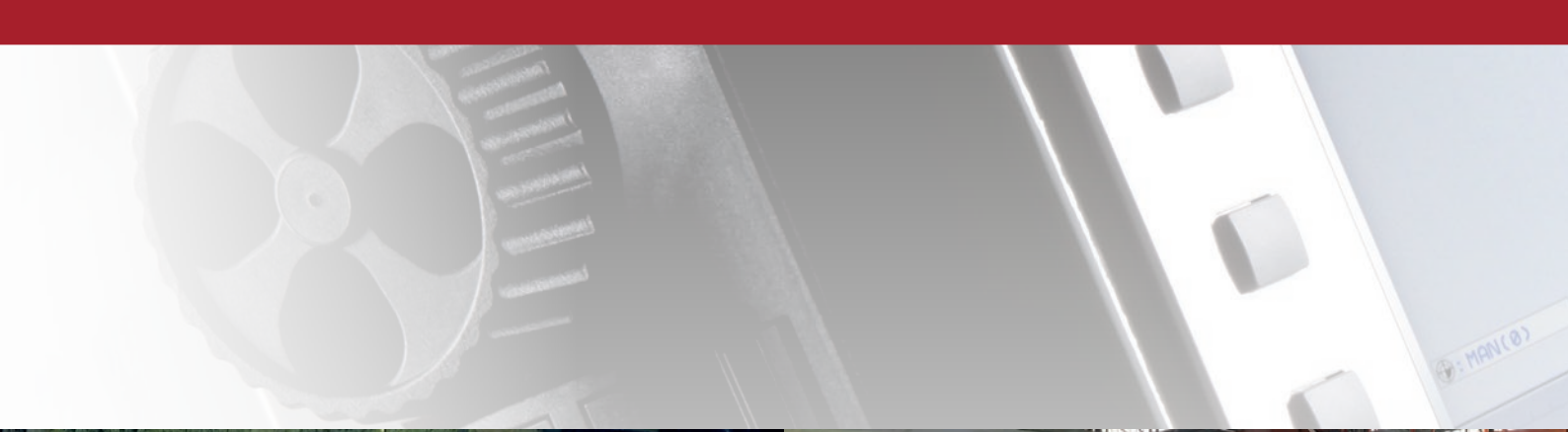


传统
与创新
TRADITION
& INNOVATION

COMPANY
PROFILE

C.B.Ferrari

ITALIAN EXCELLENCE SINCE 1966



传统与创新

伴随着自1966年起的不断突破、创新以及坚持对性能和精度的不懈追求，C. B. Ferrari在广泛的加工应用领域内皆游刃有余，获得了市场的肯定与信任，这奠定了其在世界上高精度五轴加工中心生产商中的领导地位。

目前C. B. Ferrari在意大利运营两家工厂，共有160余名积极的高技术员工，在生产高精度机床上具备丰富的经验和优秀的传统，同时自主生产包含电主轴和旋转工作台在内的绝大多数机床部件，这一切使得C. B. Ferrari能保证产品优异的质量和可靠性。

C. B. Ferrari在世界范围内安装超过5000台机床，并就近提供及时的销售和售后服务。

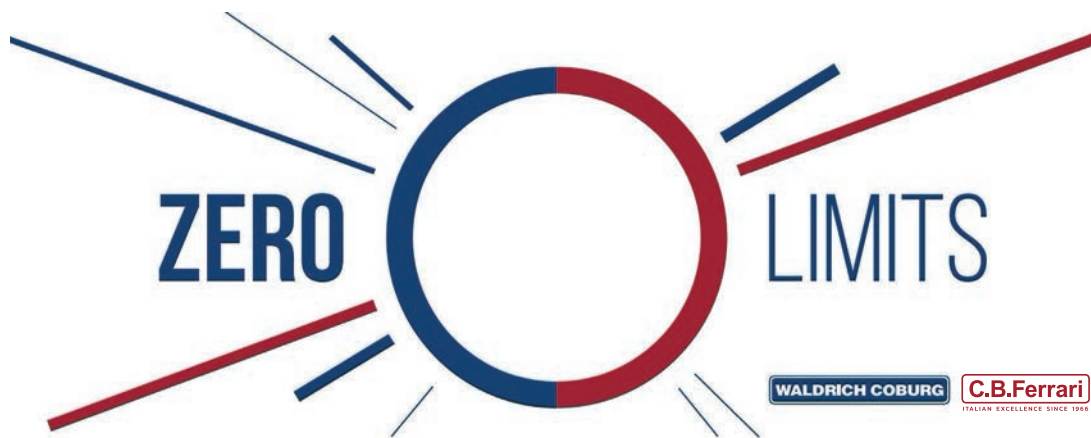
C. B. Ferrari确保客户能够获得极高水平的技术支持，并享受业内顶尖水准的机床性能与精度。

