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Brief B69-10190

NASA TECH BRIEF

Tools for Applying Lead Tape to FCC for Chemical Stripping

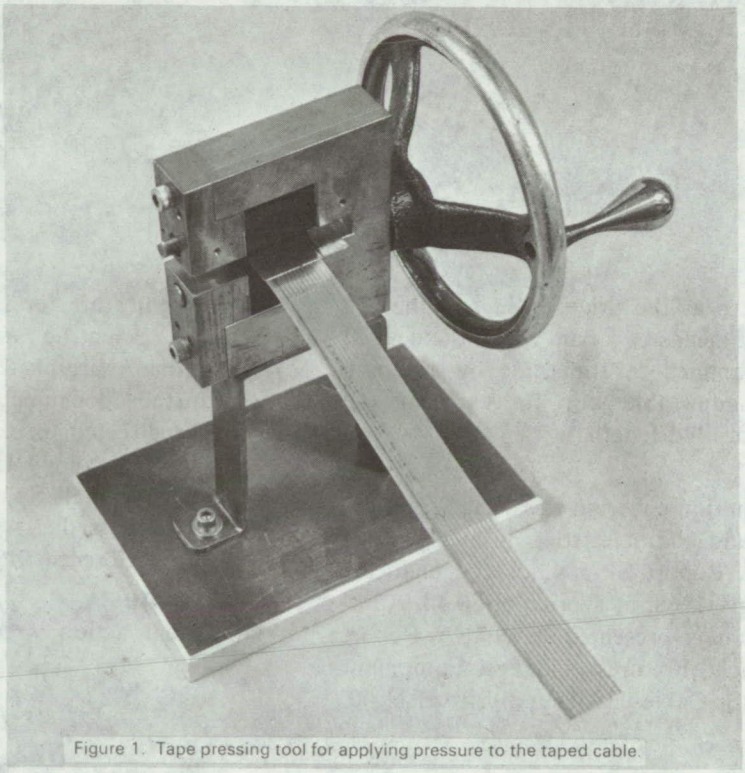

Figure 1. Tape pressing tool for applying pressure to the taped cable.

Flat conductor cabling (FCC) lends itself to modern circuit design for application where low packaging density, low cost, short lead time, high reliability, and uniform electrical characteristics are major considerations. Increased application of FCC has resulted in the development of two tools to facilitate chemical stripping of the cable insulation.

The problem:

When adhesive lead tape is applied to flat conductor cable (FCC) to protect the insulation from a chemical stripping solution, it is necessary that the tape be pressed tightly against the insulation at a certain distance from the end of the cable.

The solution:

A tape pressing tool and a taping fixture have been designed to accomplish these requirements.

How it's done:

The tape pressing tool is equipped with two rubber rollers that apply pressure when the taped cable is rolled between them. The bottom roller is actuated by

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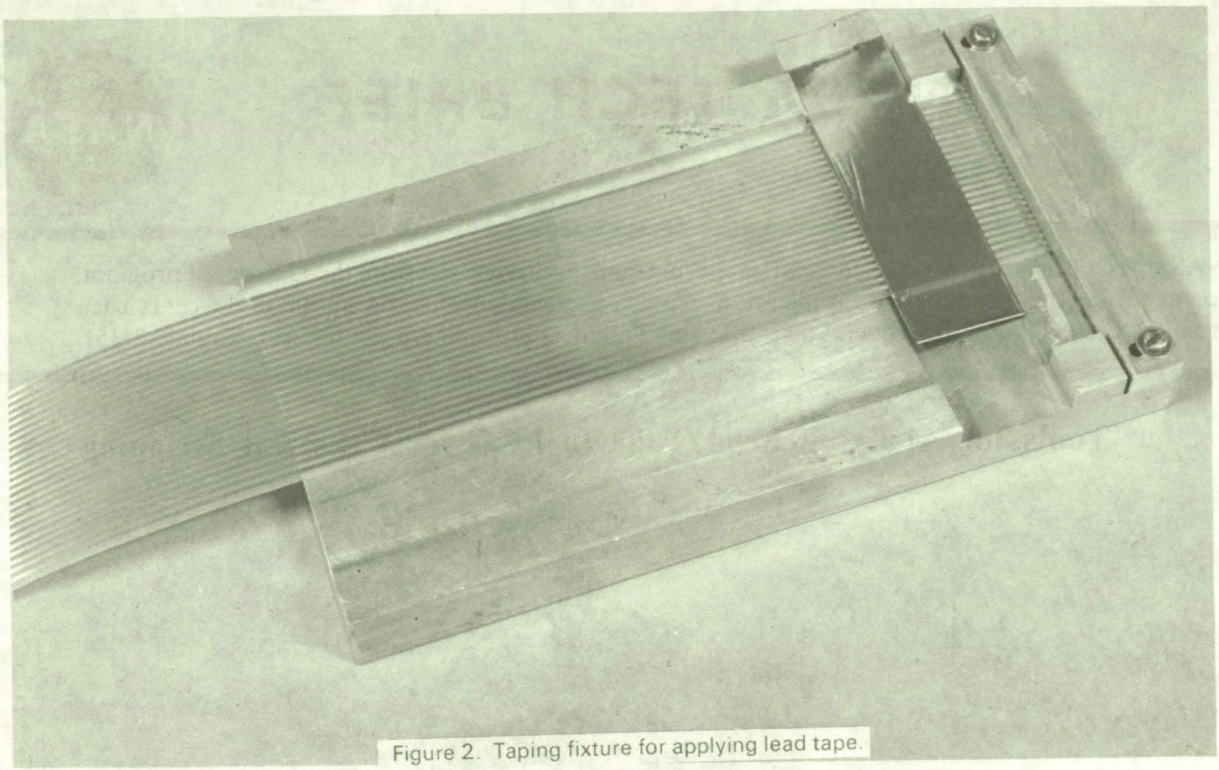

Figure 2. Taping fixture for applying lead tape.

a handwheel to serve as the drive roller and the top roller is adjusted by means of a cam to set the desired pressure. Tape is applied to the cable by a taping fixture having an adjustable stop for exposing the conductors to the desired length.

Notes:

1. Technical information covering the design, fabrication, assembly and characteristics of FCC is presented in NASA Report SP-5043, Flat Conductor Cable Technology, 1968, at a price of $0.40. Additional information is presented in NASA Report SP-5924(01), Tools, Fixtures, and Test Equipment for Flat Conductor Cables, 1968, at a price of $1.00. Both reports are for sale by the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151.
2. No further documentation is available. Inquiries may be directed to:

   Technology Utilization Officer
   Marshall Space Flight Center
   Huntsville, Alabama 35812
   Reference: B69-10190

Patent status:

No patent action is contemplated by NASA.

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