



# The Leading Service and Solution Provider of BOPP Films

COMPANY PRESENTATION

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**Leading provider** of biaxially oriented polypropylene (BOPP) films

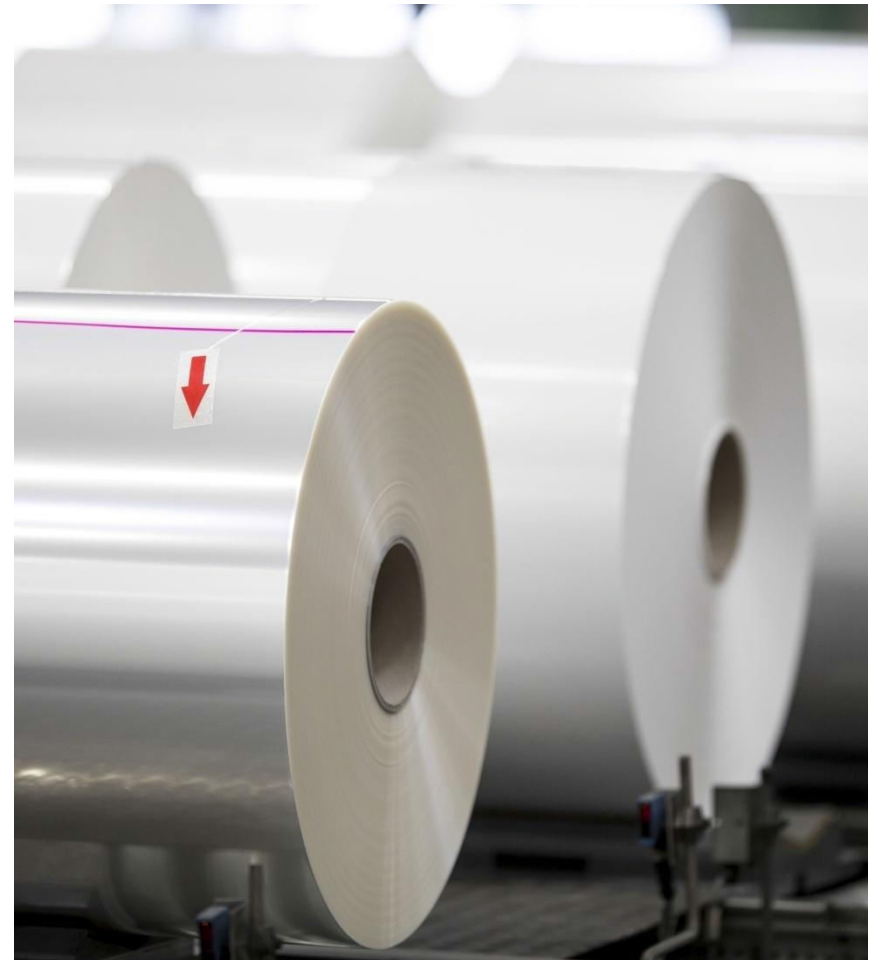
**More than forty years of expertise** in the BOPP market

**Innovative partner** of the world's largest FMCG manufacturers and brands

**Joint partnerships** with leading converters and industry partners

**Market leader in technical films** for electrical applications

**Only manufacturer serving all segments** in the BOPP industry

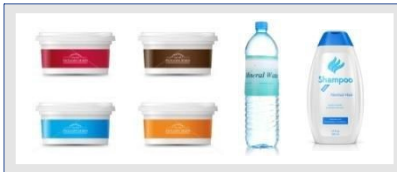


# Our Five Business Segments – The Most Diverse Portfolio in the Market



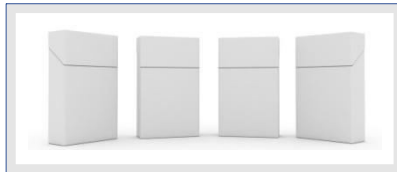
## Packaging Films

High quality film solutions for the protection of a diverse range of food and non food applications



