UNIVERSITY OF PANNONIA

SUBJECT DATASHEET

Semester:	2009/10/1
Subject:	Machines for Silicate Industry I.
Code:	VEMKGEB112L
Responsible department:	Department of Mechanical Engineering
Responsible department code:	MKGE
Responsible lecturer:	Dr. Sándor Verdes

Educational objectives:

To make known working of machines used in silicate industry and in related areas. Calculation of main geometrical and running parameters

Detailed content of the subject:

About silicate industrial machines. Structural materials. Basics of design. Design calculations of axes for mixing. Critical rotation speed. Driving mechanism for mixing and constructional solutions. Calcultaions of pressured vessels. Bended and pressed rings. Thin-walled shells, strains. Closing solutions for tanks. Acessories for vessels. (Flanges, studs) Supports. Equipments and apparatuses under different stresses (vacuum, heat, rotation). Basics of size-changing processes. Basics of classification and separation. Technologies, processes and machines. Systemtechnic approach.

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.