THE COMPANY

Since 1966 the constant innovation, performance-based approach and market recognized and consolidated superior accuracy achieved in a wide variety of manufacturing applications, have led C.B.Ferrari to a world-leading position in high precision 5-Axis machining Center solutions.

Currently, C.B.Ferrari operates with two manufacturing facilities in Italy, with 160 skilled and highly motivated employees, enjoying the homeland long-standing tradition in precision mechanics, design and manufacture all machines in-house including electro-spindles and rotary tables, ensuring the extraordinary and long-term quality and reliability.

With more than 5000 machines successfully installed worldwide, supported by a complete and prompt sales and service network, C.B.Ferrari ensures its Customers the ultimate manufacturing support, achieving state-of-the-art results in terms of accuracy and performance.



2011年与德国WALDRICH COBURG公司加入同一集团
SINCE 2011 IN THE SAME GROUP OF WALDRICH COBURG - GERMANY

机床的组装过程中时刻通过
严格的几何检测保证优异的装配精度

*MACHINES ASSEMBLED WITH HIGH ACCURACY AND
SPECIFIC GEOMETRIC CONTROLS*

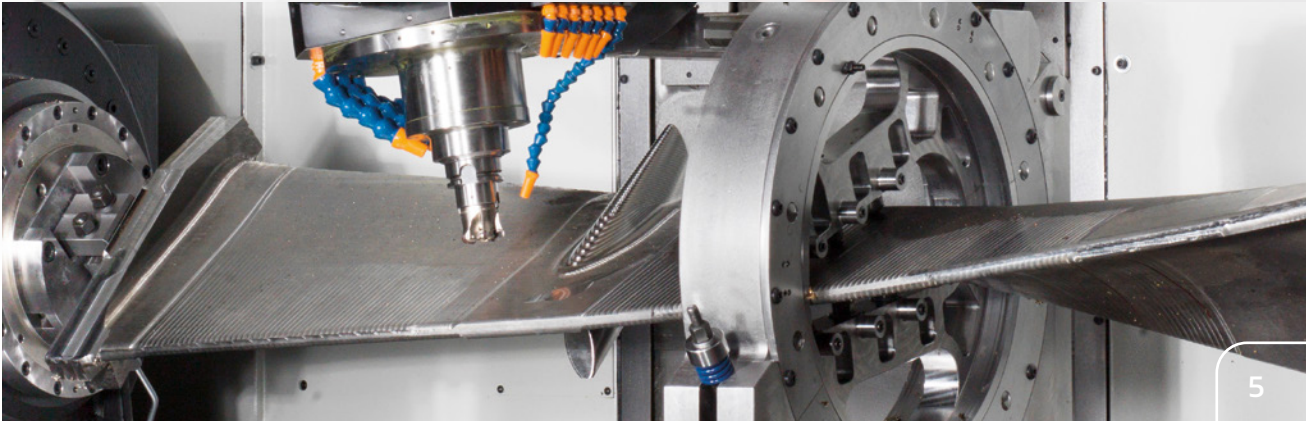
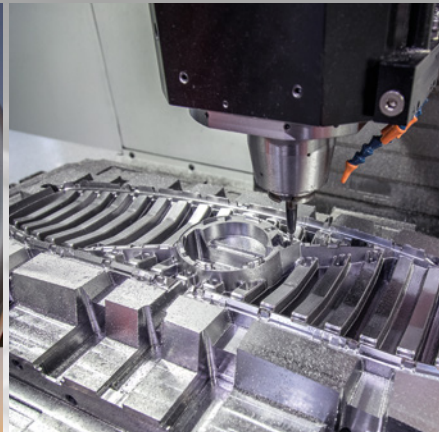
远程协助
预测性维护
*REMOTE ASSISTANCE
PREDICTIVE MAINTENANCE*



