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WATERJET CUT

# DRIVE YOUR TECHNOLOGY

[www.comispa.it](http://www.comispa.it)



# COMI Worldwide | COMI 全球



## The Group | 集团介绍

COMI is established in August 1973 with the aim of designing and producing thermoforming machinery, specifically for the refrigeration sector.

After more than 45 years of activity, today COMI is a solid industrial reality, with more than 2.000 systems installed in over 50 countries all around the world, a top-level reference list and a brand among the most prestigious in its market. When the significant development abroad consolidated the company as a reference player in the refrigeration sector, the management decided to diversify its range of solutions through the expansion of its staff, hiring specific technically skilled people, together with an intense activity of company acquisitions, including AMUT-COMI, specialized in packaging thermoforming machines.

COMI创建于1973年8月,自设计生产热成型设备起步,特别是用于制冷行业。

经过45年的发展,如今COMI已经成为行业翘楚,在全球50多个国家安装了超过2000套设备,拥有全球最顶端的客户群和在市场中最负盛名得品牌。

当公司以其卓越的发展稳固了在制冷行业的领先地位,管理层决定通过扩大员工队伍,增加具有特定技术技能的资源以及开展大量的公司收购活动来实现多元化的解决方案,包括AMUT-COMI,专门从事包装热成型机。



# Facts & Figures | 现况与数据

200

**Employees/员工**  
among direct and indirect  
相关人员

4

**Manufacturing/工厂**  
facilities in Italy  
在意大利

4

**Subsidiaries/子公司**  
abroad  
国外

52

**Milion/百万**  
euro revenues  
欧元营业额

95%

**of Sales/的销售**  
from international markets  
来自国际市场

3%

**Invested/投资**  
constantly in R&S  
在研发部分

4

**Proprietary/专利**  
technologies  
专有技术

+2k

**Machines/机器设备**  
installed globally  
在全球安装使用

# Key Sector | 主要应用行业



**Household Appliances**  
家用电器



**Marine**  
船舶



**Automotive**  
汽车



**Hydro-sanitary**  
厨卫



**Aerospace**  
航空航天



**Railway**  
铁路

“ Our expertise in specialised machines and in robotics also enable us to offer complete customised systems according to the **specific needs of our customers**

TechMill is a division of COMI Group which offers a complete range of Water Jet machining centers for machining of a wide range of materials. The company has always been able to adapt to the changes in customer needs and to the Water Jet cutting market. The design, production and installation of the machinery is tailored to meet customer needs, studying technical solutions for the continuous improvement of productivity and 360° customization. Each machine is a suit tailored to the needs of our customers. COMI provides the competences and advice of their R&D department. Our engineers ensure feasibility studies, the qualification and optimisation of processes as well as the design and manufacture of complete systems.

All machines are multi-purpose, reliable and precise enables you to cut all types of materials, and to make components in complex or simple forms with optimum productivity!

“ 我们在专用设备和机器人技术方面的专业知识,使我们能够根据客户需求, **提供完整的非标定制系统。**

TechMill是COMI集团旗下从事水射流切割中心的事业部,其水射流切割系统可加工广泛范围的各种材料。公司可满足水射流切割市场上不同客户的个性化需求,并具备介入客户前端开发设计的核心竞争力。我们的工程技术人员可以为客户进行可行性分析,工艺质量保证和 优化服务,也可以设计制造高达20联动轴的复杂系统。

所有机器具备多用途,可靠性和高精度特征,可以让您切割所有型号的材料,通过复杂的或简单的系统以优化的效率生产各种部件。



COMI, leader in design and manufacture of Water Jet Cutting Centre, presents its new generation of table type "WJA II" 3, 4 or 5 axis. Heart of COMI range, it is compatible with all the options and can evolve in time!

The machine is driven by a latest generation CNC FANUC (No.1 Global) allowing ease of use and offering a previously unequalled level of Reliability and Precision. The very high pressure water supply (4000B - 6200B), is supplied by a BFT pump (European No. 1) or KMT (No.1 Global).

