

Tailor-made to your needs

RIGENERA+ introduces a new concept of complete modularity that helps configure each system based on your regeneration requirement. In particular, you can create your system by choosing from two different types of modules by their function

PRINT & CLEAN



CLEAN



Once the modules' function is set, you can then configure the system with up to three modules (M+S+S)

PRINT & CLEAN MAXIMUM CONFIGURATION



CLEAN MAXIMUM CONFIGURATION



Printhead Modules

RIGENERA+ is compatible with all the main printheads on the market because it uses a specific adapter module that includes a hydraulic part and the electronics for controlling the printheads during washing and printing. When new printheads or models are released onto the market, all you will have to do is buy the relevant module for the new printhead, which actually makes RIGENERA+ a future-proof solution.



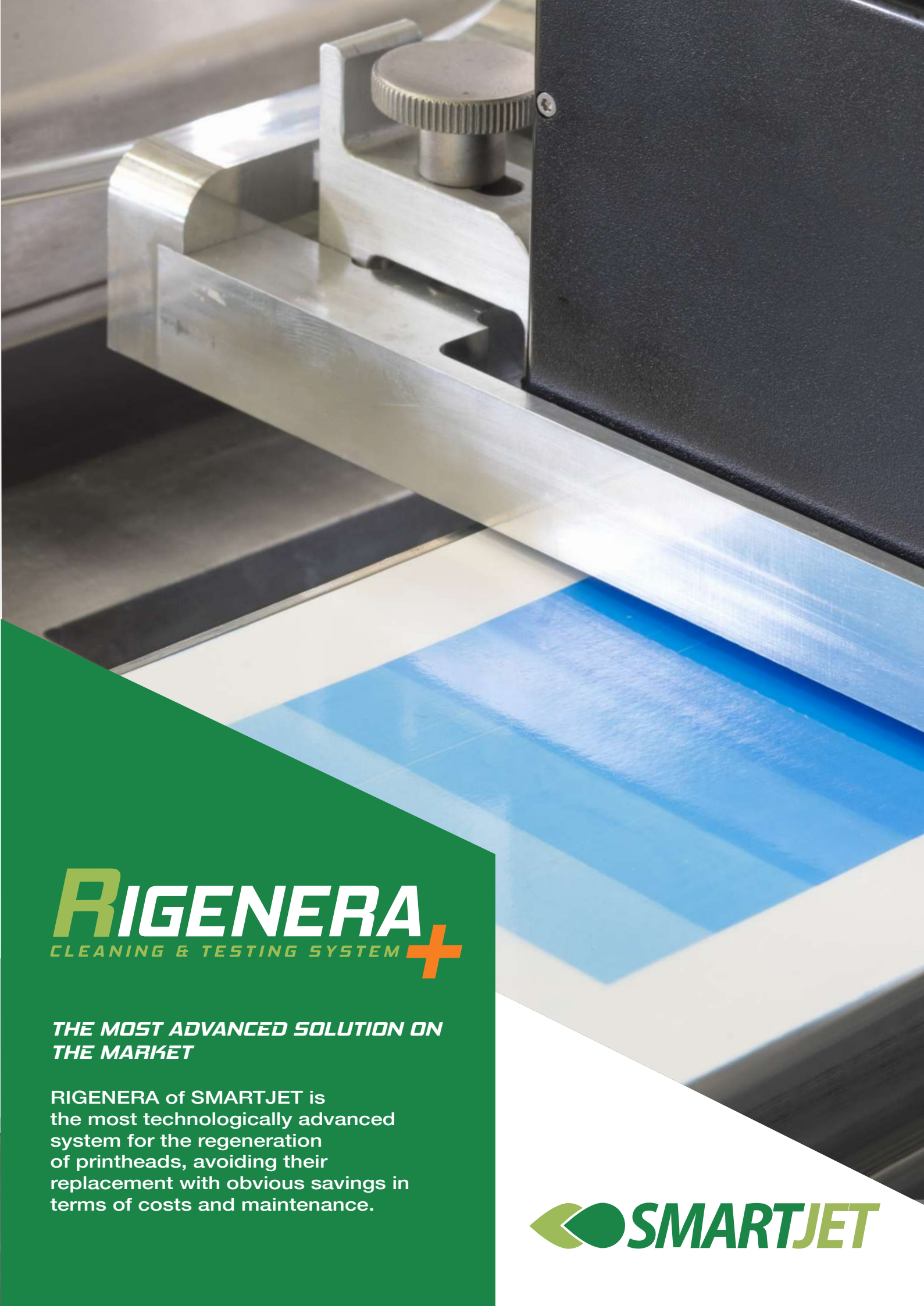
Technical data sheet

Characteristic	RIGENERA
Dimensions	1250x800mm height 1850mm
Weight	300 kg
Power supply	230VAC 50Hz 1ph
Pneumatic supply	4 bar minimum
Installed power	3 kW
HMI	24" touchscreen
PLC	Siemens S7-1200 PLC
SMARTCLEAN canisters	2 canisters, 15L
WASTE canister	External, optional for the customer



Smartjet S.r.l.

Via Enrico Mattei, 30,  
41042 Fiorano Modenese MO, Italy  
Email: [Info@smartjet.it](mailto:Info@smartjet.it)  
Telephone: 0536 079000  
[www.smartjet.it](http://www.smartjet.it)  
VAT: IT03536740362



**RIGENERA+**  
CLEANING & TESTING SYSTEM

THE MOST ADVANCED SOLUTION ON THE MARKET

RIGENERA of SMARTJET is the most technologically advanced system for the regeneration of printheads, avoiding their replacement with obvious savings in terms of costs and maintenance.





Maximum operational efficiency

Thanks to solid experience in cleaning systems for piezoelectric printheads, SMARTJET is introducing a new generation of RIGENERA onto the market which sets a new standard on the market of cleaning systems for industrial inkjet print heads. RIGENERA+ is introducing INTEGRA, the innovative management software which redefines the on-board user experience. The operator's work flow in the regeneration process has been further optimised to make it faster and more efficient. On the other hand, important new functions are being introduced, aimed at expanding the performance of RIGENERA in terms of **effective restoration, process efficiency and active monitoring of the system by the operator.**