直接畅通的联络方式
IMMEDIATE AND DIRECT CONTACT

完美契合工业 4.0

MACHINES PREPARED FOR INDUSTRY 4.0



应用领域

航空航天
模具及工装
医疗器械
涡轮叶片
汽车制造
刀具加工
精密机械
能源发电

APPLICATION SECTORS

AEROSPACE
MOULDS & DIES
MEDICAL
TURBINE BLADES
AUTOMOTIVE
CUTTING TOOLS
PRECISION MACHINERY
POWER GENERATION



ELECTROSPINDLES

C.B.Ferrari equips all its machines with powerful and reliable electrospindles, offering remarkable advantages to its Customers:

- Spare spindles always available
- Easy replacement with reduced intervention times.
- Low repair costs.
- Reduced machine downtime

6

电主轴

C.B.Ferrari 为其所有机床配备功能强大且可靠的电主轴，为其客户提供了卓越的优势：

- 备用更换电主轴充足
- 响应时间短且主轴易于更换
- 低廉的维修费用
- 减少机床停机时间

40.000 RPM	HSK E40	10/14 kW	5/7 Nm		A - B - GT ML - D - N
28.000 RPM	HSK E40	25,5/32,5 kW	18/23 Nm		
24.000 RPM	ISO V40-HSK A63	30 kW	42/59 Nm		
24.000 RPM	HSK A63	42/55 kW	67/87 Nm	A 236	
16.000 RPM	HSK A63	26/31 kW	124/149 Nm		
20.000 RPM	ISO V40-HSK A63	28 kW	63/83 Nm		
16.000 RPM	ISO V40-HSK A63	33 kW	105/140 Nm		
16.000 RPM	HSK A63	50/67 kW	90/120 Nm	A 236	
20.000 RPM	HSK A63	50/67 kW	90/120 Nm	D 双摆	
16.000 RPM	HSK A63	52 kW	150/240 Nm		
9.000 RPM	ISO V40-HSK A63	31/42 kW	130/175 Nm		
<hr/>					
20.000 RPM	HSK A63	50/67,5 kW	90/120 Nm		D - N
16.000 RPM	HSK A63	53/64 kW	170/236 Nm		
16.000 RPM	ISO V45	53/64 kW	170/236 Nm		
12.000 RPM	ISO V50	53/64 kW	170/236 Nm		
10.000 RPM	ISO V50	63/82 kW	300/410 Nm		
6.500 RPM	ISO V50	41/45 kW	265/340 Nm		

B166

用于电极、模具镶件和小型模具的加工。
For machining of electrodes, mould inserts and small moulds.



3 轴 · 3-AXIS VERSION

行程 - Travels XYZ	850-520-420 mm
速度 - Feed rates XYZ	40-30-30 m/min.
转速 - Spindle speed	16000-20000-24000-28000-40000 RPM
加工区间 - Clamping area	1275x550 mm
刀库 - Tool magazine (Nr.)	30



铣削 · 配置直线电机和力矩电机的加工中心 MILLING MACHINES · MACHINING CENTERS WITH LINEAR AND TORQUE MOTORS

ML45

用于电极、精密机械、小型叶轮和叶片的5轴加工。
For 5-Axis machining of electrodes, precision mechanical part, small impeller and blisk.



5 轴 · 5-AXIS VERSION

行程 - Travels XYZ	320-320-320 mm
速度 - Feed rates XYZ	60 m/min.
主轴转速 - Spindle speed	28000-40000 RPM
摇篮 - Tilting and rotary table	C 360° B +/-100°
刀库 - Tool magazine (Nr.)	60



A236

创新型多功能铣车复合加工中心：
用于涡轮叶片（航空航天或能源发电）、叶轮、叶盘、刀具主体、
凸轮或医疗产品（医用假肢）的加工。

Innovative and multifunctional machining center for milling and turning of: turbine blades (aviation or power technology), impellers, blisks, cutting tool bodies, cams or medical products (prosthesis).

