



Dr. H. Tracy Hall holds 20-carat diamond cylinder, the world's largest known man-produced diamond. The industrial stone was produced at Provo lab.

SEP 24 1970

# Not Liz Taylor's, But Rock's A Gem

DESERET NEWS

PROVO — The world's largest manufactured diamond—a 20 carat piece larger than a toothpaste cap—has been produced by a team of Utah scientists at a private laboratory here.

The unattractive gray-black stone won't ever make it as jewelry, but it is expected to have major impact on the nation's \$100 million-a-year diamond tool industry.

The diamond was unveiled by Dr. H. Tracy Hall, president of Megadiamond Corp., who in 1954 was the first man to create artificial diamonds in the laboratory.

Hall, who also is a professor at Brigham Young University,

said it is within his firm's capability to create manufactured diamonds up to 100 carats and that commercial production could start immediately.

Gov. Calvin L. Rampton hailed the creation of the diamond as a "technological breakthrough of the highest order."

The manufactured diamond was created by subjecting natural or synthetic diamond particles to enormous pressure and temperatures high enough to melt steel.

The resulting product is tough as the hardest natural diamonds, but doesn't have to go through an expensive

grinding process to get the proper shape. Hall explained.

The Megadiamond stone can be formed directly into virtually any desired shape and "opens up limitless possibilities" for industrial use, he noted.

Dr. Bill J. Pope, who collaborated in the project with Hall and Dr. M. Duane Horton, said the new stone "has far greater strength than existing industrial diamond materials."

In addition, natural industrial diamonds can only work at certain angles because they tend to chip. The Megadiamond stone is a many-  
See ARTIFICIAL on Page B-2



# Artificial Diamond

SEP 24 1970

## World's Largest

DESERET NEWS

Continued from Page B-1

crystallized material of uniform hardness and the angle at which it can be used is not as critical, he explained.

The stone doesn't look anything like a sparkling jewel "because something happens in the bonding process — we're not certain just what—that absorbs all the light in the diamond," Horton noted.

Anyway, about 80 per cent of the diamond market is in the industrial field, he added.

Hall, an award winning scientist whose, found-internationally known, found-

ed Megadiamond Corp. in 1966 to do high-pressure work with diamonds and other materials.

He produced the world's first synthetic diamonds while a researcher at General Electric's Laboratories in New York in 1954 and built the high-pressure device which opened the way for research work done in some 600 laboratories around the world today.

After leaving GE in 1955, Hall designed a new high pressure system for his own work done in some 600 laboratories around the world today. After leaving GE in 1955, Hall designed a new high pressure system for his own work done in some 600 laboratories around the world today. After leaving GE in 1955, Hall designed a new high pressure system for his own work done in some 600 laboratories around the world today.