

ULTIMATE[®] BOOST GEARSET

The Ultimate BOOST gearset is intended to help technicians and airsoft hobbyists with optimal parts for the most common custom AEG build applications. The BOOST gearset program offers high performance at a competitive price point WITHOUT compromising on quality

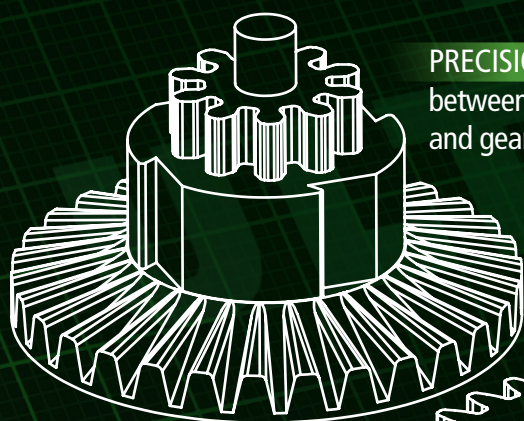
The Ultimate BOOST Gearset uses a perfect combination of high-quality metal injection molding and precision high durability CNC elements in 'high stress' areas.

In the BOOST gearset the Bevel and Sector gears are a hybrid of MIM copper steel alloy and CNC processed

hardened steel while the Spur gear is entirely crafted using our precision CNC process.

In addition, the ULTIMATE Gearset Bevel Gear in each set has been expertly crafted to mesh perfectly with the Pinion Gear on our ULTIMATE motors. This perfect fit reduces stress on the gears points of contact and ensures flawless operation.

All MIM components use a copper cementation process for strength and are vacuum hardened for ULTIMATE durability!



PRECISION gear mesh angle
between motor pinion gear
and gearbox bevel gear

GREATER versatility in
custom gearbox building

LOW STRESS ON BEARINGS/BUSHES

EXTENDED LIFETIME
through reduced wear and tear

REDUCED GEAR NOISE

ULTIMATE BOOST GEARSET

Ratio: 13.5:1 Ref. 19563

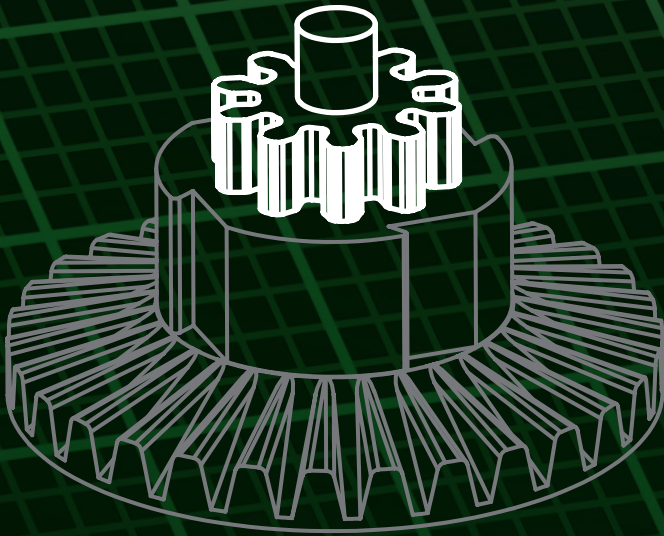
Ratio: 16.5:1 Ref. 19564

Ratio: 19.5:1 Ref. 19565



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BOOST GEARSET (BEVEL) - TECHNICAL DATA



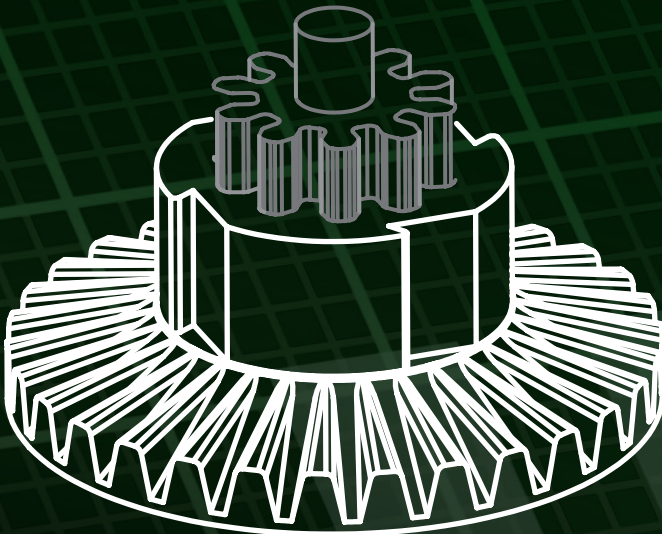
CNC MACHINED SCM415 STEEL

TEETH ROLLING PROCESS

SHAFT EMBOSSING PROCESS

LOW STRESS ON BEARINGS/BUSHES

Hardening: Done under vacuum which assure all machined tolerances are not lost under the hardening treatment. Hardness : 40-45 Rockwell



MIM (METAL INJECTION MOLDING)

**MATERIAL FX-1008 CUPRICE CEMENTED-
ALLOY STEEL COPPER INFILTRATED**

To achieve stiffness and durability when using Iron powder for MIM molding, copper alloy steel is infiltrated as well into the process. During the heating process the copper pieces dissolve into the pores of the metal and secure the gear is firmly bonded by the molten copper liquid.

