



JURMET  
WINDER

## PROFESSIONAL FLEXOGRAPHIC PRINTING

Quality, keeping deadlines, experience



# COMPANY PRESENTATION- LIST OF SLIDES

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- Founding date – **2007**
- Headquarters - **Ożarów Mazowiecki**
- Number of employees – **over 100**
- Recent investment - about ZL 4 million has been obtained from the European Funds and it is to be spent on the modernization of the machine park



- Individual approach to the choice of the most appropriate solutions
- Short deadlines
- The highest quality of services on offer, supervision at every stage of work
- Friendly and professional staff
- High ethical values
- Keeping commitments



We offer our services in the production of flexible packaging: labels, monolayer films, duplex and triplex laminates in flexographic printing technology, together with solvent and solventless lamination.



Pro-Flex S.A. produces packaging for the following market segments:

- Beverage industry– labels for soft drinks, beverage bulk packaging;
- Confectionary baked goods industry– packaging for cakes, chips, puffs and snack foods;
- Food additives industry– candied fruit, spices;
- Meat industry;
- Household goods industry– packaging for household products;
- Food Processing industry– frozen foods packaging;
- Coffee processing industry and coffee additives industry;
- Confectionary industry– packaging for candy and chocolate products.



## COOPERATION WITH THE BEST

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Clients of Proflex S.A. – top Polish and international producers from the following market segments: cosmetics, drinks, food processing, confectionary and food additives.



## COOPERATION WITH LEADING SUPPLIERS

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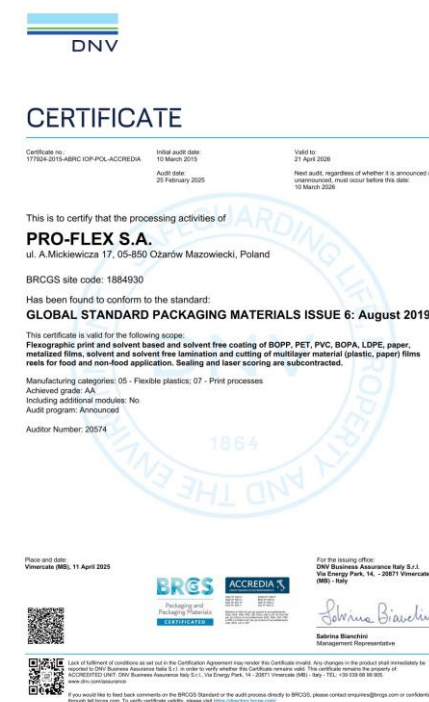
Our suppliers consist of companies with an established position on the market and with years of experience.





We regularly undergo an assessment by independent certifying units and we are proud to present the following compliance certificates that we have:

- ISO 9001:2015 „Quality Management Systems. Requirements”
- ISO 22000:2018 „Food Safety Management Systems - Requirements for any organization in the food chain”
- BRC Global Standard for Packaging Materials Issue 6 - it guarantees safety of the produced packaging and fulfilment of all legal and hygienic requirements



Our staff's reliability and competence as well as the extensive machine park, and state-of-the-art technologies ensure seamless cooperation.



# WHAT SETS US APART?



**FULL SCOPE OF PRINT**—Both outside and inside print, in a high line count and colour management

## COMPREHENSIVE, ALL-INCLUSIVE SERVICES

All-embracing services from A to Z, starting in the pre-press studio and Form department to the transport of finished products. When requested, we also offer additional services such as laminating and laboratory tests of packaging materials.

**INNOVATIONS**—Great emphasis on preparing and implementing new products into production process; standard solutions, novelties on the market as well as new packaging structures.