## Label Films

State-of-the-art film solutions for in mould (IML), wrap around (WAL) and self adhesive (SAL) applications



## Tobacco Films

Single pack and collation shrink-wrap solutions for major tobacco manufacturers, customized printable solutions



## Technical Films

Functional thin-film technology for high-performance capacitors in electrical applications



## TreoPore Microporous Separators

Innovative high performance solution for lithium ion batteries and double layer capacitors in electric vehicles and energy storage applications

# The Treofan Group at a Glance – Facts & Figures

**Close to 200.000 tons**  
film production per year

**7.5 billion square meter (IT 2,5 bil )**  
total capacity output per year

**€ 450 million turnover (IT € 140 ml)**  
per year (in 2015)

**1,100 employees (IT 210 empl)**  
worldwide (in 2015)

**4 production sites**  
in Germany, Italy and Mexico: 14 extrusion lines,  
2 pilot lines for R&D,  
1 coater, 1 metallizer



# Our History – More Than Forty Years of Expertise in the BOPP Market

## **1969**

Foundation of Folienwerke Saar as a joint venture of Hoechst and Saarbergwerke in Neunkirchen, Germany

## **1973**

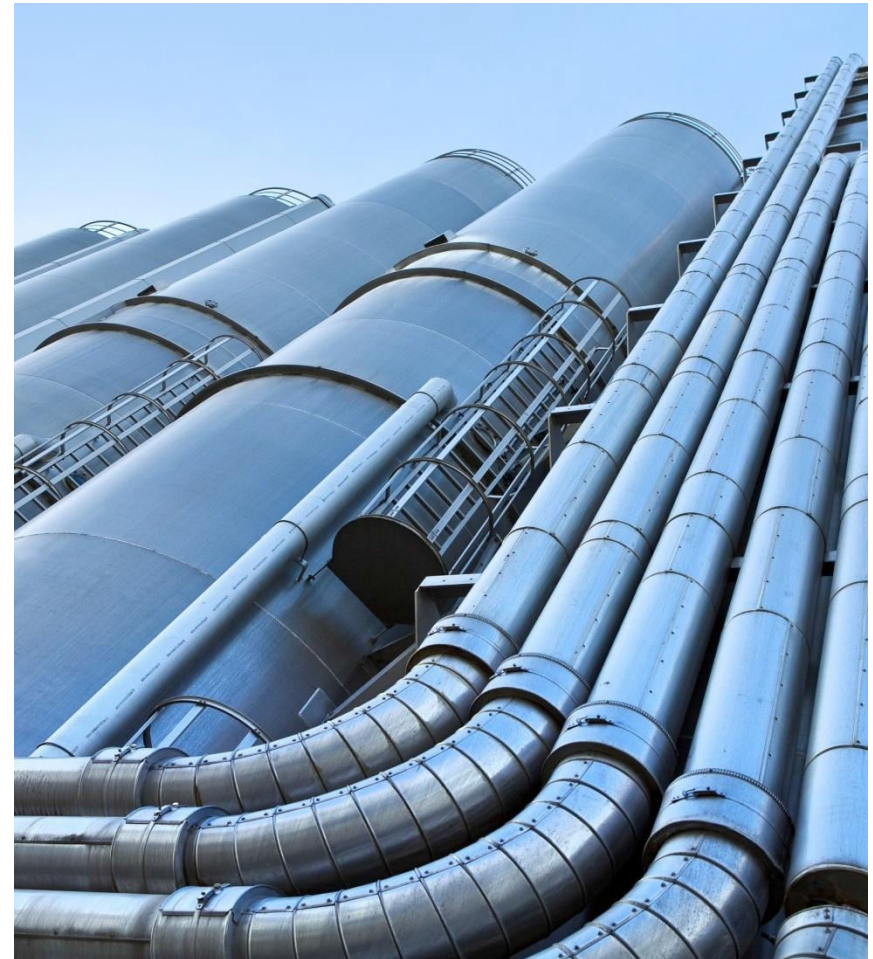
Renaming of Polymer and foundation of Moplefan in Terni, Italy

