File name:	S:...\Solid\Data\BAM 8.2 Kruschwitz\2016-P52\D_12-2021c.144

SOLID REPORTING

Company name:	BAM - FB 1.3
Operator:	C. Prinz

TEST INFORMATION

Test date:	21-06-16
Sample name:	D_12 Zement Estrich [5609]
Comment:	
Sample mass (g):	0,6505
Sample skeleton density (g/cm³):	2,18
Test file name:	S:...\Solid\Data\BAM 8.2 Kruschwitz\2016-P52\D_12-2021.P44
Combined with file (140):	S:...\Solid\Data\BAM 8.2 Kruschwitz\2016-P52\D_12-2021.P14
Mercury surface tension (N/m):	0,48
Mercury contact angle (°):	140,0
Test filling volume (mm³):	448,0 at P < 1 Pa
Starting hydr. press. of test (MPa):	0,0124
(Dil+Hg+Sample) weight (g):	173,93
Corrected weight (Dil.+Hg+Sample) (g):	174,12

ANALYTICAL CONDITIONS

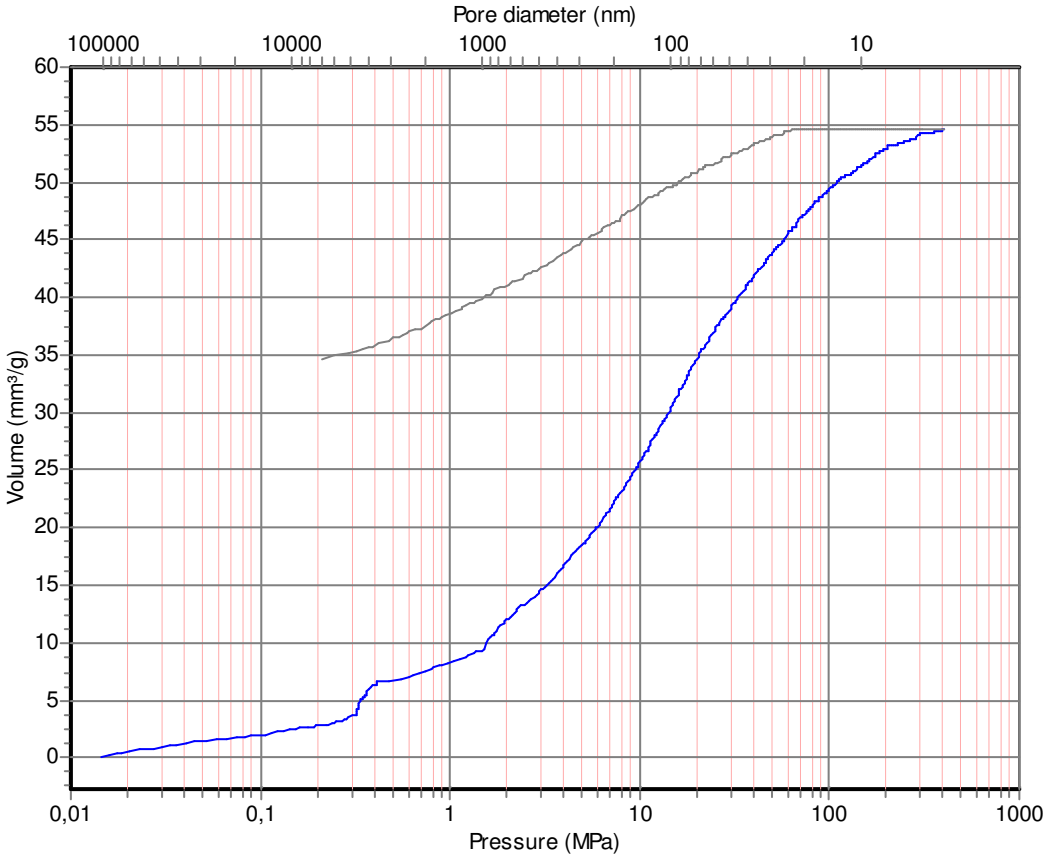
Maximum test pressure (MPa):	400
Increase speed:	5 - 17 MPa/min
Increase method:	Pascal Stepwise
Decrease speed:	5 - 17 MPa/min
Decrease method:	Pascal Stepwise
Temperature of test (°C):	24,0
Mercury density @ test (g/cm³):	13,5365

