

# Total Machining Solutions

From the planning stage to Production

- Process Identification
- Fixture development & interface
- Automation Solutions
- Complete prove-out

## Tooled up solutions

The application engineering team of AMS has wide experience in identifying the process for machining and providing suitable workholding and tooling solutions. This ranges across the markets from high speed & productivity solutions for the automotive industry to the high precision and accuracy solutions for the aerospace or mould making industry. This not only includes support in selection of the most suitable machines but also designing the fixtures and identification of the ideal cutting tool for the selected process. The entire prove out of the components to meet the desired cycle time can be undertaken when solutions are opted for.



## Automation solutions

It is constant endeavor to provide better productivity on our products. Our machines are made suitable for automation interface of different types. Based on the manufacturing process flow and the level of autonomous operation required different options can be provided. This can range from a simple load-unloader or gantry operated line or a robotic cell connects multiple machines & component conveyors.

*Due to continuous updating of machines, images & specifications mentioned herein are subject to change without notice*



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# END TO END MACHINING SOLUTIONS



- High Speed Drill Tap Centers
- High Productivity Vertical Machining Centers
- High Productivity Twin Spindle Machining Centers
- High Performance Horizontal Machining Centers
- High Precision 5Axes Machining Centers





## About Us

Customer focus & continual improvements have always been the core strengths of AMS. Ever since its inception AMS has been working very closely with its customers, valuing every feedback with utmost care. The organization is driven by its principle of providing superior quality products at lower cost with the best post-sales support. The overwhelming response from the customers has led to the development of wide variety of products. Today AMS is not only one of the market leaders in manufacturing Vertical Machining centers but also has an increasing demand for its Horizontal Machining Centers & Drill tap machining centers.

Along with the manufacturing of machining centers we also have developed rich experience in providing total machining solutions. This includes fixtures, Tooling selection, Automation solutions and prove-out of the components. We are ever ready to provide (customized) solutions to your manufacturing needs. With a wide spread marketing and support network across the country we are always there to listen to your requirements and provide you with befitting solutions.

With the increase in global demand, AMS machining centers have created a market in countries like the USA, France, Italy, UK, Mexico, Russia, Korea, Middle East, Thailand, Vietnam & China.

## Quality Policy

We are Committed to achieve total satisfaction of our Customers, Employees and other interested parties through effective implementation of integrated management systems (IMS) comprising quality, environment, safety, social accountability, confidentiality and integrity to ensure:

- Innovation, development and timely delivery of products
- Nurturing and sustaining of environment
- Elimination of hazards
- Compliance to all applicable legal and statutory requirements
- Continual improvement of our products, processes, people and suppliers

## Products at a Glance

Standard VMCs		MCV-300	MCV-350	Winner	SuperWinner	MCV-400	MCV-450	ACER	MCV-550L	MCV-650	MCV-700N	MCV-700 NL	MCV-700	MCV-800	
Traverse	X	mm	400	400	500	500	600	800	800	1000	1020	1250	1500	1500	2000
	Y	mm	350	350	400	400	450	450	510	650	700	700	700	700	810
	Z	mm	320	480	350	500	500	500	550	600	600	600	700	810	

V series		430V	730V	540V	740V	850V	1060V	1280V	1580V
Traverse	X	mm	400	750	500	700	800	1000	1500
	Y	mm	300	300	400	400	510	600	800
	Z	mm	400	400	450	450	500	600	600

High Speed VMCs		Challenger+	MCV-400F / MCV-400XL	MCV-450 XL	ACERXL
Traverse	X	mm	600	600	800
	Y	mm	450	450	510
	Z	mm	350	500	500

VMCs with BT-50		MCV-550L/50	MCV-650/50	MCV-700N/50	MCV-700NL/50	MCV-700/50	MCV-800/50
Traverse	X	mm	1000	1020	1250	1500	2000
	Y	mm	550	650	700	700	810
	Z	mm	550	600	600	700	810