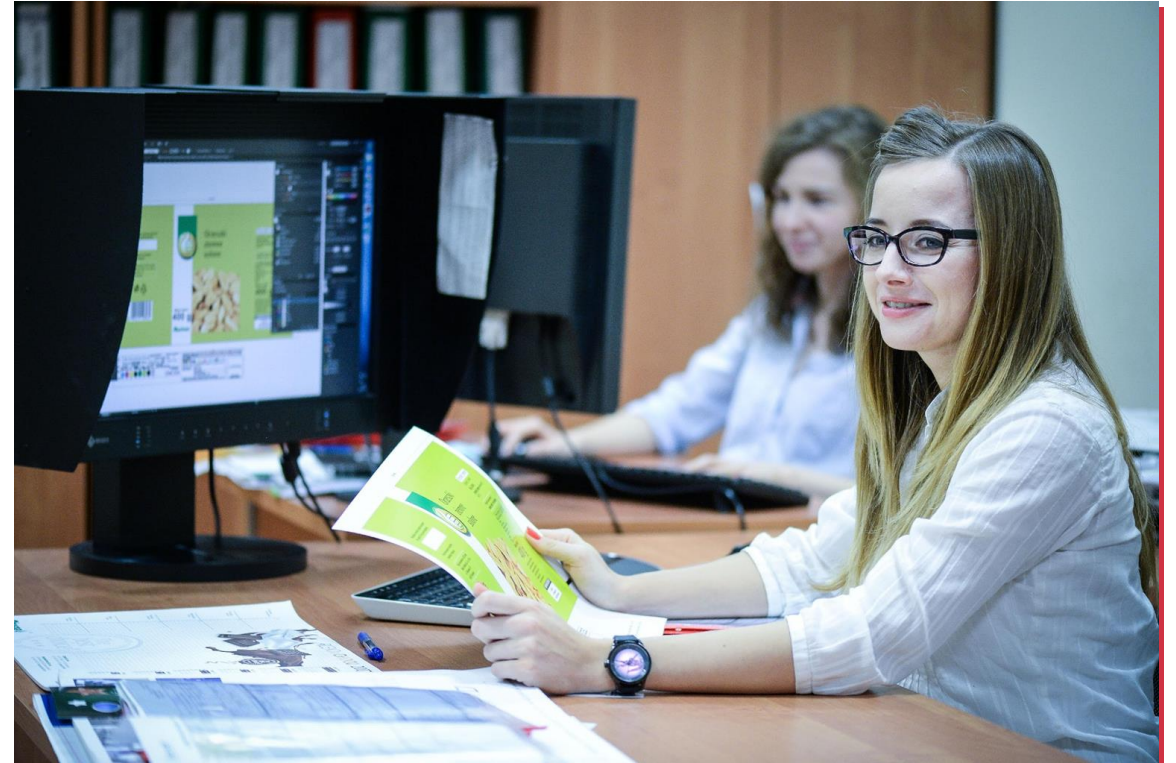


The manufacturing operations of Pro-Flex S.A. are subdivided into the following technological processes:

- Pre-press Studio and Form Department
- Ink Department-- Colour Management
- Flexographic Printing Department
- Laminating Department
- Cutting and Sorting Department
- Quality Control Laboratory



In-company graphic studio, modern technological solutions, such as raster image processing and proofing, preparing forms (CTP technology, modern equipment for the processing of photo-polymer plates).



The ink mixing system using an InkMaker Dispensing System P32, InkFormulation software creating ink formulae, a spectrophotometer measuring colour, high quality and complete repeatability of mixed printing ink colours.



The activities undertaken within Colour Management encompass the whole production process, starting with the graphic design and finishing with the final print.

The colour management procedures include:

- creating colour profiles of printing machines
- proofing
- colour assessment:
  - creating ink formulae –InkFormulaton
  - controlling colour consistency—Colour Quality

Colour Quality involves using advanced software to control colour. Colours are analysed and compared against a set pattern, resulting in an automatic information about consistency with the pattern and meeting the quality criteria of a client. It also guarantees repeatability and a uniform colour scheme in the whole batch.

