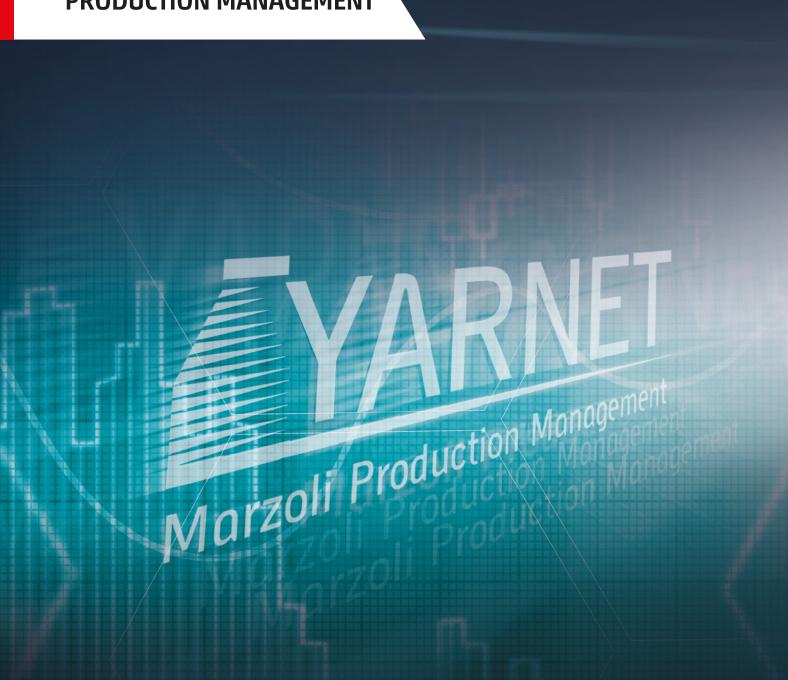


YARNET PRODUCTION MANAGEMENT



YARNET / Software Platform

THE END2END PRODUCTION MANAGEMENT PLATFORM

KEY POINTS

- HIGHLY INNOVATIVE PRODUCTION MANAGEMENT SOFTWARE
- EASY & IMMEDIATE PRODUCTION CONTROL
- SIMPLE MANAGEMENT OF PRODUCTION RECIPES
- TOTAL CONTROL OF THE ENTIRE PRODUCTION PROCESS
- YARNET
 Marzoli Production Management

YarNet is Marzoli highly innovative production management software.

This product has been designed in order to make production management smart, easy and immediate:

- it registers and stores all production data, machines operating conditions, machine statuses and technological parameters;
- it allows to elaborate these data with useful functions and obtain valuable information in the form of tables, colors, charts and diagrams;
- it enables the customer to interact directly with the machine by downloading, editing and sending production recipes.

line of machines for opening, preparation and spinning of short-staple fibers. This, together with the software modular design that allows an easy connection with any Marzoli machine, makes YarNet the only software platform that can interact with each and every machine comprising the entire production process.

Thanks to YarNet, the customer can rely on just one software to manage the entire plant.

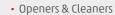
Needless to say, the centralization and organization of all the messages coming from the entire production process in one intuitive and well-structured interface allows to have everything under control in any moment and to improve the speed of response in production operations.

Marzoli is the only European manufacturer of the full

- NO USELESS COMPLICATED FUNCTION
- PERFECTLY SUITABLE TO ANY TYPE OF SPINNING MILL
- IMPROVED SPEED OF RESPONSE IN PRODUCTION OPERATIONS



OPENING SECTION





Card



COMBING SECTION



- Lap Winder
- Comber
- Lap Transport



SPINNING SECTION

- Roving Frame
- Ring Spinning Frame
- Bobbin Transport
 System



02

PRODUCTION MONITORING & MANAGEMENT

YarNet is a highly advanced software that allows a simple but thorough and effective monitoring of the entire spinning plant.

The Layout window allows to monitor every single machine comprising the spinning mill.