VMCs with APC		MCV-300/ MCV-350	Winner/ Super winner	Challenger+	MCV-400 Series	MCV-450 Series	Acer Series	MCV-550 L	MCV-650	MCV-700N	MCV-700
Pallet size-LAPC	mm	500 x 325	600 x 385	850 x 430	650 x 430	800 x 435	800 x 485	1000 x 535	1000 x 635	1250 x 685	1600 x 685
Pallet size-RAPC	mm	500 x 350	600 x 400		700 x 450	800 x 450	800 x 500	800 x 500			

\* APC: Automatic Pallet Changer, L: Linear, R: Rotary

Special VMCs		Twine spindle				Moving Column	Double Column	5 Axes VMC			
		Gemini Mini S	Gemini Mini L	Gemini Jr. XL	Gemini XL	Gemini Max.	DM 800	DC-2512	DC-3020	Penguin 5ax	
Traverse	X	mm	400	600	500	600	750	1000	2700	3200	650
	Y	mm	400	450	450	450	500	800	1300	2200	600
	Z	mm	500	500	600	600	600	500	800	(800/ 1000)	500

DTMCs		Spark	Sperk XL	Dart S	DTC-400/ DTC-400XL	DTC-400 L XL	TCV-540	Super Dart	
Traverse	X	mm	300	400	400	500	700	500	600
	Y	mm	250	300	350	400	400	400	450
	Z	mm	250	250	320	320	320	320	500



Standard HMCs		Proton	HMC-400XL	
Traverse	X	mm	500	600
	Y	mm	400	500
	Z	mm	400	500

Column Moving HMCs		CMH-400 XL	CMH-500 XL	MCH-400 XL	MCH-500L	
Traverse	X	mm	600	800	610	800
	Y	mm	500	800	610	800
	Z	mm	500	600	650	800

Column Moving HMC with BT-50		CMH-500/50	MCH-500L/50	MCH-630	MCH-800	
Traverse	X	mm	800	800	1000	1500
	Y	mm	600	780	900	1200
	Z	mm	600	800	910	1300



# Vertical Machining Centers

## Drill Tap Machining Centers

		Spark	Spark XL	Dart S	DTC-400	DTC-400 XL	DTC-400L-XL	Super Dart
Stroke X, Y & Z axes	mm	300 x 250 x 250	400 x 300 x 250	400 x 350 x 320	500 x 400 x 320	500 x 400 x 320	700 x 400 x 320	600 x 450 x 500
Table size	mm x mm	500 x 250	650 x 360	650 x 360	750 x 400	750 x 400	850 x 400	800 x 450
Max. load on table	Std./Opt.	kgf	150	200	400	300	300	250
Spindle speed	Std.	rpm	6000	8000	8000	10000	10000	8000
	Opt.	rpm	8000		10000	12000	Upto 24000	Upto 15000
Spindle power	Std./Opt.	kW	5.5 / 3.7	5.5 / 3.7	5.5 / 3.7	7.5 / 5.5	7.5 / 5.5	7.5 / 5.5
Spindle taper	Std.		BT-30	BT-30	BT-30	BT-30	BT-30	BT-30
	Opt.				BBT-30	BBT-30	BBT-30	BBT-30 / HSK A50
ATC capacity	Std./Opt.	Nos.	8	8	12	12	16 / 24	20
Rapid traverse - X/Y/Z	Std.	m/min	25 / 25 / 18	36 / 36 / 36	48 / 48 / 40	48 / 48 / 40	60 / 60 / 48	50 / 50 / 40
CNC System	Std.		Fanuc	Fanuc	Fanuc	Fanuc	Fanuc	Fanuc
	Opt.				Mitsubishi	Mitsubishi	Mitsubishi	

