FURNITURE ON DEMAND

by LECTRA

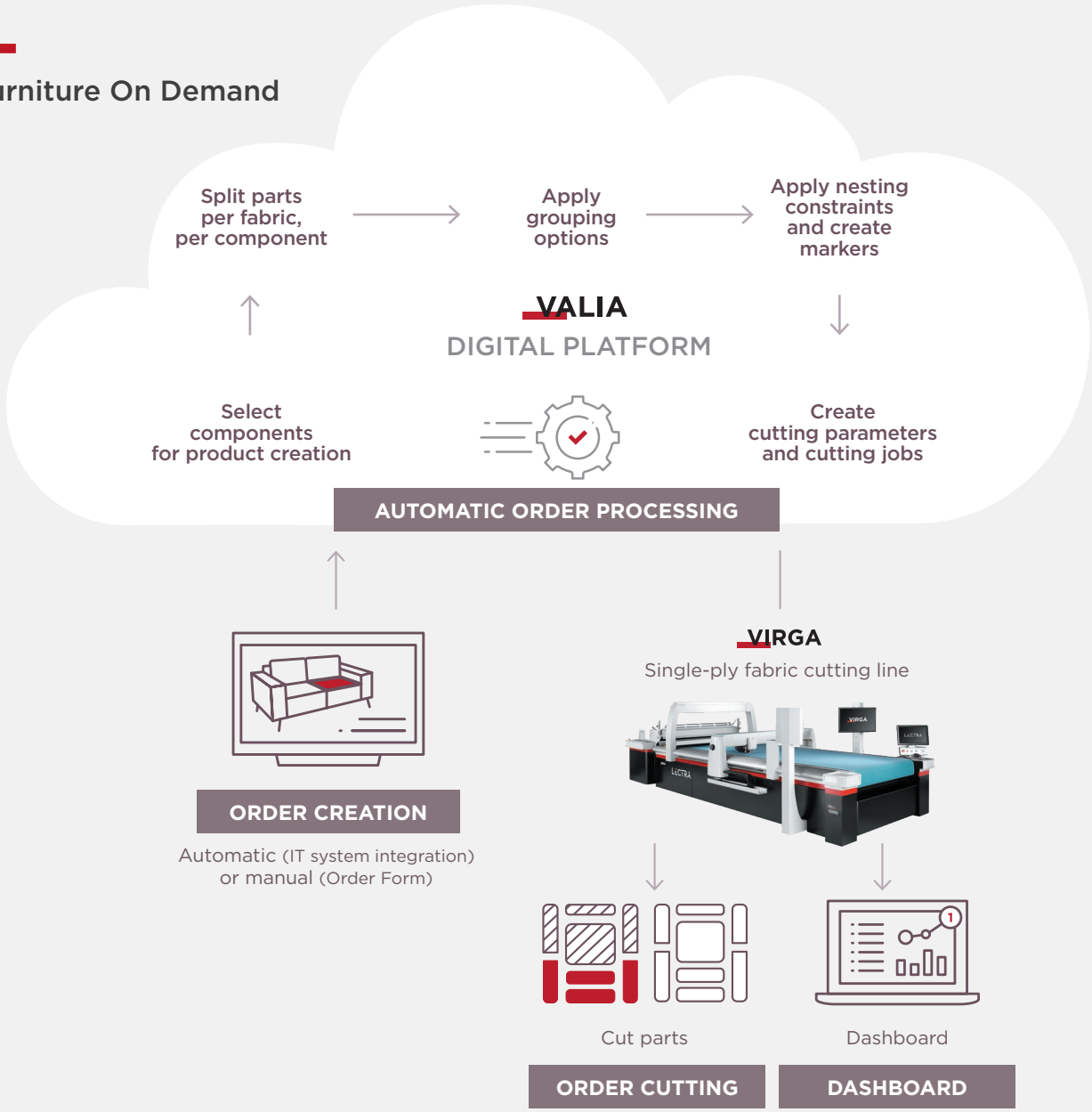
VIRGA single-ply cutting equipment

Integrated digital single-ply fabric-cutting solutions designed to deliver high-precision cutting quality with a reduced environmental footprint

Improve your manufacturing efficiency while lowering costs and reducing waste and consumables with digital cutting equipment that pushes the boundaries of speed, quality and reliability.

