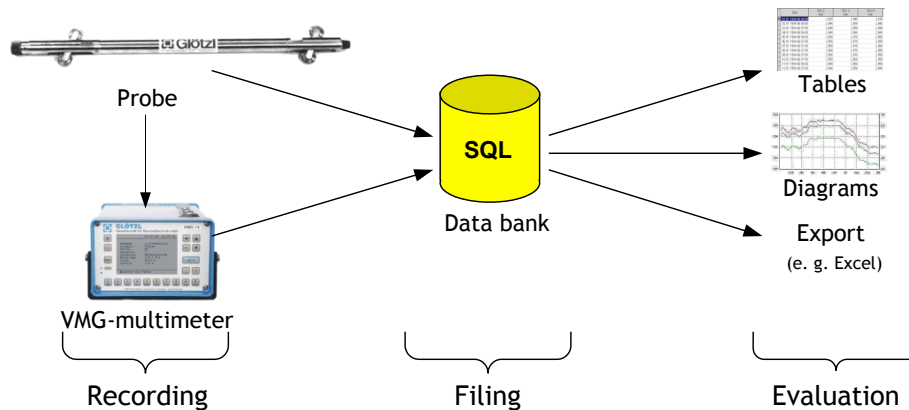


GLÖTZL Baumeßtechnik

GLNP 4 – EVALUATION PROGRAM

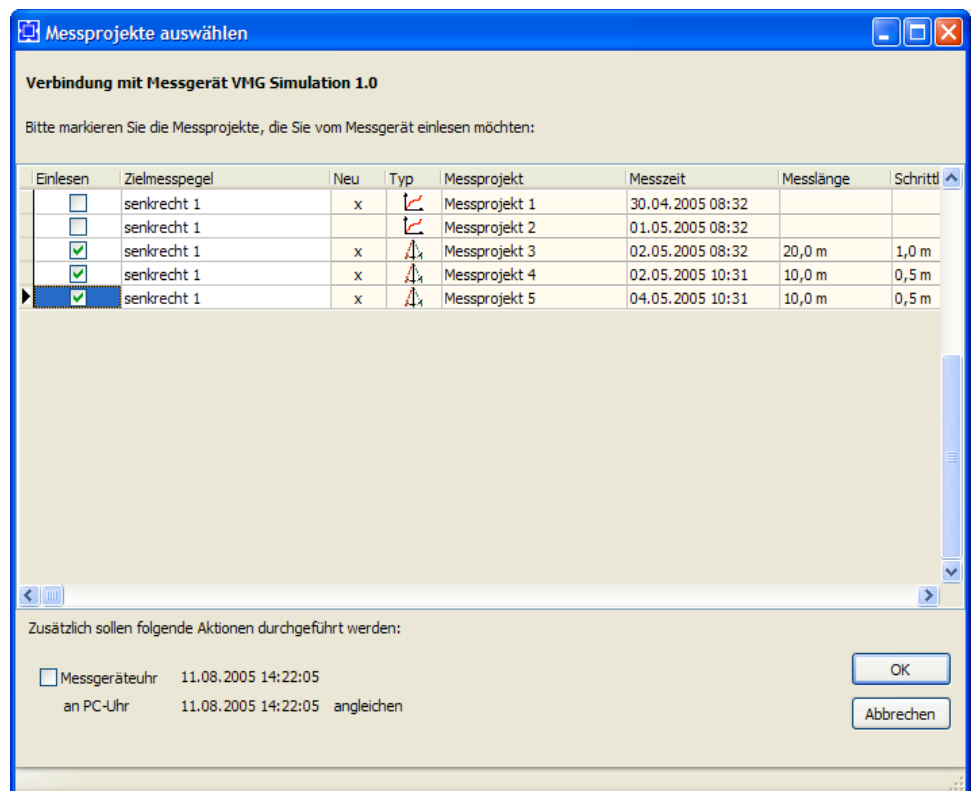
Type: GLNP
Art. No.: 190.02

GLNP 4 software – an all-purpose and flexible software tool for acquisition, filing and evaluation of inclination measuring data for projects of constructional measurement technique



Acquisition

- Multiplex support of probes with the sensors A,B,H and HII (inclination sensors); T (temperature); X and Y (XY-precursor probe); L (Trivec, sliding deformeter); E (length measuring probe, BES-probe); S (HPG); Kal4Pkt (4-point calibre probe), and T4Pkt (4-point temperature probe).
- Measurements can as well be done for horizontal- as for vertical borings.
- Measurements can be managed with only one measuring run till up to max. four measuring runs (dependent on the prevailing sensor). Five different turnover types are available, and furthermore numerous adjustable measuring sequences.