适配工业4.0:

- 与用户公司的 IT 系统的连接
- 预防性维护
- 数字孪生（使用 Sinumerik ONE）
- 远程服务

车削选项

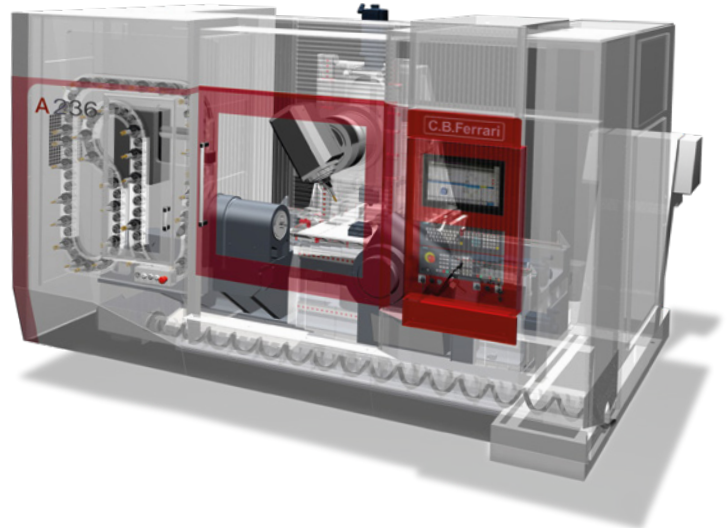
自动托盘或棒料装载
力矩电机驱动旋转轴

Ready for Industry 4.0 through:

- Connectivity with the IT systems of the user company
- Predictive maintenance
- Digital twin (with Sinumerik ONE)
- Remote assistance

TURNING OPTION

AUTOMATIC LOADING OF BARS OR PALLETS
TORQUE ROTARY AXES



5-6-7 轴 • 5-6-7-AXIS VERSION

行程 - Travels XYZ	1220-310-465 mm
速度 - Feed rates XYZ	50 m/min.
主轴转速 - Spindle speed	16000-24000 RPM
摆动范围 - Rotation B2 (摆头 - Head)	B2 +/-120°
转速 - Rotation speed B2	60 RPM
旋转范围 - Rotation A1 - B1 (分度头 - Dividing Unit)	A1 360° B1 -15° +90°
刀库 - Tool magazine (Nr.)	40-60-80



SERIE A

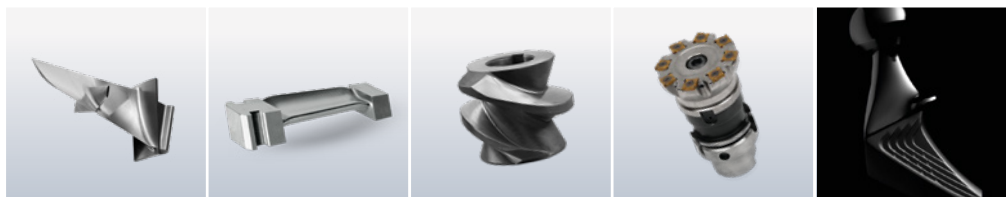
用于涡轮叶片（航空航天或能源发电）、刀具主体、凸轮或小型医疗产品的加工。

For machining of turbine blades (aviation or power technology), cutting tool bodies, cams and technical and medical parts.



3-4-5-6 轴 · 3-4-5-6-AXIS VERSION

行程 - Travels XYZ	A152 850-420-420 mm A156 850-520-420 mm A176 1050-520-420 mm A196 1620-520-420 mm
速度 - Feed rates XYZ	40-40-30 m/min.
主轴转速 - Spindle speed	9000-16000-20000-24000 RPM
摆动范围 - Rotation B2 (摆头 - Head)	B2 +/-91°
旋转范围 - Rotation A1 - B1 (分度头 - Dividing Unit)	A1 360° B1 +45° -135°
转速 - Rotation speed A1 - B1	500-60 RPM
刀库 - Tool magazine (Nr.)	30-60



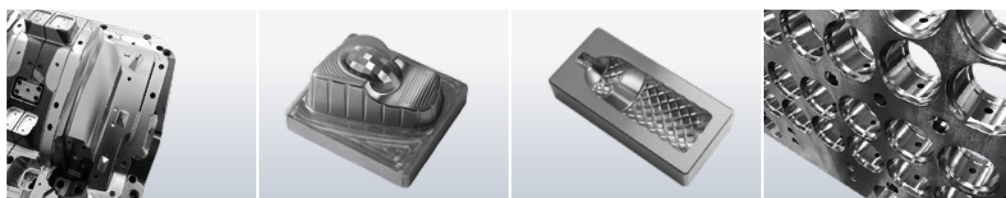
SERIE GT

用于模具和精密机械的加工。
For machining of moulds & dies and precision machining.



