PL ISSN 0032-3012

2-3 1988

POLISH TECHNICAL REVIEW

2-3
176-177/1988

POLISH TECHNICAL REVIEW

SIGMA

PUBLISHERS OF TECHNICAL PERIODICALS AND BOOKS SIGMA – AN ENTERPRISE OF THE CENTRAL TECHNICAL ORGANISATION
ul. Biała 4, 00-950 Warszawa, P.O.B. 1004, Tel.: 39 11 99, Tlx 814877 WCT WA PL. Issued in English, French, German and Russian

CONTENTS

A multifunctional glow discharge lamp
The main advantages of the glow discharge lamp developed at the Institute of Nuclear Chemistry and Technology, Warsaw is its increased versatility which makes it possible to use various cathode/anode systems and different glow discharge excitation techniques i.e. with the use of cold flat cathodes, cold recessed cathodes, hot recessed cathodes and hot or cold recessed microcathodes. The lamp can be connected with various types of spectrographs, spectrometers and monochromators. The article reviews various applications of this glow discharge lamp, especially for the direct analysis of high purity materials. For details see p. 3.

An eddy-current flaw detector
The principle of operation of the flaw detector built at the Institute of Electrical Engineerings, Warsaw consists in the utilization of the eddy-current phenomenon. This flaw detector is designed for detecting and measuring cracks, structural changes, type of material and the nature of heat treatment applied. In addition to a technical description the article brings many examples of applications. See p. 5.

Viscoelastic POLASTOSIL ABM silicone plastics
This plastic material has an ability to elastically absorb energy similarly to a spring or rubber. It also flows under load (like a highly viscous liquid) and is capable of dissipating the energy absorbed (evolution of heat). This makes possible the application of the POLASTOSIL ABM silicone plastics instead of metal springs (1 kg of POLASTOSIL ABM can replace up to 200 kg of metal springs) while playing additionally the role of a hydraulic damper. Details on p. 11.

POLCOR process – an air-hardened sandmix
The POLCOR process used in the foundry practice entails appropriate sandmixes for core moulding and the necessary equipment. Advantages of the POLCOR sandmix comprise the ease of making the sandmix, the possibility of utilizing any type of material as matrix, the long-lasting availability of the sandmix for moulding, the short hardening times of POLCOR-based products, the high strength of the hardened sandmix, very good knock-out properties, low toxicity factor and low price. See article on p. 12.

Subscription orders should be addressed to the Ars Polona-Ruch, 00-950 Warsaw, P.O.B. 1002, Krakowskie Przedmieście 7 or to one of the representatives of this company abroad.

Printing office: SIGMA (Warsaw)
Index no 36915