## **1995**

Spin-off of BOPP production site Neunkirchen from Hoechst and renaming inTrespaphan

## **2002/2003**

Merger of Trespaphan and Moplefan: foundation of the Treofan Group, renaming of global BOPP activities in Treofan



# Our Management and Executive Team



**Dr. Walter Bickel**  
Chief Executive Officer (CEO)  
& Managing Director  
Treofan Group



**Dr. Boris Trautmann**  
General Counsel &  
Managing Director  
Treofan Group



**Luigi Martinese**  
Chief Operations Officer  
Europe (COO Europe)



**Carolyn Wagner**  
Head of Business Unit  
Packaging & Label Films



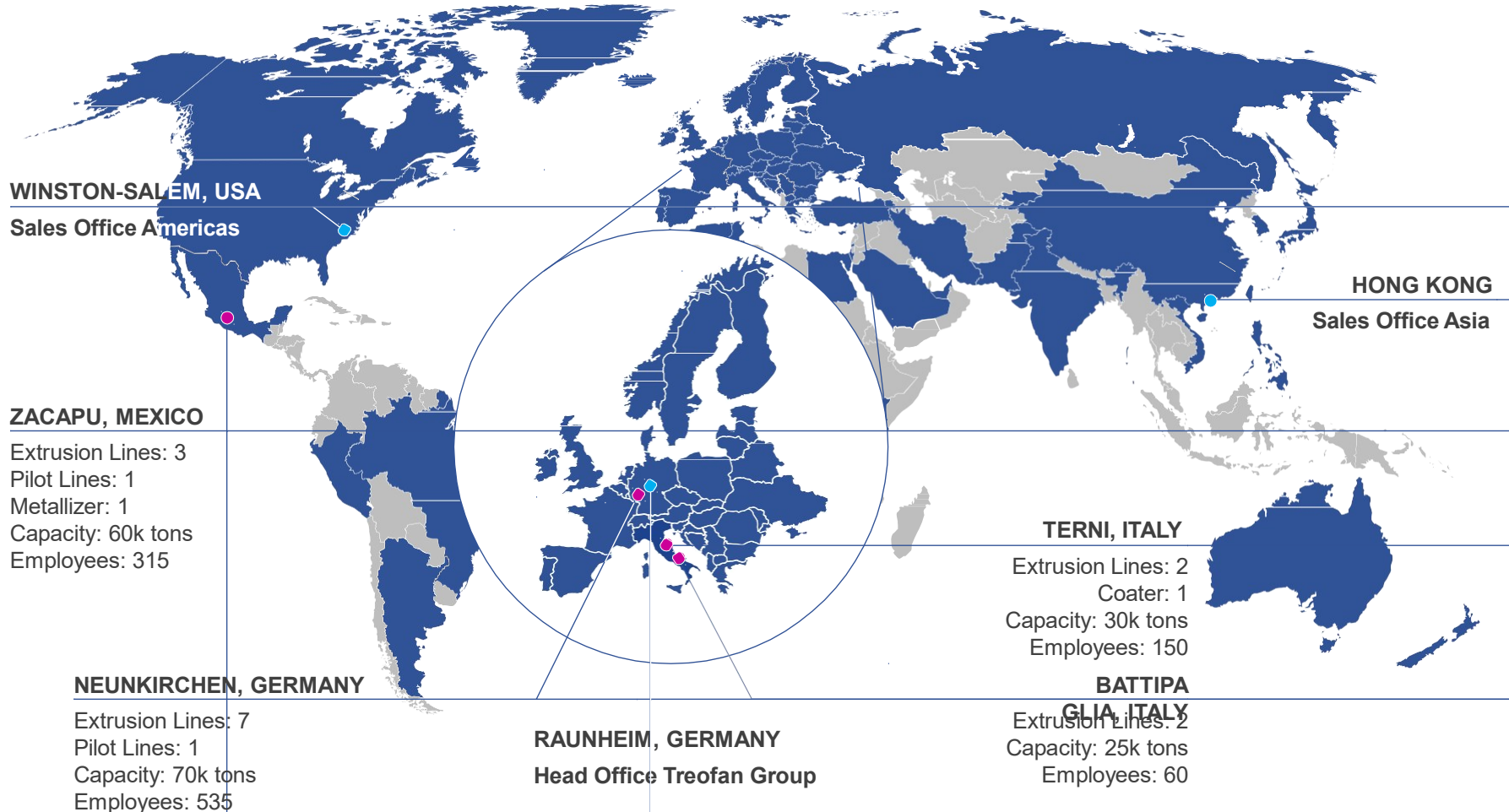
**Nico Schoeman**  
Head of Business Units  
Tobacco & Technical Films



