

High-Precision Gear-Based Components

For more than five decades, Ashot Ashkelon Industries has been supplying aircraft manufacturers, engine manufacturers, Tier-1 system and subsystem manufacturers around the globe with top quality / high-precision gear-based components. Ashot Ashkelon Industries Ltd. is a vertical integrated global center of excellence for high precision gears, transmissions and actuation components for various applications within the Aerospace & Defense industries.

Ashot Maintains a wide range of capabilities for gear design, production and testing:

- Gear cutting and grinding: up to AGMA 14, up to module 15 and 900 mm diameter.
- Machining: up to 2000 Kg. weight.
- Gear inspection: 1000 mm diameter, 2000 mm length and 725 kg. weight.

As vertically integrated and independent manufacturer of high-precision gear-based components, Ashot Ashkelon Industries Ltd. delivers its customers with top-quality products, on time. Every time.

Ashot Ashkelon Industries Ltd. global footprint offers agility, redundant production capability and complementary gear cutting capabilities which include:

- Hobbing
- Grinding
- Honing
- Lapping
- Hypoidal Cutting
- Shaping

- Broaching
- Milling
- Turning
- Deep hole drilling and boring
- Testing facilities
- Balancing
- Heat Treatment

- Surface treatment
- Coating and painting
- Non Destructive Test (NDT)
- Laboratories
- (Chemical, mechanical and metallurgical)
- Assembly

Center of Excellence of High Precision Gears:

- Spur
- Straight bevel
- Spiral Bevel (RG)
- Zerol® bevel (RG)
- Helical
- External helical
- Internal spur gears
- Warm gears
- Crowned gears
- Splines

Custom-made gears and transmissions:

- High precision detail gears
- Parallel shaft
- Planetary
- Speed reducers / increasers
- Special reduction gear drives

Ashot Ashkelon Industries Capability List:

Hobbing:

- CNC Vertical & Horizontal
- M1 M15, D800 / H500

Gear Grinding: up to AGMA 14, D800 / H500:

- External grinding
- Internal grinding

Honing

Lapping

Hypoidal Cutting

Shaping:

- CNC & Convention
- M1 M10, D1000 / H500

Broaching: Vertical & Horizontal

Bevel Gear Cutting and Grinding (RG).

Heat Treatment

- Hardening and tempering
- Carburizing
- Nitriding
- Carbonitriding
- Nitrocarburizing
- Induction hardening

- Press quenching
- Sub Zero HT
- Solution and Aging Aluminum alloy
- Aging HT steels
- Inert gas HT
- Stress Relief

 Vacuum HT (Hardening, Quenching, carburizing, annealing, solution and aging PH steels, tempering, stress relieve)

Surface Treatment

Shot Peening:

- Automatic Shot Peening (Steel & Glass beads media)
- Robotic Shot Peening

Chemical processing:

- Cadmium
- Alodine
- Copper
- Black oxide
- Chrome
- Painting
- SS passivation

NDT

- MPI (Magnetic Particle Inspection)
- FPI (Fluorescent Penetrant Inspection)
- Nital Etch Inspection

Industry & Regulatory Standards:

- Industry Standards: American Gear Manufacturers Association (AGMA) class up to 14, Din 1
- Regulatory Standards: ISO 9001:2018 / AS9100D
- NADCAP: Heat Treatments, NDT, Conventional Machining as a Special Process, Surface Enhancement, Chemical Process









