



## Horizontal lathes

▶ Intuitively controlled manual lathes  
**OPTICA**



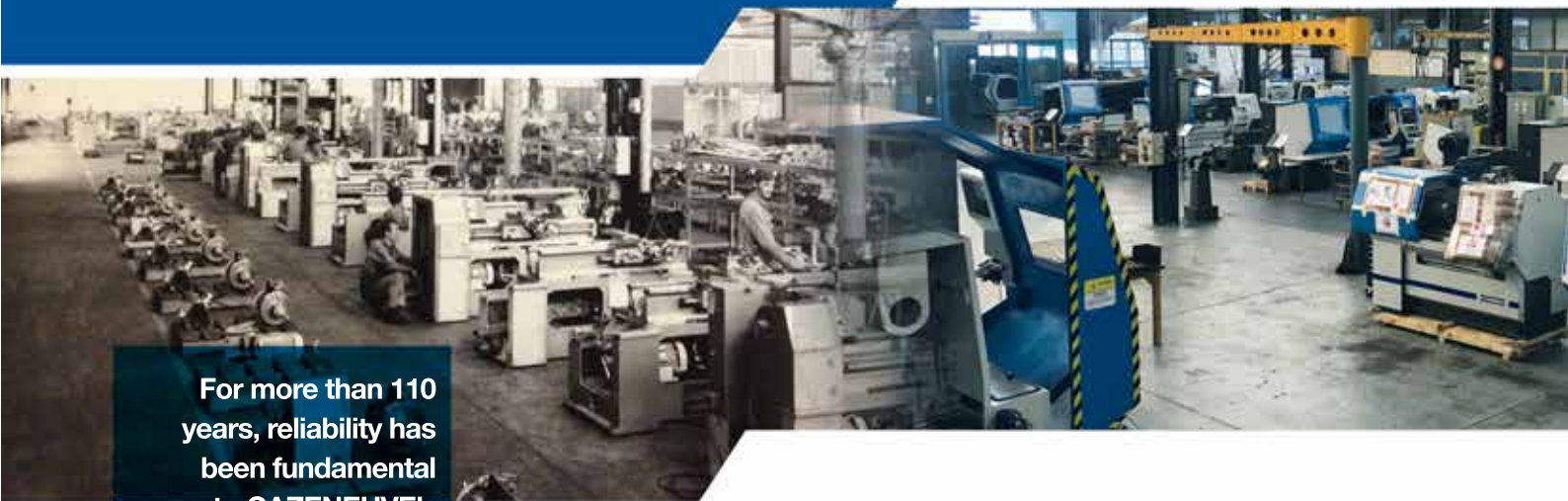
▶ CNC assisted lathes  
**OPTIMAX**



▶ CNC lathes  
**OPTIMAX CN**



# CAZENEUVE, the standard for reliability



For more than 110 years, reliability has been fundamental to CAZENEUVE's choice of fabrication technology and its commitment to the highest quality. Every machine that is delivered bears the hallmark of this business culture which is shared by everyone in the company and recognised by thousands of loyal customers from the smallest business to major industrial groups.

CAZENEUVE lathes stand out for their robustness, their precision, their exceptional user-friendliness and their throughput.



## DESIGN

CAZENEUVE has adopted an R&D strategy that is dedicated to the continuous improvement of competitiveness, productivity and ease of use. This strategy relies on its multidisciplinary engineering team (materials science, styling, state-of-the-art software development and mechanical design), its practical experience of machining and its close contact with its customers.



*Engineering office*

## FABRICATION

The lathes are made in the CAZENEUVE workshops in Pont-Evêque (France). The bed is made from a single cast block with the ways machined in the mass, hardened and surface ground to ensure that the structure is rigid and remains stable for the whole life time of the machine. Efficient organisation of the workshops ensures total control over all the fabrication processes such as fitting using hand scraping, assembly, wiring, inspections and testing.



*Induction hardening*

## CUSTOMER SERVICE

CAZENEUVE advises customers, wherever they may be, before, during and after purchase.

**Appropriate solutions** for the throughput and projected growth of each customer: new machines, rebuilding machines, upgrading existing machines, custom modifications, etc

**Personal service:** continuity and availability of sales engineers, who know their business and are out in the field

**Extended service:** technical support, training, troubleshooting, on site repairs

**Long-term service:** the after sales service can provide spare parts for machines designed more than 40 years ago, confirming that CAZENEUVE lathes are built to last



