

# KUNARK HITECH MACHINING & SALES PVT.LTD.



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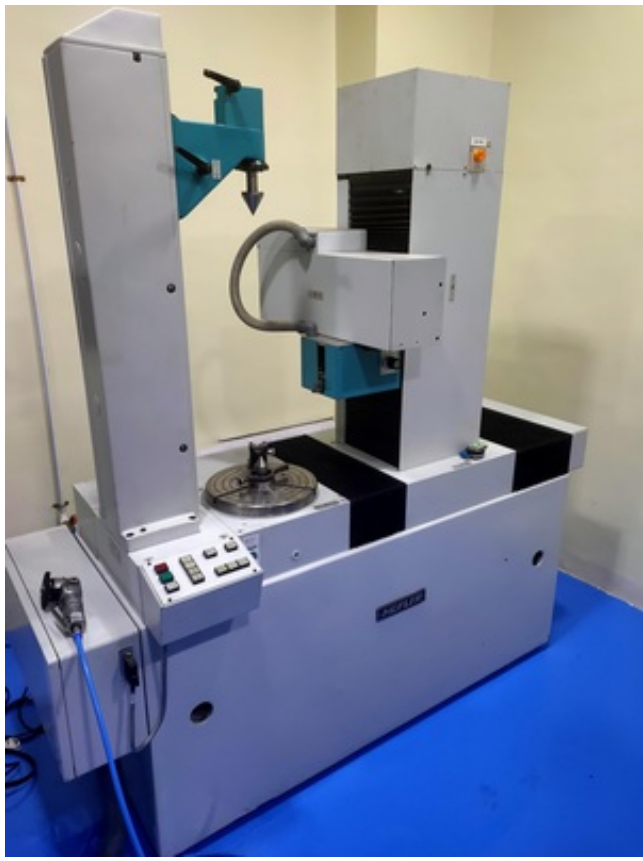
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## Features of GearSoft

- ✓ 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

- ✓ 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 software. It features a 'Gear Data' entry form with the following elements:

- Component Type:** Radio buttons for 'Gear' (selected) and 'Shaving Cutter'.
- Component No.:** A text input field containing '11'.
- Buttons:** 'Show Data', 'New Data', 'Edit Data', and 'Delete Data'.
- Data Table:** A table with 'Field Name' and 'Value' columns.
 

Field Name	Value
Type	Gear
Component No.	11
Component Name	11
Gear Type	Spur
Face Width	30
Module	2
Number of Teeth	20
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	57
Base Circle Diameter	55.382
Active Profile Length (Add Length)	6.8
Start of Active Profile (Profile Length)	3.27
Correction Factor	0
Span Measurement	0 Dia 0 Teeth
Ball Diameter	0
- Navigation:** A 'Next' button at the bottom.
- Component Type:** A dropdown menu with 'Component Type' selected.
- Information Tabs:** 'Component Information', 'Profile Information', 'Gear Information', and 'Helix Information'.
- Instructions:** 'Enter Component No. upto 20 chars.'

GearSoft Data Entry Screen



> Component Information Screen

Component Information Screen

Component No.: 112  
 Component Name: Gear  
 Type: Gear  
 Gear Type: Spur Helical L.H. R.H.  
 Face Width: 25 mm DP in mm  
 Module: 2.54 mm 10  
 No of Teeth: 35  
 Pressure Angle: 20° 0' 0"  
 Helix Angle: 15° 0' 0"  
 Base Helix Angle: 14° 4' 34"  
 I.D.H.A.: 14° 4' 34"

Diagram illustrating gear profiles with labels: P = 1.288, P = 1.278, P = 1.2, P = 1.14, P = 1.07, P = 1.014. Labels include MODULE and DIAMETRAL PITCH.

Buttons: Previous, Next

Component Type: Gear Information

Component Information Profile Information Helix Information

Enter Module in mm.

About GearSoft Data Entry Screen

> Profile Information Screen

Profile Information Screen

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.: 22.036

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: 115.4

Diagram illustrating profile nomenclature with labels: C.G.D., C.R.D., C.P.D., C.S.P., C.B.D., C.R.D.M.

Buttons: Previous, Next

Component Information Profile Information Helix Information

Enter Form Diameter in mm.

