

WELDOR®

CNC MACHINES

Forming The Future - The True Reputation of Quality

V-GROOVING CNC MACHINE



RELIABLE



HIGH QUALITY



PRECISE GROOVING



MADE IN INDIA

www.weldorcncmachines.com

INTRODUCTION

WHAT IS V-GROOVING MACHINE ?

CNC V-GROOVING MACHINE IS USED FOR INDUSTRIES THAT NEED HIGH PRECISION SHEET METAL FORMING, SUCH AS

- ELEVATOR INDUSTRIES
- DECORATIVE MATERIALS
- STAINLESS STEEL PROCESSING
- HOUSEHOLD APPLIANCES
- STEEL CLADDING



THE MACHINE FRAME IS RIGIDLY FABRICATED AND WELDED WITH STEEL PLATES, STRESS RELIEVED AFTER FABRICATION AND WELDING FOR LONG LIFE. THE MACHINE ADOPTS FRONT FEEDING MECHANISM AND FIXED BEAMS. MODULAR DESIGN EASES REPLACING WORN OUT PARTS WHERE NECESSARY.

THE GRINDED WORK TABLE IS REPLACEABLE, THE PROBLEM OF BAD SURFACE DEFORMATION CAN BE ELIMINATED IF REQUIRED IN THE FUTURE ALSO. THE WORK TABLE IS ENHANCED WITH ROBUSTNESS AGAINST EXTERNAL DISTURBANCES WHILE WORK PROCESS. THE FLATNESS OF THE BED IS IN THE RANGE OF HIGHEST ACCURACY, WHICH ENSURES THE DEPTH PRECISION OF THE GROOVING QUALITY.

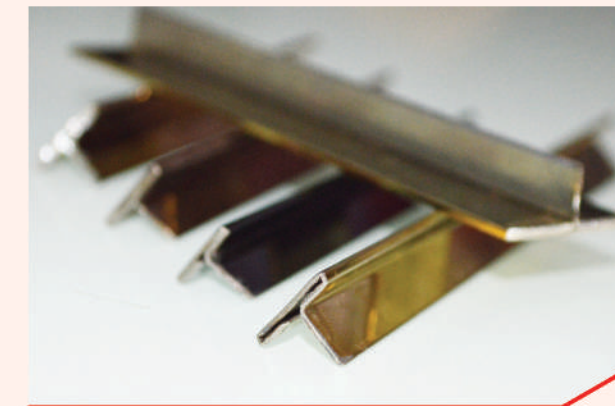
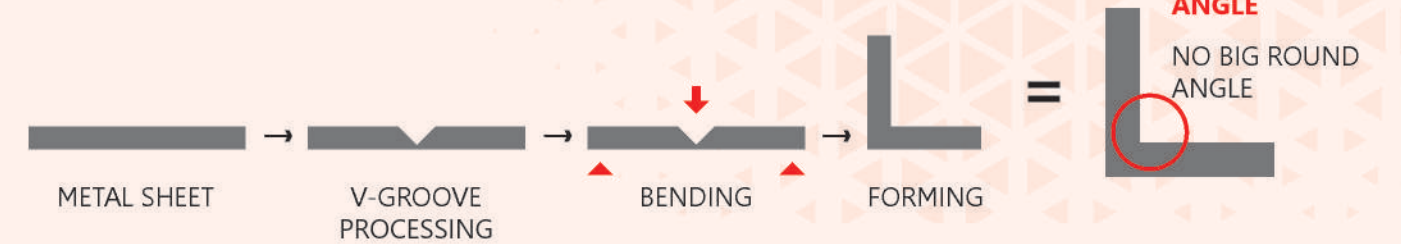
PNEUMATIC CLAMPING AND PRESSING PLATE ARE ADOPTED TO ENSURE THE TIMELY CLAMPING AND FIRM PRESSING OF THE SHEET.

