



SMART 3D PRINTER

JCR 600
600 Pro

The ideal industrial 3D printers for standard and technical materials.

Large size and high definition. From small and fast models with defined details to large pieces, with a printing tray of 580x400x500 mm and interchangeable nozzles from 0.3 mm to 1.2 mm, for different qualities and finishes.

Double extruder. Double tilting extruder to work with double material in a stable and reliable way (*JCR 600*) or double extruder up to 500 °C maximum temperature (*JCR 600 Pro*).

Guaranteed user experience. Guaranteed printing experience with *JCR 600* for standard materials (PLA, JCR Print, FLEX - TPU and PVA), and easy manufacturing with the most complex and technical materials that you could choose (open material), with *JCR 600 Pro*: PC, ABS, Nylon, CFR Nylon, ABS medical, ABS HI, Flex, JCR Print, PVA, PLA...

Smart printers designed for industry.

Efficiency from the first moment with automatic correction of files and verification of print configuration, reducing time and production costs.



JCR Manager

Management and communication software between the user and the 3D Printer, with an intuitive and intelligent use of the functions to print with reliability and previous optimization of parameters.

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Most important functions

1 Automatic Check

It automatically verifies and repairs the STL file and provides a detailed report of it. If it has mistakes, (holes in the design, inverted normals, etc.) it recomposes it and makes it suitable for printing.

This software is integrated in the printer and is valid for files of less than 100 MB. For higher files, the function is included in the JCR Edit software (included as standard in all the JCR 3D models).

2 File Tester

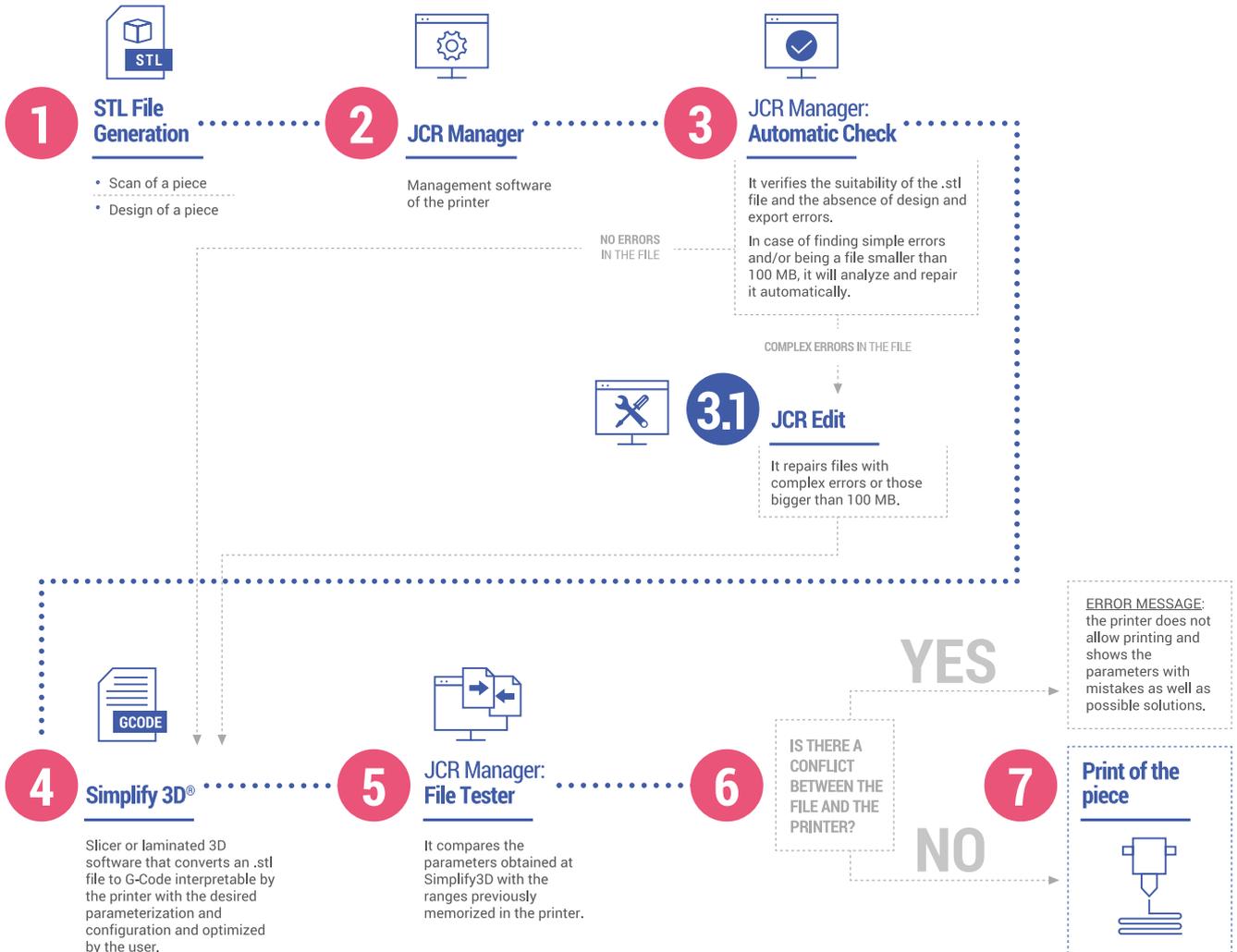
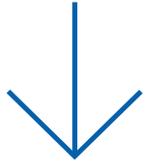
It verifies that the configuration of the G-Code file and the 3D printer are compatible, checking parameters (layer thickness, printing speed, printing nozzle, etc). In case of error, it does not allow to start printing and indicates the steps to correct it.

