



# ANILAM 3000M

Changing The Way You Think About Controls

The 3000M gives you more programming flexibility with hard drives that have storage capabilities ranging from large CAM-generated programs to average size daily functioning programs. These controls are configured to your needs; whether it's 2, 3 or 4 Axes.

The PC-based 3000M uses true conversational format – real machinist's language to prompt you for various movements and functions.

Installation has been made simple. More components have been built into the console. There is only one cabinet. Electrical connections just snap in. In fact, the total installation process can be completed in one day.



The computer, motion control, compact flash drive and 8 GB hard drive are built right into the console. Plus, the new simplified design of the CNC control software includes the timer and parts counter.

## TAPPING

With the machine control option, the 3000M provides the most common tapping cycles. Rigid tapping requires a spindle encoder.

## BOLT-HOLE PATTERNS

Used to drill either full or partial bolt hole circles by filling in the first angle, number of holes and diameter of the circle.

## DXF CONVERTER

With just a minimal amount of editing, the program is ready to cut parts.

## HARDWARE OPTIONS

Autolube, precision linear encoders, electronic handwheel, remote start/stop and networking.

## POWERFUL AC BRUSHLESS SERVO MOTORS

Maintains smooth operation and precise positioning.

## HANDWHEELS

Provides all manual operations. Ideal for set up and teach modes and for machining the simplest parts.

## DATA STORAGE

Compact Flash external data storage makes transferring program files between the control and personal computers simple.





**THE ANILAM OFFLINE SOFTWARE PACKAGE**

This optional package allows offline programming and the transfer of small and large programs.

**QUICK, EASY, SNAP-IN CONNECTIONS**

The total installation process can be completed in one day.

**Y-AXIS DRIVE ASSEMBLY**

Driven by a powerful 27"/lb (3.3 Nm) AC brushless servo motor (optional 41"/lb., 4.6 Nm), this assembly features a tough and extremely durable one-piece machined casting.

**X-AXIS DRIVE ASSEMBLY**

A rugged one-piece machined casting guarantees years of reliable operation. Anilam's high quality kit components finish the machine with both the appearance and performance of today's finest CNC equipment.

**BALL SCREWS**

Precision ground for high accuracy.

**3000M HARDWARE KITS**

Available for both new and old models of the most common knee mills and bed mills.

**DSP<sup>2</sup>**

**An enhanced motion control system**

Provides significant increases in productivity by producing high speed machining.

**QUILL DRIVE ASSEMBLY WITH DISCONNECT**

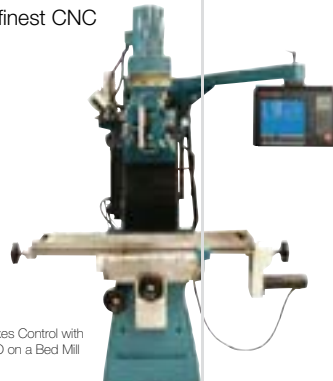
This durable one-piece casting incorporates Anilam's unique and proven quill block drive design. This Z-axis downfeed assembly ensures accuracy, repeatability and can take real cuts for many years to come.

The disconnect capability allows the operator to switch between 2-axis and 3-axis machining on the fly. The Z-axis servo drive unit quickly disconnects from the quill. The precision-ground ballscrew is driven by a powerful 27"/lb. (3.3 Nm) AC brushless servo motor.

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## From Complete Kits To Custom Configurations

Our worldwide reputation for quality components ensures the precise, trouble-free operation of ANILAM controls. From drive assemblies to state-of-the-art circuit boards, each component has been engineered to ANILAM's standard-setting specifications. Suited to fit all your needs.