COPPER CEMENTATION PROCESS

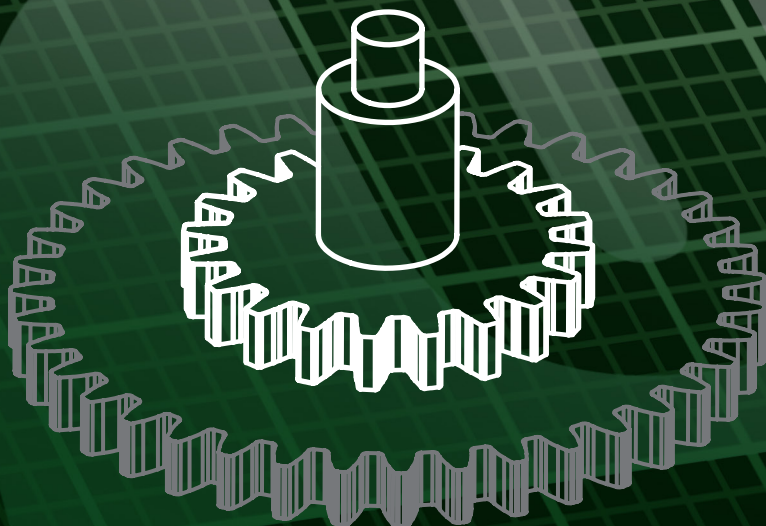
FIVE STAGE BRAKE STRUCTURE - MOLDED

Hardening: Vacuum heating treatment.
Hardness : 30-35 Rockwell



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BOOST GEARSET (SPUR) - TECHNICAL DATA



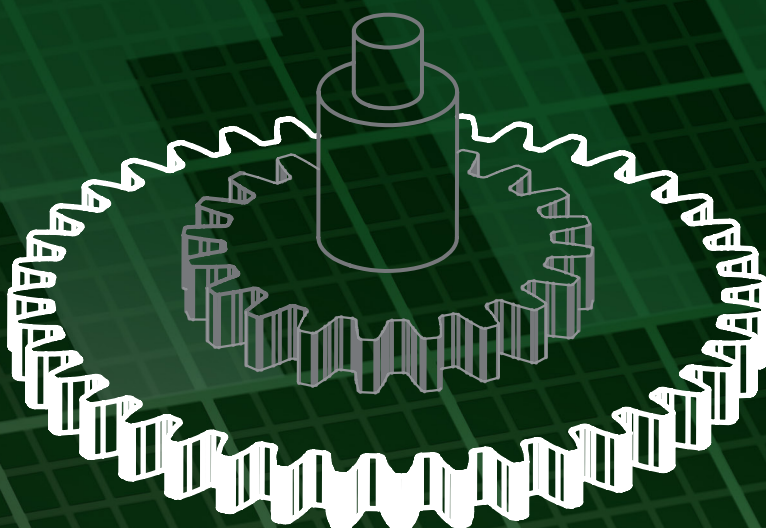
CNC MACHINED SCM415 STEEL

TEETH ROLLING PROCESS

SHAFT EMBOSSING PROCESS

Hardening: Done under vacuum which assure all machined tolerances are not lost under the hardening treatment.

Hardness: 50-55 Rockwell



CNC MACHINED SCM415 STEEL

TEETH ROLLING PROCESS

Hardening: High frequency heating treatment.

Inner hole: 30-35 Rockwell.

Outside: 45-50 Rockwell



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BOOST GEARSET (SECTOR) - TECHNICAL DATA

MIM (METAL INJECTION MOLDING)

MATERIAL FX-1008 CUPRICE CEMENTED ALLOY STEEL COPPER INFILTRATED.

To achieve stiffness and durability when using Iron powder for MIM molding, copper alloy steel is infiltrated as well into the process. During the heating process the copper pieces dissolve into the pores of the metal and secure the gear is firmly bonded by the molten copper liquid.

COPPER CEMENTATION PROCESS

Hardening: Vacuum heating treatment
Gear surface is CNC processed on the side after hardening to assure 100% contact between the gears under assembly. Hardness : 30-35 Rockwell

CNC MACHINED SCM415 STEEL

TEETH ROLLING PROCESS

MILLING PROCESS (SCREW HOLES)

Hardening: Done under vacuum which assure all machined tolerances are not lost under the hardening treatment. Hardness : 40-45 Rockwell

SCREWS CNC MACHINED 303 STAINLESS STEEL

MILLING PROCESS (HEX HEAD)

Hardening: Done under vacuum which assure all machined tolerances are not lost under the hardening treatment. Hardness : >50 Rockwell