

# Abstracts of Articles

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Dear Reader,

In spite of serious world economic crisis the market of the flexo process is in a continuous growth. Besides the emerging digital printing, flexo is a segment, which has a definite and unbroken development in the packaging technology. Via the printable/printed products, and production processes, electronics is that determinates the ways, trends and directions of technical development. Besides the actual news of flexo, we give reports about forging ahead of UV processes, about advantages of sleeve-technology, and I recommend you an article written by *Szabolcs Szabó*, titled: *What an RFID label maker – by all means – has to know*. In present issue of our paper please find a new column series titled *Book Corner*, which will offer you some real scoops of newly published professional book editions. One can order or buy them through our Secretariat so our readers can easily have them. This time, in the column of *Graphics in Hungarian Magyar Grafika*, Ilona Kiss, a book designer artist and some of young typographers already having closing exam, are introducing themselves, as well as *Péter Maczó* gives an extraordinary remembrance about *Alan Fletcher* in form of a Necrology. There are in 2007 a lot of significant events too. For example: *Dataprint*, *EmbaxPrint*, *FESPA*, and *PrintExpo* exhibitions. We will give reports regularly about them. Among programs of PNYME, the *Flexo Symposia* will be again of great interest. Our paper will be published right at the time of it. Please find in it many of the *Abstracts of Presentations* of this big event for those not being able to take part at it. Next issue of our paper – which will be published at 31. May 2007 –, deals with packaging, with printed packaging materials and products. Till then, I wish you a nice springtime, calm, pleasant afternoons and evenings, as well as time enough for reading our paper.

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Flexo Panorama 2007: With this year a New Age is starting in the World: The Convergence of Printing and Electronics. In other words: A Change of Steps in the Printing and Electronics. After fifty years constant domination of the silicon microelectronics (chips), now here is the era of the printed, flexible and organic electronics. Including Radio Frequency Identification (RFID), Smart Labels/Tags and electronic smart packaging. This are what our article is dealing with. Some of the titles of it are as follows: From polymer transistors to the printed, flexible and organic electronics. New materials. Printing with Conductive Printing Inks, and Insulator Materials. New printing technologies and tools. Brand new products of the Future in the Printing Industry: Battery Assisted Labels, Printed Memories and Printed Circuitry, Printed Power Amplifiers, Printed Organic Light Emitting Displays (OLED), Printed Transparent Laminar Microphone and Loudspeaker etc. After so many years of traditional Flexo printing technologies, we are going to the next stage, to the Commercialization of Printed

Electronics. The future electronic fabrication plants will be the printing rooms. But one main question still remains: which printing process shall we use for that? There area lot of technological questions too beside these, for instance: How does ink-film thickness impact conductivity in printed traces? In what ways does the substrate influence conductivity? What screen-percentage can provide the best results? There are a lot of studies dealing with and trying to give answers to these questions. Enormous markets will be created where conventional silicon chips cannot go today because they are costly, large and brittle. A full range of electrical and electronic components will be printed in our industry from transistor circuits to displays and even speakers. The market for organic, flexible and printable electronics is expected to reach \$300Bn in ten years – larger than the size of the silicon industry today.

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*What an RFID maker – by all means – has to know*: The author of this article is dealing with the RFID production technology and its usage, from the start of production process to the end of it. Some of the subjects the article is dealing with: How active, semi-conductive (semi-passive) and passive RFID labels, tags and this kind of other intelligent products work; The steps and workflow of the technology; How to put chips onto the antenna; Standardization of the process; Protocol, Gen2 international system; Reading range, Size, Direction, Attributes of RFID Frequency, Ranges, costs, penetration and so on.

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We use more and more sleeves on narrow web fed printing machines. Advantages of the technology, from point of view of the product quality, costs, prices and profit according to the European experiences. Sleeve usage in practice. These are the main subjects of this article.

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All the efforts of narrow web fed printing's developments are concentrated in *UVivid Flexo JD Supernova White* program. The last one of *The Strawberry Girl* label serial clearly demonstrated the excellent results when products and services work together. You can read about the comprehensive experiences of *Corniche*.

