

i5 TS INTELLIGENT LATHE



i5 intelligent system

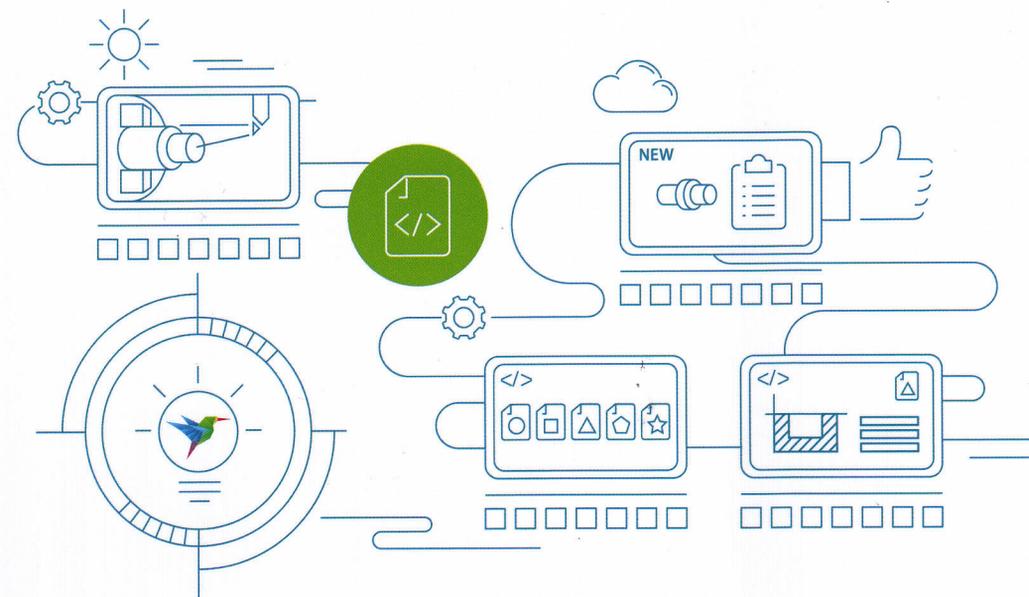


Based on advanced motion control and network technique, i5 has intelligent internet terminal, i5 means industry, information, internet, intelligent, integrate and realize many functions like intelligent Operation, intelligent programming, intelligent maintenance, intelligent management.