This window lists all the machines and, for each one of them, it showcases real-time production data (e.g. count, twist, speed, production volumes, etc.) and, thanks to colored progress bars, machines statuses (e.g. red=alarm, blue=doffing, yellow = wait, green=run, etc.). This grants a clear overview of the whole plant and allows to immediately identify machine alarms and stops.

KEY POINTS

- EASY MONITORING OF THE SPINNING MILL
- CLEAR OVERVIEW OF THE WHOLE PLANT
- IMMEDIATE IDENTIFICATION OF ALARMS & STOPS
- THOROUGH ANALYSIS FOR HIGHER PRODUCTIVITY & EFFICIENCY
- WAITS & STOPS ANALYSIS FOR EFFECTIVE MAINTENANCE

The "Production" and "Charts" windows allow to investigate production and efficiency levels of the mill. The data can be filtered and managed in several ways and with an expert use of these functions customers can usually find ways to boost productivity and efficiency of their plants.

A very interesting feature of YarNet is the "Waits & Stops" window. This window allows to analyze the causes of the stops and waits of the machines, giving valuable guidance for maintenance operations.

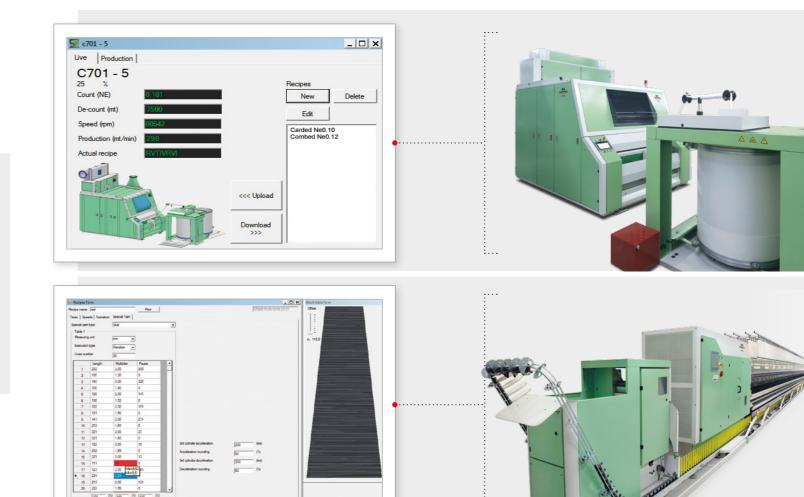
I SIMPLER EDITING OF PRODUCTION RECIPES

From the "Layout" window, by clicking on the details button located underneath the production parameters, the customer can access a more detailed window of the machine. The right side of this window is dedicated to the management of the production recipes. With YarNet the customer can download, modify, create and send recipes whose production can be started automatically after the next doffing or can be signaled on the machine panel (in this case, the operator at the machine will decide if and when to start its production). The possibility to handle any production recipe from a single computer rather than standing in front of the idle machines makes it easier and faster to manage production.

During the editing of the production recipe, YarNet analyzes the mechanical reduction of each motor,

verifies the inserted parameters, calculates the maximum and minimum tolerance values, verifies the feasibility of the inserted data and, if a parameter exceeds its tolerance values, it warns the user by highlighting the field in red. Beside all the advantages related to monitoring and management of production, YarNet also gives the opportunity to back up all the production recipes on a hard disk in order to preserve the technological know-how of the company.

YarNet also allows to import and export the production recipes from and to .xml format (readable with Microsoft Excel) which enables the customer to share, review and modify production recipes with colleagues and business partners.