3-4-5 轴 · 3-4-5-AXIS VERSION

行程 - Travels XYZ	GT1200 1200-620-620 mm GT2000 2000-820-850 mm GT3000 3000-920-1000 mm
速度 - Feed rates XYZ	30 m/min.
主轴转速 - Spindle speed	9000-12000-16000-20000 RPM
摆动范围 - Rotation B2 (摆头 - Head)	B2 +/-91°
旋转范围 - Rotation A1 (转台 - Rotary table)	A1 360°
刀库 - Tool magazine (Nr.)	30-60



SERIE D

用于模具和精密机械的加工。
For machining of moulds & dies and precision machining.



3-4-5 轴 · 3-4-5-AXIS VERSION

行程 - Travels XYZ	D230 1600-1600-820 mm DU2600 1040-1000-820 mm (3 托盘) *D422 2000-2200-1000 mm *D432 3000-2200-1000 mm
速度 - Feed rates XYZ	40 m/min.
主轴转速 - Spindle speed	12000-16000-20000 RPM
摆动范围 - Rotation A (摆头 - Head)	A +/-91°
旋转范围 - Rotation A - C (双摆头 - Bi-rotary head)	A +/-100° C +/-240°
旋转范围 - Rotation A1 (转台 - Rotary table)	A1 360°
刀库 - Tool magazine (Nr.)	30-60-120

* 双摆头选配 - Option with bi-rotary head



10

SERIE N

用于大尺寸涡轮叶片的加工。
For machining of big dimensions turbine blades.



6 轴 · 6-AXIS VERSION

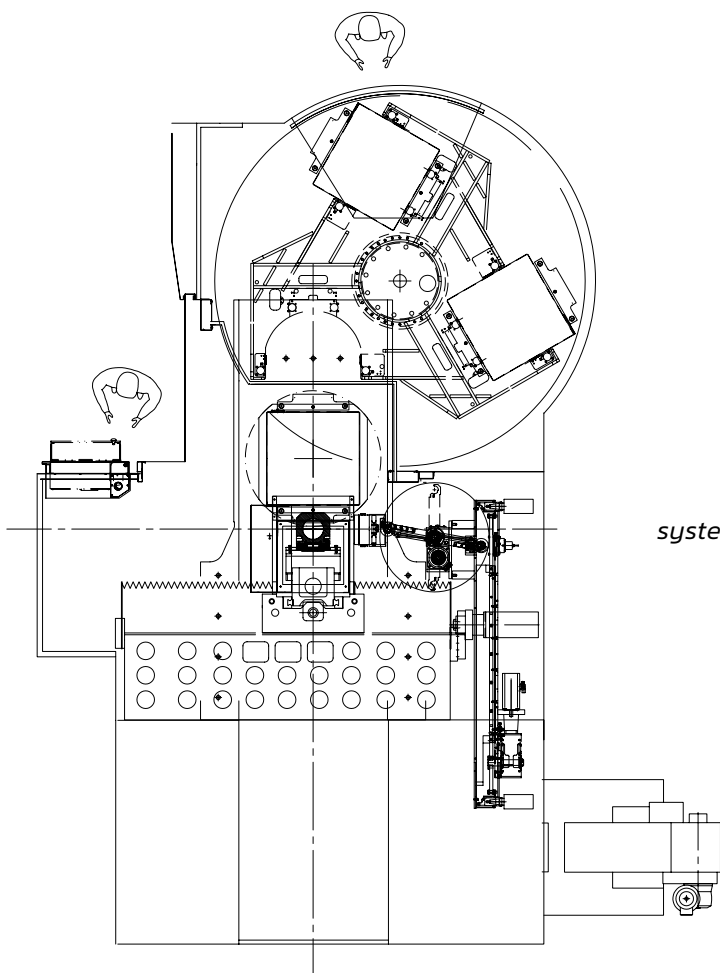
行程 - Travels XYZU	N316 1400-620-820-490 mm N516 2580-620-820-2580 mm N530 3000-820-820-3000 mm
速度 - Feed rates XYZU	40 m/min.
主轴转速 - Spindle speed	12000-16000-20000 RPM
双分度头+摆头 - Double dividing unit+Tilting head	A 360° a 360° C +/-100°



自动化解决方案 AUTOMATION SOLUTIONS

自动上下料系统
在机床上可以应用自动机器人，
由 C.B.Ferrari 或其他外部供应商生产。

ROBOTIZED SYSTEMS FOR AUTOMATIC PIECES CHANGE
On the machines is possible to apply automatic loading systems, which can be produced by C.B.Ferrari or by external suppliers.