BLANK & DILATOMETER INFORMATION (Data from Pascal 440 file)

Blank date:	06-04-16
Blank filename:	S:\Archiv\Mess-Files\Pascal140-440\Solid\Blank\Dil83_121-CD3N\Dil83_121-400-3.P4Hochdruckbereich
Comment	Hochdruckbereich
Blank Max pressure (MPa):	400
Blank Increase speed:	5 - 17 MPa/min
Blank Increase method:	Pascal
Blank Decrease speed:	5 - 17 MPa/min
Blank Decrease method	Pascal
Dil. number:	83
Dil. type:	CD3
Dil. Cone length (mm):	25
Dil. Electrode gap (mm):	5
Dil. stem radius (mm):	1,5
Dil. weight (g):	57,496
Temperature of blank (°C):	24
Mercury density @ blank (g/cm³):	13,5365
Blank filling volume (mm³):	462 at P < 1 Pa
Starting hydr. blank press. (MPa):	0,012713
(Dil+Hg) weight (g):	177,27

SAMPLE RESULTS

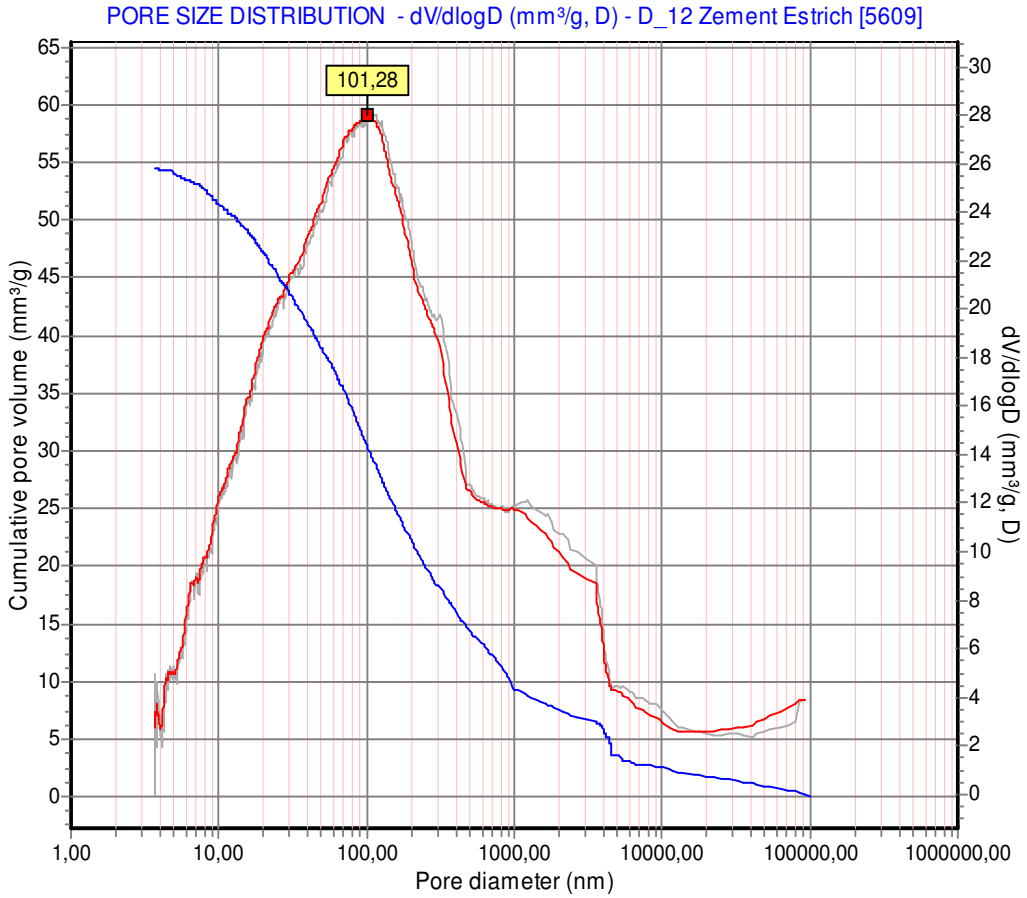
Inc / Dec - D_12 Zement Estrich [5609]



