

Wire Preheating Systems

Preheaters from Beta LaserMike provide uniform, in-process wire heating to eliminate insulation voids in primary cables. When a wire is preheated for only fractions of a second by a low frequency (50/60 Hz) heat cycle, the heat is unevenly applied to the wire, resulting in hot and cold spots. When high frequency preheating is used, more heat cycles are applied to the wire, ensuring more consistent heating all along the length of the wire. For this reason, all Beta LaserMike Preheaters use high frequency heating.

- Safety features include wire break detection, current overload sensors, and a wire path that is concealed behind an electrically locked door
- A facility to fit an optional external temperature controller is provided on all models, allowing compensation for low speed applications and varying input temperatures
- All Preheater components are carefully designed to ensure that power losses are minimized and that all input power is used to heat the wire
- Each Capstan Preheater uses an inverter to drive an AC capstan motor for reduced maintenance



Preheater Models

Model	OD range	Max line speed	Pulley size	Power output	Max loop voltage
MCS 120L0817	0.28 – 1.4 mm (0.01– 0.055 in.) 29 – 15 AWG	1500 m/min. (4900 ft/min.)	2 x 120 mm (2 x 4.7 in.)	8 kVA	17 V
MCS 280L1640	0.45 – 2.8 mm (0.02– 0.11 in.) 25 – 9 AWG	2500 m/min. (8200 ft/min.)	2 x 280 mm (2 x 11 in.)	16 kVA	40 V
MCS 190L1640	0.37 – 1.4 mm (0.015 – 0.055 in.) 27 – 15 AWG	2500 m/min. (8200 ft/min.)	2 x 190 & 2 x 120 mm (2 x 7.5 in. & 2 x 4.7 in.)	16 kVA	40 V

- Max wire temperature is 370° F (190° C) for MCS 120 and 280.
Max wire temperature is 750° F (400° C) for MCS 190.
- Pulley sleeve is contact/insulating for MCS 120 and 280.
Pulley sleeve is ceramic for MCS 190.