- Inclination measurements can be carried out and recorded in several ways:
 - By the GLM-software (extra program module for GLNP) as online measurement with a notebook with various probes: Digital probes (AB-probe, H-probe, double-H-probe, HPG-probe and more), borehole module probes with the following modules: Basis, XY-precursor, compass, sliding deformeter, Trivec, length measuring probe BES, 4-point-caliber, 4-point-temperature, video and more.
 - Via the GLV-software (extra program module for GLNP), which directly indicates the video pictures - parallel to the measurement with the GLM-software – and which also can digitally store the pictures. For doing this, a borehole module probe with video module is required.
 - By a measuring device (VMG 11, VMG 14 NMA09) without a computer in-situ and a following direct input of data into the GLNP-program
 - Input of manual values possible
- Automatic raw data backup in XML-format during downloading of measuring devices
- Automatic measuring level selection at input of measuring devices on account of adjustable name conventions for measuring project names (configurable measuring level prefixes)

Filing: Administrative functions

The screenshot displays the GLNP V4 software interface. The top window shows the project explorer with a tree view of folders and files. The middle window shows a table of measurements with columns for 'Auswertungen', 'Art', 'Verwendung', 'Titel', and 'Besch'. The bottom window shows a detailed data table for 'Fehler-/Mittelwert (vertikal)' with columns for 'Schritt', 'Tiefe', 'A 1', 'A 2', 'FA', 'A', 'SUM A', 'B 1', 'B 2', 'FB', 'B', 'SUM B', 'AB Radius', and 'AB Winkel'.

Schritt	Tiefe	A 1	A 2	FA	A	SUM A	B 1	B 2	FB	B	SUM B	AB Radius	AB Winkel
m	m	cm	cm	mm	cm	cm	cm	cm	mm	cm	cm	cm	Grad
0,00	-1,000				0,00	21,62				0,00	15,48	26,59	35,6
1,00	-2,000	0,01	-0,04	-0,15	0,03	21,60	0,83	-0,69	0,70	0,76	14,72	26,13	34,3

- Quick training by habitual and intuitive operation, „drag-and-drop“ support
- Easy operating by generally conventional functions, as e.g. erasure or copying and infix via intermediate file, usual multiple selection of single elements incl. multiple functions
- Window technique, easy comparative possibilities of tables and diagrams
- For each project, a single data bank file is created with the ending .gnp
- Project explorer with hierarchical display of the following elements: Diagram copies, table copies, measuring levels and measuring series

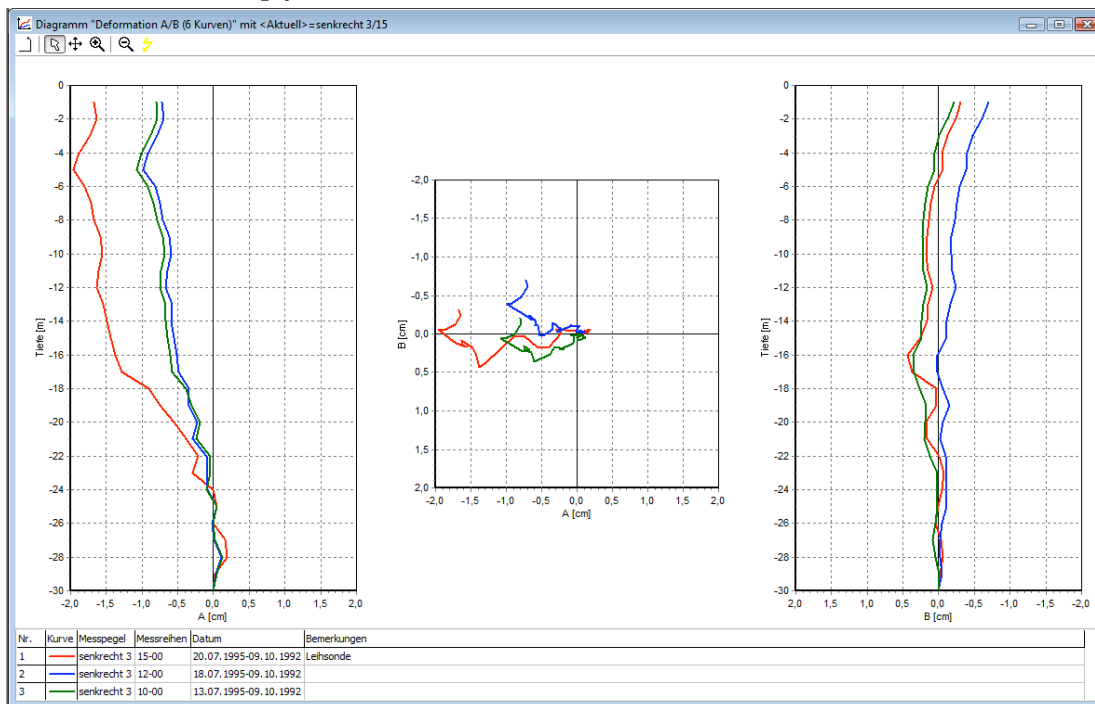
- XML-export of measuring series and/or measuring levels incl. measured values and parameters in one file for an easy data exchange with foreign programs
- XML-import of measuring series and/or measuring levels of data files, which have been created by the GLNP with XML-export, or with the GLM-software at measurement, or which may originally belong to foreign programs