The Human/Machine interface is customizable, like the CNC it is fully programmed internally by our Design Office, and managed under Windows 10 PRO. The system is intended to operate autonomously.

The numerous sensors allow control and remote control of the system via a computer network and via internet.

The equipment is very compact and uses only high quality mechanical and electrical components for increased reliability.

### STANDARD FEATURES

Cutting speed limited to	30M/MIN.
Repeatability	+/- 0,02 MM.
Absolute precision	+/- 0,03 MM.

### CNC WITH INTEGRATED PC

Easy management via the Windows® 10 PRO application
Networking possible (Server)
3D graphic function
Powerful backups
Internet connection as Standard
WebCam optional

COMI公司,杰出的水射流切割中心设计制造商,开发了新一代台面型"WJA II" 3轴,4轴,5轴水射流切割机。

作为COMI机器里的核心机型,它适用所有选配项并可以适时拓展。

组件采用最新一代发那科数控系统(全球第一),操作方便并实现高于以往的高度可靠性和精度。BFT泵(欧洲第一)或KMT泵(全球第一)为系统提供了非常高的水压供应(4000B-6200B)

人机界面可定制,如CNC加工中心,可以通过我们内部设计室完整编程,在Windows 10 PRO 系统下进行管理。该系统意图实现自主式操作。

数字式传感器的存在,让通过计算机网络和Internet的系统控制/远程控制得以实现。

设备设计非常紧凑,并总是采用高质量的机械和电气元器件来提高系统可靠性。

### 标准参数

割速度极限	30M/MIN.
重复精度	+/- 0,02 MM.
绝对精度	+/- 0,03 MM.

### 带集成PC的CNC

通过Windows® 10 PRO的应用实现方便管理
网络支持(服务器)
3D绘图功能
强大的备份
标配因特网连接
选配Webcam



COMI presents its 5-axes-“FBJET III” new generation machine. Open structure set up is conceived with a inox tank cantilever and all advanced technologies.

Our Model has a remote arm and unique configuration for increased accessibility! The machine is driven by a latest generation CNC FANUC (No.1 Global) allowing ease of use and offering a previously unequalled level of Reliability and Precision. The very high pressure water supply (4000B - 6200B) is supplied by a BFT pump (European No. 1) “OEM” version, fully integrated into the machine frame. The Human/Machine interface is customizable, like the CNC, it is fully programmed internally by our Design Office, and managed under Windows 10 PRO. The system is intended to operate autonomously. The waterjet machine is equipped with a remote control system with computer and internet network. The equipment is very compact and uses only high quality mechanical and electrical components for increased reliability.

### STANDARD FEATURES

Cutting speed limited to	30M/MIN.
Repeatability	+/- 0,02 MM.
Absolute precision	+/- 0,03 MM.

### CNC WITH INTEGRATED PC

Easy management via the Windows® 10 PRO application
Networking possible (Server)
3D graphic function
Powerful backups
Internet connection as Standard
WebCam optional

COMI公司,杰出的水射流切割中心设计制造商,开发了新一代台面型“FBJET III” 5轴水射流切割中心。是无缝完美集成当前最领先的技术的专业设计。

我们的型号带有一套悬臂和独特的配置以提高可达性!

组件采用最新一代发那科数控系统(全球第一),操作方便并实现高于以往的高度可靠性和精度。高压水供应(4000B-6200B)采用BFT泵OEM版(欧洲第一),完美集成于设备框架内。

人机界面可定制,如CNC加工中心,可以通过我们内部设计室完整编程,在Windows 10 PRO 系统下进行管理。该系统意图实现自主式操作。

数字式传感器的存在,让通过计算机网络和Internet的系统控制/远程控制得以实现。

设备设计非常紧凑,并总是采用高质量的机械和电气元器件来提高系统可靠性。

### 标准参数

割速度极限	30M/MIN.
重复精度	+/- 0,02 MM.
绝对精度	+/- 0,03 MM.

### 带集成PC的CNC

通过Windows® 10 PRO的应用实现方便管理
网络支持(服务器)
3D绘图功能
强大的备份
标配因特网连接
选配Webcam



COMI presents its High Precision Model, type "LCJET III" 3 axes.

