

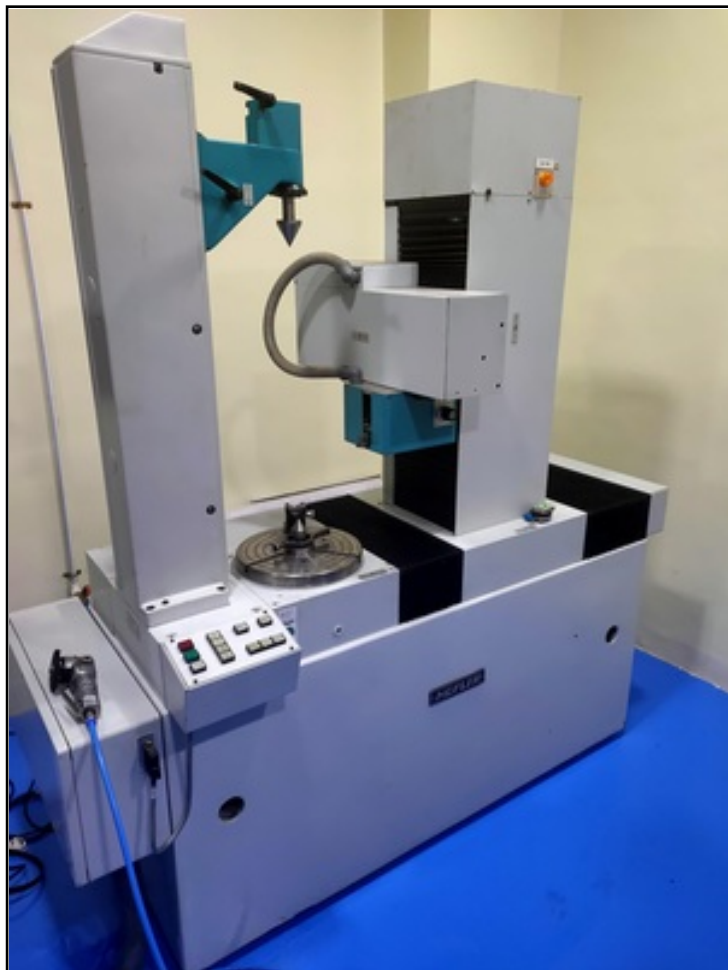
# Farrell Engineering Ltd

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## Features of GearSoft

- ✓ User friendly 32-bit software under Windows.
- ✓ Large amount of data per unit is captured resulting in high accuracy.
- ✓ Digital Filters are employed to eliminate noise.
- ✓ Time to check individual gear is reduced with simple operation.
- ✓ Online graph plotting, error & DIN, AGMA or JIS Class display on screen.
- ✓ Complete report with analysis (As per DIN standards).



## Features of GearSoft

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- ✓ Standard, Crowning, K-Chart type Evaluation of Gear.
- ✓ Four teeth's of a gear can be tested for lead & profile with report.
- ✓ Automatic saving, retrieving & viewing of Gear parameters.
- ✓ Automatic & Manual mode for selecting scales of graphs (magnification).
- ✓ Active Profile Length (With SAP & EAP & Chamfer Cuts ) calculations.



## Features of GearSoft

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- ✓ User changeable Evaluation Range.
- ✓ User specified (SAP, PCD, EAP & OD ) marks with actual Positions on the screen graphs & print reports.
- ✓ Sequential saving & erasing of graphs as well as viewing of graphs in variable magnification.
- ✓ Out of limit Errors and Classes are displayed in different colors.
- ✓ Graphs can be stored & retrieved temporarily or permanently as per user specifications in a powerful database.



## Features of GearSoft

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- ✓ Emalling of graphs and storing of graph reports in graphics file format.
- ✓ Powerful Data Backup and Data Restore Facility.
- ✓ Report on a high-resolution color or black & white Jet printer-plotter.
- ✓ All the graphs for a single gear are plotted & analysis is presented on single paper or different papers.
- ✓ Machine related user specified operator input error checks.





> Main Screen

**Gear Data**

Component Type  
 Type : Gear / Shaving Cutter  
 Component No.: 11

Show Data    New Data  
 Edit Data    Delete Data

Next

Field Name	Value
Type	Gear
Component No.	11
Component Name	
Gear Type	Spur
Face Width	25
Module	2
Number of Teeth	35
Pressure Angle (Decimal)	20
Outer Diameter	65
End Diameter	65
End of Active Profile	65
Pitch Circle Diameter	60
S.A.P. Diameter / Form Diameter	58
Start Diameter	62
Base Circle Diameter	56.392
Active Profile Length (Roll Length)	6.8
Start of Active Profile (Roll Length)	9.37
Correction Factor	0
Span Measurement	0 On 0 Teeth
Ball Diameter	0

Next

Component Type      Gear Information

Component Information      Profile Information      Helix Information

Enter Component No. upto 20 chars.

