Selection of Projects executed by our engineers

Our engineers feature about 90 years of experience in the field of gearbox design. Here is a listing of some projects accomplished successfully by them. The listing is split in the work handled mainly in the USA, and the part which was done primarily in Europe. However, whenever necessary our engineers join forces over the Atlantic ocean, to provide maximum benefit to the client.

**American branch**

- Spur and helical designs from 0.75 to 120 diametral pitch
- Agricultural tractor power train design and analysis – all aspects
- Wire rope winch design and analysis – 10,000# to 140,000#
- Slewing drive design and analysis
- Small engine cam drives in plastic
- Planetary gear heads
- Planetary final drives
- Linear actuator drives utilizing crossed axis helical gearing
- Automotive actuator transmissions using plastic and/or powder metal gears
- Aero space actuator drives used in positioning and latching systems
- Down hole drill drive gearing
- Motorcycle transmission gearing
- Gearing for power tools – saws, drills, etc.

**Swiss branch**

- Lay-out of a 2-speed-gearbox for a drilling machine
- Optimizing a gear drive of a Color-Printer (30 gears in plastic)
- Verifying the resistance of shafts (when breaking, risk of people being damaged)
- Layout of a Wolfrom gear drive
- Rack-Pinion drive for an elevator
- Reengineering of a face gear drive for a dentist drilling machine
- Layout of a complete drive for a water meter mechanism
- Expertise for noise-optimization of a sewing machine
- Damage analysis and lifetime prediction of a tunnel boring machine
- Resistance and life time verifying of the complete drive of a military tank
- Lay-out of a Pinion with Open Gear drive for an emergency drive on a gondola
- Multiple stage gear drive with worms and cylindrical gears for a kitchen manufacturer (for opening of kitchen drawer)
- Design of a gear drive for a Textile Machine (Weaving machine)
- Expertise on gear damages
- Design of a 5-stage gear drive for a Control Valve
- Rack-Pinion drive for car (moving the roof window)
- Design of the gear drive of a CD player
- Worm/Spur gear drive for car air conditioner
- Design of 3 gear chain system
- Design of a wind generator gear box
- Complete drive modeling of a CVT tractor
- 4-stage-planetary gear box for space application
- Camshaft gear drive design
- Bearing calculation of a wind generator gear box
- Differential drive for an excavator
- High speed gear box design and layout for a paper machine
- Power take-off gear drive on a diesel motor
- Screw calculation of a flanged connection
- Bevel gear drive for a portable drilling machine
- Gear pumps
- Noise optimization of the drive of a medical device for diabetics
- Non-circular gear drive for a textile machine (comber)
- Face gear drive for a hair dresser machine
- Expertise for a planetary gear box in 100 ton truck