



# **BACK TO THE FUTURE**

The C23, manufactured by IMA in the mid eighties, has been one of the most successful tea bagging machines ever: reliable, efficient and very simple to use.

The constantly increasing market demand for stapleless and natural teabags has represented a challenge for those companies totally equipped for the production of traditional double chamber filter bags with string, tag and aluminium staple still produced on well maintained C23 machines.

Requests to modify existing C23 machines to produce innovating knotted teabags have now become a reality and today IMA is able to offer a solution that perfectly fits on these machines enabling the production of top quality knotted teabags.







# **KNOTTED TEABAG FEATURES**

The shape and features of the traditional double chamber filter bag produced on the C23 is exactly the same even after the machine has been upgraded with the knotting group.

The only difference is the replacement of the aluminium staple with a double knot.

### The new group provides:

- Fixing of the string to the tag paper by means of cold glue (glue is pre-arranged on the inner tag paper)
- Fixing of the string to the filter paper teabag by means of a double knot (the string required for filter bag knotting is supplied by an additional cotton thread coil)



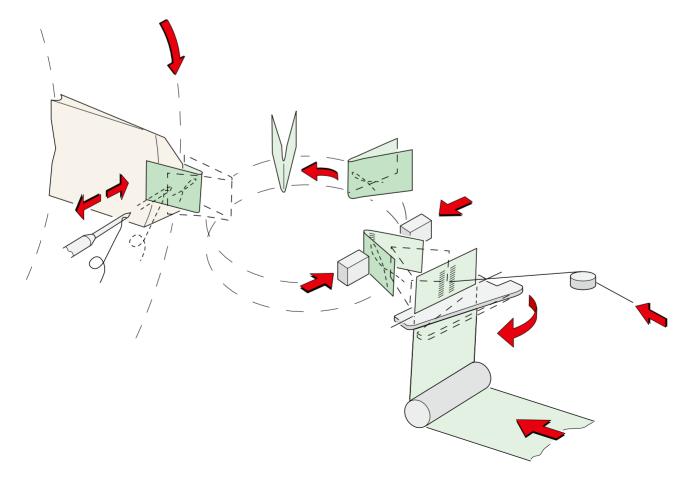
MACHINE SPEED: 200 BAGS PER MINUTE FOR NAKED BAGS, CRIMPED AND HEATSEALED OUTER ENVELOPES



THE TRADITIONAL DOUBLE CHAMBER FILTER BAG PRODUCED ON THE C23 MAINTAINS EXACTLY THE SAME SHAPE AND FEATURES EVEN AFTER MACHINE UPGRADE WITH KNOTTING GROUP.



KNOTTING GROUP FLOW-CHART



# FOCUSING ON UPGRADING THE MACHINE TO KNOT TECH I

### **MECHANICAL UPGRADE**

Judging at first glance it might appear that the the staple unit has simply been replaced by a new knotting group, however, significant modifications have also been applied to the tag unit too.

With the precise aim of allowing easy access to the tag unit, the knotting group has been designed to 'open' as per the same procedure used on the staple unit.

To minimize the installation time for machine upgrade and to guarantee correct operation, a complete tag unit replacement has been foreseen.

Any version of the C23 machine can be modified to knot technology – naked bags, crimped or heatsealed outer envelope–



#### IMPORTANT NOTE:

THE UPGRADE PROCEDURE FORESEES THAT THE OLD STAPLE AND TAG UNITS, REMOVED FROM THE MACHINE AND REPLACED BY THE KNOTTING GROUP ARE SENT BACK TO IMA.

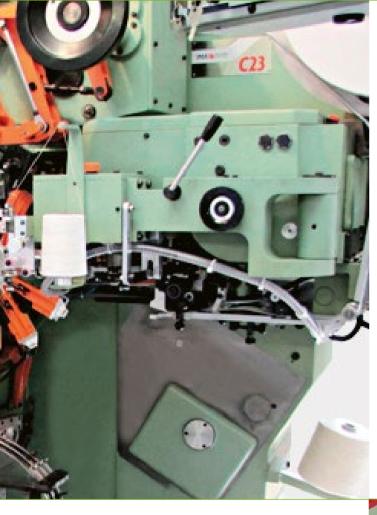
#### **ELECTRICAL UPGRADE**

On recent machines, updated messages can be displayed on the operator panel simply by replacing the PLC memory card.

On older machines an additional lamp will warn the operator when the machine has stopped due to issues related to the knotting unit.

A complete and detailed proposal for the electrical upgrade can be supplied to customers based on the machine serial number.

# HNOLOGY



### **GUARDS**:

NO UPDATE IS REQUIRED. THE EXISTING GUARDS ARE COMPATIBLE WITH THE NEW KNOT AND TAG GROUPS.

#### **INSTALLATION TIMING**

The knotting group can be fitted on the C23 machine at customer's site – there is no need to send the machine back to IMA for upgrading.

According to IMA's experience, an approximate time of five working days is required to install both knot and tag groups on a well maintained and running C23 machine.

Testing and training on the updated machine are also foreseen and included in the above estimated time.

#### **DOCUMENTATION**

Updated electrical schemes and spare parts catalogue are supplied together with the groups to facilitate maintenance operations on the C23 machine.

#### **SPARE PARTS CONSUMPTION**

One of the significant features of the C23 machine is the reduction in spare parts consumption; upgrading to knot technology, removing the stapling unit, results in additional consistent cost reductions.



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