

# CAV

Bar Feeders for Cincom Turning Centers



P E R F E C T I N T E G R A T I O N

Engineered exclusively for CINCOM CNC Swiss type lathes

# CAV HYDROSTATIC, MAGAZINE BAR FEEDER

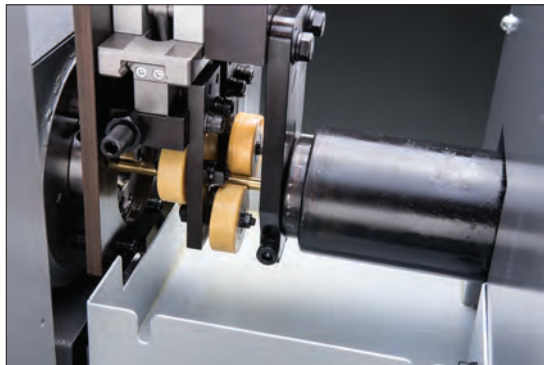
No other bar loader is built exactly like a CAV, because CAV and only CAV, is engineered for use exclusively with CINCOM Swiss-style turning centers. Instead of compromising to meet the needs of many machines, the CAV is specialized to meet just one.

## That Means:

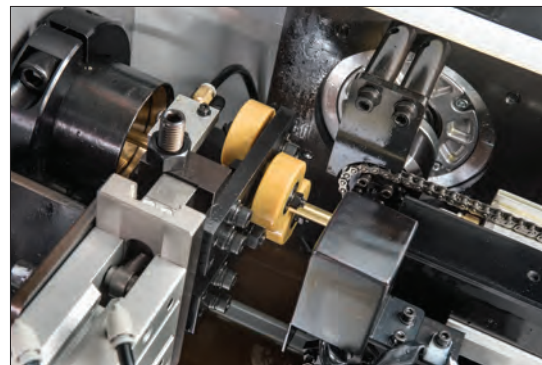
It's perfectly configured to the speeds, torque, power and axis movements of the CINCOM, allowing it to respond with the precise movements needed for optimum precision, performance and productivity.

The CAV and the Cincom share the same CNC controller and the same electrical system.

Space requirements are reduced and the combination CAV bar feeder/CINCOM turning center assures exceptional quality at an affordable price.



Cincom's unique bar and spindle stabilizing mechanism aligns precisely the bar's center of rotation with the center of the spindle. Forces are evenly distributed, protecting the spindle from excessive wear.



Oil/Roller Support System: As the bar rotates, it becomes hydrostatically supported in a bath of oil and perfectly centered in the guide channels. Even with full-length, 13' bars, the lathe can operate noise-free and vibration-free at speeds to 15,000 rpm.



Space-Saving Pusher Design: An auxiliary device pre-positions the bar.



Complete bar change is a

CAV  
CAV  
CAV

# FEEDERS FOR CINCOM



CAV12-LE-IS

CAV16KE-IS

CAV16-M4E-IS

CAV20-L2E-IS

CAV32-LE-IS

CAV32-M4E-IS



approximately 35 seconds.

A7 axis motor becomes part of the Z1 axis motor while main spindle collet is closed.

## Unique Features

- Fully integrated into the machine control for easier operation and total control from a single console;
- Quicker response between the bar feeder and the machine's sliding headstock;
- Improved accuracy when specs are critical;
- A unique stabilizing mechanism to minimize wear and down time;
- Servo drives reduce moving parts, provide instantaneous insertion and braking response, and positioned bars to tenths accuracy with no following error;
- Hydrostatic oil support;
- Roller support system;
- Automatic remnant retraction;
- Versatility – round, hex and square stock;
- And just one company to contact for parts and service.

Axis	MC	Core	Operation Range
X1	1.36590	-0.07874	-10.03937
Z1	-0.01707	-0.01969	8.07055
Y1	1.24254	-0.03936	26.25984
X2	24.80182	-0.07874	24.90063
Z2	0.00001	-0.03937	8.11024

The screenshots also display various control panels with buttons for 'Pusher Retract', 'Pusher Advance', 'Gripper Stock', and 'Stabilizer/Channel Open/Close'. A 'Notice' box in one screen reads: '1. Press CAV ON key on operation panel. 2. Select necessary operation in active indication by allow keys. 3. Press START key for executing selected operation.'

CAV operation screens located in the machine's preparation mode.