数控系统 AVAILABLE CNC CONTROLS



SIEMENS SINUMERIK 840D SL
SIEMENS SINUMERIK ONE

HEIDENHAIN TNC 640



绝对测量系统 ABSOLUTE MEASURING SYSTEM

所有旋转轴均配备海德汉绝对编码器。精度等级达到 $\pm 2''$ 。
All rotary axes are equipped with Heidenhain absolute encoders. Accuracy class $\pm 2''$.



所有机床均标配海德汉绝对光栅尺。
All machines are equipped with Heidenhain absolute linear scales.

机床配件

机床可安装以下标准配件：

- 用于铝合金或钛合金加工的排屑器
- 废气过滤器
- 25/75 bar 主轴中心水冷或气冷
- 3D 工件测量系统
- 激光对刀仪或接触式对刀仪
- 操作门圆形视窗
- 其他按需选配

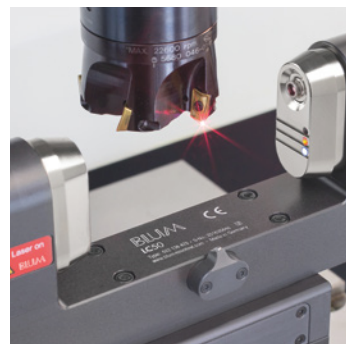
ACCESSORIES

The machine can be equipped with the following accessories:

- Chips conveyor for steel or Aluminum/Titanium
- Exhaust filter
- Through spindle coolant 25/75 bar or by air
- 3D touch probe
- Tool setting device Laser or contact
- Spin window on door (rotoclear)
- Other options available on request



3D 工件测量系统
3D touch probe



激光对刀仪
Tool setting device Laser



接触式对刀仪
Tool setting device contact



中心出水冷却单元 - 75 BAR 500升水箱 - 鼓式过滤器
THROUGH SPINDLE COOLANT GROUP - 75 BAR - 460 LITERS TANK - DRUM FILTER



可对旧机床的工作台、分度头以及电主轴进行升级。
Possibility to update the used machines with new CNC, electrosindles, dividing units, etc.

服务内容

C.B.Ferrari 提供广泛的技术服务，包括：

- 全球范围的销售和服务网络
- 专有主轴、分度头的制造与维修
- **顶尖的专有CAM软件和仿真模拟软件**
- 交钥匙解决方案
- 机床操作示范及加工效率优化
- 精度和重复定位精度测试
- 定制自动化解决方案
- 机床大修
- 全面的技术培训



SERVICES

C.B.Ferrari offers a complete consultancy service, which includes:

- *Worldwide Sales and service organization*
- *Production and reparation of electrospindles, dividing unit and rotary tables*
- ***Proprietary CAM and simulation software***
- *Turnkey projects*
- *Machine demonstration and time studies*
- *Accuracy and repeatability tests*
- *Customized automation solutions*
- *Used machines overhauls*
- *Training courses*

