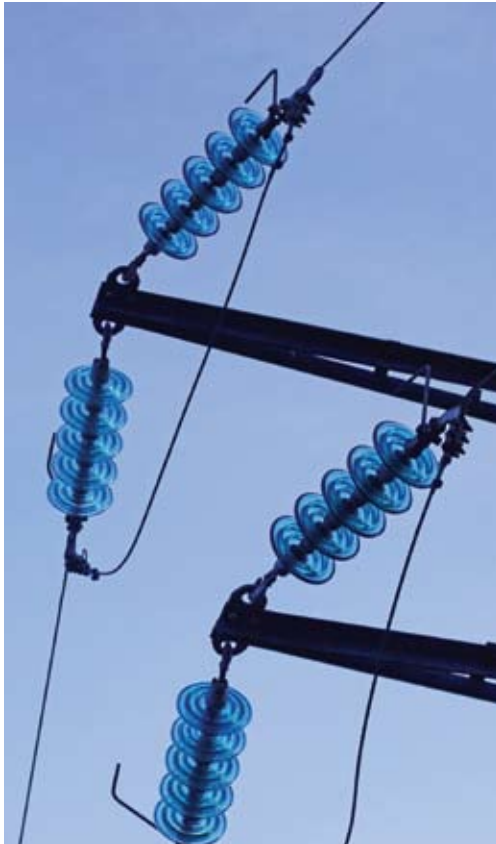


EXPERIENCE, DEDICATION & QUALITY

ELKONITE® CONTACTS



CMW ELECTRICAL CONTACTS » CMW produces dozens of specialty contact materials to meet the diverse requirements of our customers including Tungsten, Silver and Molybdenum bearing Elkonite® and Silver semi-refractory materials. The Silver-semi-refractory materials have relatively high electrical conductivity combined with other desirable features such as low stable contact resistance and excellent resistance to sticking and welding. Elkonite® and Silver semi-refractory materials are not true alloys, but powder metallurgy materials that exhibit good non-sticking properties and resist arc erosion.

CMW Elkonite® contact materials are a family of unique composite materials consisting of Tungsten, Molybdenum, or Tungsten Carbide combined with Silver or Copper. They are excellent contact materials for heavy duty switching applications. The high melting temperatures and high strength of the refractory metals give them a high resistance to arc erosion, welding, mechanical wear and deformation. The high conductivity metals provide good electrical and thermal conduction and a low contact resistance.

Common applications for CMW Elkonite® contact materials include aircraft circuit breakers and relays, light rail contactors, electric power transformer load tap changers, reclosers and vacuum switchgear, breakers and interrupters.



ELECTRICAL CONTACTS

TYPICAL PROPERTIES OF COMMON CMW ELKONITE® MATERIALS

ELKONITE® MATERIAL	COMPOSITION % BY WEIGHT	COMPOSITION % BY VOLUME	ELECTRICAL CONDUCTIVITY % IACS	HARDNESS ROCKWELL B	DENSITY G/CM3
20S	73 W / 27 Ag	60W / 40Ag	49	90	15.72
35S	65 W / 35 Ag	50W / 50Ag	55	78	14.77
50S	51 W / 49Ag	36W / 64Ag	65	55	13.48
2110	10 W / 90 Ag	6W / 94Ag	92	41	10.37
G12	35WC / 65Ag	27WC / 73Ag	57	57	11.72
G14	60WC / 40Ag	50WC / 50Ag	37	100	12.97
G17	60Mo / 40Ag	60Mo / 40Ag	45	82	10.22
G18	50Mo / 50Ag	50Mo / 50Ag	55	67	10.23
1W3	55W / 45Cu	36W / 64Cu	53	77	12.50
3W3	68W / 32Cu	50W / 50Cu	50	90	13.93
5W3	70W / 30Cu	52W / 48Cu	48	95	14.18
10W3	75W / 25Cu	58W / 42Cu	45	98	14.84
30W3	80W / 20Cu	65W / 35Cu	41	103	15.56
50W3	90W / 10Cu	80W / 20Cu	35	27 (HRC)	17.16

CMW'S COMMITMENT » SUPERIOR QUALITY

CMW enjoys a long history of producing superior quality in all its products. As an ISO 9001:2000 certified facility, CMW takes great pride in managing and continuously improving its robust quality system. The CMW quality system is focused on ensuring that quality is reinforced at every step of managing a customer order. Many of the products CMW manufactures involve a significant amount of critical detail that must be accommodated with the highest degree of accuracy.

CMW actively encourages and expects every employee to participate in the process of improving all elements of the business with which they come into contact. CMW's employees understand that only by way of continuous improvement will they be able to keep the company's leading position in place in an ever-more competitive global economy. CMW employs professionals including chemists, metallurgists, metallography technicians, and dedicates its facilities and equipment to the quality function of our business. CMW has a first-tier reputation for quality in all markets it serves and we are dedicated to continued investment in all of these assets to protect this reputation.

CMW wants our customers and prospective customers to know that commitment to their overall quality experience is of paramount importance. Customer satisfaction at all levels is our own expectation.

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 Electrical Contacts, please call our office or visit our website at www.cmwinc.com.

ELECTRICAL CONTACTS