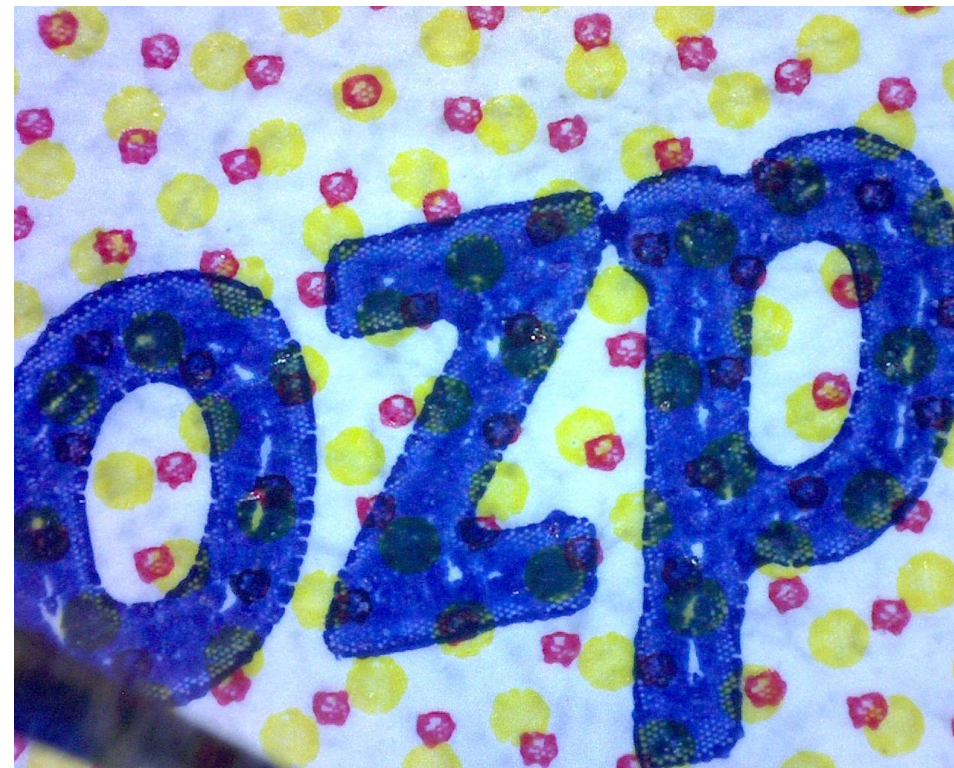
We have W&H Easy Col, the latest systems of colour selection, which is integrated with the printing machine. It allows for shorter times and less waste when using the machine.



We use high quality materials and we own three German Windmüller & Höllscher machines, two modern Miraflex 8AM machines and one Soloflex 8L, which means that Pro-Flex S.A. meets the requirements of even the most demanding customers and guarantees the highest quality of printing.

In our Flexographic Printing Department we also use a precise device for mounting printing Forms, produced by JM Heaford, Flexologic as well as a modern anilox cleaner for washing ceramic rolls produced by Flexo Wash.

In 2011 we were one of the first companies to start HD printing with 150 lpi line count in Kodak NX technology.





Our company uses HD printing technology as standard. Since 2018, as one of the first printing houses in Poland, we have implemented the production of printing plates in the Kodak NX technology. This distinguishes us on the market of flexographic printing.

By eliminating oxygen inhibition from the process, we make printing plates with ruling up to and including 175 l / cm. This enables reproduction of a wider range of tonal value and extension of the colour space of a print. In addition, due to the possibility of using anilox structures, the optical density of process colours and the saturation of special colours are exceptionally high in our company. It makes our prints saturated with intensity of colours.



We only use materials of highest quality in the production process.

The printing section comprises three printing machines by a German producer Windmüller & Höllscher, which ensures that our services meet expectations of even most demanding clients and they also guarantee the highest quality of print.

The printing section's machine park is further supplemented by JM Heaford and AV Flexologic precise machines for printing plates mounting, as well as modern Flexo Wash cleaner for ceramic anilox rolls and printing plates. Such equipment ensures that printing parameters are repeated and, at the same time, it guarantees the quality of the final product.



