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Invented by
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BIZDAY 6-22
ADV FOR PMS TUES JUNE 26
BUSINESS TODAY
BY LEROY POPE
UPI BUSINESS WRITER

NEW YORK (UPI) -- THE COST OF NATURAL INDUSTRIAL DIAMONDS HAS GONE UP SO FAST IN THE LAST TWO YEARS THAT A HUGE MARKET FOR SYNTHETIC DIAMOND ABRASIVES IS DEVELOPING, SAYS DR. H. TRACY HALL.

DR. HALL, WHO LED THE TEAM THAT DEVELOPED THE FIRST COMMERCIALY SUCCESSFULLY SYNTHETIC TRUE DIAMONDS AT GENERAL ELECTRIC CO. SOME YEARS AGO, NOW HEADS MEGADIAMOND CORP. OF NEW YORK, FORMED TO MAKE AND MARKET SINTERED SYNTHETIC DIAMONDS FOR CUTTING TOOLS.

"I FORESEE A MARKET OF AT LEAST \$140 MILLION A YEAR FOR MEGADIAMOND ABRASIVES," HE SAYS. MEGADIAMOND IS THE TRADE NAME FOR AN ARTIFICIAL CARBONADO DIAMOND MASS DEVELOPED BY DR. HALL THAT COMES SINTERED INTO DISCS, SQUARES AND TRIANGLES FOR INSERTION IN CUTTING TOOLS. THESE UNITS, WHICH SELL FOR AS LITTLE AS \$26, ARE SUPERIOR TO NATURAL DIAMOND BORT (DUST) IN CUTTING TOOLS AND WILL LAST 20 TO 50 TIMES AS LONG IN A CUTTING TOOL AS THE BEST TUNGSTEN CARBIDE OR OTHER NON-DIAMOND ABRASIVE, HE SAID.

FOR YEARS, THE UNITED STATES HAS BEEN THE WORLD'S BIGGEST CUSTOMER FOR INDUSTRIAL DIAMONDS USED TO CUT MOST MATERIALS EXCEPT STEEL AND IRON. THEY ARE NOT RECOMMENDED FOR CUTTING IRON AND STEEL BECAUSE OF TEMPERATURE PROBLEMS.

THE RUSSIANS AND JAPANESE HAVE INCREASED THEIR PURCHASES OF DIAMOND ABRASIVES RAPIDLY. THIS HAS CAUSED THE DEBEERS CO., WHICH CONTROLS AN ESTIMATED 80 PER CENT OF THE NATURAL SUPPLY, TO RAISE PRICES THREE TIMES IN THE PAST YEAR.

IN ADDITION, AMERICAN USERS OF IMPORTED INDUSTRIAL DIAMONDS HAVE HAD THEIR COSTS KITED BY THE TWO DEVALUATIONS OF THE DOLLAR AND WAGE INFLATION THAT HIT THE PROCESSING COST IN THE UNITED STATES.

IN 1970, THE UNITED STATES IMPORTED 13.37 MILLION CARATS OF INDUSTRIAL DIAMONDS FOR \$49 MILLION OUT OF A WORLD SUPPLY OF 38.3 MILLION CARATS. IT IS SINCE THEN THAT THE PRICE OF THE DIAMOND ABRASIVES HAS GONE UP SHARPLY.

DR. HALL'S SINTERING PROCESS MAKES POSSIBLE SYNTHETIC DIAMOND CUTTING EDGES SHAPED TO FIT A VARIETY OF TOOLS IN SIZES OF UP TO 20 CARATS. THE AVERAGE USABLE SIZE IS FAIY SMALL.

UNLIKE THE FAMILIAR SINGLE CRYSTAL GEM DIAMOND, DR. HALL'S SYNTHETIC ABRASIVE IS RANDOM POLYCRYSTALLINE LIKE THE NATURAL CARBONADO INDUSTRIAL DIAMOND. THAT MEANS IT CAN BE MOLDED INTO USEFUL FORMS AND WILL NOT SHATTER.

DR. HALL AND HIS ASSOCIATES BELIEVE THE MEGADIAMOND WILL TAKE OVER AN EVER GROWING SHARE OF THE DIAMOND ABRASIVES AND COULD GRAB 10 PER CENT OF THE MARKET FOR TUNGSTEN CARBIDE AND OTHER HIGH-QUALITY NON-DIAMOND CUTTING TOOL ABRASIVES RATHER QUICKLY.

THEY ARE SINTERED FROM EITHER ARTIFICIAL OR NATURAL DIAMOND BORT AT PRESSURES OF ONE MILLION POUNDS TO THE SQUARE INCH IN A TRI-CYLINDRICAL PRESS INVENTED BY DR. HALL.

ADV FOR PMS TUES JUNE 26

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Ardrey Public Relations Inc.

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July 2, 1973

Dr. H. Tracy Hall
president
Megadiamond Corporation
University Station
P. O. Box 189
Provo, Utah

Dear Dr. Hall:

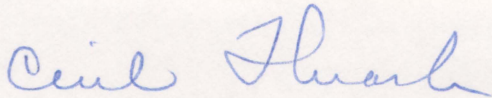
It may have come to your attention, but this teletype version of your interview by Leroy Pope of UPI may be of interest.

I'll let you know later about the fate of the DESIGN NEWS and INDUSTRY WEEK articles.

It was a great pleasure meeting you and going with you to the various press people. I learned a good deal about the history and potential of Megadiamond.

Every good wish to you and your staff. We are grateful for your cooperation.

Yours very truly,



CECIL O. THRASH

COT:mwk
Enclosure
CC-1038