*Setting up the machine*

*Scraping the carriage*



# A solution for every requirement

## CAZENEUVE helps you make the right choice

<b>Operator skills</b>	Basic knowledge of lathe work, little experience		
	Experienced in lathe work with or without understanding of CNC machining		
	Experienced in lathe work with knowledge of CNC programming		
<b>Type of production</b>	One offs		
	One offs and small runs (<50 parts)		
	Small and medium runs (<250 parts)		
<b>Machine configuration</b>	<b>Perimeter guards with :</b> <ul style="list-style-type: none"> <li>• machining with the doors open in "manual", "straight turning" or "thread" modes</li> </ul>	<b>Perimeter guards with :</b> <ul style="list-style-type: none"> <li>• the doors open in setup mode</li> </ul>	
	<ul style="list-style-type: none"> <li>• Rail-mounted sliding control panel adjustable in height</li> </ul>		
<b>Features</b>	<ul style="list-style-type: none"> <li>• Visualisation and programming on a large 19" touch</li> <li>• Manual machining with electronic hand wheel or joystick</li> <li>• Constant cutting speed whatever the mode</li> <li>• Indexed spindle with continuous hold</li> <li>• Storing the features of tools, workpieces and any machining operation</li> <li>• Simulation whatever the mode</li> <li>• Basic functions for multi-pass manual or semi-automatic machining: straight turning, thread cutting, groove cutting, thread repairs</li> <li>• Drawing mode with rough and final machining</li> <li>• Saving drawings on USB memory stick or Ethernet storage</li> <li>• Accepts dxf format drawings (CAD software available)</li> <li>• Drawings can be prepared on a PC (OPTICA Draw as an option)</li> <li>• Remote maintenance (option)</li> </ul>	<ul style="list-style-type: none"> <li>• SIEMENS SHOP TURN screens and control panels</li> <li>• Constant cutting speed</li> <li>• Indexed spindle with continuous hold</li> <li>• Setting and storing the properties of 99 different tools</li> <li>• Machining simple parts with electronic hand wheels in setup mode</li> <li>• Interactive programming: thread cutting, groove cutting, rough cut / finishing, drawing mode, thread repairs</li> <li>• Saving programs for complete parts on USB memory stick or Ethernet storage</li> <li>• Graphic simulation before and during machining</li> <li>• Accepts dxf format drawings (CAD software available)</li> <li>• C-axis with milling cycles (option for 660+ machines)</li> <li>• CNC simulator for PC (option)</li> <li>• Remote maintenance (option)</li> </ul>	
	<ul style="list-style-type: none"> <li>• Automatic multi-pass machining cycles: thread cutting, groove cutting, drilling, rigid tapping</li> <li>• Creating and saving programs for complete parts (program mode option)</li> <li>• Graphic simulation before and during machining.</li> </ul>		
			



CAZENEUVE machines include the most recent technological developments to ensure a high level of operating safety:

- Stringent safety requirements from the design stage
- SAFETY PLC for maximum protection
- Machine risk analysis: electrical, mechanical and electronic safety
- Conforms to Machinery Directive 2006/42/EC

# Machining

made easy

CAZENEUVE has carried out an in-depth R&D programme to maximise ergonomics, productivity and safety and now offers three innovative solutions for machining easily and safely.

## OPTICA and OPTIMAX interfaces

CAZENEUVE has brought manual machining into the 21st century, making it simple and efficient

- Short learning curve
- Very fast setup

- Standardisation of advanced operations: parallel, face, taper, radius, fillet and bevel machining
- Thread cutting and thread repair faster than a standard manual lathe
- Modern and easy to use with a large 19" touch screen
- Real-time 2D and 3D simulation of the part during machining

▶ OPTICA

▶ OPTIMAX



Stops mode



Workpiece definition



Thread mode



Profile mode



Groove mode



Cutoff mode



Drilling mode



Program mode

## OPTIMAX CN interface

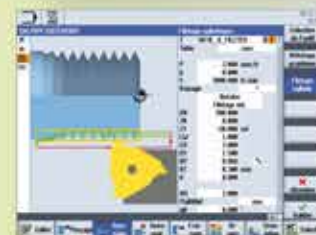
### Advanced machining for everyone!

- Programs for simple or complex cycles
- Milling (option for 660 CN machines)
- Interactive or ISO programming
- Thread repairing
- 3D graphic simulation of parts, before and during machining

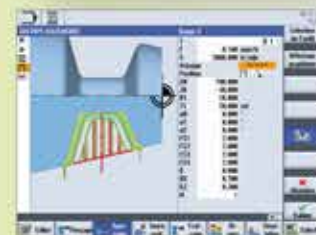
▶ OPTIMAX CN



Straight turning cycle



Thread cycle



Groove cycle



Drilling cycle



Tool table

# 360 lathes



▶ OPTIMAX 360



▶ OPTIMAX CN 360



Hard turning



Collet chuck



Sensitive drilling tailstock

<b>Bed, carriage</b>	<b>1</b>	Distance between centres	700 mm
	<b>2</b>	Swing over bed	390 mm
	<b>3</b>	Swing over cross slide	200 mm
	<b>4</b>	Carriage X axis travel	180 mm
	<b>5</b>	Z axis travel	610 mm
	<b>6</b>	Bed width	330 mm
<b>Spindle</b>	<b>7</b>	Nose type, speed	A1 6" 3000 rpm
	<b>8</b>	Chuck diameter	200 mm
	<b>9</b>	Spindle bore	54 mm
<b>Tailstock</b>	<b>10</b>	Quill diameter and taper	60 mm, MT4
	<b>11</b>	Quill travel	140 mm
<b>Tool holder</b>	<b>12</b>	Turret, tool size	Multifix B, 20 x 20 mm
<b>Overall dimensions</b>		Length	2000 mm
		Width	1575 mm
		Height	1542 mm
		Weight	2000 kg

