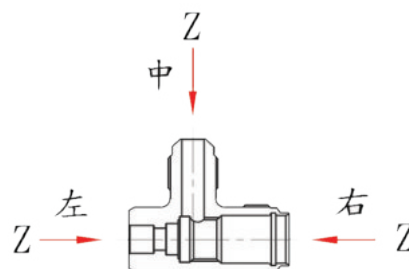


## NC Trunmulti-Spindle Combination Machining Centers

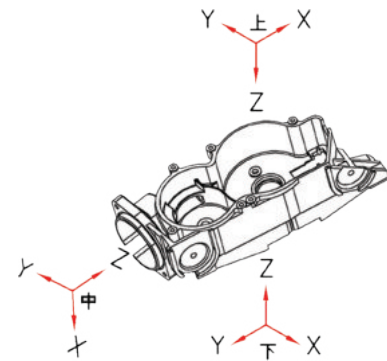


Designed for simultaneously tri-directional processing with center hole, 3DS-NC multi-spindle mill-type machining center handling boring, tapping, groovings ect. of asymmetrical casting, forgings, bars/roods tri-directionally (0°,90°,180°) without secondary clamping to achieve high concentricity, asymmetry, verticality and parallelism, with CPK value exceeding 1.33.

### MACHINE SPECIFICATIONS

SPEC/MODEL	UNIT	KH-D-80	KH-D-120	KH-D-160	KH-D-200
General capacity					
Machining direction	0°, 90°, 180°	D/2D/3D	D/2D/3D	D/2D/3D	D/2D/3D
The number of spindles	Branch	2-20	2-18	2-18	2-16
Dial					
Turntable equal parts	Station	4-12	4-12	4-12	4-12
Rotary drive		Servo motor	Servo motor	Servo motor	Servo motor
Dial time	S	1.7	1.7-2.0	2.0-3.0	2.0-3.5
Fixture	Hydraulic	Sync jaws			
		One-way clamp			
		Three-jaw chuck			
		Homemade chuck			
<b>SPINDLE</b>					
Shaft tube diameter	mm	Ø 80	Ø 120	Ø 150	Ø 200
Z spindle travel	mm	150	150	180	220
Spindle speed	rpm	4000	4000	3000	2000
Cutting feed rate	m/min	1-10	1-10	1-10	1-10
Shank size	type	NT:30	NT:40	NT:40	NT:50
0°, 180° Slide stroke		Do special design according to product			
X-axis travel	mm	50	100	150	175
Y-axis travel	mm	50	150	175	200
Stages fast feed	m/min	24	18	15	12
90° Slide stroke		Do special design according to product			
X-axis slide stroke	mm	75	125	150	175
Y-axis slide stroke	mm	75	150	250	250
Stages fast feed	m/min	24	18	15	12
Electronic control					
(X,Y,Z) Servo motor	Taiwan-made	Delta	Delta	Delta	Delta
Controller	Taiwan-made	P.C Base	P.C Base	P.C Base	P.C Base
Other					
Cutting fluid tank capacity (l)		40	60	60	60
Electrical control box air conditioning ther mostat (C°)		35-50	35-50	35-50	35-50
<b>SELECT WITH</b>					
Controller	European system	PC.Base	PC.Base	PC.Base	PC.Base
	Editor	G.M Code	G.M Code	G.M Code	G.M Code
	Mode	Coordinate	Coordinate	Coordinate	Coordinate
(X,Y,Z) Servo motor	European system	Lenze	Lenze	Lenze	Lenze
	Japanese	Mitsubishi	Mitsubishi	Mitsubishi	Mitsubishi
		Yaskawa	Yaskawa	Yaskawa	Yaskawa
Stabilizer	KVA	Based on actual KVA			
Quick tool change	HSK System	o	o	o	o
Shaped punching		x	o	o	o
Broach		x	o	o	o
Tool within the flushing		o	o	o	o

# CNC Multi-Spindle Combination Machining Center



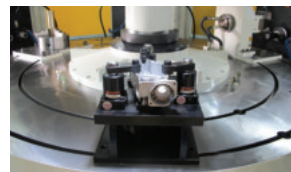
3D Multi-spindle machining center for high-efficiency production enables flexible programming to achieve 5~10 time the output of one central machining center and NC lathe while occupying less space, requiring fewer operators and lower maintenance cost, handling simultaneously tri-directional (0°,90°,180°) processing of asymmetrical castings, forgings, bars/rods without secondary clamping to achieve high concentricity, symmetry, verticality parallelism, with CPK value exceeding 1.33.



Logical multi-spindle alignment



Servo-slide simultaneously tri-directional (upper, middle and lower) processing



Chuck faceplate (1,500mm dia. & 0.02 planar tolerance) for exchange, clamping and quick positioning.



High-strength, high-precision synchronizing chuck for minimal blank OD change and symmetry of output.

## Processing examples



4" to 8" Ling hot water pipes



20mm~15mm water meter head



Gas solenoid valve



Faucet



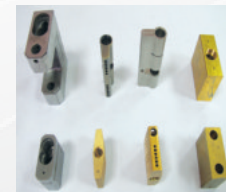
Hot water trachea joints



Hot All kinds of copper fittings



Electronic connectors



Lock



Hot water Aluminum forgings, aluminum extrusion, Auto part, bicyclejoints



Aluminum and zinc castings, motor housings, auto parts



Aluminum and zinc castings, power tools, home appliance parts



Pneumatic solenoid valve Part