

MICROFORM

1. Microforms are a natural solution for the growing paper storage problem that exists in just about every organization. The storage problem should, however, be viewed from an overall systems viewpoint. All too often filming and storage are accomplished without much thought given to eventual retrieval needs.

Microform Type

2. The standard type of microform is roll film, 16 mm being used for letter and legal-sized pages, while drawings, maps, newspapers, etc. are on 35 mm. It is the cheapest and fastest method of micro-recording in terms of recording and processing hardware. The use of cartridges has added slightly to the price of processing but has greatly increased ease of handling and film protection. The main problems with roll microfilm are locating the particular frame of information required, the cost of viewers, reproduction and the large volume of information contained on one cartridge. The latter disallowing cheap and widespread distribution. This is a poor choice for high-volume retrieval.

3. Automatic searching of cartridges has been made possible by the addition of coded patterns onto the film. A logical question can then be posed, the appropriate cartridge mounted and the system will automatically scan the entire microfilm for the desired combination of retrieval terms. For large volume collections, this becomes very burdensome since many cartridges may have to be mounted and dismounted. A further limitation is the amount of code which can be applied to any specific image. Furthermore, automatic equipment of this nature is fairly expensive and cannot be made readily available throughout an organization.

4. The other microform consists of individual 'cards' of microfilm, called microfiche, which contain substantial amounts of generally related data. Magnification of 24 times and 48 times are being adopted as international standards, the latter accommodating approximately 200 images per four-by-six inch fiche. Production of the original fiche requires more sophisticated and expensive equipment than for roll film. Subsequent cheaper duplication, the greater ease of microfilmed information dissemination and the availability of inexpensive viewers make up the added initial expense. One of the objections to microfiche seems to be the ease of loss. Fiche jacket cartridges have been introduced to reduce this risk. The needs for these are many and are necessary for the storage of fiche masters.

5. Another form of unitized microfilm is the single frame jacket. This looks similar to the fiche but each element is separately held in a jacket for easy replacement. The original development of jacket fiche was to provide a cheaper way of fiche production. Roll film equipment is normally used for the filming. Such an approach is useful where frequent individual frame changes are required, such as catalogue updates. The major drawback is that jacket fiche do not conform to general microfiche standards.

6. A new type of fiche termed ultra-fiche has recently been introduced. An ultra-fiche can put 3200 pages on a four-by-six inch sheet of film. The disadvantage being the relatively high cost of master preparation (\$500 per ultra-fiche, as compared to \$5 per microfiche), limited viewer availability and to some extent too much material on a single fiche.