RESULTS WITHOUT COMPRESSIBILITY CORRECTION

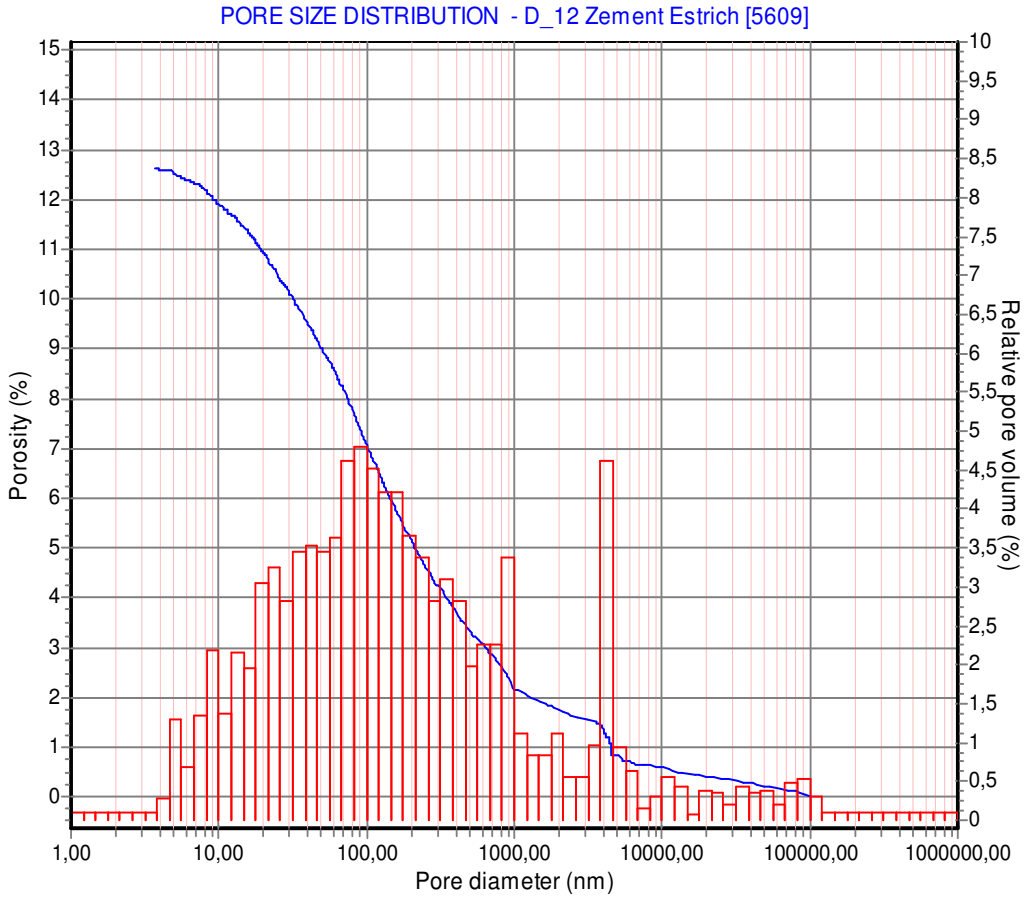
Total intruded volume (mm³)	35,49		
Total intruded volume (mm³/g):	54,56	at pressure of MPa:	400,4115
Spec. Vol. by skeleton dens. (mm³/g) Vd:	-27,05		
Bulk density (g/cm³):	2,3166		
Envelope density (g/cm³):	2,3167	at pressure of MPa:	0,015 Diam.(nm) 101086,3
Apparent density (g/cm³):	2,6518	at pressure of MPa:	400,4115 Diam.(nm) 3,7
Porosity by skeleton density (%):	-6,27	Calculated by skeleton density of	2,18 g/cm³
Porosity by Hg intrusion (%):	12,64		
Inaccessible porosity (%):	-18,91		