THE HEAVY INDEPENDENT BACKGAUGE CONSIST OF HIGH PRECISION DOUBLE BALL SCREWS AND LM GUIDES ATTACHED TO SERVO MOTOR FOR ACHIEVING REPEATABILITY. STABILITY AND ACCURACY WHILE HOLDING THE WORK SHEETS / PLATES. BACKGAUGE SUPPORT ARMS ARE STAINLESS STEEL MATERIAL TO AVOID SCRATCHES AND DENTS ON THE SHEETS SPECIALLY ADOPTED FOR PVD, SS & OTHER GLOSSY METALS.

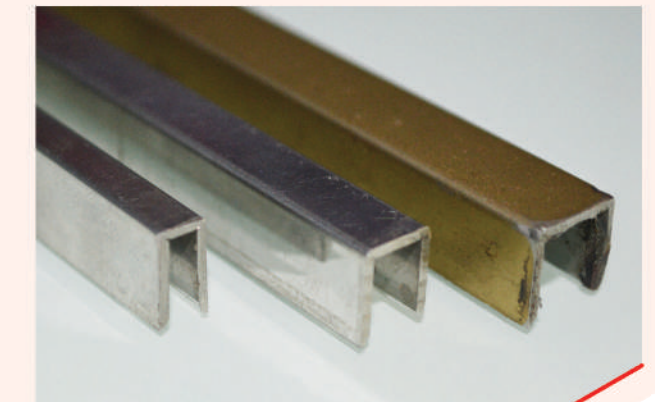
THE PROCESS

THE V-GROOVING IS AN AUXILIARY PROCESS FOR METAL OR NON-METAL MOLDING. ON BENDING LINE OF THE MATERIAL, WE PUT A V-GROOVE WITH SPECIAL GROOVING TOOLS. IT MAKES THE MATERIAL EASY TO BEND AND THE BENDING ANGLE 'R' CAN BE MINIMIZED. THEN BENDING BY A CNC PRESS BRAKE, THE PRODUCT CAN MEET THE REQUIREMENTS OF AN APPEARANCE. THE DEPTH, WIDTH, AND ANGLE OF V-GROOVE CAN BE ENSURED BY THE AMOUNT OF SHAPE OF GROOVE TOOL DURING THE PROCESS.

WITH GROOVING



T-PROFILE



U-PROFILE

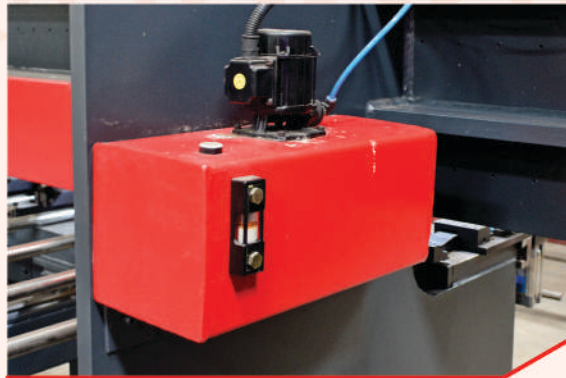
STANDARD EQUIPMENT



TILTABLE FRONT SUPPORT - 4 NOS.