3 Time Lapse

It allows the download and management of the *time lapse* (a fast camera video of the print) for supervision and analysis.

Smarts

That's how our printers *think* for you.



Software licenses included as standard in all the JCR 3D models.

In addition to the JCR Manager management software, our printers include two programs to manage, edit and repair G-Code files if necessary.

JCR Edit

Software to check, repair, export and modify 3D models.

The main functions that it incorporates are:

- **Import and export to more than 12 different formats**, such as stl, obj, ply, iges and wrl.
- **Model Fix:** options for manual repairment of the models (check and repair surfaces, normals, gaps, check thicknesses, etc).
- **Print preparation:** with Split-Connect options to split objects with different cuts to fit the pieces.

Simplify 3D®

Slicer or laminated 3D software that converts an .stl file to G-Code interpretable by the printer with the desired configuration.

Extended 2-year warranty

The use of top brand materials, the preventive software systems, the recommendation of use of the materials according to the user guides and the strict quality controls at the factory allow us to offer a **2 year warranty on all our models**.

Intelligent management of power supply interruptions

This advanced UPS gives the printer an **autonomy of more than 20 minutes**, to continue printing normally in case of power failure. After that period, the system is suspended in a controlled manner, saves the printer parameters and **sends an email to the production manager**, notifying the incident to resume **manufacturing later from where it was**.



Automatic predictive maintenance system

Warning and reminder service of the recommended maintenance of the printer according to the hours of printing and elapsed time, to guarantee its reliability.

JCR 3D SMART PRINTERS

Reliable



JCR 3D SMART PRINTERS

Flexible

Printers open to the use of any printing material

JCR 3D printers can work with the materials of the main manufacturers in the market.

JCR 3D recommends and guarantees the use of materials which are tested and selected by our engineers, providing our customers a detailed printing guide with optimal printing conditions, advices, limitations and applications of each material to help improve their use.

Cost and time saving

The incorporation of any JCR 3D model to its production process is a lever of **profitability for your business** that will result in a quick **amortization of the investment** in the printer, and, at the same time, in a **cost saving** that will go directly to your company results account.

Upgradeable

Our printers are upgradeable.

Choose the model that best suits your needs and renew it to the superior version of its range when you want to.

Large format industrial printing

Multiple dimensional possibilities with construction volumes from 580 mm to 1000 mm in length. These formats multiply the number of applications and possibilities in industries such as automotive, aeronautics, machinery, etc..

