

IPM: socketing of corrugated PE and PP pipes - injection system

Automatic inline belling machines for PE and PP double and single wall corrugated pipes, ultrarib pipes, ranging in length from 1.000 up to to 6.000 mm (12.000 mm length also possible, on request)



IPM (Italian Plastic Machinery) is a worldwide consolidated company which produces machines for the extrusion and packaging of plastic pipes.

Founded in 1987, it carries out the whole production process in its premises, starting from the design to the manufacturing of its equipment, thus guaranteeing quality and total Made in Italy.

IPM modern headquarters are located in Lugo di Romagna (RA), on an area of approximately 17,500 m², of which 7,300 m² are covered.

The partners, Ms. Silvia Geminiani, Mr. Claudio Argnani and Mr. Bruno Barabani, point out that "in an increasingly complex global context, IPM's goal is to promote the improvement, competitiveness and growth of customers' companies, through innovation and technological development, ensuring them the best performance, supporting them till the full achievement of the pre-established results, contributing to economic development and improvement of the living conditions of people and planet". With a long experience and constant innovation, IPM is one of the most representative companies in this field, very often offering "tailor-made" systems to complete the extrusion lines for plastic pipes.

In Europe, where the use of PP pipes, but also those in PVC and PE, is growing rapidly, the demand for faster, higher-performance and automated lines is higher and higher, especially because of the shortage of trained workforce, willing to work shifts, even at night, all year round.

Furthermore, the implementation of automation and the digitalization of processes, the control and management in a 4.0 perspective have become essential



IDENTITY CARD

MODEL: **SOCKETING OF CORRUGATED PE AND PP PIPES - INJECTION SYSTEM (IPM patent)**

MANUFACTURER: **IPM Srl**

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TYPE	O.D. MM
BA 160/INJ	110 - 160
BA 250/INJ	110 - 250
BA 500/INJ	110 - 500
BA 680/INJ	110 - 680
BA 800/INJ	110 - 800
BA 1200/INJ	110 - 1200

THE MACHINE OF THE MONTH



to increase the competitiveness of the pipe manufacturers, bringing about quality and reliability of products, which need testing one by one.

SOCKETING OF CORRUGATED PE AND PP PIPES - INJECTION SYSTEM (IPM patent)

It is a range of machines exclusively designed by IPM for the inline processing of PP and PE of double and single wall corrugated pipes, ultrarib pipes, even with very large diameters up to 1200 mm. They inject the socket directly on the pipe (PATENTED). This exclusive IPM system allows to obtain a RIGID, RELIABLE, SHRINKAGE-FREE SOCKET.

Compared to other existing systems (i.e.: by friction, by jointing system through sleeves), our machines offer valuable advantages:

- Perfectly welded socket, mechanically solid, aesthetically beautiful, with uniform, regular and homogeneous surface.
- Tolerances and characteristics according to EN 13476 standards.
- Absolute dimensional stability over time, even when the socket is subjected to the most varied environmental temperatures.
- Repeatability of the process regardless of the characteristics of the raw materials used and their various formulations.
- No influence on the socket of any ovalization of the pipe.
- Possibility of customizing the shape of the socket.
- Possibility of thickening the socket wall, on request.
- Possibility of socketing pipes of different materials (PP and PE) by the same machine and by the same equipment.
- High production to fully exploit the speed of the modern corrugation lines.

In addition, when compared to the traditional "friction" system with sleeves, exploiting IPM injection belling machines you reach:

- Removal of any warehouses for the sleeves, with considerable savings in space and money;
- Independence from third parties, i.e.: the suppliers

of the sleeves;

- Reduction of the costs for the gaskets (the inline belling requires just nr. 01 gasket instead of nr. 02 gaskets as when using the sleeves);
 - No waste of time or money for the identification of defects in the socket welding;
 - Elimination of production waste due to incorrect welding of the sleeve on the tube.
- IPM injection system is preferable to the inline socketing by the corrugator thanks to:
- Saving of raw material and speeding up of the production cycle with consequent reduction of the cost of the product (the sleeve is doubly long);
 - More solid joint, since the cutting phase of the internal wall of the pipe is not required;
 - No constraint on the length of the pipe to be socketed (with the corrugator the length of the pipe is constant);
 - Greater stability of the socket obtained, follow-

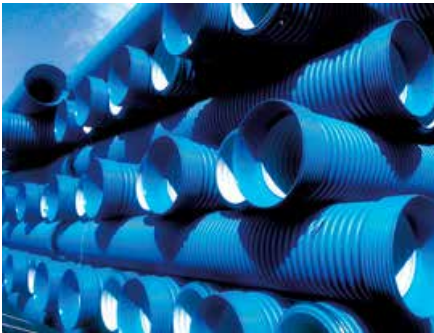
ing up the reduction of the shrinkage due to the "memory" of the raw material;

- Less waste;
- Greater production capacity.

This range of machines is equipped with NEW VIDEO TERMINALS

- with SIEMENS 12-inch touchscreen panels of last generation, with improved performance in terms of speed;
- renewed graphic interface, with visual indicators of efficiency and energy consumption that allow an immediate understanding of the machine's performance;
- analytical alarm troubleshooting directly integrated on the videoterminal providing more detailed information on the causes that have caused the alarms;
- alarm history archive: the last 1000 alarm messages can be freely consulted by the operator;
- instruction manual and electrical diagram in .pdf format that can be consulted from the videoterminal itself;
- storing of the Format Recipes (Memory card) on an external microSD to avoid losing production data in the event of panel malfunction.
- maintenance job: scheduling of alarm messages,





whose text is specified by the end user, which are activated on the basis of certain occurrences bringing about the chance of planning scheduled maintenance.

- possibility to schedule the sending of emails to addressees that can be specified by the end user, when the conditions for activating the maintenance jobs occur (it requires internet connection).

TELESERVICE

IPM wants to reduce distances and assist its customers in real time thanks to the TELESERVICE, which has been increased and facilitated by the spreading of broadband and of corporate networks (wired or wireless).

Through this service, IPM offers through an industrial router the remote connection of its machines to the user's corporate network (both Ethernet and

Wireless).

In alternative it is possible to connect using a UMTS cellular connection. This allows you to have a connection even where there is no corporate connection, neither wired nor wireless.

This device, especially with the rise of Industry 4.0, has become indispensable to safeguard the best performance in very short times, thus avoiding any costly machine downtime.