6 BIT TOOL POST



COOLANT SYSTEM



USER FRIENDLY CNC SYSTEM



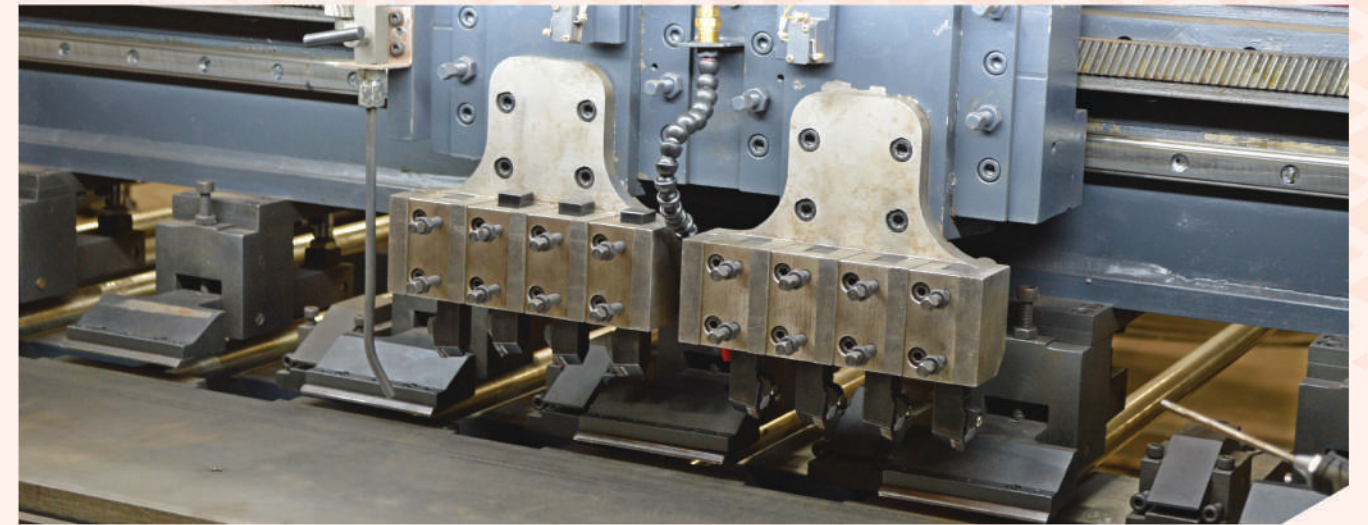
ONE SET OF GROOVE TOOLS



AIR BLOW GUN

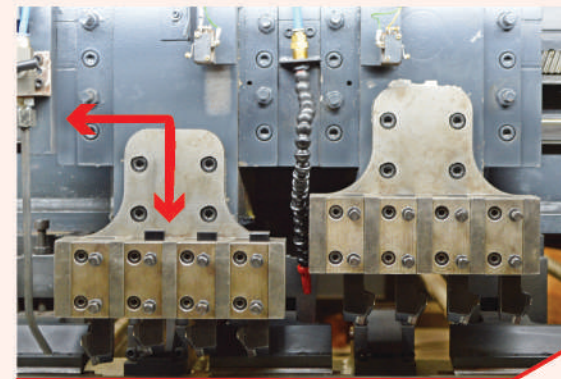
OPTIONAL EQUIPMENT

4th AXIS - FORWARD & RETURN GROOVING MECHANISM (DOUBLE HEAD)

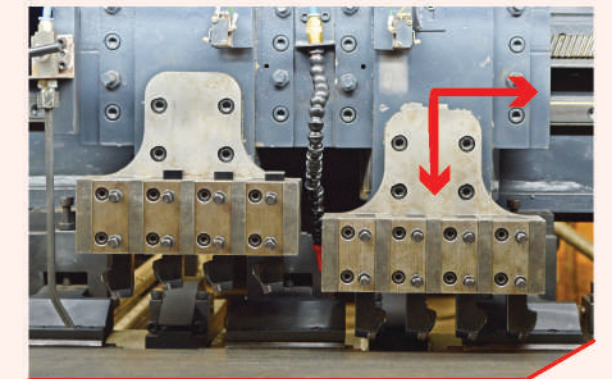


THE OPTIONAL EQUIPMENT OF DOUBLE HEAD IS INTRODUCED FOR HIGH PRODUCTION. THE CYCLE TIME FOR GROOVING IS 50% FASTER COMPARED TO THE STANDARD SINGLE HEAD GROOVING MECHANISM.

BOTH HEADS WORK SIMULTANEOUSLY AT THE TIME OF GROOVING CYCLE, THE FIRST HEAD GROOVES IN THE FORWARD FEEDING DIRECTION AND THE SECOND HEAD GROOVES IN THE RETURN FEEDING DIRECTION.



