



## Program details

## ARTICLE NUMBER

ggu-04-020

## OPERATING SYSTEM

Windows 7/8/10

## Description

**GGU-GRAIN-DENSITY** – Evaluation and visualisation of tests to determine grain density using the German Standard DIN 18124 method with a capillary pyknometer (CP).

### Capabilities:

- Input of max. 24 individual tests
- Table design using number of tests (definable number of tables and columns)
- Up to 20 rows per table with user-definable texts or using data determined by the program
- Mean determination for each table
- User-designed output sheet
- Print or copy screen sections, e.g. for transfer to a word processor
- Integrated Mini-CAD system for additional annotation of graphics

Sample designation		1	2	3
Dry sample + pyknometer no.				
Mass of pyknometer mp [g]	1   62	43.720	64.206	155.742
Dry sample + pyknometer m1 [g]	2   63	43.286	63.418	155.102
Sample + pyknometer + water m2 [g]	3   109	43.309	63.801	155.326
Temperature of water T [°C]		24.500	24.400	24.400
Volume of pyknometer V(pT) [cm³]		99.965	99.974	100.004
Density of water at T rho(wT) [g/cm³]		0.99720	0.99722	0.99722

Row	Heading	Enter what?
1	Sample designation	Sample designation
2	Pyknometer no.	Pyknometer no.
3	Mass of pyknometer mp [g]	Mass of pyknometer mp [g]
4	Dry sample + pyknometer m1 [g]	Dry sample + pyknometer m1 [g]
5	Sample + pyknometer + water m2 [g]	Sample + pyknometer + water m2 [g]
6	Temperature of water T [°C]	Temperature of water T [°C]
7	Volume of pyknometer V(pT) [cm³]	Volume of pyknometer V(pT) [cm³]
8	Density of water at T rho(wT) [g/cm³]	Density of water at T rho(wT)
9	Mass of water rho(wT) [g]	Mass of water rho(wT) [g]
10	Volume of water V(wT) [cm³]	Volume of water V(wT) [cm³]
11	Volume of grain Vg [cm³]	Volume of grain Vg [cm³]
12	Dry sample md [g]	Dry sample md [g]
13	Grain density rho(s) [g/cm³]	Grain density rho(s) [g/cm³]
14	Mean [g/cm³]	None
15	No. 15	None
16	No. 16	None
17	No. 17	None
18	No. 18	None
19	No. 19	None
20	No. 20	None

 <a href="http://www.ggu-software.com">www.ggu-software.com</a>		Report: 999.9 Annex: 9.9
<b>Grain density</b> to DIN 18124 - CP  <b>Example</b> <b>DIN 18124-CP</b>	Sampling location: KRB 99 Depth: 0,99 m Sampling method: Disturbed Soil type: Sand, silty Sample taken on: 14.09.2009	
Edited by: Buß	Date: 25.09.2009	
Sample designation	1	
Pyknometer no.	100	
Mass of pyknometer mp [g]	51.838	
Dry sample + pyknometer m1 [g]	71.462	
Sample + pyknometer + water m2 [g]	163.901	
Temperature of water T [°C]	21.000	
Volume of pyknometer V(pT) [cm³]	100.016	
Density of water at T rho(wT) [g/cm³]	0.99802	
Mass of water m(wT) [g]	92.439	
Volume of water V(wT) [cm³]	92.622	
Volume of grain V <sub>k</sub> [cm³]	7.394	
Dry sample md [g]	19.624	
Grain density rhos [g/cm³]	2.654	