Furniture On Demand lets you overcome pull-mode manufacturing complexity with Industry 4.0 technologies that connect your cutting room components and drive automated workflow with data analytics. **The automated control and decision support of Valia Furniture further expands the possibilities of Virga cutting performance, bringing broader functional coverage and interoperability.**

Furniture On Demand



Order Manager

Order Manager is used to supervise the automatic processing and preparation of orders.

Order Form

Order Form allows manual input of orders. It is used to create and simulate orders if there is no connection with the IT system.

Virga Pilot

Integrated pilot software to operate the Virga solution, accessible from the Pilot Station.

Material Manager

Material Manager houses general characteristics as well as specific information about each fabric. Essential information for cutting and nesting can then be associated to this material.

Product Manager

The Product Manager application is used to define your product catalog and the customizable aspects of the products, such as components and materials.

System Manager

System Manager allows users to administer and define production rules and configurations, such as offloading, marker making and blocking rules or grouping options.

Cutting capabilities to overcome the challenges of pull-mode production

1. THROUGHPUT OPTIMIZATION, FROM LOADING TO OFFLOADING

- Visual loading assistance: on-screen instructions & controls
- Automatic material roll out on the cutting zone
- Automatic loading of cutting instructions
- Fabric positioning with camera
- Effective, high-performance cutting
  - High speed rotary-driven decagonal & carbide blade
  - 120 m/min effective cutting speed
  - Dedicated tools for notches
  - Automatic cutting path optimization
- Intelligence and data collection with more than 300 embedded counters

2. EFFICIENCY FOR REDUCED COST PER PIECE

- Compact solution for improved productivity per square meter
- No plastic or paper costs
- Reduced power consumption
- Higher perimeter cut per blade with average 35km-lifespan blade
- Belt cleaning in hidden time

ADDITIONAL FEATURES SPECIFIC TO VIRGA-M

- Motif characterization wizard for speedy, automated management during production. Cutting time for patterned fabrics is the same as for plain fabrics
- HD vision system & next-generation algorithms: scanning, on the fly motif recognition & matching, cutting while advancing
- Visual offloading assistance: maximize operator efficiency and focus on quality control & bundling

3. FLEXIBILITY TO EASILY MANAGE LAST-MINUTE CHANGES

- Synchronization with Valia cutting platform for any changes
- Rapid and easy control at any time
- Easy operator decision-making
- User interface to manage automatic recuts of rejected parts
- Cutting line designed for one or two operators (feeding & offloading command stations for optimized workflow)

4. REDUCTION OF QUALITY ISSUES

- Material controls and anti-error systems
- Pre-set cutting instructions
- High cutting quality with tension-free laying
- Operator comfort for maximum focus on quality control & bundling
- Modifications tracking (traceability)

5. SUSTAINABLE PRODUCTIVITY THROUGH USER-CENTERED DESIGN

- Operator-controlled process
  - Guided offloading option (conveyor advance validation)
  - Control sequencing of cutting jobs
- Rapid ramp-up period with intuitive software interfaces, and access at any time to digital learning supports and assistance
- Operator-centric design
  - Visual indicators
  - Touch-screen interfaces
  - Easy material loading and spreading
  - Quick, safe blade change
  - Ergonomic offload area & command station
  - Regular cutting of fabric remains
  - Advanced safety system on the cutting area

A complete range of single-ply fabric cutters

No matter whether your focus is motif or plain fabric, the Furniture on Demand range has a solution for you.

