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Arm Height Tolerance - Marketing is currently approaching the OEs with a deviation allowing an additional +2 mm in tolerance for nine months on all medium bowl products. Spain will correct this problem.

Spanish Flame Cut Blanks - Testing was completed this month on Humboldt housings produced for Spanish flame cut blanks. No edge milling was done. Testing was done on 380 housings P/N 303222 with the following results:

Vertical test results were very good. Brake stop results do meet our B10 requirements of 50,000 cycles, but we are concerned about the observed scatter in results. Reasons for such scatter must be further understood before Engineering approval is given.

Ford U.K. Axle Test - Testing for Ron Felgate started this month in an attempt to compare a Rockwell nonheat-treated axle housing to an Eaton nonheat-treated axle housing. The test procedure and inconclusive test results were discussed with Ron, and it was felt that a brake stop test will not show that heat-treating is not necessary. Ron will advise on how to proceed. Test loads were reduced from .6 g to .4 g decel due to the inability to hold torque on the small flanges.

Housing Prints - During J. Thompson's visit to Spain this month, many questions arose regarding print interpretation, gauging techniques for SPC, and datum definitions. These points need to be resolved as soon as possible. Knowing that print changes would have to be made based on SPC results, it is a good opportunity to set up the hypoid housing prints to the latest and greatest thinking. A task force has been recommended be set up to define the print which would include Product Engineering, Design and Drafting, Manufacturing Engineering, and Quality Assurance. Mutual agreement must be reached.

GEAR ENGINEERING

DP650 Planetary Reduction Redesign - Finite element stress analyses were completed on April 18 on the sun gear and the idler pinions for the current production design and both a 4-planet and a 3-planet replacement design. As a result of these calculations, a modified 4-planet design appears more desirable than for the 3-planet version. Marked up prints of the new design have now been provided to Design Services.

Near Net Forging of Ring Gears - A meeting was held at Manufacturing Services Center in Willoughby Hills, Ohio, on April 12 to discuss changes needed in the Battelle forging program "SPBEVL" in order to handle hypoid gears and generated gears and to open up the possibility of finishing profiles using tilt instead of modified roll. It was generally agreed that the most flexible