Evaluation

- Quick, user-friendly and representative display of data by a large number of table- and diagram copies, independent on measuring series
- Curve representation (colours, line styles, markings, marking size, numbering), globally and individually definable for each evaluation
- Maximal 10 curves for each diagram can be represented; automatic preparation of a legend with further additional information
- By mouse, zoomable diagrams for a better analysis of details
- Automatic- or manual axes division, which especially take account of the special conditions of inclination measurements (e.g. consideration of symmetries, squared diagrams)
- Easy preparation of copies – dependent on measuring series or measuring levels – from standard copies
- Clearly structured representation and good comparative possibilities of several measuring series in one diagram
- The following tabular- and graphical evaluation types are available: Meas. values, error-/ mean values, borehole inclination, deformation, differential deformation, Gauß-Krüger coordinates
- Special evaluation- and measuring methods, as e.g. measurements with and without turnover, diaphragm wall measurement, compass distortion, fix distortion
- Free selection of a reference point and its consideration for evaluation
- Export of tables by intermediate file, ASCII data files or direct export into ExcelTM program
- PDF-export and EMF-export (Enhanced Windows Metafile) of printer outputs
- Freely designed own company letterhead with logo for printer outputs can be defined.

The screenshot shows the GLNP V4 software window titled 'Glötzl Neigprogramm'. The main content is a table with the following data:

Schritt m	Tiefe m	A 1 cm	A 2 cm	FA mm	A cm	SUM A cm	B 1 cm	B 2 cm	FB mm	B cm	SUM B cm	AB Radius cm	AB Winkel gon
0,00	-1,000				0,00	21,64				0,00	15,49	26,61	39,5
1,00	-2,000	0,00	-0,07	-0,35	0,04	21,61	0,85	-0,72	0,65	0,79	14,70	26,13	38,0
2,00	-3,000	0,24	-0,32	-0,40	0,28	21,33	0,74	-0,66	0,40	0,70	14,00	25,51	37,0
3,00	-4,000	0,32	-0,39	-0,35	0,36	20,97	0,76	-0,67	0,45	0,72	13,29	24,82	36,0
4,00	-5,000	1,31	-1,38	-0,35	1,35	19,63	0,82	-0,74	0,40	0,78	12,51	23,27	36,1
5,00	-6,000	1,75	-1,82	-0,35	1,79	17,84	0,73	-0,64	0,45	0,69	11,82	21,40	37,3
6,00	-6,999	1,95	-2,00	-0,25	1,98	15,87	0,92	-0,82	0,50	0,87	10,95	19,28	38,5
7,00	-7,999	1,89	-1,96	-0,35	1,93	13,94	1,19	-1,06	0,65	1,13	9,83	17,05	39,1
8,00	-8,999	1,92	-1,98	-0,30	1,95	11,99	1,26	-1,16	0,50	1,21	8,62	14,76	39,7
9,00	-9,999	2,08	-2,15	-0,35	2,12	9,88	1,11	-1,05	0,30	1,08	7,54	12,42	41,5
10,00	-10,998	2,05	-2,10	-0,25	2,08	7,80	1,07	-1,00	0,35	1,04	6,50	10,15	44,2
11,00	-11,998	1,77	-1,84	-0,35	1,81	6,00	0,87	-0,77	0,50	0,82	5,68	8,26	48,3
12,00	-12,998	1,65	-1,73	-0,40	1,69	4,31	0,98	-0,89	0,45	0,94	4,75	6,41	53,1
13,00	-13,998	1,53	-1,61	-0,40	1,57	2,74	1,48	-1,38	0,50	1,43	3,32	4,30	56,1
14,00	-14,997	1,36	-1,42	-0,30	1,39	1,35	1,64	-1,54	0,50	1,59	1,73	2,19	57,8
15,00	-15,997	1,31	-1,38	-0,35	1,35	0,00	1,78	-1,67	0,55	1,73	0,00	0,00	0,0



Technology

- 32-bit Windows program in new .net technique, unicode support
- The program is modularly constructed and can stepwise be upgraded by a clearing key. For example, at the beginning only with A-, B- and H-sensor, and later on upgrade for sensor S (HPG measurement) via a clearing key without new installation
- Secured data keeping: Efficient SQL data bank Interbase of Borland
- Operational as single space system (e. g. for notebook), and as multiple user system in the network with central data keeping on a Windows server. The network version requires a corresponding clearing key and also a special Interbase server licence on server.
- Multilingual program (German, French, English, Spanish, Czech, Russian), language can also be shifted by menu point.
- Context-sensitive online assistance and manual (PDF file) in several languages (German, French, English, Spanish, Russian)
- Multilingual, user-friendly installation

System prerequisites

- At least Pentium 4 or similarly quick processor
- CD- or DVD drive disk (for the installation of CD)
- Screen with at least 1024 x 768 point resolution (or comparable values)
- 512 MB central memory
- 200 MB hard disk memory for program, additional memory capacity for project data banks
- Windows XP, Windows Vista, Windows 7
- Colour printer recommended