\* Mitsubishi CNC System can be offered on selected Models

DTC-400 XL



1060 V



850 V

## Standard VMCs

		MCV-300	MCV-350	Winner	430V	Super Winner	MCV-400	MCV-450
Stroke X, Y & Z axes	mm	400x350x320	400x350x480	500x400x350	400x300x400	500x400x500	600x450x500	800x450x500
Table size	mm x mm	650 x 360	650 x 360	800 x 400	650 x 300	800 x 400	900 x 450	1000 x 450
Max. load on table	Std./Opt.	kgf	400	400	200	400	400	400
Spindle taper	Std.		BT-40	BT-40	BT-40	BT-40	BT-40	BT-40
	Opt.							
Spindle speed	Std.	rpm	8000	8000	8000	6000	6000	6000
	Opt.	rpm	8000	8000 / 10000	8000	8000	8000 / 10000	8000 / 10000
Spindle power	Std./Opt.	kW	5.5/3.7 / 7.5/5.5	5.5/3.7 / 7.5/5.5	7.5/5.5	5.5/3.7	7.5/5.5 / 11/7.5	11/7.5 / 15/11
ATC capacity	Std./Opt.	Nos.	12	20	12	20	24 / 30	24 / 30
Rapid traverse - X / Y / Z	Std.	m / min	40 / 40 / 40	40 / 40 / 40	40 / 40 / 30	36 / 36 / 36	40 / 40 / 40	36 / 36 / 36
CNC System	Std.		Fanuc	Fanuc	Fanuc	Fanuc	Fanuc	Fanuc
	Opt.				Siemens	Siemens	Siemens	Siemens

\* Optional Rapid Traverse will be applicable when higher max. load on table is opted for \* Mitsubishi CNC System can be offered on selected models

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# Vertical Machining Centers

## High Speed VMCs

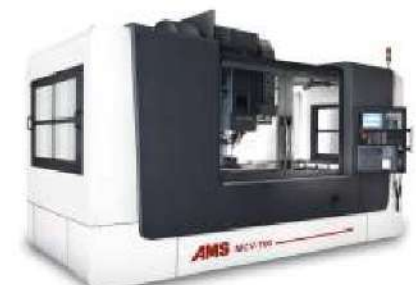
		Challenger+	MCV-400 F	MCV-400 XL	MCV-450 XL	ACER XL
Stroke X, Y & Z axes	mm	600 x 450 x 350	600 x 450 x 500	600 x 450 x 500	800 x 450 x 500	800 x 510 x 500
Table size	mm x mm	900 x 450	900 x 450	900 x 450	1000 x 450	1000 x 510
Max. load on table	Std./Opt.	kgf	250 / 500	300	500	600
Spindle speed	Std.	rpm	8000	8000	8000	8000
	Opt.	rpm	10000/12000	10000/12000	10000/12000	10000/12000
Spindle power	Std./Opt.	kW	7.5/5.5 / 11/7.5	7.5/5.5 / 11/7.5	11/7.5 / 15/11	11/7.5 / 15/11
Spindle taper			BT-40	BT-40	BT-40	BT-40
ATC capacity	Std./Opt.	Nos.	12	24 / 30	24 / 30	24 / 30
Rapid traverse	Std.	m / min	50 / 50 / 40	50 / 50 / 36	40 / 40 / 40	40 / 40 / 40
- X / Y / Z	Opt.	m / min	40 / 40 / 40			50 / 50 / 40
CNC System	Std.		Fanuc	Fanuc	Fanuc	Fanuc