**Dr. Franz Josef Kruger**  
Head of Business Unit  
TreoPore Separators

# Distribution in More Than 90 Countries and Global Production Sites

● Head and Sales Offices    ● Production Sites    ● Distribution of Treofan Products & Solutions



# Our Production Site in Neunkirchen, Germany at a Glance

- Founded as a joint venture of Hoechst and Saarbergwerke in 1969
- 7 extrusion lines
- 1 pilot line for research and development (up to 7 layers)
- Annual production: close to 60,000 tons (in 2015)
- 535 employees (in 2015, approx. 50% in production)
- Global innovation centre of the Treofan Group





# Our Production Site in Neunkirchen – Meeting the Highest Quality Standards

## Quality Management

- Certified according to DIN ISO 9001:2008



## Hygiene

- Semi-annual hygiene audit by AIB
- Annual hygiene audit by SAI Global



## Energy Management

- Certified according to ISO 50001
- Appointment of a person responsible for energy management



# State of the Art Production – Our New BOPP Line in Neunkirchen



## **Built to maintain the next decades of innovative Treofan solutions**

- 8.7 meters wide, five-layer technology
- Custom designed by Treofan in conjunction with Andritz
- Capable to produce a wide range of densities and thicknesses
- Annual capacity approx. 1 billion square meters (2.7 million square meters of film per day)

# Our Production Sites in Terni and Battipaglia, Italy at a Glance

## Terni

- Founded as Moplefan in 1973
- 2 extrusion lines, 1 coating line
- Annual production: close to 30,000 tons (in 2015)
- 150 employees  
(in 2015, approx. 85% in production)

## Battipaglia

- Founded as Stirosir in 1972
- 2 extrusion lines
- Annual production: close to 25,000 tons (in 2015)
- 60 employees (in 2015, approx. 90% in production)



# Our Production Site in Zacapu, Mexico at a Glance

- Founded in 1980
- 3 extrusion lines
- 1 pilot line for research and development (up to 7 layers)
- 1 metallizer
- Annual production: close to 60,000 tons (in 2015)
- 315 employees (in 2015, approx. 75% in production)
- NAFTA regional innovation center



