



SUBJECT DATASHEET

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| Semester: | 2011/12/1 |
| Subject: | Machines of Silicate Industry |
| Code: | VEMKGEB212L |
| Responsible department: | Department of Mechanical Engineering |
| Responsible department code: | MKGE |
| Responsible lecturer: | Dr. Sándor Verdes |

Educational objectives:

Introducing processes applied in silicate industry and connected with them and their basic machines. The role and connection of equipments.

Detailed content of the subject:

Introduction. Terms. Tests. Sampling, distributions, mathematical descriptions. Basics of size-reduction and size-enlargement. Basics of materials handling. Basics of firing. Crushing and comminution machines. Milling, mills. Screens, classifiers. Separators, dust precipitators. Storage, silos, bunkers. Mixing, homogenisation. Packaging. Automation. Process control. Sizeenlarging machines. Granulation. Machines for shaping and forming. Dryers. Furnaces. Treatment of raw materials. Sand, gravel industry. Brick Cement production. Concrete industry, concrete blocks. Cereamics. Glass production. Fibre materials. Environmental protection and silicate industry. Waste treatment.

Requirements:

2 test papers and 2 homework-studies

Required and suggested references:

Talabér J.: Szilikátipari kézikönyv, Műszaki Kiadó, Budapest, 1982. Fábry Gy.: Vegyipari gépészek kézikönyve, Műszaki Kiadó, Budapest, 1987. Fejes - Tarján: Vegyipari gépek és műveletek, Tankönyvkiadó, Budapest, 1979. Péter Gy.: Kerámiaipari gépek, Műszaki Kiadó, Budapest, 1974.