## V Series

		730V	540V	740V	850V	1060V	1260V	1580V
Stroke X, Y & Z axes	mm	750 x 300 x 400	500 x 400 x 450	700 x 400 x 450	800 x 510 x 500	1000 x 600 x 600	1250 x 600 x 600	1500 x 800 x 600
Table size	mm x mm	900 x 300	750 x 400	850 x 400	1000 x 510	1200 x 600	1400 x 600	1650 x 700
Max. load on table	Std./Opt.	kgf	250	400	400	500	800	1250 / 2000
Spindle speed	Std.	rpm	6000	6000	6000	6000	6000	6000
	Opt.	rpm	8000	10000/12000	10000/12000	10000/12000	10000/12000	10000/12000
Spindle power	Std./Opt.	kW	7.5/5.5	7.5/5.5 (11/7.5)	7.5/5.5 (11/7.5)	11/7.5 (15/11)	11/7.5 (15/11)	15/11 (18.5/15)
Spindle taper			BT-40	BT-40	BT-40	BT-40	BT-40/50	BT-40/50
ATC capacity	Std./Opt.	Nos.	20	24	24	24	24	24
Rapid traverse	Std.	m / min	18 / 18 / 18	40 / 40 / 40	40 / 40 / 40	36 / 36 / 36	32 / 32 / 24	24 / 24 / 24
	Opt.		Fanuc	Fanuc	Fanuc	Fanuc	Fanuc	Fanuc
CNC System	Std.		Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
	Opt.			Mitsubishi	Mitsubishi	Mitsubishi	Mitsubishi	Mitsubishi



MCV-400



MCV-700

ACER	MCV-550L	MCV-650	MCV-700N	MCV-700NL	MCV-700	MCV-800
800x510x500	1000x550x550	1020x650x600	1250x700x600	1500x700x800	1500x700x700	2000x810x810
1000 x 510	1200 x 550	1200 x 650	1450 x 700	1850 x 700	1650 x 700	2400 x 810
500	800	800	1200	1200	1500	2000
BT-40	BT-50	BT-40	BT-50	BT-40	BT-40	BT-40
6000	4000	6000	4000	6000	5000	5000
8000	5000	8000	5000	8000 / 10000	8000 / 10000	6000
15/11	11/7.5 / 15/11	11/7.5 / 15/11	15/11	15/11	18.5 / 15	18.5 / 15
24 / 30	20 / 30	24 / 30	20 / 30	24 / 30	24 / 30	24 / 30
40 / 40 / 30	32 / 32 / 24	32 / 32 / 24	20 / 20 / 20	20 / 20 / 20	20 / 20 / 20	18 / 18 / 18
Fanuc	Fanuc	Fanuc	Fanuc	Fanuc	Fanuc	Fanuc
Siemens	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens

Note: Option of BBT-40 can be offered in lieu of BT-40 on selected Models.

Option of HSK A-50, A-63 & A-100 can be offered in lieu of BT-30, 40 & 50 respectively on selected models

# Vertical Machining Centers

Special Vertical Machining Centers			Twin Spindle Machining Centers				
		Gemini mini S	Gemini mini L	Gemini Jr./ Jr. XL	CMV-350 TS	Gemini XL	Gemini Max
Stroke X, Y & Z axes	mm	400 x 400 x 500	600 x 450 x 500	500 x 450 x 600	400 x 400 x 515	600 x 450 x 800	750 x 500 x 600
Table size	mm x mm	800 x 400	1100 x 450	900 x 450	1100 x 500 (2)	1200 x 480	1400 x 520
Max. load on table	Std./Opt.	kgf	350	350	500	400 / 600	500
Distance between two spindles	mm	250	360	250	350	400/460	400 / 550
Spindle speed	Std.	rpm	6000	6000	8000	8000	4000
	Opt.	rpm	8000	8000	10000	10000	10000
Spindle power	Std.	kW	5.5 (2)	7.5 / 5.5 (2)	7.5/5.5 (2) /	11/7.5 (2)	11/7.5 (2)
	Opt.				11/7.5 (2)		26/22(2)
Spindle taper	Std.		BT-30	BT-30	BT-40	BT-40	BT-50
	Opt.		BBT-30	BBT-30	HSK A63	HSK A63	HSK A100
ATC capacity	Std./Opt.	Nos.	20 (2)	20 (2)	20 (2)	20 (2)	20 (2)
Rapid traverse - X / Y / Z	Std.	m / min	48 / 48 / 40	40 / 40 / 40	24 / 24 / 24 / 50 / 50 / 50	40 / 40 / 40	50 / 50 / 40
CNC System	Std.		Fanuc	Fanuc	Fanuc	Fanuc	Fanuc



