



T H E H A R R I S P R O D U C T S G R O U P
A L I N C O L N E L E C T R I C C O M P A N Y
 4501 Quality Place • Mason, OH 45040 U.S.A Tel: 513-754-2000 Fax: 513-754-6015

TECHNICAL SPECIFICATION SHEET

3-SMW

ISO 9001
 Cert. No. 31598

PHYSICAL PROPERTIES:

Yield Strength	76,000 psi	Rockwell B Hardness	93-102 HRB
Tensile Strength	108,000 psi	Brinell Hardness	200-300 HB
Reduction of Area	30%	Elongation	24%
Charpy V Notch	75 ft/# @ room temperature		

APPLICATION:

Super Missileweld assures dense non-cracking welds on problem steels such as high carbon , tool , manganese and dissimilar steels

RECOMMENDED WELDING PARAMETERS:

***GMAW (MIG) Parameters (DC Reverse Polarity) Electrode Positive Short-Circuiting transfer**

<u>Wire Diameter</u>	<u>Amps</u>	<u>Volts</u>	<u>90%Helium+7.5%Argon+ 2.5%CO₂ (cfh)</u>	<u>Wire Feed ipm</u>
.030	60-125	17-22	20-25	150-430
.035	75-160	17-22	20-25	120-400
.045	100-200	17-22	20-25	100-240

***GMAW (MIG) Parameters (DC Reverse Polarity) Electrode Positive Spray transfer**

<u>Wire Diameter</u>	<u>Amps</u>	<u>Volts</u>	<u>Argon/ 1-2% O₂</u>	<u>Wire Feed ipm</u>
.030	160-225	24-28	25	440-650
.035	180-300	24-29	30	430-500
.045	200-450	24-30	30-35	220-400
1/16	225-500	24-32	40	110-210
3/32	250-600	24-32	50	50-80

***GTAW (Tig) Parameters (DCSP) Electrode negative**

<u>Material</u>	<u>2%Thoriated</u>	<u>Filler Wire Size</u>	<u>Amps</u>	<u>Gas Cup</u>	<u>Argon(cfh)</u>
1/16"	1/16"	1/16"	80-120	3/8	20
3/32"	1/16"	1/16"	100-130	3/8	20
1/8"	3/32"	1/16"	120-150	7/16	20
3/16"	3/32"	3/32"	150-250	7/16	25
1/4"	1/8"	1/8"	200-350	1/2	25
1/2"	1/8"	1/8"	235-375	1/2	25

SPECIFICATION COMPLIANCE:

Harris Products Group
 Internal Specification

All statements, information and data given are believed to be accurate and reliable but are presented without guarantee, warranty or responsibility of any kind, expressed or implied.

Additional information available at our web site: www.harrisproductsgroup.com 01/09 MK