Print factory

With JCR Manager you can **smartly manage an unlimited number of JCR 3D printers**, in their different models and with only one operator.

Technical specifications

Printing



Printing technology	FFF (Fused Filament Fabrication)	
Printing volume	580x400x500 mm / 520x400x500 mm (dual material)	
Minimum layer height	0.1 mm	
Number of heads	2 (independent, electro tilting double extruder)	
Front panel/display	Touch, multi language and full color	
Nozzle diameters	interchangeable 0.4, 0.6, 0.8 mm Commodity and High temp extruder 0.6, 0.8, 1, 1.2 mm High Production extruder	
Filament diameter	1.75 mm + - 0.05 mm	
	----- JCR 600 -----	----- JCR 600 Pro -----
Extrusion system	Dual extruder with two Commodity extruders (up to 230 °C)	Dual extruder with two Commodity extruders (up to 245 °C) and two High Temp extruders (up to 500 °C)
Maximum extruder temperature	230 °C	500 °C
Maximum tray temperature	55 °C	130 °C
Maximum cabin temperature	45 °C	70 °C

Materials



Load of filament up to 5.6 kg coils

Filaments for model building

	----- JCR 600 -----	----- JCR 600 Pro -----
PLA Easy and economical manufacturing	●	●
JCR Print High dimensional stability	●	●
Flex - TPU Components with a high degree of flexibility	●	●
ABS Mechanical strength	●	●
ABS FP* Mechanical resistance and fire retardant	●	●
ABS Medical* Biocompatible ABS, accepted for its use in medicine	●	●
PC* For high temperatures and high resistance to traction and impact	●	●
Nylon* Very good mechanical properties. Non-abrasive material	●	●
CFR Nylon* Composite formed by PA and carbon fiber, which provides excellent mechanical properties and high thermal resistance	●	●

Filaments for support manufacture

PVA* Water soluble support	●	●
Compatibility between filaments JCR 600 / JCR 600 Pro	●	●
	PLA/JCR Print + PVA	

Add-on services

In house training

- For the handling of our printers
- About specific materials and applications by sector
- On how to get the most out of FDM / FFF technology
- To design for FDM / FFF technology

Generation service of G-Code

We offer you an external G-Code file generation service, so you don't have to worry about the configuration of your files and you can save time and material.

Warranty extension

We offer the option to increase the warranty of your printer up to 5 years. All JCR 3D printers come with a 2-year warranty included.

R + D Collaborations

We understand collaborations with other companies as part of our DNA, so we are open to working together to develop new materials, applications and printing methods that have an attractiveness for the market.

Technical and preventive maintenance

We offer a technical service for professional maintenance and for industrial use of our equipment. Being able to choose between a telephone service, ticket support and response in 24 working hours.

With preventive maintenance, you can choose the periodicity with which you would like to do a set-up of your equipment based on printing hours or elapsed time.

Tailor-made financing

We offer an external service of technological Renting, financial renting and leasing.

*Printing conditions according to user guide.

Software



Included slicing software	Simplify 3D
JCR Manager	Intelligent management of the printer
JCR Edit	Analysis, repairment and editing software file
Automatic check	Verification and repairment of STL file
File tester	Initial verification of code and printing parameters
Self-leveling system during printing	
Guided assistants for base and extruders calibration	
UPS with smart interaction with the printer and the printer resumption system after power cut	
Control and notice of end of filament	
Warning assistant and preventive maintenance control	
Immediate remote connection system for SAT actions is included.	
Generation of printing job time lapse	

Mechanics



Structural materials	Stainless steel, aluminium and methacrylate
Basic printing materials	High performance technical glass
Habitat	Controlled working conditions (temperature and humidity)
Axis X / Y motor precision	15 microns
Z axis engine precision	15 microns
Purge system for changing external material to the print volume	
Movement system on high precision guides	

Dimensionality



Dimensions	1050 x 800 x 1430 mm
Weight	160 kg

Connection / Consumption



Power supply	IF /220 V single phase
Power consumption (max)	2.8 Kw
Connectivity	Wi-Fi; Ethernet network type RJ45; USB