# Specifications

Model	CAV12-LE	CAV16-M4E	CAV16-KE	CAV20-LE CAV20LZE	CAV32-LE	CAV32-M4E
Bar diameter	2 to 12 mm <sup>1</sup> (Ø16)	2 to 16 mm <sup>1</sup>		2 to 20 mm <sup>2</sup>	3 to 38 mm <sup>2</sup>	3 to 35 mm <sup>2</sup>
Number of bars that can be accommodated	20 (Ø12 mm)	15 (Ø16 mm)		12 (Ø20 mm)	9 (Ø32 mm)	
Spindle height	1000 mm	1150 mm	1050 mm		1150 mm	
Size	4M					
Bar length	1000 to 4050 mm					
Spindle support	Roller support of 4-roller type mounted in standrd mode (installed on the main device side)					
Support and channel	1 set					
Power source	Input power capacity: 1.0 kVA, Power voltage: 200/220 VAC, Frequency: 50/60 Hz (supplied from the main device side)					
Oil	Equivalent to ISO VG34 or VG24 <sup>3</sup>				VG68	
Amount of oil	57 liters (15 gallons)					
Device mass	570 kg				650 kg	

<sup>1</sup> Small bar attachment (~Ø7, ~Ø12, ~Ø16 or ~Ø25, optional) appropriate to material diameter is required.

<sup>2</sup> Use an optional attachment (~Ø7, ~Ø12, ~Ø20, ~Ø35 or ~Ø38) appropriate to material diameter.

<sup>3</sup> Customer to provide oil.

## Standard Attached Parts

Item	Quantity
1 Pusher assembly	1 set
2 Finger chuck (FC)	1
3 Chuck joint (CJ)	1
4 Centering jib	1 set
5 One-touch collar	1 set
6 Spindle support	1 set

## Consumable Parts List

Item	Quantity
1 Pusher assembly	1 set
2 Finger chuck (FC)	1
3 Chuck joint (CJ)	1
4 Roller (for spindle support and workpiece support)	1 set
5 Workpiece clamping claw	1 set
6 Guide rail	1 set
7 Telescopic pipe	1 set

## Recommended oil

Manufacturer	Product name
MOBILE OIL	Hydraulic oil heavy medium VG68
COSMO OIL	Hydraulic AW VG68, VG32, VG34, VG24
NIPPON OIL	Super Highland 68, VG32

[www.marucit.com](http://www.marucit.com)

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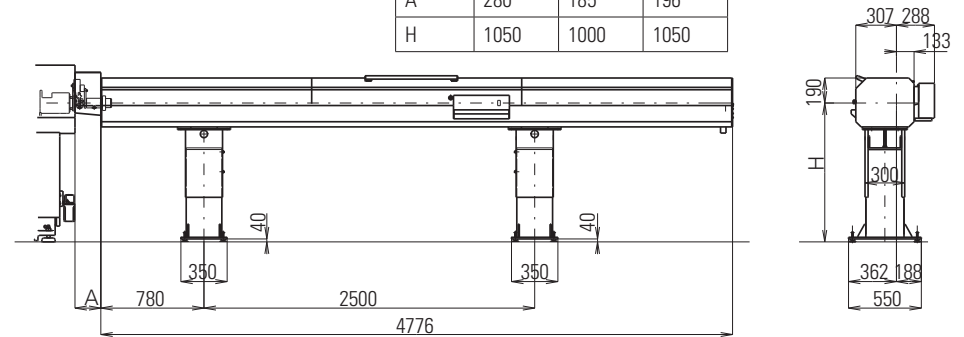
68 Moylan Lane  
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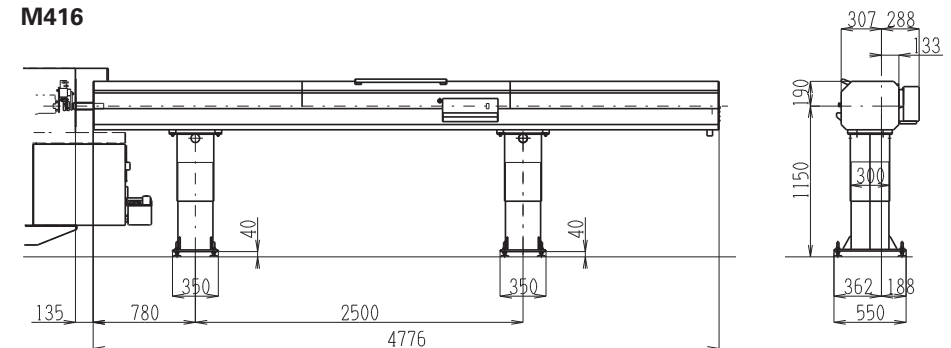
# Dimensions

## K16E / L12 / L220

	K16E	L12	L220
A	280	185	196
H	1050	1000	1050



## M416



## L32 / M420 / M432

	L32	M420/32
A	283	279
H	1050	1150

