



SPACE  
FOR BUSINESS  
BUSINESS  
FOR SPACE



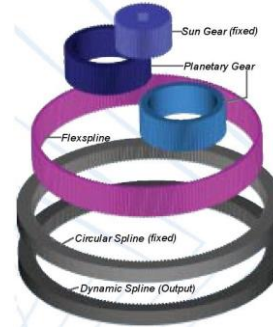
### TECHNOLOGY DESCRIPTION

The Harmonic Drive® gear provides a unique combination of precision, torque capacity and power density. These features have made it the preferred solution in a wide range of machines and devices. End-users and design engineers can rely on the quality and reliability of the Harmonic Drive® gear in machine tools, industrial robots, measuring and testing machines, medical equipment, machines for semiconductor manufacturing and in aerospace applications. A new market is developing for ever smaller gears and actuators, for a new generation of compact, lightweight machines and portable devices that can be manufactured with a minimal use of material and can operate precisely and quickly with high efficiency.



### INNOVATIVE ASPECTS

The Micro Harmonic Drive® gear as the world's smallest backlash-free precision gear meets the new market requirements: miniature dimensions and low weight, but above all precise and backlash-free positioning capability. By combining new microtechnological manufacturing techniques with the unique Harmonic Drive operating principle, a new standard has been set with respect to positioning accuracy, high torque capacity, high reduction ratios, compact dimensions and low weight for applications in a wide range of compact machines and portable devices.



### TECHNOLOGY READINESS (in space application)

TRL 9 (2024)

### COUNTRY OF ORIGIN

Germany

### LATEST UPDATE

06/2024

**TAGS** #low weight #miniature #high torque #precision gear #accurate #backlash-free

### APPLICATION AREAS

Health Energy Chemical Engineering & Biotechnology Food & Agriculture Mechanical Engineering Space technologies Transport & Logistics

TECH CARD