Pro-Flex S.A. produces its own printing inks. We are capable of recreating any colour named by a client thanks to the implemented Colour Management system.

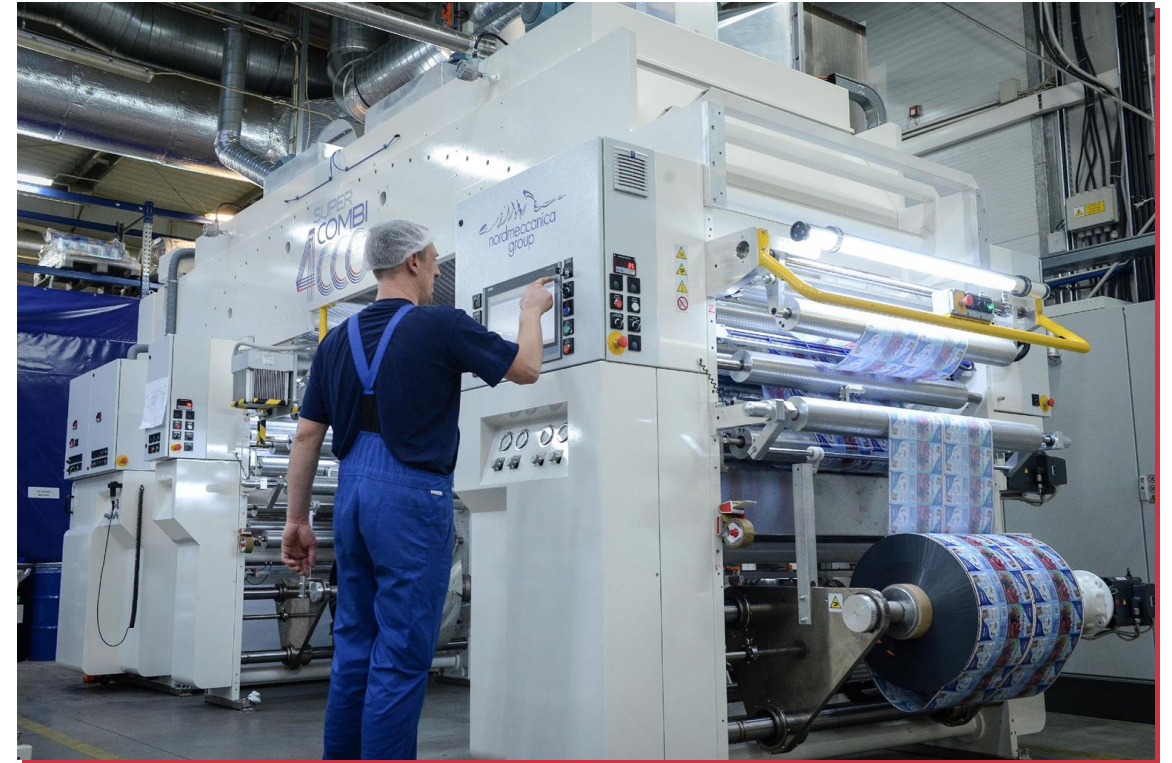
We were one of the first companies in Poland to start HD printing with 150 lpi ruling in Kodak NX technology.

Nordmeccanica Laminating machines (Nordmeccanica being the market leader)—Super Combi 4000 and Super Simplex.

Drying time is adjusted to the packaged product, structure of the product and adhesive mix used.

***Rotomec laminating machine:***

Laminating with solventless laminating adhesives.  
Drying time in appropriate conditions.

