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Improved Diamond Coring Bits Developed for Dry and Chip-Flush Drilling

Two new rotary diamond bit designs enhance the usefulness of this tool for exploratory and industrial core-drilling of hard, abrasive mineral deposits and structural masonry. In one design, the bit operates with a chip-flushing fluid, as do conventional bits. In the second, the bit includes an auger section which removes the drilled chips, obviating the need for a flushing fluid. Both bits have a longer operating life than that of previous designs. In addition, the bits with auger sections are particularly useful in drilling operations when flushing agents cannot be tolerated. Examples of such operations are decorative stone quarrying, where stains from flushing liquids would increase finishing costs, and masonry wall drilling in hospitals, hotels, and food-processing plants, where disposal of the liquids would be a problem.

Note:

Requests for further information may be directed to:

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Reference: B71-10358

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to:

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Source: W. R. Hampe, A. B. Simon, W. H. Hampton, and W. E. Decker of Westinghouse Electric Corp. under contract to Marshall Space Flight Center (MFS-21111)

Category 07

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