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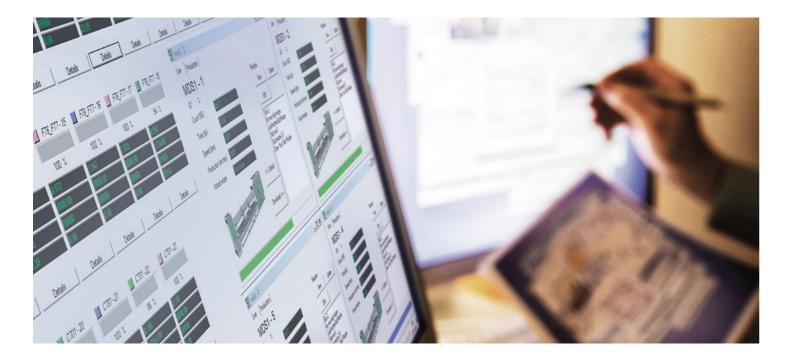
YARNET / Software Platform

POWER MANAGEMENT

Always achieve the best trade-off between efficiency & productivity

KEY POINTS

- INTEGRATED POWER MANAGEMENT FUNCTION
- NO ADDITIONAL SENSORS ON THE MACHINE
- AUTOMATIC CALCULATION OF RELEVANT PARAMETERS

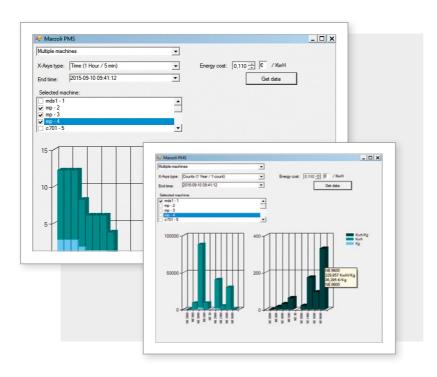


By elaborating the data regarding production and energy consumption, YarNet automatically generates graphs that identify the tradeoffs between production and efficiency (Kwh/Kg). The client can, therefore, adjust production levels in order to reduce energy consumption and boost its competitiveness (Power Management System). In traditional software, this function is available only if the client purchases another dedicated software and installs specific sensors inside the machines.

Beside the cost of the supplementary hardware and software, this external dedicated application requires the operator to insert all technological parameters manually, in order to conduct the queries on production and efficiency tradeoffs.

On the contrary, with YarNet the power management function is completely integrated: the client does not have to install any additional sensor nor is required to insert the technological parameters again. YarNet already has all the required information

because technological parameters have been inserted during the editing of the recipe; the software simply recalls these data and elaborates them in order to create the desired diagrams and charts.



FANCY YARN PRODUCTION

All the advantages of YarNet are even more evident with fancy yarn production.

Thanks to YarNet, the operator can: create long and complex production recipes sitting in front of his computer instead of standing in front of the touch screen of the idle spinning frame; save a potentially unlimited number of production recipes on his hard disk, so that he can recall them and save time during lot changes; easily identify mistakes in the recipe before the start of its production, as YarNet highlights in red the fields where non-workable parameters have been inserted and provides a preview of the black table.

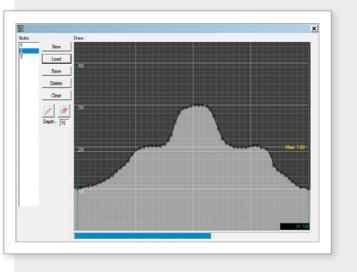
Draw your slub with YarNet

With YarNet it is possible to maximize the benefits stemming from the implementation of Marzoli's innovative patented system to edit fancy yarn recipes. The "Draw Your Slub" application works as follows: the operator draws the slub through the dedicated editor, gives an identification number to the new slub and then recalls this number in the slub table in order to insert the length and the pause of the slub. Beside making the design of the fancy yarn recipe easier and faster, this application has the great advantage of allowing the client to draw any kind of slub and shape. As anticipated, YarNet further emphasizes this advantage by making the slub design simple and intuitive. The operator can use a pencil tool to draw the desired slub on the monitor of his computer: it is sufficient to drag the pointer on the screen in order to trace the slub profile.

KEY POINTS

- TIME SAVINGS DURING LOT CHANGES
- EASIER & FASTER EDITING OF SLUB YARN RECIPES
- BLACK TABLE PREVIEW





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