MCG – Gas Shielded Metal Cored Wire

<u>Diameter</u>	<u>Polarity</u>	<u>Current (amps)</u>	<u>Voltage</u>	<u>ESO</u>
.035"	DCRP	150-240	25-33	½-¾"
.045"	DCRP	180-300	27-33	½-1"
1/16"	DCRP	240-450	26-35	¾-1¼"
7/64"	DCRP	350-500	27-35	1¼-1¾"
1/8"	DCRP	400-650	29-36	1¼-1¾"

Note: Listed parameters are for Ar-25% CO₂ shielding. Lower voltage for higher argon levels.

PREHEAT may be required. When welding on high speed tool steel, a preheat of 800-1200°F is normally required to avoid cracking. When welding on other base metals, preheat according to manufacturer's recommendations. Maintain the preheat temperature during the welding process.

Rev 0 (03/16/2015)

Notice: The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. Select-Arc disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.