



Participating organisation

ROMANIA
SC CEPROHART SA

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Bldv. Al.I.Cuza no.3, Braila, 890019, Romania

cercetare@ceprohart.r



COST E-48 3rd meeting WG1+WG2 – Milan 10-11.05.2006



Organisation's details

ROMANIA
SC CEPROHART SA

SC CEPROHART SA - Research and Development Institute for Pulp and Paper Industry

Services/Products: Applied research
Design and Consulting
Analysis, Environmental Balances,
Impact studies
Manufacturing of small tonnage of
specialty paper products



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Total number of employees: 150

Employees in E48 related areas: 4

Number of students: none

Research focus:

- **improvement of the current technologies for pulp and paper manufacturing**
- **new paper and board grades**
- **recycling technology of waste paper**
- **surface treatment of paper and board**
- **closing water systems**
- **surveys, analyses and technical solutions of diminishing the environmental impact**
- **development of raw materials basis**
- **measurements and technical solutions of decreasing specific consumptions**



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PRODUCTION

SC CEPROHART SA Brăila has a paper machine since 1989



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PRODUCTION

Main paper grades manufactured on the paper machine:

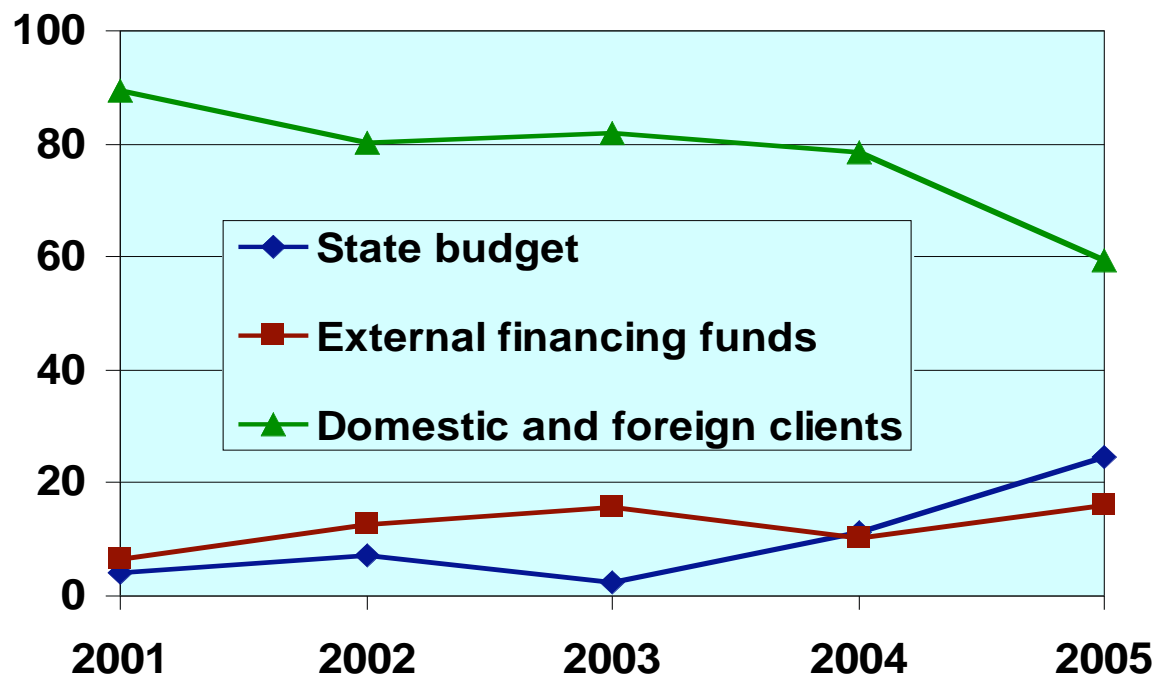
- Writing - printing papers
- Greaseproof paper
- Colored papers
- Coated boards and printing boards
- Filter sheets for alimentary, pharmaceutical and cosmetic industry use
- Specialty board for automobile industry



