

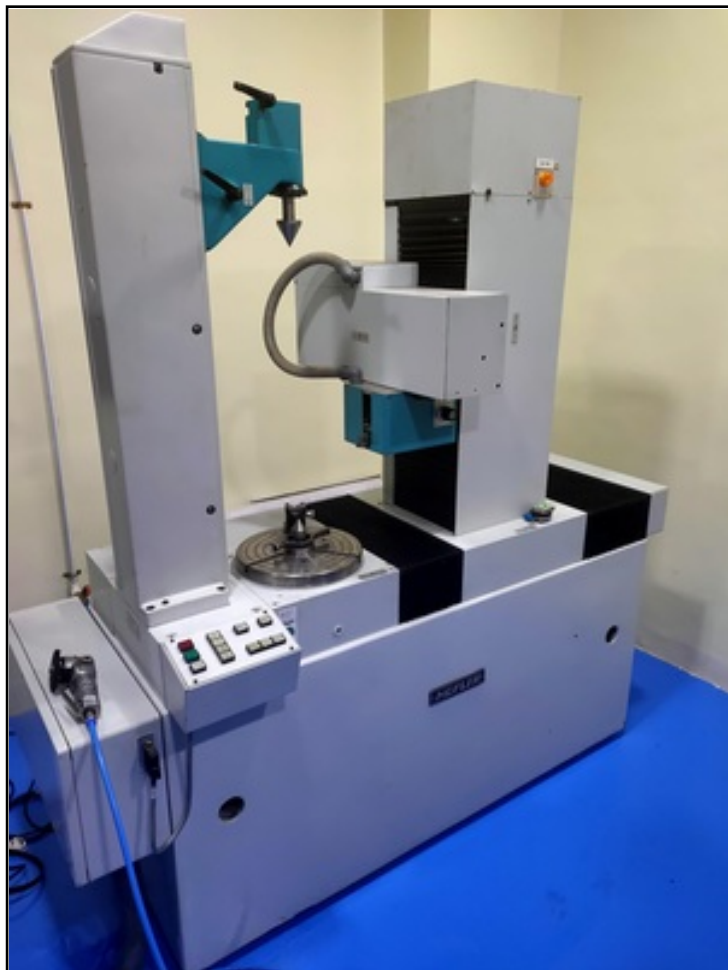
Farrell Engineering Ltd

Westbury House, 23-25 Bridge Street, Pinner HA5 3HR United Kingdom

Tel : 0044-208-3432 3291 Fax : 044-208-9657586

Email : chan@farrellengineering.com







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

- ✓ 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"

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

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:

- 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 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: 5 Tol: 2

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



> Profile Relief Screen

Crowning Data

Tip Relief
 Amount of Relief: 12 Tol: 2
 Length of Relief: 5 Tol: 1

Root Relief
 Amount of Relief: 10 Tol: 2
 Length of Relief: 2 Tol: 1

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.

About GearSoft Data Entry Screen

> GearSoft Online Graph Plotting Screen (Type : One)

GearSoft Ver. 3.7

Helix Errors

Lead : 000.0 mm Profile : 000.0 mm

MASTER GEAR(S) Length: 3000.0 mm Machine Status

V.M: 20 mm A.P.S: 8.7 mm S.A.P: 12.7 mm P.C.D: 18 mm

Q: 100 F2: R.Y. Scale F7: Left Profile F8: View Graph F9: Test Data

Qs: F3: Right Profile F8: Test Data F9: Trace Graph

Ms: F4: Left Profile F10: View Graph

Bs: F5: Right Profile F11: Print Report

Test Status: F12: Exit GearSoft

Test No. 1 2 3 4 Lead Value 0 0 0 0

Left Profile 0 0 0 0 Right Profile 0 0 0 0

Left Profile 0 0 0 0 Right Profile 0 0 0 0

Cursor Main Probe R Disk is Free

> GearSoft Online Graph Plotting Screen (Type : Two)

GearSoft Ver. 3.0

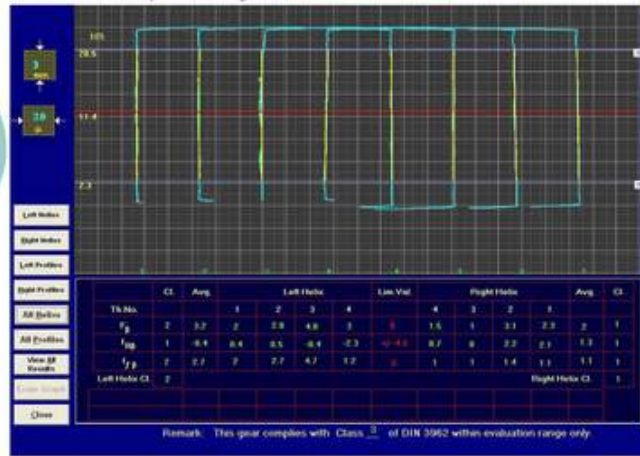
Lead: 000.0

Loading

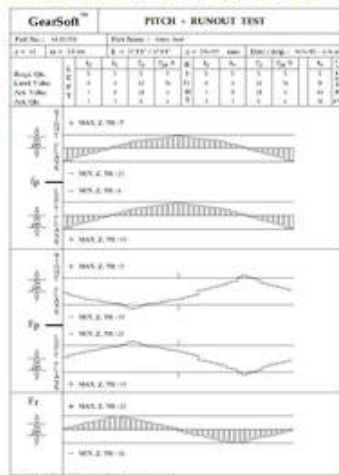
Test No.	1	2	3	4
Lead Value	0	0	0	0
Right Profile	0	0	0	0
Left Profile	0	0	0	0
Right Profile	0	0	0	0

Part No.	98	Lead	000.000	F1	F2	F3	F4	F5	F6
Face Width	18.711	Profile	000.000	F7	F8	F9	F10	F11	F12
Start of Profile	45.3	Eb	00.00.00						
Check Lead at		HValue	000.000						
Check Profile at		MValue	000.000						
HVal	000.000	Rb	000.000						
MVal	000.000	Probe Pressure	000.0						
Base Helix Angle									

> GearSoft Graph Viewing Screen



> GearSoft Pitch + Runout Test Report



> Evaluation Length Screen

Classification Data

Profile Evaluation Length
 Start of Evaluation : 0.002
 End of Evaluation : 16

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

PROFILE WITH TRUE INVOLUTE - RF

Previous Next

Evaluation Lengths Class Test

Enter Profile Start of Evaluation.

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

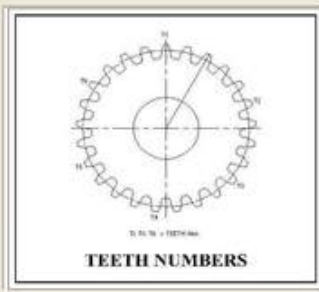
Lead Teeth Numbers to Inspect :
 1 8 15 22

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 Testers CNC	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 :-