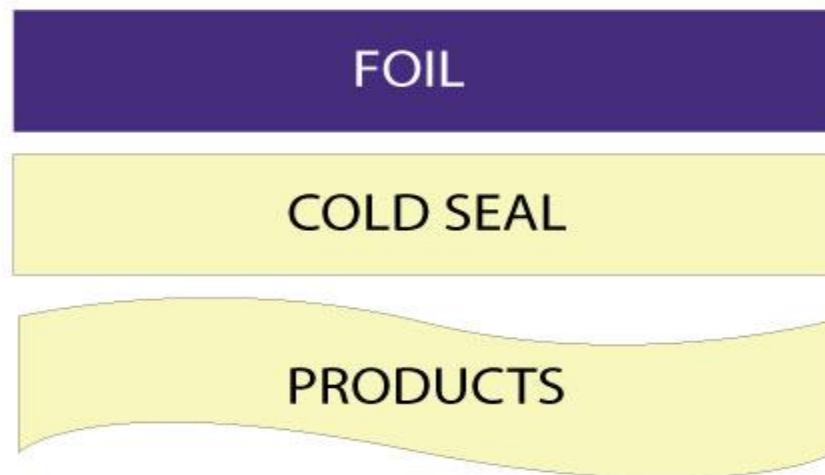


**Cold seal** is a special adhesive based on natural latex rubber. The dried layer of the cold seal glue has such properties that it adheres only to itself under the influence of a certain pressure force.

Pro-flex will be able to produce this type of packaging thanks to the upgrade of the laminating machine to a work system in a register with original print.

Cold seal packaging:

Anti-blocking varnish, print,  
cold seal, products



Anti-blocking varnish protects against seal sticking thanks to the application of cold seal glue on the reverse (Mainly based on polyamide resins).

## PACKAGES WITH COLD SEAL

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Use: for packaging of heat-sensitive products, where heat sealing destructively affects the packaged product (dissolves it). Examples of products: chocolate, ice cream, chocolate wafers. The application allows you to carry out the packaging process at high speed. High process efficiency.

Packaging with the application of cold seal can also be produced in the laminate version - the top film then has a special anti-adhesive



Modern cutting machines make very quick cutting of printed and laminated packaging materials possible while maintaining high packing standards.

### ***Two Jurmet slitting machines***

Maximum diameter of a roll 600mm

Maximum slitting speed 500m/min



**Unrivalled experience in printing projects in High Definition.** Owing to the use of specialized anilex ceramic rolls with a high line count, as well as a digital preparation in Flexcel NX technology, produced by KODAK, we are able to offer you a print with a line count of 175 LPI Kodak's Flexcel NX – we offer a print with 175 lpi (tonal range of  $\Delta D > 1,70$ , the smallest reproducible point on the print of 8%). We have at our disposal state-of-the-art slitting machines which allow for using 70mm-diameter, 76mm-diameter, 152mm-diameter cores, max reel length being 800mm. We can also slit paper as we use rotary cutters and equipment for automatic pushing and collecting of heavy reels.



We have at our disposal the following printing options:

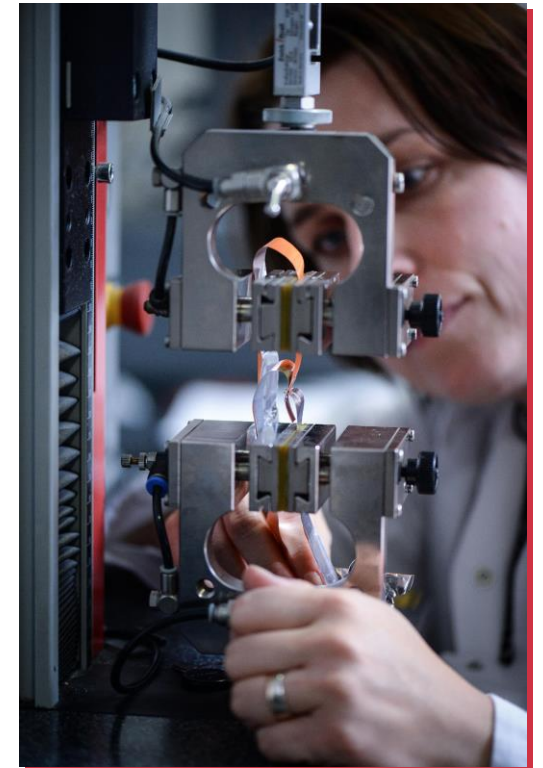
- obtaining print with selective varnishing-gloss/matte effect
- obtaining print with selective varnishing-paper imitation, which is hard to distinguish from real paper
- obtaining print with selective varnishing-gold or silver mirror effect, which is achieved with the use of super silver ink