GEMINI MINI S



GEMINI XL



DM-800



Penguin-Sax

Special Vertical Machining Centers			TCV-540	Penguin-Sax	DM 800	DC-2512	DC-3020
Stroke X, Y & Z axes	mm		500 x 400 x 320	650 x 600 x 500	1000 x 800 x 500	2700 x 1300 x 800	3200 x 2200 x (800/ 1000)
Table Size	mm x mm		760 x 400 (2)	Ø800 x 500	1000 x 700	2500 x 1200	3000 x 2000
Max. Load on table	Std./Opt.	kgf	200 / 250	350	1500	5000	8000
Spindle Speed	Std.	rpm	10000	12000	8000	6000	6000
	Opt.	rpm	16000	15000	10000	6000	6000
Spindle Power	Std.	kW	7.5 / 5.5	11 / 16.5	15 / 11	18.5/15	18.5/15
				HSK A63	BT-40	BT-50	BT-50
ATC Capacity	Std./Opt.	Nos.	16	30	20 / 30	20 / 40	20 / 40
Rapid traverse - X / Y / Z	Std.	m/min	50 / 50 / 50	40 / 40 / 40	20 / 20 / 16	18/18/15	15/15 /15
CNC System	Std.		Fanuc		Fanuc	Fanuc	Fanuc
	Opt.			Siemens / Mitsubishi	Siemens / Mitsubishi	Siemens / Mitsubishi	Siemens / Mitsubishi

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# Horizontal Machining Centers

Standard HMCs			Stationary Column		Moving Column
			Proton	HMC-400 XL	Fier-H
Stroke X, Y & Z axes	mm		500 x 400 x 400	600 x 500 x 500	550 x 500 x 500
Table/Pallet size	mm x mm		400 x 350 / 400 x 320 (2)	400 x 500	400 x 500
Max. load on table/Pallet	Std./Opt.	kgf	400 / 200	400	400
	Std.	rpm	6000	6000	6000
Spindle speed	Opt.	rpm	8000 / 10000	8000 / 10000	8000 / 10000
	Std./Opt.	kW	7.5/5.5 / 11/7.5	11/7.5 / 15/11 / 18.5/15	11/7.5 / 15/11
Spindle taper			BT-40	BT-40	BT-40
ATC capacity	Std./Opt.	Nos.	16	24 / 30 / 40 / 60	24 / 30
Rapid traverse - X / Y / Z	Std.	m / min	40 / 40 / 40	40 / 40 / 32	40 / 40 / 40
CNC System			Fanuc	Fanuc	Fanuc



PROTON



MCH-400 XL



MCH-630



MCH-800

HMCs			Moving Column			Moving Table				
			CMH-400 XL	CMH-500 XL		MCH-400 XL	MCH-500 L	MCH-630	MCH-800	
Stroke X, Y & Z axes	mm		600x500x500	800x600x600		610x610x650	800x800x800	800x780x800	1000x900x910	1500x1200x1300
Table size	mmxmm		400 x 500	500 x 630		400 x 500	500 x 630	500 x 630	630 x 800	800 x 1200
Max. load on Pallet	Std./Opt.	kgf	400	500	500	500	500	500	1200	2000
	Std.	rpm	6000	6000	4000	8000	6000	4000	4000	4000
Spindle speed	Opt.	rpm	8000 / 10000	8000 / 10000	5000	10000	8000 / 10000			
	Std./Opt.	kW	11/7.5 / 15/11	15 / 11	15 / 11	15 / 11	15 / 11	26 / 22	26 / 22	30 / 22
ATC capacity	Std./Opt.	Nos.	40/60	40/60	20/30	40/60	40/60	40/60	60	60
Rapid traverse - X / Y / Z	Std.	m / min	50/50/50	40/40/40	40/40/40	48/48/48	40/40/40	40/40/40	40/40/40	40/40/40
CNC System			Fanuc	Fanuc	Fanuc	Fanuc	Fanuc	Fanuc	Fanuc	Fanuc

\* Machine should be grouted