THE BENEFITS

**MAXIMUM EFFECTIVENESS OF PRINthead REGENERATION**

Significantly reduce the number of printheads you buy and lower **costs due to poor** quality from having to throw them away because the nozzles are clogged.

**HIGH PRODUCTIVITY**

Cut **regeneration times** for a single printer and run **preventive cleaning** cycles for large printers.

**UNBEATABLE EFFICIENCY**

Complete the cleaning and testing cycle without ever disconnecting the print heads. Furthermore, you can now **connect RIGENERA+ to your company IT system** to get extremely fast and efficient flows of information.

**EASY TO USE**

Create and launch individual processes extremely quickly and intuitively thanks to the new **INTEGRA interface** and the new **24" touchscreen**.

**RELIABILITY AND DURABILITY**

By using **high-quality industrial components** and long-lasting materials, RIGENERA helps minimise downtime for maximum operating stability.

**A FULLY AUTOMATIC AND EASILY PROGRAMMABLE CLEANING CYCLE**

**Full programming** of cleaning cycles and **automatic management** of washing help run the entire process with a minimum level of supervision from the operator.

**ACTIVE MONITORING OF OPERATING DATA**

Display RIGENERA+ **operating data** and check the **system status** remotely too in real time thanks to the **MySMARTJET app**.

**SYSTEM CONFIGURABILITY**

Configure the system that best suits your needs and **integrate up to three modules** into one single system. For each one, you will be able to choose the **PRINT&CLEAN** or just **CLEAN** function.

Features

**CUTTING-EDGE TESTING**

Thanks to the various types of tests, it can print a test pattern that lets operators carefully assess how every single printhead nozzle is working

**TEMPERATURE ACTIVE MANAGEMENT SYSTEM**

Run long cleaning cycles without interruptions for the most effective cleaning thanks to the solvent temperature management system

**INTEGRA**

Create new and effective cleaning recipes extremely quickly and intuitively. Also use web-based functions to constantly monitor the system status, on board the machine or remotely through the MySMARTJET app.