ANILAM 3000M 3 Axes Control with Coupled 2 Axes DRO on a Bed Mill



# 3000M Specifications

General Operation	2X	3X	4X
Automatic, Single Step and Manual Modes	•	•	•
Background Functions (Program, Edit, RS-232 etc.)	•	•	•
Feedrate, Program Distance To Go, Machine Position Displays	•	•	•
Tool number, diameter and length offset display	•	•	•
Loop counter, dwell time, Timer and Parts counter display	•	•	•
Automatic and programmable homing	•	•	•
Integrated Motion Setup and Testing Software	•	•	•
DNC (Direct Numerical Control)	•	•	•
Teach-in mode	•	•	•
Programming, Program Editing, Programming Tools	2X	3X	4X
Programming Input -- MDI, RS232 and Floppy Disk	•	•	•
Networking	Optional	Optional	Optional
Inch/Metric Conversion	•	•	•
Absolute/Incremental Programming	•	•	•
Conversational Programming	•	•	•
Blueprint Programming	•	•	•
Polar/Coordinate Programming	•	•	•
Help Graphics	•	•	•
Rotation	•	•	•
Mirroring	•	•	•
Scaling	•	•	•
G-Code to Conversational Converter	•	•	•
Triangle, Math and ICON Geometry Calculator	•	•	•
Plane Selection		•	•
Hot Keys on Numeric Keypad	•	•	•
Off-line Software Package (Windows 3.11, 95, and NT compatible)	Optional	Optional	Optional
Work Coordinate Offsets (with calib. Key)	9	9	9
Graphics	2X	3X	4X
Isometric, XY, XZ and YZ View	•	•	•
Automatic Fit	•	•	•
Real Time Draw Graphics	•	•	•
Tool Display	•	•	•
Simulate a section of or the entire program	•	•	•
Compensations	2X	3X	4X
Number of tools in library	99	99	99
Diameter/Radius, Length Offsets	•	•	•
Length offset calibration (input to table)	•	•	•
Lead screw compensation	•	•	•
Backlash Compensation	•	•	•
Linear Compensation	•	•	•

Computer, Motion Control and Interface	2X	3X	4X
INTEL Pentium CPU, 166MHz	•	•	•
DRAM	8MB	8MB	8MB
DRAM Upgrade to 16MB, 32MB or 64MB	Optional	Optional	Optional
Compact Flash Remote Data Storage	•	•	•
RS-232 Port	•	•	•
Printer Port	•	•	•
Hard Drive	8MB	8MB	8MB
32-bit 50 Mhz (100 Mhz) DSP2 Motion Control Board w/ CAN Bus Interface - Surface Mount Design	•	•	•
Controlled Axes	2	3	4
Programmable Spindle Axis	Optional	Optional	Optional
DRO Axis (1)	1	1	1
Block Cycle Time	5 MS	5 MS	5 MS
Block Throughput	200	200	200
Standard I/O Available	10/6	10/6	10/6
Console	2X	3X	4X
12.1" TFT Flat Screen	•	•	•
Jog Resolution Key (x1, x10, x100, Feed, Rapid)	•	•	•
Jog Keys for Controlled Axes	•	•	•
DB-25 Printer Port Access	•	•	•
DE-9 RS232 Communications Port Access	•	•	•
DB-25 Handwheel Port Access	•	•	•
Mini DIN Connector for PC Keyboard	•	•	•
Compact, Contamination-Proof Display and Keypad Enclosure	•	•	•
Console Mounting Arm	•	•	•
DE-9 Remote Start/Stop	•	•	•
Floppy Access in Console	•	•	•
Canned Cycles	2X	3X	4X
Ellipse	•	•	•
Elbow Milling		•	•
Frame Pocket Milling	•	•	•
Hole Milling	•	•	•
Circular Pocket Milling	•	•	•
Rectangular Pocket Milling	•	•	•
Full Bolt Hole Pattern	•	•	•
Partial Bolt Hole Pattern	•	•	•
Basic Drilling	•	•	•
Irregular Pocket with islands	•	•	•
Boring		•	•
Peck Drilling		•	•
Chipbreaker Drilling		•	•
Rectangular Hole Pattern	•	•	•
Spiral Helical		•	•
Mold Rotation about any Axis		•	•
Tapping		•	•
Rectangular Profile (inside/outside)	•	•	•
Face Milling	•	•	•
Circular Profile (inside/outside)	•	•	•