GearSoft Data Entry Screen

> Component Information Screen

**Gear Data**

Component No.: 12  
 Component Name: 12  
 Type: Gear  
 Gear Type: Spur Helical / L.H. / R.H.  
 Face Width: 25 mm    DP > mm  
 Module: 2.54 mm    10  
 No of Teeth: 35  
 Pressure Angle: 20 ° 0' 0"  
 Helix Angle: 15 ° 0' 0"  
 Base Helix Angle: 16 ° 4' 34"  
 B.H.A.: 14 ° 4' 34"

MODULE      DIMETRAL PITCH

Previous    Next

Component Type      Gear Information

Component Information      Profile Information      Helix Information

Enter Module in mm.

About GearSoft Data Entry Screen

> Profile Information Screen

**Gear Data**

Profile Information  
 Outer Diameter: 112    Dia: 88 mm  
 End Diameter: 111.5    Roll Deg: 11.84 °  
 E.A.P.: 111    Trace: 9.034 mm  
 P.C.D.: 92.036  
 S.A.P. Dia / Form Dia: 88  
 Start Diameter: 87  
 B.C.D.: 86.125  
 A.P.L. (Roll Length): 25.98  
 S.A.P. (Roll Length): 9.03  
 Total Roll Length: 35.01  
 Correction Factor: 1  
 Span Measurement: 2.54 On 3 Teeth  
 Ball / Roller Diameter: 2.1  
 Over Ball Dimension: 113.4

NOMENCLATURE OF PROFILE

Previous    Next

Component Information      Profile Information      Helix Information

Enter Form Diameter in mm.

About GearSoft Data Entry Screen

### > Helix Information Screen

Lead Data

Helix Information

Type of Lead:
 

- Standard
- Intermediate
- Cluster

Lead Measurement:
 

- Top To Bottom
- Bottom To Top

Length of Chamfer Cut Top:

Length of Chamfer Cut Bottom:

Lead Measurement Start:

Lead Measurement End:

LEAD WITH CHAMFER CUTS

Previous Next

Component Information Profile Information **Helix Information**

Enter Length of Top Chamfer Cut.

About GearSoft Data Entry Screen



### > Helix Crowning Selection Screen

Crowning Data

Helix Crowning Selection

No Crowning  
 Crowning

Crowning Selection List:

- Crowning
- Top PLUS With Crowning
- Top MINUS With Crowning
- Hollow Crowning
- Top PLUS With Hollow Crowning
- Top MINUS With Hollow Crowning

K Graph

LEAD WITH CROWNING - RH

Previous Next

Helix Crowning Selection Crowning Relief Special Crowning K Graph

Helix Crowning Profile Crowning

Select Helix Crowning.

About GearSoft Data Entry Screen



### > Helix Relief Screen

Crowning Data

Top Relief

Amount of Relief:  Tol.  $\pm$

Length of Relief:  Tol.  $\pm$

Bottom Relief

Amount of Relief:  Tol.  $\pm$

Length of Relief:  Tol.  $\pm$

LEAD WITH TOP & BOTTOM RELIEF - RH

Previous Next

Helix Crowning Selection Crowning Relief Special Crowning K Graph

Helix Crowning Profile Crowning

Enter Bottom Length of Relief Tolerance Value.

About GearSoft Data Entry Screen



> Helix K-Graph Screen

Crowning Data

Helix K-Graph				
A1:	A2:	A3:	A4:	A5:
5	6	4	5	6
R1:	R2:	R3:	R4:	
2	3	2	3	

**LEAD CROWNING WITH K-GRAPH - RH**

Previous Next

Helix Crowning Selection    Crowning    Relief    Special Crowning    K-Graph

Enter Length Value of K-Graph.

About GearSoft Data Entry Screen



> Profile Crowning Screen

Crowning Data

Crowning

Amount of Crowning: 10 Tol: 2

Crowning Point: 5 Tol: 4

**PROFILE WITH CROWNING - RF**

Previous Next

Profile Crowning Selection    Crowning    Relief    Special Crowning    K-Graph

Enter Crowning Point Tolerance Value.

