RAPID DEFLAGRATING CORD (RDC)

Rapid Deflagrating Cord (RDC) transfer line is a linearized metal sheathed propagation cord that uses a high temperature thermally stable energetic material to provide energy to provide signal transmission, heat / ballistic pressure for ignition and / or actuation. The energetic material has an extremely high deflagration (burn rate) that does not transition to a detonation. Additional protection to the outer metal sheath can be incorporated with the use of plastic extrusions or braided textiles / stainless steel wire.

APPLICABLE SPECIFICATIONS

Caloric Output: 700 Calories per gram minimum
 Generates a flame pattern of 5-8 inches using a nominal 6 grains/foot lead sheath

Burn Rate: Typical deflagration rate in low coreloads (2-6 grains/foot) is 8000 in/sec and will be 12,000 in/sec for coreloads in the 10 grains/foot or higher

Operating Temperature: -320 °F to +700 °F

Thermal Stability: +650° F for 24 hours (depending on sheath material)

RDC Ignition Methods: Initiated at either end by:
 an electrical pyrotechnic initiator
 a military grade percussion primer
 a blasting cap
 another length of RDC

Available Sheath Material:
 Lead
 Tin (Patented)
 Aluminum
 Silver