Our own, extended quality control laboratory equipped in state-of-the-art machines and working 24 hours a day. The control of quality parameters of materials, semi-finished products and finished products is effected with the use of:

- Gas chromatograph produced by Perkin Elmer—Clarus 580—used primarily to monitor solvents in the wake of the printing process (the main impact of too large a quantity of solvents involves the barrier qualities of the packaging, which is tied to the penetration of substances into the product as well as sensory-related changes in the product),
- Strength testing machine produced by Zwick—used to control the strength of delamination of the produced specimen blanking laminates—tools facilitating both blanking specimen for grammage testing and the delamination strength.
- Barcode checker produced by Integra—allows verifying printed barcodes for conformity with norms in force as well as clients' specifications
- Electronic micrometer—allowing for a very precise gage of materials and products
- Thermal chamber
- Laboratory scales
- Laboratory heat sealer



## Technical Specification of Products

### 1. Simplex with surface printing are secured with varnish, depending on customer's requirements

- Printed BOPP polypropylene films – transparent, pearly white, white, metallic and transparent with a matte surface
- Printed LDPE polyethylene films – transparent, white
- Printed PET polyester films – transparent, metallic
- Polyethylene coated paper
- Paper
- Twisted materials such as Hicor, Twist lyte, PVC (transparent, white, metallic)

### 1. Laminates (duplex)

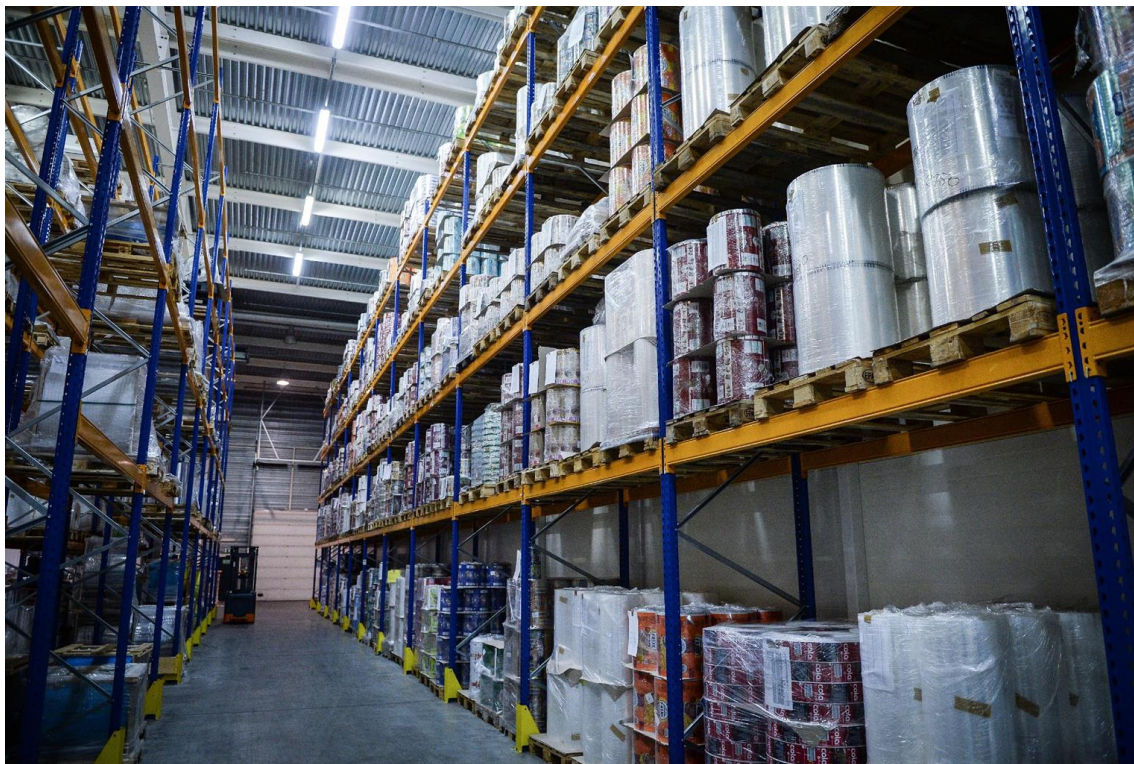
- BOPPP + BOPP films ( transparent, perly white, metallic or white)
- BOPP + CAST films
- BOPP + LDPE films (transparent, white, metallic)
- PET + LDPE films
- LDPE + LDPE films

