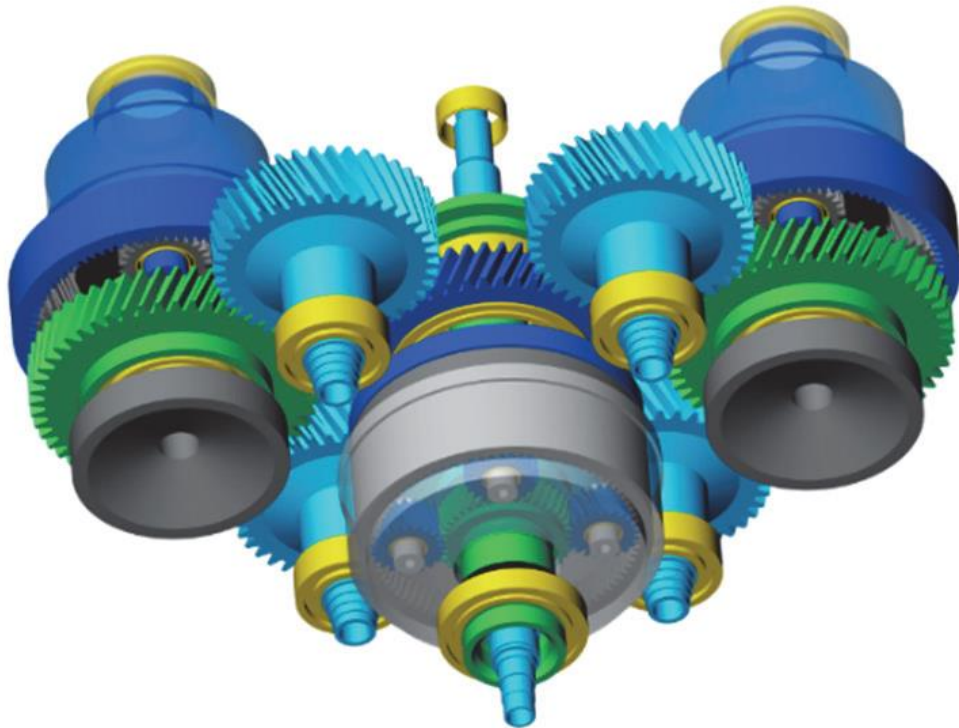


KISSsoft Training KISSsoft Fundamentals Basic Cylindrical Gear Optimization Basic Shaft and Bearings

Gleason hosts a 3-day comprehensive KISSsoft Training Class to be held January 28-30, 2020 at The Gleason Works Facility in Rochester, NY.



Day 1: KISSsoft Fundamentals Outline

The emphasis of the training is an introduction to using KISSsoft and understanding the different buttons, settings and shortcuts needed to become an efficient KISSsoft user.

Please note: Although this class is intended for new KISSsoft users, as preparation for this training we strongly recommend gaining familiarity with a KISSsoft test version and the tutorials available.

Recommended Prerequisite Classes: None

General scope of the program:

- KISSsoft general settings and buttons
- Introduction to the different dropdown menus, functions and graphics
- Accessing the modules, examples and help manuals
- General design layout practices
- Brief Introduction to KISSsys (system level design in KISSsoft)
- Understanding the KISSsoft databases on how to customize them
- Begin cylindrical gear introduction and answer Day 1 questions or additional requested topics

Day 2: Basic Cylindrical Gear Design and Optimization

The emphasis of the training is an introduction to basic cylindrical gear design and optimization techniques. Trainees will learn some basic gear theory initially, and then the proper techniques in KISSsoft to size and optimize both macro and micro geometries of cylindrical gears.

Please note: Although this class is intended for new KISSsoft users and people new to gearing, as preparation for this training we strongly recommend gaining familiarity with a KISSsoft test version and the tutorials available.

Recommended Prerequisite Classes: KISSsoft Fundamentals

General scope of the program:

Cylindrical (Spur/Helical/Planetary) Analysis:

- Techniques for a successful gear design
- Preliminary parameter and setting definitions
- Strength calculations and methods
- Specific sliding and contact ratios
- Load spectrums

Commonly Used Techniques for Optimization of gears:

- Deep tooth forms
- Rough and fine sizing
- Contact analysis:
 - Contact stiffness, contact of a gear pair under load
 - Transmission error and impact shock
 - Techniques for determination of noise and vibration reducing tooth forms
- Well balanced root/flank strength
- Balanced specific sliding and profile shifts
- Backlash and tip clearance optimization
- Tooth profile and lead modifications
 - Assessment of the manufacture of a tooth form
 - Manufacture of a tooth form using custom versus standard cutting tools

Day 3: Basic Shaft and Bearings

The emphasis of the training is an introduction to basic shafts and bearings in KISSsoft. Trainees will learn some basic shaft and bearing theory, and then the proper techniques in KISSsoft to size and optimize both shafts, bearings, and ultimately the gears affected by the deflections.

