SP LICING TECHNIQUES
SPLICING MACHINE
PARTS OF INTERNAL CABLE OR FIBER DROP WIRE
STEPS FOR FIBRE OPTICS SPLICING

STEP 1: PREPARE THE WORK AREA

- When preparing the work area make sure you have the following items:
  - Fusion Splicer
  - Precision Cleaver
  - Cinbin
  - Lint free tissues
  - Isopropyl alcohol
  - Strippers
  - Kevlar scissors
  - Splice Protectors
  - Rotary Cable Slitting & Ringing Tool
STEPS FOR FIBRE OPTICS SPLICING

STEP 2: REMOVE THE CABLE JACKET FROM THE DROP WIRE OR INTERNAL CABLE USING A ROTARY CABLE SLITTING & RINGING TOOL OR STRIPPER
STEPS FOR FIBRE OPTICS SPLICING

STEP 3: CUT THE KEVLAR TO APPROPRIATE LENGTH USING YOUR KEVLAR SCISSOR.

STEP 4: REMOVE CLADDING FROM DROPWIRE OR INTERNAL CABLE.
STEPS FOR FIBRE OPTICS SPLICING

**STEP 5: PLACE THE SLEEVES**

**STEP 6: STRIP THE COATING**
STEPS FOR FIBRE OPTICS SPLICING

STEP 7: CLEANING THE CORE FIBRE WITH ISOPROPYL ALCOHOL

STEP 8: CLEAVING THE CORE FIBRE
STEPS FOR FIBRE OPTICS SPLICING

STEP 9: PLACE THE FIBRE IN THE SPLICING MACHINE (fibre should be placed 3mm before electrode)

STEP 10: SPLICE THE FIBRE BY PRESSING SET ON THE SPLICING MACHINE (Loss value permissible should be from 0.05dB to 0.10dB)
STEPS FOR FIBRE OPTICS SPLICING

STEP 11: PLACE THE SPLICE PROTECTOR ON THE SPLICING AND PLACE IT INSIDE THE HEATING CHAMBER AND PRESS THE HEAT BUTTON ON THE SPLICING MACHINE.

STEP 12: INSTALL THE REMAINING FIBRE AND THE SPLICE IN THE SPLICING TRAY AFTER A COOLING TIME OF 3 MIN AND CLOSE THE TB
AVOIDING COMMON SPLICING ERRORS

**Good Splice**
Upon inspection with a microscope good splice will show no visible signs of being two joined fibres and no defects.

**Dark Line**
A line visible through the splice can indicate that the arc was not strong enough to sufficiently melt the fibres prior to stuffing.

**Air Bubble**
Air bubbles in joint are caused by poor cleave or dirt on fibre end face.

**Necking**
Insufficient pressure during stuffing.

**Swelling**
Too much pressure during stuffing.

**Too Much Arc**
Molten ends producing 'pin head' effect and may be caused by arc current too high or arc current too long.

**fibres Too Far Apart**
Initial gap set between fibres too wide thus fibres do not meet when their ends are molten.