TOTAL PORE SIZE

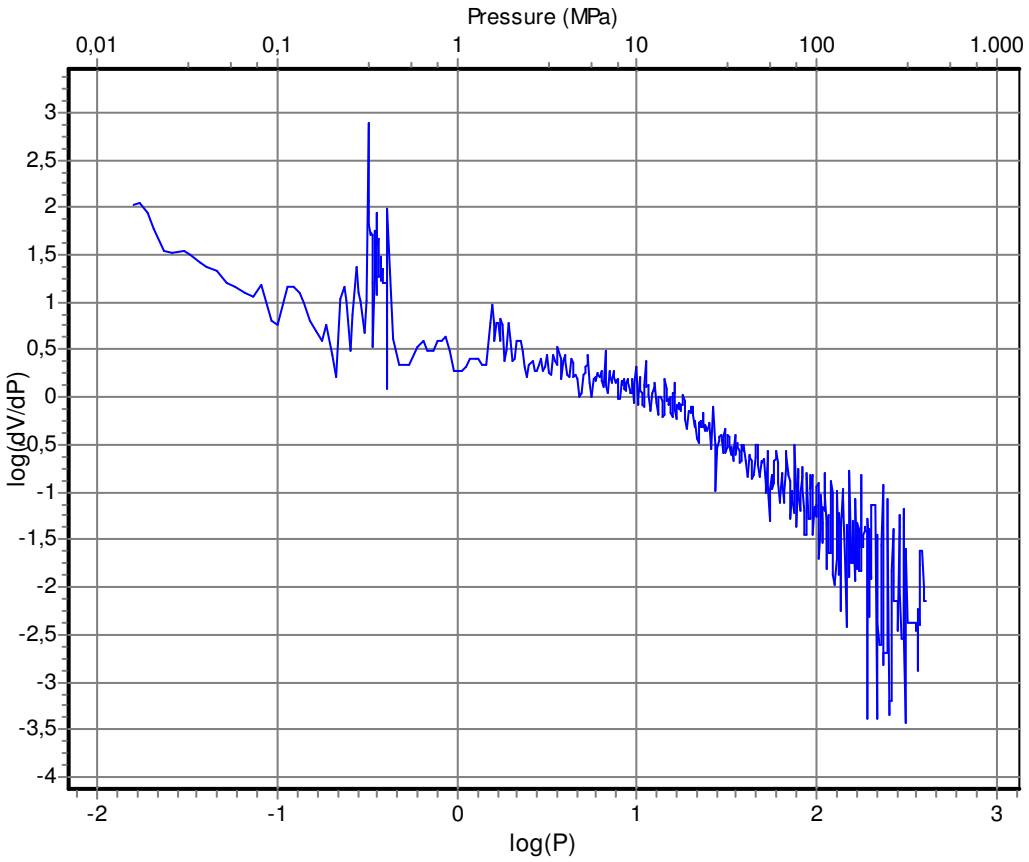


Derivative calculated with			
Moving average points:	99		
Smoothing factor:	0,80		
Calc. press. range (MPa):	0.0 to 400,411		
Total pore volume (mm³/g):	54,56		
Total pore surface area (m²/g):	5,006	with model :	Cylindrical and Plate
Average pore diameter (nm):	43,60	Hydraulic (4V/A)	
Median pore diameter (nm):	129,65	at (mm³/g) :	27,28
Modal pore diameter (nm):	101,28	at dV/dlogD (mm³/g, D) :	28,02
Span:	31,8706	at Min. Vol. (%) 10,0	at Max. Vol. (%) 90,0

TOTAL PORE SIZE HISTOGRAM



FRACTAL DIMENSION OVERALL - D_12 Zement Estrich [5609]



Calc. press. range (MPa)::	0,0 to 400,4
Fractal dimension overall:	2,9727

OTHER CALC.

RESULTS OF TORTUOSITY:

Surface area model:	Cylindrical and Plate
Tortuosity (Carniglia):	2,087
Tortuosity extended calculated:	from Customer choice area
Customer choice area:	1,0
Exponent cylindrical pore:	1,754
Tortuosity extended (Carniglia):	0,795

RESULTS OF PERMEABILITY:

Cylindrical pores permeability (µm²):	750,84E-6
General permeability calculated:	from Tortuosity
General permeability (µm²):	719,48E-6