**INTEGRATED PRINTING MODULE**

RIGENERA+ is a complete 2-in-1 printhead regeneration system. The operator can therefore wash and check the state of the print head without disconnecting the electrical and hydraulic connections

**SPECIFIC ADAPTERS FOR EACH PRINT HEAD**

Every type of printhead uses a specific adapter module that includes a hydraulic part and the electronics

**VARIOUS CLEANING ACTIONS**

- Direct cleaning with solvent
- Ultrasonic bath
- Reverse cleaning of the nozzles
- Turning the nozzles on during cleaning cycle

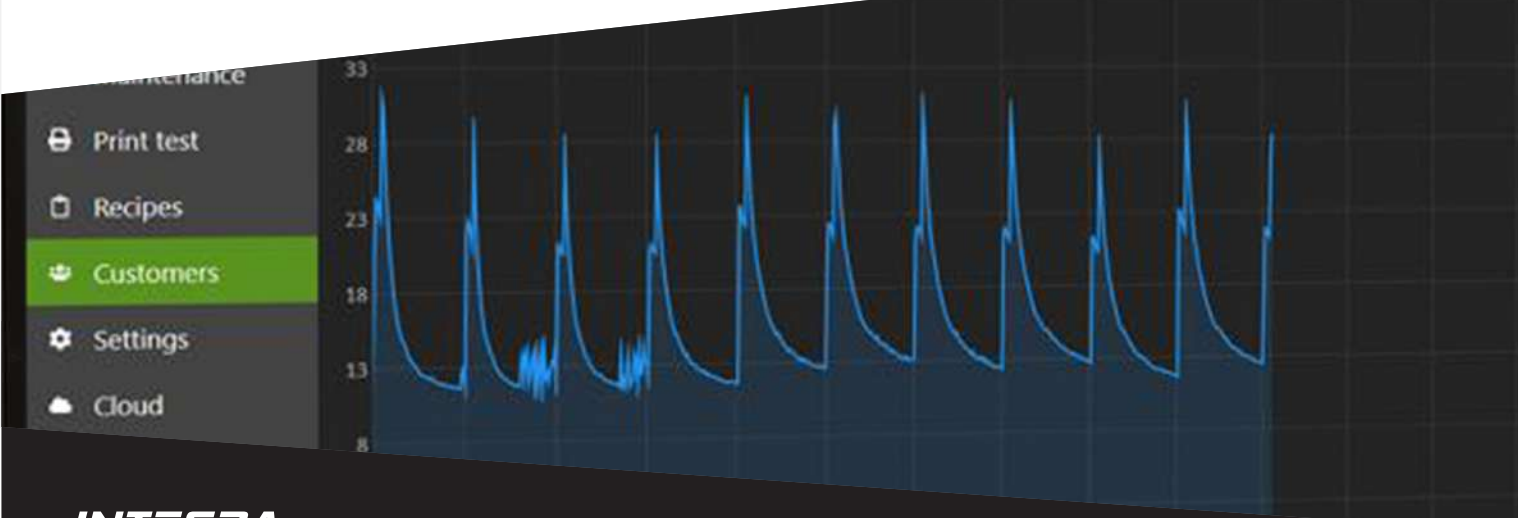
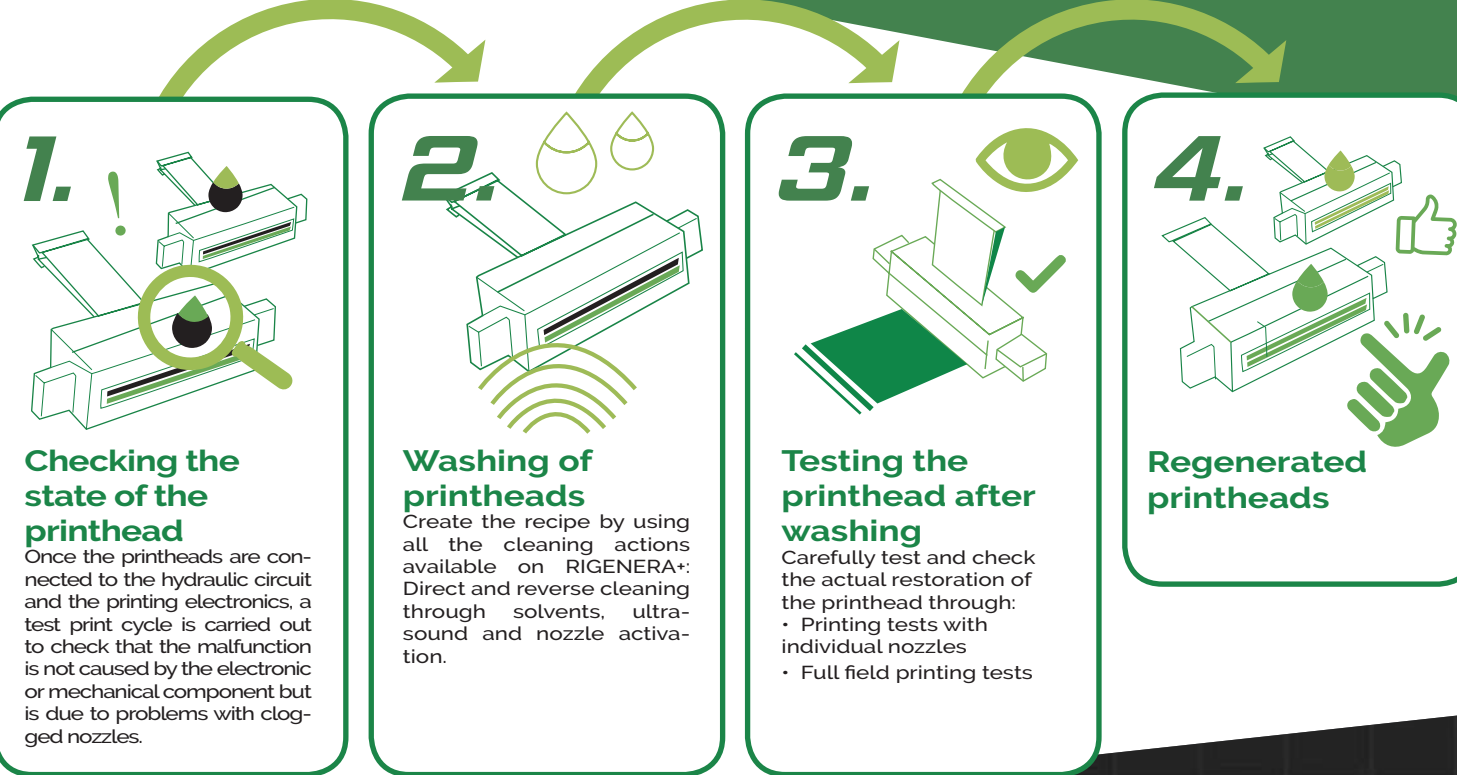
**SEALED CHAMBERS**

