

India's Largest Manufacturer of Machining Centers

# 1690V

# HIGH PERFORMANCE VMC

# **Optimal Solutions for**

- Die Mould Machining
- Pattern Machining





#### About 1690V

1690V is High Performance Machining Center, capacity to machine bigger size heavy duty components. This machine is ideally suitable for machining Die Mould and Pattern machining components. High precision LM Guideways, ball screws helps in achieving high degree of positional accuracy at faster rate.

With a rigid structure and high precision parts one can achieve high accuracy and productivity. The machine is designed, manufactured and tested to perform under very demanding working conditions.

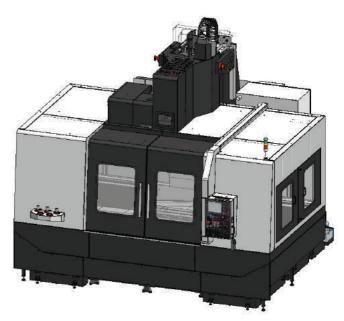
# **Key Highlights**

- Extended Y-Stroke
- Smooth Surface Finish

- Wider Working Area
- Apt for Large Die & Pattern Components

## **Machine Structure**

- 1690V is the result of continuous R&D efforts and experience of AMS in building highly cost effective, productive & accurate machining center.
- 1690V is highly rigid machine with wider working area widely used for machining large die mould and pattern components.
- Our castings are internally reinforced with heavy ribs to resist flex and damp vibrations.
- The advanced design of our spindles provides high axial thrust capability, yet generates minimal heat.



1690V

# Die Mould Features



Z-axis Retraction Function



Program Restart Function



Power Failure
Detection Feature



**Drop Prevention** 



Air Nozzle for Dry Cutting

# **Standard Features**

- Spindle Power 15/11 kW
- Rapids 20/20/20 m/min
- Side Chip Disposal
- Ball Screw Stretching for all 3 Axes
- Flood Coolant

# **Optional Features**

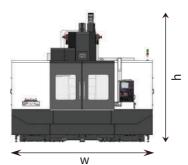
- Higher Spindle Power upto 18.5/15 kW
- Die Mould Kit
- Coolant Through Spindle
- Chip Conveyor along Y-axis
- 4th & 5th Axis Rotary Table

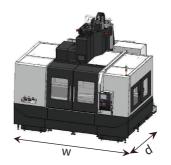


# **Machine Specifications**

| Specifications   | Unit                 | 1690V-BT 40                                     | 1690V-BT 50   |
|--|----------------------|---|---|
| Travels  |                      |   |   |
| X axis Y axis Z axis Dist. from Spindle face to Table top                                      | mm<br>mm<br>mm<br>mm | 1630<br>910<br>810<br>150-960                   | 1630<br>910<br>810<br>150-960                       |
| Table  |                      |   |   |
| Table size Max. load on Table Table Height from floor T-slot dimension (n x w x p)             | mm<br>kg<br>mm<br>mm | 1800 x 800<br>2000<br>1050<br>6 x 18 x 125      | 1800 x 800<br>2000<br>1050<br>6 x 18 x 125          |
| Spindle  |                      |   |   |
| Tool shank type Spindle speed Std. Spindle Bearing Dia Std. Spindle power Std.                 | rpm<br>mm<br>kW      | BT-40<br>6000<br>80<br>15/11                    | BT-50<br>4000<br>100<br>15/11                       |
| Feed   |                      | ,   | ,   |
| Cutting feed<br>Rapid traverse   | mm/min<br>m/min      | 1-10000<br>20/20/20                             | 1-10000<br>20/20/20                                 |
| Automatic Tool Changer   |                      |   |   |
| No. of tools Tool diameter Tool weight Max. Tool length Max. Tool change system Pull Stud Type | mm<br>kg<br>mm       | 24<br>80/155<br>8<br>250<br>Twin Arm<br>MAS-403 | 20<br>125/250<br>20<br>350<br>Twin Arm<br>DIN-69872 |
| Accuracy (As per ISO 230-2)  |                      |   |   |
| Positioning accuracy Repeatability   | mm<br>mm             | 0.010<br>±0.003                                 | 0.010<br>±0.003                                     |
| Control System   |                      |   |   |
| Fanuc  |                      | 0iMF+   | 0iMF+   |
| Installation data  |                      | 10000   | 10000   |
| Machine weight – Net<br>Machine wxdxh  | kgf<br>mm            | 12000<br>4150 x 3700 x 4000                     | 13000<br>4150 x 3700 x 4000                         |

<sup>\*</sup> All Specifications are subject to change without prior notice. - All the dimensions mentioned are in mm.





#### **End to End Solutions**

From the Planning stage to Production



**Process Identification** 



**Fixture Development** 



**Automation Solutions** 



**Complete Prove-out** 

# **Applications**



Die Mould



**Aerospace** 



Medical



**Energy Generation** 

A Green Co Gold Company

awarded by CII

Global

Locations

## **Contact Us**



In Pursuit of Excellence Leading Manufacturers of Machining Centers

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