



Precision par Excellence.  
Smart to Future.

# THW-2080/3080

## CNC Worm Thread Grinding Machine

Founded in 1913, Matrix Precision tool has remained the world's market leader in the manufacture of high precision CNC Worm Thread grinding machine. With the integrated strength from HIWIN group, we are proud to introduce the Matrix **THW-2080/3080** CNC Worm Thread grinding Machine.

**THW-2080/3080** applies the FANUC controller and high speed grinding spindle, it will design the tooth profile and grinding parameters flexibly through the intelligent conversations window software. The machinable workpieces include the standard worms (ZK, ZI, ZN & ZA), dual-lead worms, ZC (Niemann) worms, thread plug gauges and rolling dies. The high efficiency and high-precision machining performance meet the worldwide top brand products in this field. **THW-2080/3080** is your best choice.

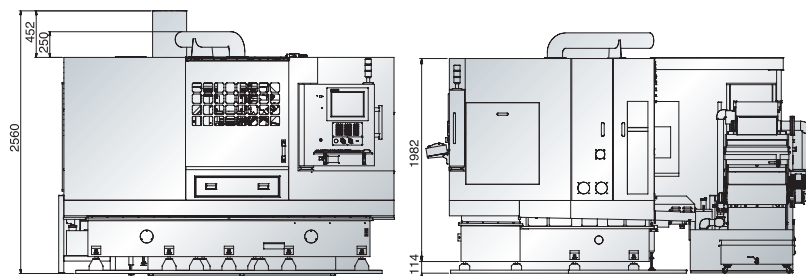
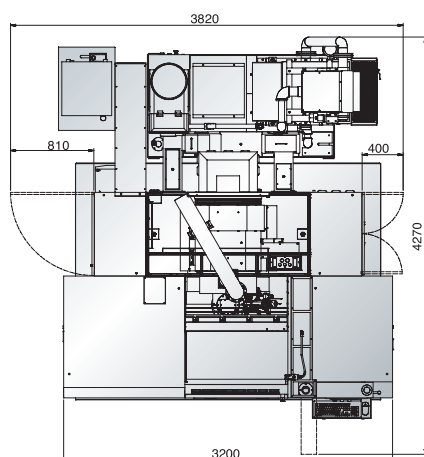


# THW-2080/3080

## CNC Worm Thread Grinding Machine

MAIN SPECIFICATIONS	THW-2080	THW-3080
Min./Max. workpiece outside diameter	5mm / 200mm (0.19"/7.8")	5mm / 300mm (0.19"/11.8")
Max. module	M8 (DP3.2)	M12 (DP2.1)
Thread range	1 ~ 99	1 ~ 99
Lead angle range	± 35°	± 45°
Pressure angle range	5° ~ 30°	5° ~ 30°
MECHANICAL SPECIFICATIONS		
Min. distance between centers	80mm (3.1")	130mm (5.1")
Max. distance between centers	800mm (31.4")	800mm (31.4") (Standard) 1200mm (Through-bore) (47.2")
Work spindle through bore		110mm (4.3")
Max. axial slide travel (Z axis)	650mm (25.5")	650mm (25.5")
Min./Max. Distance between work spindle and grinding spindle	155mm / 400mm (6.1"/15.7")	155mm / 400mm (6.1"/15.7")
Max. table load (workpiece with fixture)	60kg(132lb)	80kg(176lb)
GRINDING WHEEL SPECIFICATIONS		
Min grinding wheel root diameter/Max grinding wheel diameter		260mm / 400mm (10.2"/15.7")
Max. grinding wheel thickness		40mm (1.5")
Max. rpm of grinding spindle		4000 rpm
Drive power of grinding spindle		17kW (22Hp)
ELECTRIC SYSTEM		
Voltage		3Ø 220V
Current Requirement		45 Amp
Ambient Temperature		20°C ~ 26°C (68°F ~ 79°F)
Max. Load of Machine		20 kVA
CNC CONTROLLER		FANUC
DIMENSION & WEIGHT		
Space Requirement	L 4270 x W 3820 x H 256mm 800mm (32") on each dimension is required for maintenance).	L 169" x W 151" x H 100"
Weight of Basic Machine		8500kg (18700lb)

The specifications are subject to the contract, as well as new technology and industrial advancements available.



Matrix Precision Co., Ltd.

No.1-9, Li Hsin 1st Rd., Hsinchu Science Park,  
Hsin-Chu City, Taiwan 30078  
TEL: +886-3-5786767 FAX: +886-3-5773488  
Email: sales@matrix-machine.tw  
<http://www.matrix-machine.tw>

