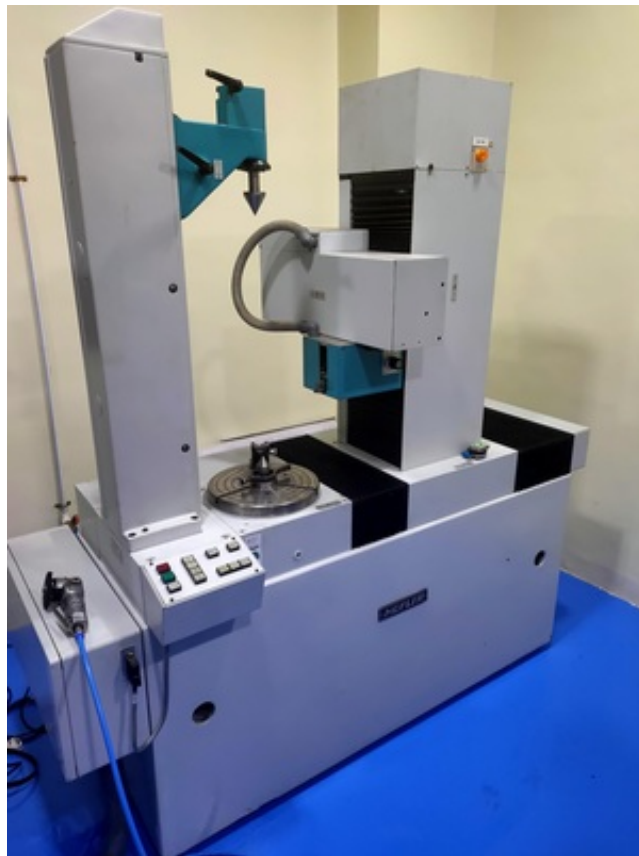








Features of GearSoft

- ✓ 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

- ✓ 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

- ✓ 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

- ✓ Emailing 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

The screenshot shows the 'Main Screen' of the GearSoft Data Entry Screen. It features a 'Gear Data' section with a table of parameters and their values. The table has two columns: 'Field Name' and 'Value'. The parameters include Component Type, Component No., Gear Type, Face Width, Module, Number of Teeth, Pressure Angle (Decimal), Outer Diameter, End Diameter, End of Active Profile, Pitch Circle Diameter, S.A.P. Diameter / Addendum Diameter, Start Diameter, Base Circle Diameter, Active Profile Length (Add Length), Start of Active Profile (Pitch Length), Correction Factor, Span Measurement, and Add Diameter. The values are displayed in a blue box. Below the table, there are buttons for 'Show Data', 'New Data', 'Edit Data', and 'Delete Data'. At the bottom, there is a 'Next' button and a 'Component Type' dropdown menu. The screen also has a 'Gear Information' section with tabs for 'Component Information', 'Profile Information', and 'Helix Information'. A prompt at the bottom says 'Enter Component No. upto 20 chars.'

Field Name	Value
Type	Gear
Component No.	11
Component Name	
Gear Type	Spur
Face Width	30
Module	2
Number of Teeth	30
Pressure Angle (Decimal)	20
Outer Diameter	66
End Diameter	66
End of Active Profile	66
Pitch Circle Diameter	60
S.A.P. Diameter / Addendum Diameter	58
Start Diameter	57
Base Circle Diameter	66.362
Active Profile Length (Add Length)	6.8
Start of Active Profile (Pitch Length)	9.37
Correction Factor	0
Span Measurement	0 Dia 0 Teeth
Add Diameter	0

GearSoft Data Entry Screen



> Component Information Screen

Enter Data

Gear Information

Component No.: 112

Component Name: 12

Type: Spur

Gear Type: ☐ Spur ☐ Helical ☐ L.H. ☐ R.H.

Face Width: 25 mm

Module: 2.54 mm DP: mm 10

No of Teeth: 35

Pressure Angle: 20° 0' 0"

Helix Angle: 15° 0' 0"

Base Helix Angle: 16° 4' 54"

I.D.H.A.: 14° 4' 34"

Previous Next

Component Type: Gear Information

Component Information Profile Information Helix Information

Enter Module in mm.

About GearSoft Data Entry Screen

> Profile Information Screen

Enter Data

Profile Information

Outer Diameter: 112 Dia: 98 mm

End Diameter: 111.5 Roll Deg: 11.84°

E.A.P.: 111

P.C.D.: 92.038 Trace: 9.034 mm

S.A.P. Dia / Form Dia: 98

Start Diameter: 87

B.C.D.: 96.125

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 Teeths

Ball / Roller Diameter: 2.1

Over Ball Dimension: 113.4

Previous Next

Component Information Profile Information Helix Information

Enter Form Diameter in mm.