The system is based on a homogenous and user-friendly assembly which uses all the current state-of-the-art techniques.

The stainless steel and modular Housing + Chassis are well adapted to the teaching environment and environmental concerns in the workshop! The Human/Machine interface is customizable, like the CNC, it is fully programmed internally by our Design Office, and managed under Windows 10 PRO. The system is intended to operate autonomously.

The equipment is very compact and uses only high quality mechanical and electrical components for increased reliability.

### STANDARD FEATURES

Cutting speed limited to	20.000M/MIN.
Repeatability	+/- 0,02 MM.
Absolute precision	+/- 0,03 MM.

### CNC WITH INTEGRATED PC

Easy management via the Windows® 10 PRO application
Networking possible (Server)
3D graphic function
Powerful backups
Internet connection as Standard
WebCam optional

COMI公司,杰出的水射流切割中心设计制造商,设计开发的高精度型号“LCJET III”型3轴或5轴水射流切割中心。

该系统基于一套同质且界面友好型组件,采用了当前最领先的技术

不锈钢和模块化外舱+底盘,适用于教学环境和车间有环保要求考虑的场所。

人机界面可定制,如CNC加工中心,可以通过我们内部设计室完整编程,在Windows 10 PRO 系统下进行管理。

该系统意图实现自主式操作。

设备设计非常紧凑,并总是采用高质量的机械和电气元器件来提高系统可靠性。

### 标准参数

割速度极限	20.000M/MIN.
重复精度	+/- 0,02 MM.
绝对精度	+/- 0,03 MM.