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*Xpannd* – is it a *Cuckoo's Egg*? Offset project was a big surprise when a basically flexo printing company – the GIDUE –, has shown to public, his own UV-web-offset printing press.

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UV Time–GIDUE Cooperation for widening of UV applications: For a more environment friend UV flexo printing process, GIDUE – which is well known of its narrow web fed flexo machines – has started a development project and entered into an agreement with UV Time.

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In March this year Czech Republic based Soma Engineering has announced the supply of its first eight colors, full turnkey printing and converting line, a water based flexo machine in Japan for an offset printing company. They will print and convert packaging materials destined for outer food wrapping, medical, sanitary and hygiene uses.

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RFID tag technology has arrived! LogSystem Ltd. was founded in 2004 with the objective of introducing the new demanding RFID technology on the Hungarian market and in the Central & Eastern Europe region. The steps of the work are as follows: Requirement analysis, pilot implementation and evaluation, project planning, staged implementation and support within the frame of a long-term relationship.

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Being always the first: In a logistic point of junction, at Székesfehérvár Hungary, was an impressive building built in the middle of a beautiful garden, for BCL Kft. This company is producing and trading bar code technical products and labels. *Csegő Csepregi*, executive leader tells us their story and the secret of their success.

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About folding and gluing machines of Bobst: this article contains an interview made with *Hakan Pfeiffer*. Please find in it the answers given by him to the questions as follows: What is your opinion about your product line in the present situation? What does the word „specialties” mean from your point of view? What do you have to consider when developing peripherals by training in the context, of your product line?

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Flexo printing and its efficiency: Nowadays flexo is the most rapidly developing printing process in general and especially in the field of narrow web printing of labels and other packaging materials in spite of its disadvantages. What are the significant differences between offset and flexo? How can we make it more efficient? Such questions are dealt by this article.

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Exhibition news and new products of W&H: Subjects –among others- of this article are as follows: Helping you meet future challenges; Transparency of the printing process, Enhanced output and flexibility; Saving time and raw material; Flatness is a main consideration; Fast, efficient and quiet flexo printing.

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EmbaxPrint 2007: This exhibition, which is most important international event in Central Europe, exists since more than 20 years. Next time we can visit it in Brno between 22–25. May, 2007. Some new themes are of it: marketing and advertisement.

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FESPA from the Near: It is a big exhibition, dealing with screen and pad printing beside flexo. Please find in this article interesting interviews made with some experts about this important event.

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FESPA 2007 Preview: Berlin (Germany). Digital showcase, FESPA Premier Awards Competition; National Halls; Product Launches; Inks, UV and Solvent technologies; Narrow web and wide format printing as well as Gala Evening. These can you find if you visit FESPA.

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New Digital Front End is maximizing the power of HP Indigo Color Capabilities: HP has announced the availability of the Indigo Production System Server Version 1.1. Powered by Creo, the digital front end provides HP Indigo digital press users a greater ability to print accurate color using wider range of process and spot colors.

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PrintCity Web-, Offset and Sheet-fed Commercial Printing Seminar Budapest Hungary, April 25<sup>th</sup> 2007: Subjects of it are as follows: Value Added Printing Newspapers; Best Practice UV sheet fed printing and coating for publication and commercial purposes;

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Printing Room in Focus: The traditional, well organized and automatic printing process is estimated as not an environment friendly one. Despite of production processes not using lead any more. The article is dealing with this subject.

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Digitization in Printing: This year it was our first program organized by *Hansaprint Elanders Kft.* in Komárom. This article contains a detailed report about the interesting event.

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A prize *For the Hungarian Printing*: The Award Winner this year has been dr. *Ildikó Endrédy*. Please find detailed report of the author about the event and about the winner.

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*Web- to-Print*: Printing directly from Internet: Today print service providers are under immerse pressure to process jobs more quickly and cost effectively, and printers are striving to find new ways of transforming their businesses in order to gain competitive edge. Main subjects of this article are: Web- to-print solutions, how do they work? How can we avoid pitfalls? How to save time and money? Maintaining our human contacts.