

## **A NEW TECHNOLOGY FOR THE PRODUCTION OF “SUPERPOWER” STRETCH FILM 7-LAYER 2 METERS STRETCH FILM LINE WITH 6 EXTRUDERS**

The line has been developed for the production of rolls of “SUPERPOWER” film for high speed wrapping machines, but can also be used for the production of hand rolls in very thin gauges (6 my) and 200 m in length.

The main innovations are:

### EXTRUSION SECTION :

- based on 6 extruders : 5 having a screw 48 mm diameter (19”), L/D 40 and one having a screw 130 mm diameter (51”), L/D 35 ;
- The output of the 48 mm extruders is 200 Kg/h each and the 130 mm extruder has an output of 900 Kg/h;
- The net output of the line is 1500 Kg/h with the following layer distribution:  
A-B-C-D-C-E-F (10-10-25-10-25-10-10 %);
- The standard range of thickness is from 6 to 40  $\mu$ .

### CHILL ROLL UNIT :

The unit is a real innovation. The concept is based on two Chill Rolls: the primary has a 1200 mm diameter and the secondary a 600 mm diameter. This feature has been studied in order to extend the low cooling process of the film in order to increase its mechanical properties.

### IN LINE TRIMS RECYCLING :

The trims generated by the neck-in or the eventual “bleed trims” are reprocessed in-line with a “cold” system by injecting the fluff directly in the barrel of the extruder of the “C” layers.

### REWINDING SECTION :

Driven by Brushless motors, it is based on a Twin 4-shafts rewinder and can handle both 2” or 3” cores.

### LAYOUT:

The total floor space required is only 120 m<sup>2</sup> and the line length is 11 m.

The energy consumption has been reduced to 0,40 / 0,44 kW /Kg.