FULLY INTEGRATED SECONDARY PROCESSES AND QUALITY SYSTEMS PROVIDE SINGLE SOURCING, FASTER DELIVERY.

As a leading medical contract manufacturer, Autocam Medical provides OEMs single sourcing for a wide variety of secondary processes that complement our core CNC precision-machining capabilities. Our integrated in-house systems allow us to manufacture medical device components efficiently and economically, passing the added value onto our customers. If necessary, we can even push the limits of our equipment to prioritize an urgent project – without the need for outsourcing.

CNC PRECISION MILLING
3rd, 4th, 5th-axis
Vertical, Horizontal

CNC PRECISION CUTTER GRINDING
Multi-axis

CNC PRECISION MILL/TURN
CNC Fixed
CNC Swiss

INTEGRATED IN-HOUSE PROCESSES
DEEP-HOLE GUN DRILLING
(dedicated)

CNC PRECISION GRINDING
Centerless: Infeed
Surface

CNC WIRE EDM
LASER
Etching
Marking
Welding

SAWS
Vertical, Auto-feed

WELDERS
SURFACE FINISHING/COATING
SECONDARY FINISHING

Bead Blast
Electropolish
Passivation
Deburr
Heat Treat
Hone
Extrude Hone
Spherical Lapp
Anodize (in-house partner)

COATING
TiN Coat
AlTiN Coat
Chrome Coat
Medical Black

CLEANING
Class 100,000 Clean Room
Ultrasonic

QUALITY CONTROL (QC)
INSPECTION/PROCESSES
CMM
Optical Measurement
Non-contact Vision Measurement
Short-run SPC
Computer Automated Calibration Recall System (GAGEtrak)
Material Analysis/Cleanliness Testing

CAM PACKAGES
We have capabilities to work with models created in all native software drawing packages.

NON-STERILE PACKAGING
Label Design/Development
Packaging
Heat Sealing
Poly Tubing
Customer supplied

MATERIALS
Autocam Medical precision machines all medical grades of stainless steel, titanium, cobalt chrome (CoCr), nitinol (NiTi), exotic alloys, aluminum, brass and polymers; including PEEK, polyethylene (UHMWPE), Radel and others.
## COMPREHENSIVE EQUIPMENT LIST

### CNC PRECISION MACHINING

**CNC PRECISION MILLING**

**VERTICAL**
- (1) Brother TC-S2C-0
- (2) Fanuc Robodrill a-D21LiA5
- (2) Fanuc Robodrill a-T14iB
- (1) Fanuc Robodrill a-T14iE
- (1) Fanuc Robodrill a-T10C
- (3) Fanuc Robodrill a-T21iFLA
- (2) Fanuc Robodrill a-T21iE
- (1) Hurco VMC
- (1) Hurco VM2
- (1) Makino F3
- (1) Mazak Nexus 510c
- (2) Matsuura RA-2
- (6) Matsuura MAMT2-25V
- (1) Matsuura MC-1000Vs
- (1) Matsuura MC-500V
- (2) Matsuura MC-510VF
- (1) Matsuura MC-550XV
- (2) Matsuura MC-600VF
- (2) Matsuura MC-660VG
- (2) Matsuura MC-800VF
- (3) Mikron HSM 400U
- (4) Mikron HSM 600U
- (6) Mikron HSM 600ULP
- (5) Makino F5 Pro
- (4) Mikron HSM400u LP
- (1) Mori Seiki MV 65
- (3) Mori Seiki NV 5000
- (1) Mori Seiki SV 50
- (1) Mori Seiki SV 500
- (1) OKK VM5
- (1) Leadwell V-40

**HORIZONTAL**
- (3) Kiwa KNH-400
- (6) Kiwa KMH-300
- (1) Makino A55
- (1) Makino A51NX
- (2) Makino A61NX
- (1) Matsuura H-Plus 300

**CNC PRECISION CUTTER GRINDING**

**MULTI-AXIS**
- (3) Rollomatic Grindsmart 628XS
- (1) Rollomatic Grindsmart 629XS
- (1) Walter Mini
- (1) Walter Power

**CNC PRECISION MILL/TURN**
- (1) Chiron FZ 12K S
- (1) Chiron FZ 8K
- (1) DMG Mori NTX-1000
- (1) Nakamura WT-300
- (1) Mori Seiki NT2500

**CNC PRECISION TURNING**

**FIXED HEADSTOCK (single-spindle)**
- (1) Bridgeport Ezpath
- (1) Hardinge Conquest GT
- (1) Hitachi Seiki HT20
- (1) Hitachi Seiki TS15
- (1) Hurco TM8i
- (1) Ikegai Geneses 1208
- (1) Miyano BND-34C
- (1) Mori Seiki Duratum 2050
- (1) Nakamura TMC-20
- (1) Okuma SL6
- (1) Okuma & Howe ACT15