About GearSoft Data Entry Screen

> Helix Information Screen

Enter Data

Helix Information

Type of Lead: ☐ Standard ☐ Intermediate ☐ Cluster

Lead Measurement: ☐ Top To Bottom ☐ Bottom To Top

Length of Chamfer Cut Top: 1

Length of Chamfer Cut Bottom: 1

Lead Measurement Start: 1

Lead Measurement End: 28

Previous Next

Component Information Profile Information Helix Information

Enter Length of Top Chamfer Cut.

About GearSoft Data Entry Screen

> Helix Crowning Selection Screen

Enter Data

Helix Crowning Selection

☐ No Crowning ☒ Crowning

Crowning

Top PLUS With Crowning

Top MINUS With Crowning

Hollow Crowning

Top PLUS With Hollow Crowning

Top MINUS With Hollow Crowning

K Graph

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: 12 Tol. ± 2
 Length of Relief: 5 Tol. ± 2

Bottom Relief
 Amount of Relief: 10 Tol. ± 3
 Length of Relief: 4 Tol. ± 2

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: 5 A2: 6 A3: 4 A4: 5 A5: 6
 R1: 2 R2: 3 R3: 2 R4: 3

LEAD CROWNING WITH K-GRAPH - RH

Previous Next

Helix Crowning Selection Crowning Relief Special Crowning K Graph
 Helix Crowning Profile Crowning

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: 9 Tol. ± 3

PROFILE WITH CROWNING - RF

Previous Next

Profile Crowning Selection Crowning Relief Special Crowning K Graph
 Helix Crowning Profile Crowning

Enter Crowning Point Tolerance Value.

About GearSoft Data Entry Screen

> Profile K-Graph Screen

Crowning Data

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

PROFILE WITH HOLLOW CROWNING WITH K-GRAPH - RF

Previous Next

Profile Crowning Selection Crowning Relief Special Crowning K Graph
 Helix Crowning Profile Crowning

Enter Length Value of K Graph.

About GearSoft Data Entry Screen

Crowning Data

Tip Relief

Amount of Relief: Tol.:

Length of Relief: Tol.:

Root Relief

Amount of Relief: Tol.:

Length of Relief: Tol.:

TIP PLUS

TIP PLUS Amount: Tol.:

**PROFILE WITH
TIP & ROOT RELIEF - RF**

Previous Next

Profile Crowning Selection Crowning Relief Special Crowning K Graph

Helix Crowning Profile Crowning

Enter Length of Root Relief Tolerance.

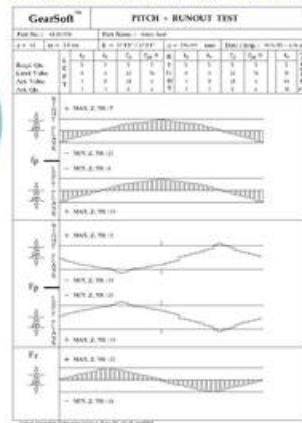
[illegible]

Microsoft Excel 2003
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Test Type	Class	Ang	1	2	3	4	Test Val	Test Val	4	5	6	7	Ang	Class
Test Results Test No. 1 2 3 4 Lead Bb High Bb Lead Profile High Profile Part No. 988 Force Width 10.215 Action Profile 45.2 Start of Profile 45.2 Check Lead of Check Profile at Width 100.000 MVal 100.000 Lead 000.000 Profile 000.000 Bb 000.000 HValue 000.000 MValue 000.000 Rb 000.000 Probe Pressure 000.0														

[illegible]

> GearSoft Pitch + Runout Test Report



> Evaluation Length Screen

Evaluation Length

Profile Evaluation Length
Start of Evaluation: 0.507
End of Evaluation: 16

Helix Evaluation Length
Start of Evaluation: 3
End of Evaluation: 11

PROFILE WITH TRUE INVOLUTE - RF

Previous Next

Evaluation Length Class Test

Enter Profile Start of Evaluation.

About GearSoft Data Entry Screen

> Class and Errors Selection Screen

Class Selection

Required Class : No Tolerance
User Tolerance
DIN
AGMA

Profile Error Tolerances

Total Ff: 7 Tols: 2
Angular fth: 5 Tols: 1
Form f: 8 Tols: 2

Helix Error Tolerances

Total Fp: 5 Tols: 3
Angular fth: 4 Tols: 2
Form fp: 5 Tols: 2

Error Selection for Calculation

Profile Helix
Total Ff Total Fp
Angular fth Angular fth p
Form f Form fp

Previous Next

Evaluation Length Class Test

Enter Value of User Total Tolerance.

About GearSoft Data Entry Screen

> Test Selection Screen

Test Selection

Helix Inspection Diameter: 60
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

TEETH NUMBERS

Previous Next

Evaluation Length Class Test

Enter Teeth No.

About GearSoft Data Entry Screen