About GearSoft Data Entry Screen

> Helix Information Screen

Helix Information Screen

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

Diagram illustrating lead with chamfer cuts with labels: LENGTH OF CHAMFER, AMOUNT OF CHAMFER, LEAD MEASUREMENT, LEAD MEASUREMENT WIDTH.

Buttons: Previous, Next

Component Information Profile Information Helix Information

Enter Length of Top Chamfer Cut.

About GearSoft Data Entry Screen

> Helix Crowning Selection Screen

Helix Crowning Selection Screen

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

Diagram illustrating lead with crowning - RH with labels: AMOUNT OF LEAD CROWNING, CROWNING LAYER, THIS LEAD, AMOUNT OF LEAD CROWNING, LEAD MEASUREMENT WIDTH, REMOVED PART.

Buttons: 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: 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  
 Helix Crowning Profile Crowning

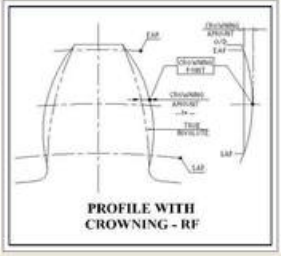
Enter Length Value of K Graph.

About GearSoft Data Entry Screen

> Profile Crowning Screen

Crowning Data

Crowning  
 Amount of Crowning: 10 Tol. ± 2  
 Crowning Point: 9 Tol. ± 1



PROFILE WITH CROWNING - RF

Previous Next

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

Enter Crowning Point Tolerance Value.

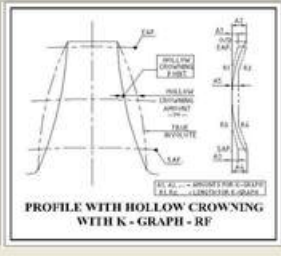
About GearSoft Data Entry Screen

> Profile K-Graph Screen

Crowning Data

Profile K Graph  
 A1: 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  
 Helix Crowning Profile Crowning

Enter Length Value of K Graph.

About GearSoft Data Entry Screen

> Profile Relief Screen

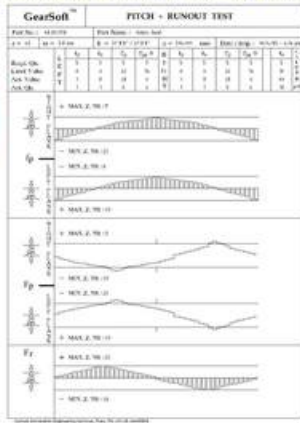
About GearSoft Data Entry Screen

> GearSoft Online Graph Plotting Screen (Type : One )

> GearSoft Online Graph Plotting Screen (Type : Two )

> GearSoft Graph Viewing Screen

> GearSoft Pitch + Runout Test



> Evaluation Length Screen

Classification Data

Profile Evaluation Length  
 Start of Evaluation: 0.00  
 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

Classification Data

Class Selection  
 Required Class: No Tolerance  
 User Tolerance  
 DIN  
 AGMA

Profile Error Tolerances  
 Total Fp: 7 Tol: 2  
 Angular Fth: 5 Tol: 1  
 Form Ff: 8 Tol: 2

Helix Error Tolerances  
 Total Fp: 5 Tol: 3  
 Angular Fth: 4 Tol: 2  
 Form Fp: 5 Tol: 2

Error Selection for Calculation  
 Profile: Total Fp, Angular Fth, Form Ff  
 Helix: Total Fp, Angular Fth, Form Fp

Previous Next

Evaluation Length Class Test

Enter Value of User Total Tolerance.

About GearSoft Data Entry Screen



> Test Selection Screen

Classification Data

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





<b>Machine Id</b> :- 1272	<b>Serial No</b> :-
<b>Category</b> :- Gear Testers CNC	<b>Model</b> :- EMZ400
<b>Country</b> :- Germany	<b>Make</b> :- Hofler
<b>Type of Machine</b> :- 4 Axis CNC Gear Tester	<b>Year</b> :-
<b>Weight</b> :- 0.0	<b>Dimensions</b> :-
<b>Power</b> :-	<b>Location</b> :- Mumbai Warehouse,India

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**