# Setting the Standards in the Business – Our Global Innovation Approach

**More than 350 patented product applications in the last four decades**

**Advanced testing and analytical labs**

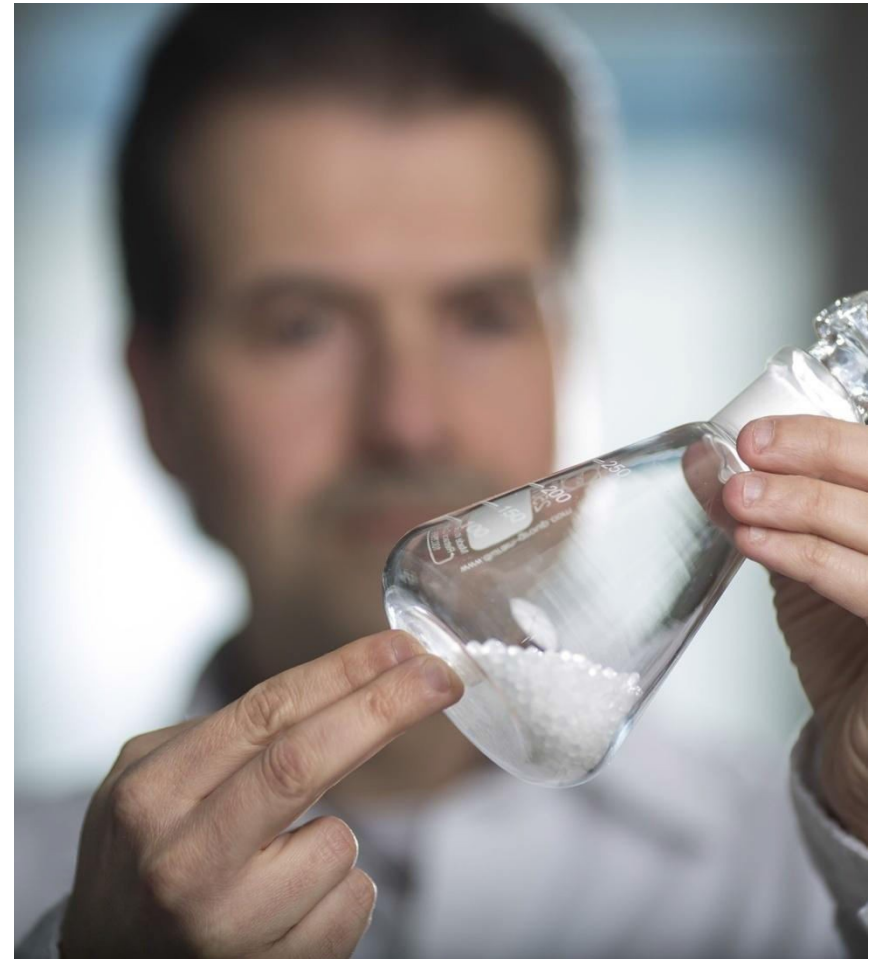
**Innovative team of experienced scientists**

**Global group innovation center in Neunkirchen, Germany**

- 1 pilot line for research and development (up to 7 layers)

**NAFTA regional innovation center in Zacapu, Mexico**

- 1 pilot line for research and development (up to 7 layers)
- Dedicated product development



# Setting the Standards in the Business – Treofan's Milestones in Innovation

## **Low temperature sealable films for the food industry**

Customized films for high speed  
application

## **Opaque films**

Foamed films with densities 0.55 -  
0.88 g/cm<sup>3</sup>

## **PLA films**

Films made of renewable resources  
with properties  
for differentiation

## **In mould labelling films**

First films introduced in the market  
place



# Setting the Standards in the Business – Treofan's Milestones in Innovation

## **TreoPore microporous separators**

The ultimate separator solution for lithium ion batteries and double layer capacitors

## **Ultra thin electronic films for capacitors**

Thickness reduced to 1.9 micron

## **Shrink films for the tobacco industry**

Shrinkage of up to 13% without creases  
thickness reduced to 16 micron



# Developing Packaging Film Solutions Together – Our Expertise for Your Success

**Treofan is the committed and innovative supplier of packaging solutions to support the growth of the top FMCG brand owners world wide.**

We are offering...

- a high-class service level partnership,
- customized developed, high-quality packaging solutions,
- a flexible, outstanding technical service,
- a consistent key account management approach,
- a long lasting, close network with leading industry partners and brand owners relevant for your business





# New Packaging Film Solution HybraPack – The Rigid Flexibel Packer

Our new, innovative product for stand-up pouches: HybraPack – the material consisting of two interconnected layers: paper (60-160g/m<sup>2</sup>) and film (7-30g/m<sup>2</sup>)!

- Paper appearance and touch: offering a back to the roots look and excellent appearances
- Decreased use of aluminum, reducing complexity and cost
- High-sealing technology for powerful barriers
- All materials already running on customers lines

**TREOFAN**  
Passion & Innovation  
Joint partner col  
between:  
**feldmuehle**  
**widmann**  
**COVERIS**  
HIGH PERFORMANCE PACKAGING



# Developing Label Film Solutions Together – Our Expertise for Your Success

**Treofan is the expert partner of IML solutions for converters and brand owners worldwide.**

We are offering...