About GearSoft Data Entry Screen



> Profile K-Graph Screen

Crowning Data

Profile K-Graph				
A1:	A2:	A3:	A4:	A5:
5	4	3	4	5
R1:	R2:	R3:	R4:	
3	4	4	3	

**PROFILE WITH HOLLOW CROWNING WITH K-GRAPH - RF**

Previous Next

Profile Crowning Selection    Crowning    Relief    Special Crowning    K-Graph

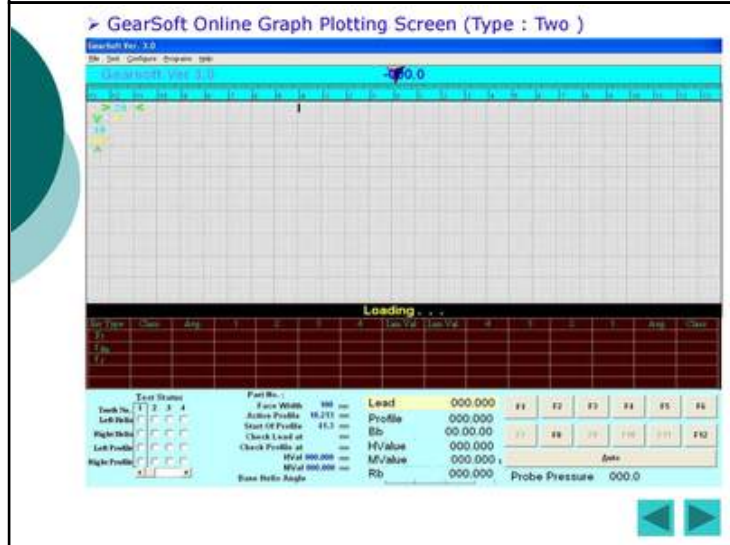
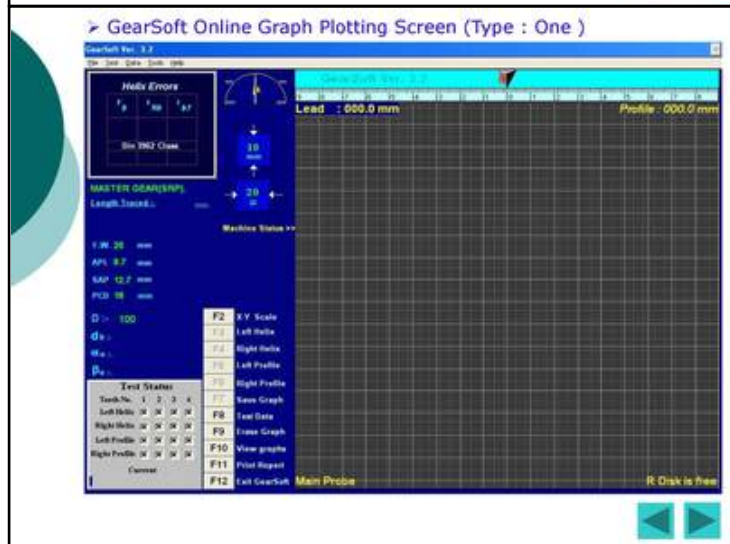
Enter Length Value of K-Graph.

