



AN INNOVATIVE ELECTRODE FOR GALVANIZED STEEL

G-CAP® ELECTRODES



CMW® G-CAP® ELECTRODES LAST LONGER » CMW® G-CAP® electrodes in RWMA Class 2 (CMW®3) chrome copper material are the most efficient and economical caps available to those who weld galvanized steels. This unique nose configuration produces a controlled “mushrooming” effect allowing the G-CAP® electrode to perform without the necessity of dressing. It will outlast any standard zirconium or dispersion strengthened copper cap found in today’s market. This electrically efficient nose design also enables the G-CAP® electrode to be operated at a substantially lower heat setting, producing a quality nugget from the first weld.



FOR RESISTANCE WELDING OF ALL GALVANIZED STEELS

- » **NO STICKING:** Specially designed to begin welding from the very first weld.
- » **QUALITY WELDS:** G-CAP® electrode nuggets meet or exceed industry standards from the first weld through the life of the G-CAP® electrode.
- » **ELIMINATES BRASS BUILD-UP:** The ultimate RWMA CLASS 2 electrode that literally rolls the brass away.
- » **USES LESS ELECTRICAL POWER:** Achieves superior welds at up to 25% lower power levels.
- » **INCREASE PRODUCTIVITY:** G-CAP® electrodes make up to 10 times more quality welds without dressing.
- » **COMPETITIVELY PRICED:** Increased cap life gives you significantly reduced cost per weld.

RESISTANCE WELDING

G-CAP® ELECTRODE WELD SCHEDULE FOR GALVANIZED STEEL

METAL THICKNESS	.020	.030	.035	.040	.050	.060	.078	.093	.125
G-CAP	244	254	254	254	255	255	266	266	266
PRESSURE	300	400	500	650	750	800	1,000	1,200	1,400
SQUEEZE CYCLE	25	25	25	25	30	30	30	35	35
UP-SLOPE CYCLE	---	---	---	---	4	4	4	4	5
UPSLOPE KILOAMPS	---	---	---	---	2.0 to S.C.*	2.0 to S.C.*	2.0 to S.C.*	2.0 to S.C.*	2.0 to S.C.*
WELD CYCLE	6	8	9	10	7	8	10	12	10
KILOAMPS	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.5	13.5
COOL CYCLE	---	---	---	---	1	1	1	1	1
WELD CYCLE	---	---	---	---	7	8	10	12	10
KILOAMPS	---	---	---	---	10.5	11.0	11.5	12.5	13.5
COOL CYCLE	---	---	---	---	---	---	---	---	1
WELD CYCLE	---	---	---	---	---	---	---	---	10
KILOAMPS	---	---	---	---	---	---	---	---	13.5
HOLD CYCLE	3	4	4	5	5	10	10	15	20

*S.C. = Starting Weld Current

G-CAP® LINEAR STEPPER

TOTAL WELD COUNT	500	1,000	3,000	5,000	7,500	10,000	12,000
TOTAL AMPS BOOST	600	1,000	3,000	5,000	6,800	8,400	9,200
AMPS BOOST PER WELD	1.20	.88	.88	.88	.60	.60	.60

The above schedules and stepper is only meant to be a guide and will require adjustments to fit the application.

- 1) The two opposing G-CAP® electrodes must align properly. In case of misalignment, use a dome or a large radius electrode for the proper contact surface area.
- 2) Determine the current which produces an acceptable weld nugget. Introduce a manual or a programmed stepper schedule that produces consistent quality weld nuggets for the life of the electrodes.
- 3) The G-CAP® electrodes are available in male (prefix MGXXX) and female (prefix MPGXXX) tapers. Offset noses (MGDXXX, MPGDXXX) are available in all three electrode diameters.

About the Company » With its roots to 1916 as the Mallory Metallurgical Company, CMW operates in three primary business units dedicated to silver-based electrical contacts, tungsten-based high density metals and copper-based resistance welding consumables. Numerous organizations have repeatedly recognized our company and its associates for safety, quality and continuous improvement programs. With an employment base including over 1,000 years experience in chemistry, metallurgy, manufacturing engineering and other industrial technologies, CMW operates a range of capabilities across the spectrum of manufacturing in its 6+ acre complex in the center of the United States.

We stand ready to assist you!

CMW is ISO 9001:2000 certified.

For more information about CMW® G-CAP® electrodes, please call our office or visit our website at www.cmwinc.com.

RESISTANCE WELDING