- unmatched breadth of knowledge and experience in IML-IM segment,
- deep understanding of the overall IML process chain,
- a consistent key account management approach,
- an excellent brand owner approach track record in packaging segment,
- a global production and sales presence



# New Label Film Solution EPT – The Film for Real IML Thermoforming

**EPT, the new film for in mold labeling delivers a look and feel on par with injection-molded products.**

- The perfect solution for in mould labeling in thermoforming
- Enables stable fusing of thermoforming and label film at low temperatures and pressures
- Allowing the benefits of thermoforming in optimal quality
- Innovative surface

**Joint partner corporation between:**

**TREOFAN**  
Passion & Innovation

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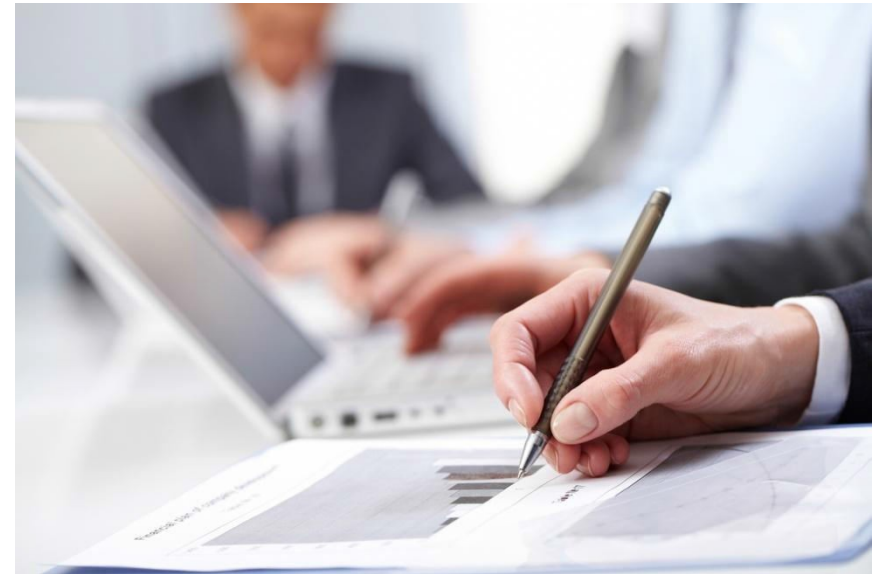


# Developing Tobacco Film Solutions Together – Our Expertise for Your Success

**Treofan is the committed, expert partner – offering the right quality, performance BOPP films for tobacco applications.**

We are offering...

- a high-class service delivery partnership,
- deep knowledge and understanding of the customers requirements and a unique solution orientation,
- film properties matching the demanding requirements and specifications,
- a consistent product quality, exceeding requirements



# Developing Technical Film Solutions Together – Our Expertise for Your Success

**Treofan is the trusted solution partner for technical BOPP films, delivering innovative products, with a consistent performance.**

We are offering...

- proven film solutions build on the excellence of the PHD brand,
- constant further developments of future solutions for the industry,
- highest level film properties and specifications,
- a reliable consistent quality maintaining its performance throughout the supply chain until the final application



# Developing TreoPore Separator Solutions Together

## Expertise for Your Success

**TREOPOR**  
Passion & Innovation

**TreoPore is the newly developed separator solution, ideally suited for the entire range of lithium ion batteries and double layer capacitors with highest requirements on safety and reliability.**

We are offering...

- an innovative separator solution based on co-extruded ceramic composite layers,
- a new technology already tested and certified by the world leading battery manufacturers,
- a cost effective and environmentally friendly production process of bi-axially stretched polypropylene separators,
- a highly flexible solution, which allows to vary all key separator properties, such as thickness, porosity and permeability





THANK YOU FOR YOUR  
ATTENTION!