### 带集成PC的CNC

通过Windows® 10 PRO的应用实现方便管理
网络支持(服务器)
3D绘图功能
强大的备份
标配因特网连接
选配Webcam





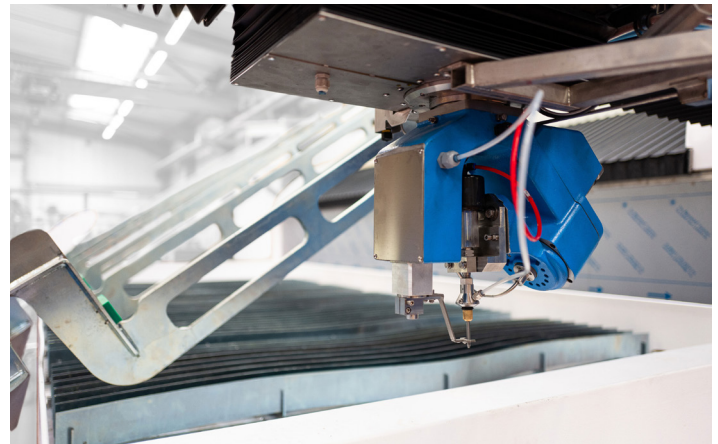
## COMPARE OUR PRODUCTS

## 比较我们的产品

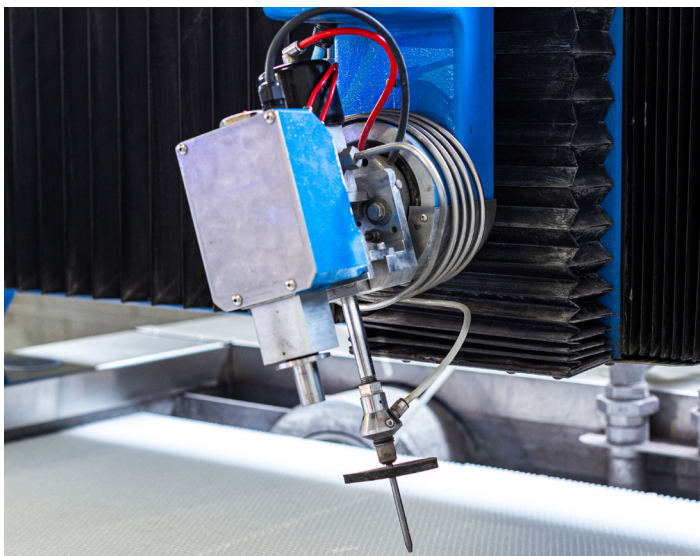
Model / 模型		WJA II	FBJET III	LCJET III
Axes strokes (X mm x Y mm x Z mm) 有效行程 (X mm x Y mm x Z mm)	<b>mini</b>	1000x1000x200	1700x3300x200	1200x1100x200
	<b>maxi</b>	6000x18000x200	2000x4000x200	1100x1200x200
Overall dimensions (X mm x Y mm) 外形尺寸 (X mm x Y mm)	<b>mini</b>	2000x2000	4140x5700	2270x2680
	<b>maxi</b>	7100x19100	4350x6300	2270x2680
5 Axis 3D head (Z=350mm) 3D五轴头 (Z=350mm)		Yes (Option 选配)	No	Yes (Option 选配)
5 Axis head ACTIVE 2,5D (Z=200mm) ACTIVE 2,5D五轴头 (Z=200mm)		Yes (Option 选配)	Yes (Option 选配)	Yes (Option 选配)
Z axis stroke 500mm or 750mm 位移Z= 500mm Or Z= 750mm		Yes (Option 选配)	No	Yes (Option 选配)
Number of Heads / On Independent Z carriage 工作头数、最大点数/在独立台车上		4	1	2
Maximum number of bridges 动梁最大数量		4	2	1
Height / Flatness Sensor 高度/平面度 传感器		Yes	Yes	Yes
Abrasive Feeder Driven by the CNC CNC驱动的磨料喂入		Yes	Yes	Yes
Touch Screen (control panel) 触摸屏(控制面板)		Yes	Yes	Yes
Maximum Possible Pressure (bar) 最大压力 (bar)		6200	6200	6200
Maximum movement speed (m/min) 最大运动速度 (m/min)		50	40	50
Positioning accuracy (+/- mm) 定位精度 (+/- mm)		0,03	0,03	0,03
Repeatability (+/- mm) 重复精度 (+/- mm)		0,02	0,02	0,02
Standard load accepted by the table (kg/m <sup>2</sup> ) 工作台标准负载 (kg/m <sup>2</sup> )		1000	1000	1000
Load accepted by the table - Option 2t/m <sup>2</sup> or 3t/m <sup>2</sup> 工作台负载(选配) 2t/m <sup>2</sup> or 3t/m <sup>2</sup>		Yes (Option 选配)	Yes (Option 选配)	Yes (Option 选配)
Diameter of the nozzle (mm) 喷嘴直径 (mm)		0,08	0,08	0,08
	<b>maxi</b>	0,4	0,4	0,4
Automatic variation of the water level integrated to the machine tray (ballast) 集成到机器托盘自动水位控制(平衡压舱)		Yes (Option 选配)	Yes (Option 选配)	Yes (Option 选配)
Manual variation of the external water level tot the machine tray (external vessel - possible later installation) 连接到设备托盘的外部水位手动调节 (外部容器-可能的后期安装)		Yes (Option 选配)	Yes (Option 选配)	Yes (Option 选配)



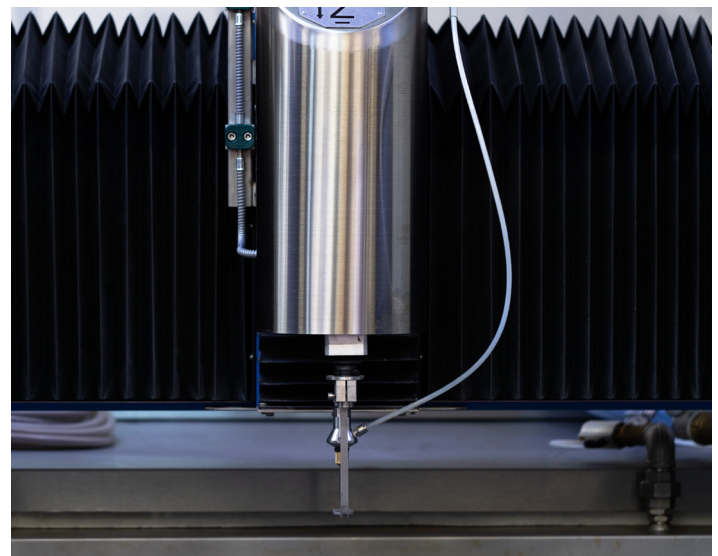
FBJet machine with vertical plate loading surface  
FBJet机型带立式台板装载方式



