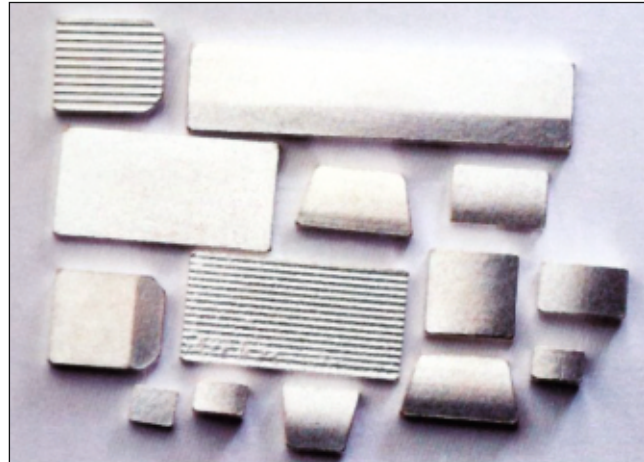


# Silver Tungsten & Silver Tungsten Carbide

SILTUNS / SILTUNS C

## Silver Tungsten - SILTUNS

The silver and tungsten composite group combines the high thermal and electrical conductivity of silver with the high erosion resistance of the high melting tungsten. These materials are also characterised by their high strength and their resistance to welding or sticking. They are principally made by infiltration and the nominal silver content varies from 20-50%. By increasing the amount of tungsten, the hardness and welding is reduced. This composite group of alloys is specially preferred for use in air.

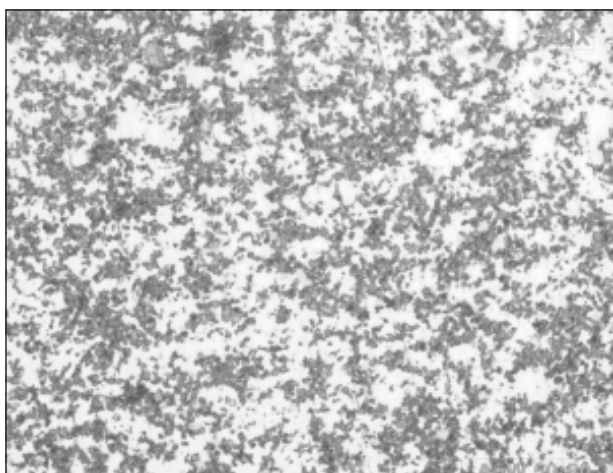


On account of their excellent properties, silver tungsten materials have found a wide field of applications. They are used successfully with high tungsten content as burn-off contacts for large low-voltage circuit breakers, and with lower contents as contacts carrying a steady line current for moulded case circuit breakers and in various protective circuit breakers. These contacts are also used in high current contactors where resistance to contact welding and arc erosion are required.

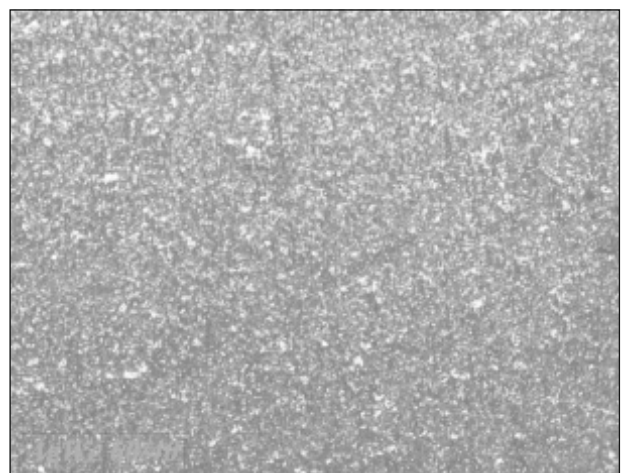
## Silver Tungsten Carbide - SILTUNS C

The silver and tungsten carbide composites exhibit initial resistance to formation of surface films and possess good antiweld and arc erosion resistance. These are specially used for devices requiring more consistent millivolt drop as compare to silver tungsten.

*Modison manufacture these composites by powder metallurgy: Pressed parts are sintered and infiltrated by silver in liquid phase.*



SILVER TUNGSTEN



SILVER TUNGSTEN CARBIDE

# SILVER TUNGSTEN & SILVER TUNGSTEN CARBIDE ELECTRICAL CONTACTS

## TYPICAL PROPERTIES

MATERIAL NOMINAL COMPOSITION	DENSITY g/cm <sup>3</sup>	HARDNESS HV 10	ELECTRICAL CONDUCTIVITY	
			% I.A.C.S.	m/Ωmm <sup>2</sup>

## SILVER TUNGSTEN - SILTUNS

SILTUNS - 80	16.1 - 16.5	180 - 240	31 - 39	18 - 23
SILTUNS - 75	15.5 - 15.9	170 - 220	32 - 43	19 - 25
SILTUNS - 70	15.0 - 15.4	160 - 200	34 - 44	20 - 26
SILTUNS - 65	14.5 - 14.9	150 - 190	38 - 46	22 - 27
SILTUNS - 60	14.0 - 14.4	140 - 170	41 - 50	24 - 29
SILTUNS - 50	13.2 - 13.6	120 - 150	45 - 55	26 - 32

## SILVER TUNGSTEN CARBIDE - SILTUNS C

SILTUNS C - 65	13.0 - 13.4	160 - 200	34 - 43	20 - 25
SILTUNS C - 50	12.2 - 12.6	140 - 180	38 - 46	22 - 27
SILTUNS C - 40	11.6 - 12.1	120 - 160	41 - 52	24 - 30

**MODISON**  
THE SILVER PEOPLE

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