VIRGA

P-SERIES

Overall length: 6.50 m
Weight: 2430Kg

Overall width: 109" - 2.79 m

Overall length: 6.50 m
Weight: 2430Kg

Overall width: 109" - 2.79 m

M-SERIES

✓ = Standard O = Option - = Not Available

LEVEL	P-SERIES	M-SERIES
Cutter (Virga)		
Scanner for fabric / High Resolution	O	✓
Mobile height-access system for scanner maintenance	O	O
Automatic Belt cleaner	✓	✓
Inkjet printing : single nozzle device for Virga cutting line	O	O
TV Offloading visual assistant (add TV option)	✓	✓
AR Offloading visual assistant (add video projection option)	O	O
AR Offloading visual assistant (add video projection upgrade for already installed system)	O	O
Offloading Trash bin	✓	✓
Feeder (SPC)		
SPC40 - Feeding system	✓	✓
SPC40 - Roll bar system (B-SUP)	O	O
SPC40 - Roll bar system > Additional bar	O	O
SPC40 - QR-Barcode Label printer (placed on the feeder)	O	O
SPC40 - QR-Barcode reader USB (placed on the feeder)	✓	✓

SOFTWARE		
Cutting equipment / Pilot Software	✓	✓
Scanning upgrade / Pilot Software	O	-
PERFORMANCE		
Compressed fabric height	1 ply	1 ply
Vacuum assembly	7,5kw	7,5kw
Cutting speed (max)	120m/min	120m/min
Maximum acceleration	12m/s²	12m/s²
Vibration frequency (rpm)	24000	24000
Effective cutting window length	2,10m	2,10m
Effective cutting window width	1,60m	1,60m
Average power consumption	<4kWh	<4kWh
SPECIFICATIONS		
Length Virga Cutting Line [SP40+Virga Cutter] (inch / meter)	252in / 6,38m	252in / 6,38m
Length Virga Cutter only (inch / meter)	216in / 5,48m	216 in / 5,48m
Length SPC40 Feeder only (inch / meter)	36in / 0,9m	36in / 0,9m
Width exterior (inch / meter)	109in / 2,79m	109in / 2,79m
Width belt (inch / meter)	63in / 1,60m	63in / 1,60m
Height Scanner (inch / meter)	-	75in / 1,9m
Height Projector (inch / meter)	80in / 2,02m	80in / 2,02m
Height Table (inch / meter) (depending feet setting)	38>42in / 0,97>1,07m	38>42in / 0,97>1,07m
Noise level	< 77dB	< 77dB
Installed electrical power (max)	15kW	15kW
Weight (kg)	2430	2430
Machine control location	left	left
Safety devices	Emergency Stop	Emergency Stop
Temperature	10°-43°C	10°-43°C
Humidity (at 30° without condensation)	<95%	<95%
Compatibility	Valia Digital Platform	Valia Digital Platform
Operating system	Windows	Windows

Services included with Furniture On Demand

Furniture on Demand includes all 4.0 services accessible through the MyLectra portal and a dedicated Customer Success follow-up.

DIGITAL SUPPORT

Permanent access to online support allowing users to submit issues and requests 24/7.

KNOWLEDGE CENTER

Online application gathering all the relevant and necessary learning & self-care resources for the users of our solutions.

MAINTENANCE MANAGER

View your cutting equipment details and maintenance state records and plan your interventions.

CUSTOMER SUCCESS

Dedicated follow-up to ensure the quality of the onboarding, adoption an daily usage of Lectra solutions

About Lectra

As a major player in the fashion, automotive and furniture markets, Lectra contributes to the Industry 4.0 revolution with boldness and passion by providing best-in-class technologies.

The group offers industrial intelligence solutions - software, equipment, data and services - that facilitate the digital transformation of the companies it serves. In doing so, Lectra helps its customers push boundaries and unlock their potential. The group is proud to state that its 2,500 employees are driven by three core values: being open-minded thinkers, trusted partners and passionate innovators.

For more information, please visit **lectra.com**.