## WORKING HEADS



## 工作头



## WATER JET CUTTING PUMPS



VERY HIGH PRESSURE  
特高压

## 水射流切割泵



VERY HIGH PRESSURE  
特高压

## MULTIPLIER TYPE PUMPS 倍增型泵

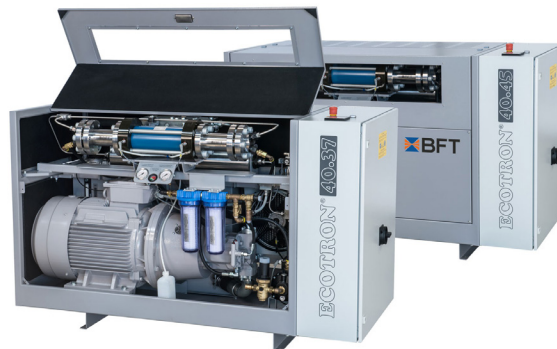
Maximum 4150 bar  
最高 4150 bar

High load rate, reliable, economical  
高加载速率,可靠,经济

## MULTIPLIER TYPE PUMPS 倍增型泵

Maximum 4150 bar  
最高 4150 bar

High load rate, reliable, economical  
高加载速率,可靠,经济



ULTRA HIGH PRESSURE

特高压

## MULTIPLIER TYPE PUMPS

Maximum 6200 bar

Projects requiring enhanced productivity and/or  
extreme materials and thickness

## 倍增型泵

最高 6200 bar

市场上独一无二的变化调节范围,从100bar到  
4150bar 适用于需要增强的生产能力和/或极端  
材料和厚度的项目

## WATER JET CUTTING PUMPS

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VERY HIGH PRESSURE  
特高压

## MULTIPLIER TYPE PUMPS 倍增型泵

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Unique variation range on the market from 100 bar to 4150 bar  
市场上独一无二的变化调节范围, 从100bar到4150bar

Brushless motor  
无刷电机

Power Saving  
节能

Ideal for composites  
复合材料的理想选择

## 水射流切割泵

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HIGH PRESSURE  
高压

## DIRECT ACTION TYPE PUMPS 直动泵

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Maximum 3800 bar  
最高 3800bar

Low load rate  
低加载速率



**COMI**  
MIDDLE EAST

**COMI**  
DEUTSCHLAND

**COMI**  
AMERICAS

**COMI**  
QINGDAO



Comi Group



Comi Group



COMI spa

**THERMOFORMING**  
热成型



**METAL SHEET**  
钣金生产线



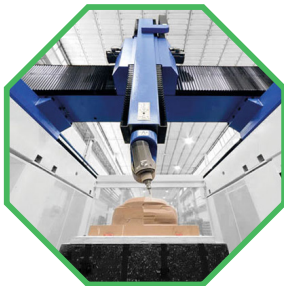
**PRESSES**  
压机



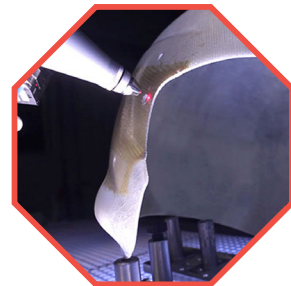
**AUTOMATION**  
自动化



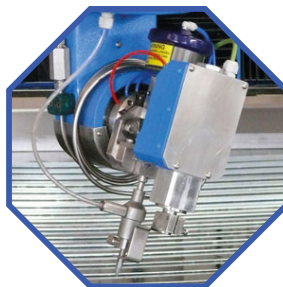
**CNC MILLING**  
CNC加工



**LASER CUT**  
激光切割



**WATERJET CUT**  
水切割



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