Ownership
structure:

State Ownership Fund
Financial Investment Company
SC Alcoplus SA

FINANCING SOURCES





E48 representative's presentation (I)

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DANIELA ȘERBAN

Doctor engineer

SC CEPROHART SA, Blvd. Al.I.Cuza no 3, 890019 Braila,
Romania

daniela.serban@ceprohart.ro



Academic background:

Technical University of Iasi

Pulp, Paper and Fibers Department

Areas of expertise:

- pulp manufacturing
- fibers processing
- physical, mechanical and chemical analyses for the pulp, paper and board

Function in COST E48:

Member



E48 representative's presentation (II)

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DANIELA SERBAN

Most relevant publications in the field of E48 :

D. Serban, F. Gavrilă, D. Buteica

Increase the retention/dewatering process efficiency of the 100% waste based toilet paper making

Celuloză și hârtie, 53, no.3/2004, p.44

C. Secara. D. Serban

Measures for reduction the amounts of stickies in paper mills producing testliner and fluting

Buletin Informativ Tehnic, no.2/2005, p.21

D. Serban, P.Nechita

New opportunities for using the virgin and secondary fibers.

Celuloză și hârtie, 54, no. 4/2005, p. 28



Own expectations in E48

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- Present situation regarding the recovery/recycling of waste paper
- Current research in Europe
- Effects of recycling on chemistry and morphology of fibers
- Effects of recycling on pulp sheet properties
- Effects of recycled pulp on wet end chemistry of paper machine



Own contributions to E48

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Finished or current projects in the area of E48:

- Efficient solutions to reduce the amount of colloidal and dissolved substances in process water coming from the recovered papers
- Optimizing the quality of linerboard and corrugated medium in relation to the paper boards grammage reduction and by using recycled paper as the main fibrous component
- Novel products: polymeric biocomposite from renewable resources for high tech applications.



Projects submitted or planned during the duration of E48

- solutions for increasing the percent of recycled fiber in composition of newsprint
- microbiological problems in the paper mills that use recycled paper

Specific tools relevant for E48 objectives

- Pilot plants able to simulate many industrial processes
- Accredited Laboratory for physical – mechanical testing of paper and board.



Project 1: Elimination of stickies in paper mills producing testliner and fluting

*Objectives: proposals for an optimal processing in stock preparation and
in the approach flow system*

- a) an efficient separation of contaminants represents an essential condition to obtain appropriate paper stock quality and good paper machine runnability
- b) it is essential to have exact knowledge of the initial load
- c) prevention of sticky fragmentation
- d) removal of macro stickies as early as possible in coarse screening
- e) high – consistency screening
- f) improvement of the sticky load in the long fiber fraction by fractionation and subsequent fine screening
- g) cleaning of contaminated water loops



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Project 2: The papermaking potential development of the secondary fibers

Objectives:

- to study the application of high-consistency refining to secondary fibers
- to obtain stronger pulps at higher freeness by better preservation of fiber length and superior fiber bonding potential
- to disperse, reduce and release the hard, chemically nondispersible inks from fiber and help them to be removed by post-deinking operations

Results:

- the high-consistency refining is suitable for improving the wet and dry strength and appearance of paper
- the high-consistency refining offers a dense, well-bonding sheet
- the mild refining accomplished by fiber-to-fiber action leads to strength development without any substantial reduction in fiber length
- a uniform interfiber friction is needed to produce good separation of inks from the fiber
- the high-consistency refining can break down more ink particles



Organisation of E48 events

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Organisation:

- **The CEPROHART works closely with:**
 - **ATICHR – Technical Association for Romanian Pulp and Paper Industry**
 - **ROMPAP – Patronizing Federation for Romanian Pulp and Paper Industry**
 - **ARFCO – Romanian Association of Corrugated Board Manufacturers**
 - **ARC – Romanian Association of Quality**
- **The CEPROHART has potential to organize meetings in Romania**
- **The CEPROHART publishes COST events (Romanian Pulp and Paper magazine)**