About GearSoft Data Entry Screen



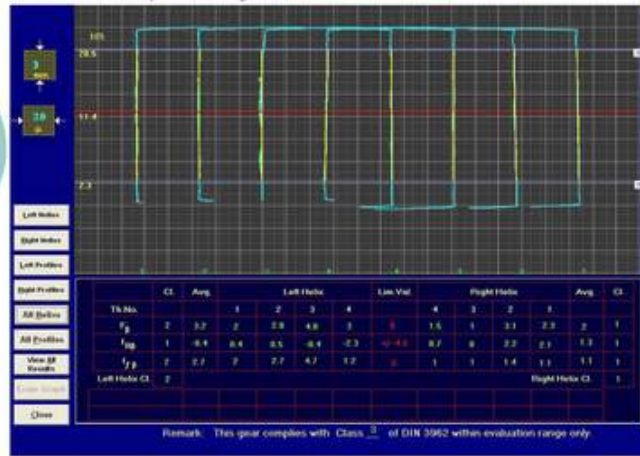


About GearSoft Data Entry Screen

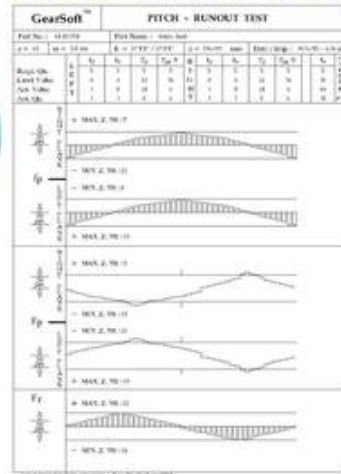




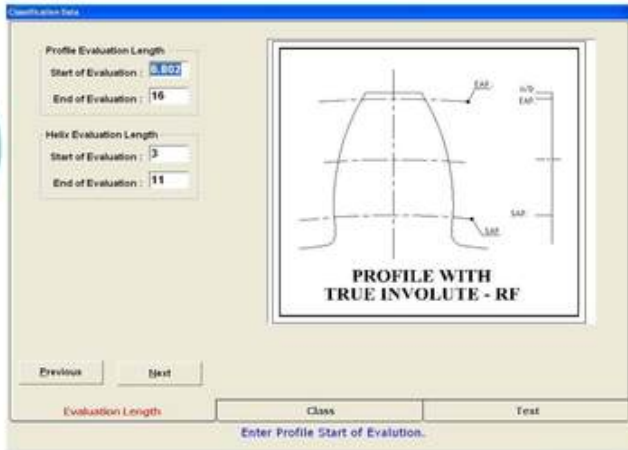
> GearSoft Graph Viewing Screen



> GearSoft Pitch + Runout Test Report



> Evaluation Length Screen



About GearSoft Data Entry Screen

> Class and Errors Selection Screen

Classification Data

Class Selection  
 Required Class :  No Tolerance  
 User Tolerance  
 DIN  
 AGMA

Profile Error Tolerances

Total Ff	7	Tol	2
Angular Fhx	5	Tol	1
Form f/f	8	Tol	2

Helix Error Tolerances

Total Fp	5	Tol	3
Angular Fhp	4	Tol	2
Form fp	5	Tol	2

Error Selection for Calculation

Profile Helix

Total Ff	Total fp
Angular Fhx	Angular Fhp
Form f/f	Form fp

Previous Next

Evolution Length Class Test

Enter Value of User Total Tolerance.

About GearSoft Data Entry Screen

> Test Selection Screen

Classification Data

Helix Inspection Diameter : 50  
 Profile Inspection Position : 15  
 Stylus Diameter : 2

Select Test :  
 Both  Only Lead  Only Profile

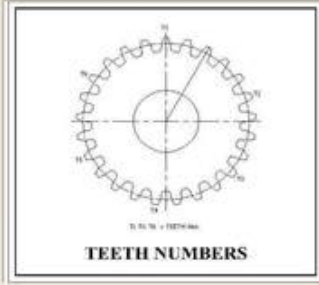
Lead Teeth Numbers to Inspect :  
 1 8 15 22

Profile Teeth Numbers to Inspect :  
 1 8 15 22

Previous Next

Evolution Length Class Test

Enter Teeth No.



TEETH NUMBERS

About GearSoft Data Entry Screen

Category	:-	Gear Related Machines	Serial No	:-	
Model	:-	EMZ400	Country	:-	Germany
Make	:-	Hofler	Type of Machine	:-	4 Axis CNC Gear Tester
Year	:-		Weight	:-	0.0
Dimensions	:-		Power	:-	
Location	:-	Mumbai Warehouse,India	Asking Price	:-	On Request

Specification :-

**Hofler EMZ-400**

**Description:-**

**4 Axis CNC Gear Tester**

Technical Specifications:

- Gear Diameter range min / max                      mm                      20 / 400
- Range of BCD                      min / max                      mm                      15 / 380
- Module                      min / max                      mm                      0.5 / 20.0

- Helix angle.	max	Deg	+ / - 60
- Face width.	max	mm	500
- Admit Between Centers	min / max	mm	20 / 1050
- Gear Height above table	min	mm	80
- Job weight capacity on table	max	Kg	350
- Linear Axes Least Count.	min	microns	0.1
- Table Indexing Least count	min	seconds	0.36
- 3-D Probe Least Count	min	microns	0.1
- Power requirement (220V AC)	max	kw	2.0

#### Standard Operating & Application Features:

1. Types of Measurements - 1.0 External / Internal Involute Spur & Helical Gear
  - 1a. Gear Tooth Involute Profile & Lead inspection
  - 1b. Individual/Adjacent/Cumulative Pitch Errors,
  - 1c. PCD Radial Run-out errors.
  - 2.0 Shaving Cutter Inspection. (Optional)
  - 3.0 Shaping Cutter Inspection. (Optional)
2. Complete Auto Cycle measurement of all parameters.
3. Machine Axes Calibration Cycle.
4. Manual Joy-stick control for axis movements.

Please note :-

we can sell machine as is where is basis (you can either use the same original software )

Or

We can change the and rebuilt the machine with New software and the features of the new software is

Briefed as attached

Description :-