### 3. Laminates (triplex)

- BOPP + PET + LDPE films
- BOPP + PET films (metallic) + LDPE film
- PET + AL + LDPE films
- PET + PET films (metallic) + LDPE film
- BOPP + PET films (metallic) + BOPP film
- BOPP +ORH films (pearly white, matte on one side)+ BOPP film



- Waste sorting, energy-saving lighting, reasonable management of water, electrical and thermal energy, as well as resources used in production.
- Proactive measures to reduce noise and emissions of volatile organic compounds.
- We take into consideration our neighbours' expectations and aim at conducting business in a way that facilitates harmonious cohabitation with them. Given the above, we have placed particular emphasis on the reduction of noise and volatile organic compounds.



- Combustion which takes place in temperatures between 800 and 1000°C— end products being carbon dioxide and steam.
- Very low exit gases concentration-- the permitted emission of VOC is 100mg/m<sup>3</sup>;
- The heat retention system –using heated, clean air from the Regenerative Thermal Oxidizer to heat air in the production hall--considerable reduction of gas usage and, consequently, CO<sub>2</sub> emission.



- Acoustic screens for ventilators for the Regenerative Thermal Oxidizer—the guarantee noise level <math><45\text{dB (A)}</math> at a 10-meter distance from the installation at night time.
- Additionally, a 7-meter-high acoustic screen-- it comprises acoustic panels with the sound absorption indicator of 13 dB and airborne sound insulation indicator of 26dB.



In 2009 we have obtained subsidies from the MAZOVIAN REGIONAL OPERATIONAL PROGRAMME 2007-2013 within priority I, measure 1.5.

The implemented project “The increase of competitiveness of Pro-Flex S.A. by introducing technological changes as well as broadening the offer and introducing new products” includes the following investments:

- purchase of a printing machine Miraflex
- purchase of a regenerative thermal oxidizer with a heat exchanger
- purchase of a cutting machine
- purchase of additional equipment for the quality control laboratory

**Value of the project:** 6 465 750 PLN

**Subsidies:** 3 879 450 PLN

Pro-Flex S.A. is implementing the project “New Quality of Graphics in Flexible Packaging—putting into production R&D results” (project no POIR.03.02.01-14- 0020/15).

The project is co-financed from the European Regional Development funds within the Intelligent Development 2014-2020 Operational Programme, priority axis 3. Support of innovations in enterprises, measure 3.2. Support of implementation of R&D work results, sub-measure 3.2.1 Market research.

**Total value of the project amounts to PLN 11 588 718.00**  
**Including the project subsidies PLN 3 473 440.00**



**Unia Europejska**  
Europejski Fundusz  
Rozwoju Regionalnego



# CONTACT



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You are welcome to check our offer and contact the sales department. Our employees will be happy to answer any questions you have and to draft a detailed offer suited to your needs.

The company is located in the center of Ożarów Mazowiecki, 15 km from the center of Warsaw. Location within an easy reach by car from Warsaw, Poznan, Katowice or other big agglomerations. Trains are a quick and comfortable transport option for clients using public transport.