**FIXED HEADSTOCK (twin-spindle)**
- (1) Mori Seiki NZ X1500/800SY2
- (2) Nakamura TW-20

**SWISS TURNING**
- (3) Citizen A20
- (1) Citizen C32
- (9) Citizen L20
- (1) Citizen L720
- (1) Citizen L32
- (12) Citizen M20
- (12) Citizen M32
- (1) Citizen M432Y
- (1) Citizen M432Y
- (1) Star SR-20RI
- (1) Star SR-20RII

**INTEGRATED IN-HOUSE PROCESSES**

**DEEP-HOLE GUN DRILLING**
- (3) Nagel TBT Model DM50-2

**CNC PRECISION GRINDING**
- (1) Sunnen Hone Grinder
- (1) Select OD Grinder
- (1) Toyoda G32 Grinder
- (2) Okamoto Surface Grinder
- (2) Proth Surface Grinder

**CNC WIRE EDM**
- (1) Hole Poppers
- (3) Mitsubishi EDM
- (2) Mitsubishi FA 20S
- (1) Mitsubishi FX 20

**LASER**
- (3) Pro Laser Welder Cutter
- (1) Telesis CO2: 30W Fiber
- (1) Telesis Nd:YAG 100W Lamp
- (3) Pro Laser Welder Cutter

**SAWS**
- (1) Cosen C-3ZONC (Auto-feed)
- (1) Hem Saw (Auto-Feed)
- (1) Marvel Mark II
- (1) W.F. Wells (Auto-Feed)
- (3) Vertical Band Saws

**WELDERS**
- (1) Miller Heliaarc
- (1) Panasonic Plasma Cutter PF 60

**SURFACE FINISHING/COATING**

**SECONDARY FINISHING**
- (24) Bead Blast Cabinets
- (2) Burr King Sanders
- (4) Burr King Variable Speed Buffer/Polisher
- (3) Comco Micro Blaster w/ Torit Dust Collector
- (1) Cyclone Direct Pressure Cabinet
- (2) ExtrudeHone Vectra 8/6
- (1) Hydro-Hone
- (10) Lapping Machines

**COATING**
- (1) Alpha Series Coating Chamber

**CLEANING**
- (1) Class 100,000 Clean Room
- (1) Blackstone GMC 1818
- (1) Branson B510 Ultrasonic 40khz
- (1) Branson B452R Vapor Degreaser 40khz
- (8) Branson Bench Top
- (1) Citru Surf Station
- (6) Crest Ultrasonics
- (1) Crest Ultrasonic Benchtop Alkleen 009C
- (1) Crest Ultrasonic Benchtop Oasis 560
- (1) Miraclean Ultrasonic Final Cleaning System w/Passivation and Dryer
- (2) Pro-Ultrasonics Washer
- (1) Ramco Ultrasonics

**QUALITY CONTROL (QC)**

**CNC MEASURING DEVICES**
- (1) Brown & Sharpe CMM
- (1) Hexagon Optiv Classic 321 w/Vision/Probe CMM
- (3) Mitutoyo Surf
- (1) Taylor Hobson Form Talysurf
- (6) Zeiss CMM
- (1) Zeiss O-Inspect 322

**NON-CONTACT SURFACE MEASUREMENT**
- (1) Brown & Sharpe CMM Global 2000
- (2) Brown & Sharpe CMM Global 5.7.5 (Tesa)
- (2) Brown & Sharpe CNC Excel 7.10.7 (Renishaw)
- (1) Brown & Sharpe Profile (Tesa)
- (1) Starlite 15 Vision
- (2) OGP SmartScope

**MEASUREMENT INSPECTION**
- (9) Air Gauging
- (4) Brown Sharp Micro Hite
- (1) Computer Automated Calibration Recall System (GAGEtrak)
- (11) Deltronic DH 214
- (4) Keyence IM 62256
- (1) Keyence TM-40
- (2) Laser Micrometers
- (14) Mantis Scopes
- (5) Meiji Techno MC-50 Reflected Light Microscope/Micrometer
- (2) Mitutoyo Height Master 12" 510-310 0423
- (5) Mitutoyo Optical Comparator
- (1) Mitutoyo Roundtest RA-114
- (1) OGP Comparator
- (3) S.T Optical Comparator
- (2) Z-Mike Laser Micrometer
- (3) Toolmaker’s Microscopes

**MATERIAL ANALYSIS/CLEANLINESS TESTING**
- (2) Digital Profiiliometers
- (1) Wilson Hardness Tester
- (1) Wilson Rockwell Hardness Tester 547
- (1) Wilson Rockwell Hardness Tester B504-R

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**A WORLD OF MANUFACTURING EXPERTISE IN EVERY PART.**