Please note: Although this class is intended for new KISSsoft users and people new to shafts and bearings, as preparation for this training we strongly recommend gaining familiarity with a KISSsoft test version and the tutorials available.

Recommended Prerequisite Classes: KISSsoft Fundamentals

Shaft Design

Shaft Editor

- Input of a single shaft with geometry, stress concentration elements, forces, bearings
- Sizing of bearings
- Sizing of cross sections for shaft strength calculation

Shaft Calculation

- Calculation of deformation (deflection lines etc.)
- Overview on shaft strength calculation
- Explanatory notes on graphics and reports
- Several stress cases
- Consideration of temperatures
- Calculation with a load spectrum
- Natural frequencies (critical speed) and buckling
- Understanding the effects of the shaft and bearing deflections on the gear teeth, and how to correct the contact pattern for an ideal face load factor and contact distribution on the gear teeth

Bearing Calculation

- Overview of calculation methods
- Influence of bearing stiffness on deformations and forces
- Influence of the inner geometry on bearing life time

Schedule:

Class Times: 8:30 AM – 4:30 PM

Lunch 11:30 AM - 12:30 PM

Pricing:

\$1,800 per person.

Lunch is included as part of the course fee in the Gleason cafeteria. [Customers will need to bring their laptops with them.](#) Gleason will provide software and training material electronically prior to the training.

Registration:

Complete the request for registration on the next page to reserve your training spot. Please include the name of the person/persons attending and any special dietary considerations. The class size will be limited to 30 and fills up fast.

Please send the completed form to the Gleason Training Department:

Attn: **KISSsoft Software Training**

Phone **(585) 256-6688**

e-mail jlabarge@gleason.com or gwrtraining@gleason.com

Receive course confirmation.

All classes at The Gleason Works Customer & Dealer Training Center are taught in English. If trainees require an interpreter, one must be provided by them or arranged through their Gleason Sales Office or representative.

Cancellations must be made at least 10 days in advance of a class. If a cancellation is received after that day but before the start of a class, the student will be charged 50 percent of all course fees. Students who do not attend a session for which they registered will be charged the full course fee.

Request for Registration

KISSsoft Training
January 28-30, 2020 The Gleason Works, Rochester, NY

Date of this request: _____

Name(s): _____

Employee of Company: _____

Company address: _____

Telephone: _____

E-mail: _____

Training Details:

Number of attendees: _____

Attendee Name(s): _____

Type of payment: Purchase Order Purchase Order Number: _____

Check Enclosed

Credit Card – (Bring your credit card to the class for payment)

Gleason Hotel Providers

Would you like Gleason Works to make a hotel reservation for you? Yes _____ No _____

If yes, please specify hotel and dates for check-in and check out. Please note that some hotels provide transportation. The Gleason Works does not provide daily transportation.

Hotel _____ Check in _____ Check-out _____

Signature: _____ Date: _____

WOODCLIFF HOTEL & SPA 199 Woodcliff Drive, Fairport, New York 14450

www.woodcliffhotelspa.com

Current Rate (one breakfast included): \$92 per night, plus tax

Reservations call: 1-800-365-3065 or (585) 248-4810 (Ask for the Gleason rate.) Complimentary shuttle service to/from Gleason is provided. (Must be arranged in advance by customer prior to arrival. 8:15 AM hotel departure to Gleason and 5:30 PM Gate 1 departure to hotel.) Shuttle service to/from airport and within a 3-mile radius of hotel is also provided by customer request.

The Woodcliff is approximately 12 miles from Gleason; estimated drive time is 20 minutes.

The approximate cost of a taxi to Gleason is \$30 (one way).

Cancellation Policy: 24 hours in advance (must cancel by 6 PM day before check-in).

HILTON GARDEN INN DOWNTOWN 155 East Main Street, Rochester, NY 14604

www.rochesterdowntown.hgi.com

Current Rate (breakfast included): \$94 per night, plus tax.

Reservations call: Toll Free: 1-877-782-9444 or 585-232-5000, then press "0" (ask for the Gleason rate).

Complimentary shuttle service to/from the airport and to/from Gleason is available. Call 585-232-5000, then press "0" when flight arrives. Shuttle service to/from Gleason **MUST** be arranged in advance.

Parking: Self-parking is available in the Stone Street Garage at a cost of \$10 per night. Valet parking is available at a cost of \$15 per night.

Cancellation Policy: 4 PM day of arrival.

Please send/submit the completed form using one of the email address below.

Attention: KISSsoft Software Training

Phone: (585) 256-6688

e-mail: jlabarge@gleason.com or gwrtraining@gleason.com

Once everything is finalized. We will follow up with a Sales Order Acknowledgment as your confirmation to attend.