激光应用 LASER DIVISION

激光机床

C.B.Ferrari 不断开发旨在解决特定客户需求的激光应用。

MACHINES WITH LASER SOURCE

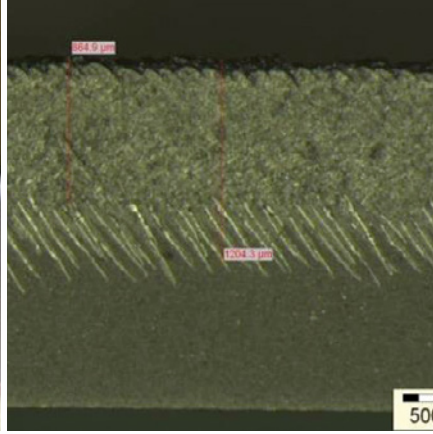
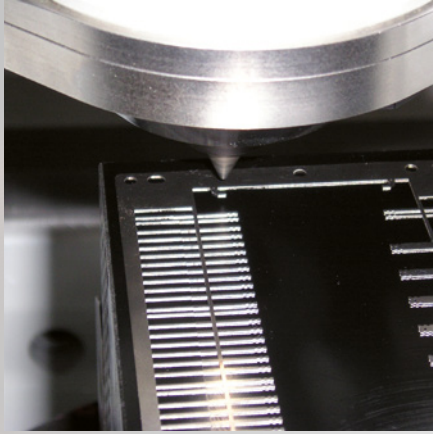
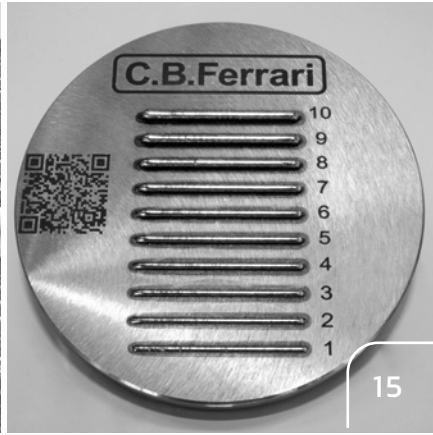
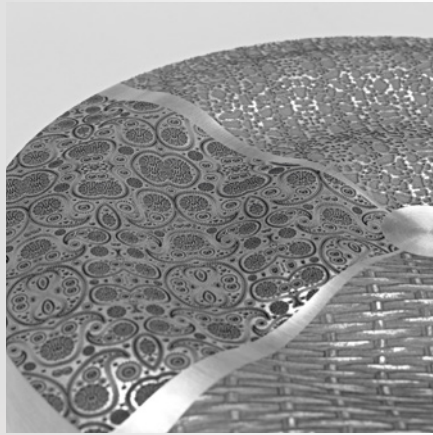
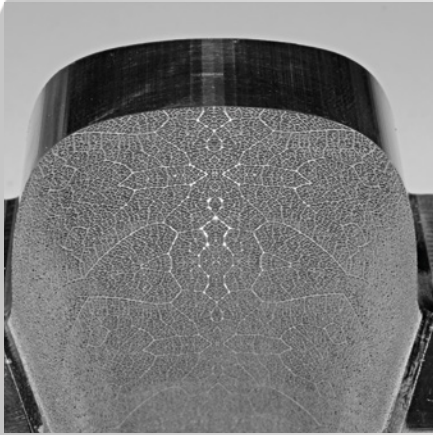
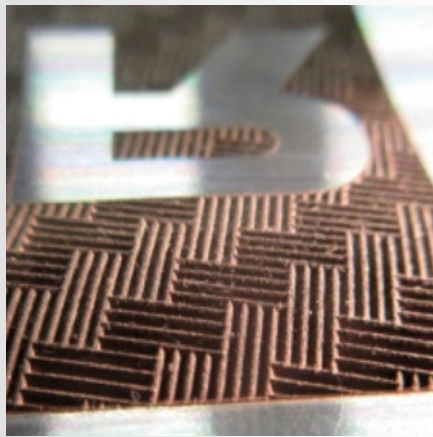
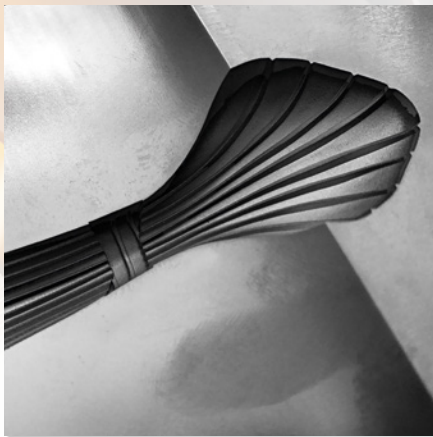
C.B.Ferrari develops Laser applications designed to solve specific customer needs.



应用领域

2D 烧蚀
3D 烧蚀
3D 纹理
焊接
打孔
连杆划线

APPLICATIONS
2D ENGRAVING
3D ENGRAVING
3D TEXTURING
WELDING
CUTTING
DRILLING
CONROD SCRIBING



C.B.Ferrari

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