These chambers minimise the consumption of solvent and limit the spread of unpleasant odours in the working environment

**HIGH-QUALITY MATERIALS AND COMPONENTS**

The structure is made entirely from stainless steel and anodised aluminium, while the electrical system uses a SIEMENS PLC. The entire system has been designed to stand the test of time and to be easily maintained by staff with a moderate level of training

Process



INTEGRA

INTEGRA is designed to support you in the everyday use of our systems in order to achieve maximum efficiency and effectiveness in restoring your piezoelectric printheads.

**SJ WORKFLOW**

Organise your process efficiently

- Create your processing order by specifying all the details you need
- Develop new and effective cleaning recipes for each type of print head
- Actively manage the phases of each recipe by configuring all the cleaning actions available
- Save and archive each process with the possibility of analysing it in the future

**SJ ANALYTICS**

Quickly and intuitively read the huge amount of data that your system generates every day and extract useful insight for your operations

- Archive all the processing done for the customer
- Monitor in real time all the operating parameters of every single washing phase
- Export the data you need in CSV format or Excel

**MySMARTJET**

Use the web-based functions of the SMARTJET platform, both on desktop and the MySMARTJET app. You will therefore be able to display all the operating statistics, constantly monitor the state of the machinery and receive any alarms remotely.

Consumables

In order to guarantee maximum performance in terms of cleaning and testing of the printheads, a range is available specifically designed for RIGENERA™:

**SMARTCLEAN™ SJ50 - WASHING SOLVENT**

SJ 50 is the washing solvent specifically designed for RIGENERA and for treating piezoelectric inkjet printheads. Its formula is extraordinarily effective against ink blockages yet also incredibly gentle on more delicate components.

**SMARTINK SJ100 - TEST INK**

On the one hand, the special properties of the ink help check the recovery of each nozzle and, on the other hand, preserve the materials of the piezoelectric print head during the test. It can also be used as a preservation liquid for the print head during transport.

- Ink filter

- Cartridge solvent filter

- Preprinted on photographic paper for print tests

- Specific fabric for "Wiping" print head cleaning