FORWARD GROOVING



RETURN GROOVING

APPLICATIONS



ELEVATORS



WALL CLADDING



FURNITURE



ESCALATORS



KITCHEN & DISPLAY COUNTERS



INTERIOR DESIGNS

TECHNICAL SPECIFICATION

MODEL	VGM 2512	VGM 2515	VGM 3012	VGM 3015	VGM 4012	VGM 4015
SHEET SIZE (mm)	2500 x 1250	2500 x 1500	3000 x 1250	3000 x 1500	4000 x 1250	4000 x 1500
MAXIMUM GROOVING THICKNESS (mm)	6 (M.S.) 4 (S.S)	6 (M.S.) 4 (S.S)	6 (M.S.) 4 (S.S)	6 (M.S.) 4 (S.S)	6 (M.S.) 4 (S.S)	6 (M.S.) 4 (S.S)
MINIMUM GROOVING THICKNESS (mm)	0.5	0.5	0.5	0.5	0.5	0.5
GROOVING SPEED (APPROX)						
FORWARD CUTTING SPEED (max.)	1000 mm/s	1000 mm/s	1000 mm/s	1000 mm/s	1000 mm/s	1000 mm/s
RETURN SPEED (max.)	1000 mm/s	1000 mm/s	1000 mm/s	1000 mm/s	1000 mm/s	1000 mm/s
MACHINE POWER (kW)	10	10	10	10	10	10
X AXIS TRAVEL (mm)	1250	1500	1250	1500	1250	1500
COOLANT TANK (liters)	1	1	1	1	1	1
TOOL POST HEAD (nos.)	1	1	1	1	1	1
TOOL HOLDING CAPACITY	6 BITS	6 BITS	6 BITS	6 BITS	6 BITS	6 BITS
MACHINE LENGTH (mm)	3750	4000	4750	4750	5750	5750
MACHINE WIDTH (mm)	2250	2500	2250	2500	2250	2500
MACHINE HEIGHT (mm)	2050	2050	2050	2050	2050	2050

MODEL	VGM 2512 (4 - AXIS)	VGM 2515 (4 - AXIS)	VGM 3012 (4 - AXIS)	VGM 3015 (4 - AXIS)	VGM 4012 (4 - AXIS)	VGM 4015 (4 - AXIS)
SHEET SIZE (mm)	2500 x 1250	2500 x 1500	3000 x 1250	3000 x 1500	4000 x 1250	4000 x 1500
MAXIMUM GROOVING THICKNESS (mm)	6 (M.S.) 4 (S.S)	6 (M.S.) 4 (S.S)	6 (M.S.) 4 (S.S)	6 (M.S.) 4 (S.S)	6 (M.S.) 4 (S.S)	6 (M.S.) 4 (S.S)
MINIMUM GROOVING THICKNESS (mm)	0.5	0.5	0.5	0.5	0.5	0.5
GROOVING SPEED (APPROX)						
FORWARD CUTTING SPEED (max.)	1000 mm/s	1000 mm/s	1000 mm/s	1000 mm/s	1000 mm/s	1000 mm/s
RETURN SPEED (max.)	1000 mm/s	1000 mm/s	1000 mm/s	1000 mm/s	1000 mm/s	1000 mm/s
MACHINE POWER (kW)	12.5	12.5	12.5	12.5	12.5	12.5
X AXIS TRAVEL (mm)	1250	1500	1250	1500	1250	1500
COOLANT TANK (liters)	1	1	1	1	1	1
TOOL POST HEAD (nos.)	2	2	2	2	2	2
TOOL HOLDING CAPACITY	8 BITS	8 BITS	8 BITS	8 BITS	8 BITS	8 BITS
MACHINE LENGTH (mm)	4500	4500	5000	5000	6000	6000
MACHINE WIDTH (mm)	2250	2500	2250	2500	2250	2500
MACHINE HEIGHT (mm)	2050	2050	2050	2050	2050	2050

Specifications, appearance and equipment are subject to change without notice by reason for improvement.

BACK VIEW



FRONT VIEW



CNC PIPE PUNCHING
MACHINE



CNC SYNCHRO
PRESS BRAKE



CNC HYBRID
PRESS BRAKE



PANEL
BENDER



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