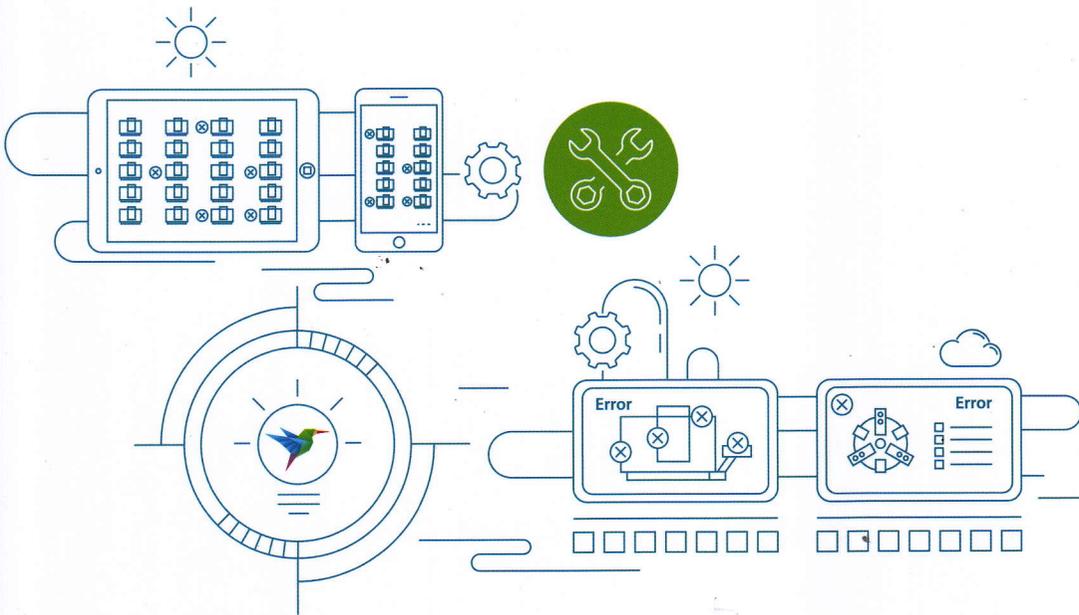
+ INTELLIGENT OPERATION

Through the guidance of graphic, automatic pattern matching, touch-screen interactive technology, simplify the operation. According to customer's requirements, different interface can be made and fast switched.



+ INTELLIGENT PROGRAMMING

Through the guidance of graphical programming, It can complete programming using the graphical interface. The system has 3D simulation function, support process track browsing, also the system can recommend machining parameter to the customer through the selection function.



+ INTELLIGENT MAINTENANCE

i5 system makes users quickly find the problem and solve it to lower downtime through graphic diagnosis, remote diagnosis function. The system can update quickly and make the machine tool system synchronization with the latest technology.



+ INTELLIGENT MANAGEMENT

Using the cloud management, we can see the information (such as the tool processing state, order complete) from the internet browser, so we can monitor management and make analysis easily.

i5 T5

Intelligent lathe

Super hero of i5 serials, i5T5 specializes in machining shaft parts, the main performance indicators have reached international advanced level.

The processing precision can reach IT6 level, the surface roughness can reach Ra0.4 in the best cutting state. No need heat engine, the machine tools can be used when the power on, and the dimension precision of the shaft parts can be up to 0.005mm.

It has a professional advantage in the cage, turbocharger, half shaft, gear shaft, motor, pump and other fields.

Shaft Specialist

Originality manufacturing
High efficiency and precision

High-precision

Without heat engine, shaft parts machining precision is stable

High efficiency

Intelligent tailstock with high speed closing and tender tightening

High expansibility

Modular design, suitable for automatic assembly line



Outer ball cage

MAT. 40Cr
TIME 64s



Inner ball cage

MAT. 40Cr
TIME 167s



Ball mandrel

MAT. 40Cr
TIME 43s



Gear shaft

MAT. 20CrMnTi
TIME 89s



Motor end cover

MAT. Aluminum alloy
TIME 42s



Motor shaft

MAT. 40Cr
TIME 136s



Pump shaft

MAT. 45#+6Cr18Ni
TIME 153s



Camshaft

MAT. HT250
TIME 138s



Turbocharger rotor shaft

MAT. 42Cr Mn
TIME 297s



Turbocharger intermediate

MAT. HT250
TIME 126s



Monomer pump

MAT. 20CrMn
TIME 78s



Half shaft

MAT. 40Cr
TIME 265s

TS Intelligent lathe

The main performance indicators have reached the international advanced level with high accuracy and stability

High speed closing and tender tightening

The tailstock can close to the workpiece at high speed, intelligent deceleration, tender tightening, intelligent detection position, blank scrap, prevention card failure, it can realize the intelligent adjustment of the jacking force of the roughing lathe, automatic line can be quickly changed

No heat engine working stable

Designed for shaft parts. Can be achieved without heating machine. Parts processing accuracy of up to $\pm 0.005\text{mm}$

The bed

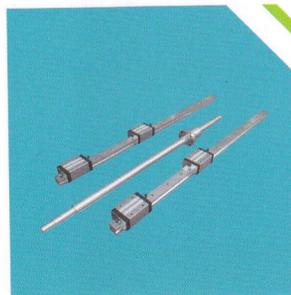
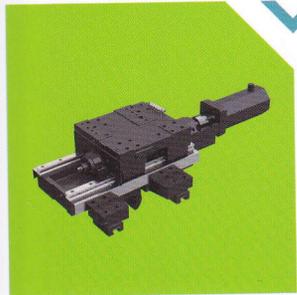
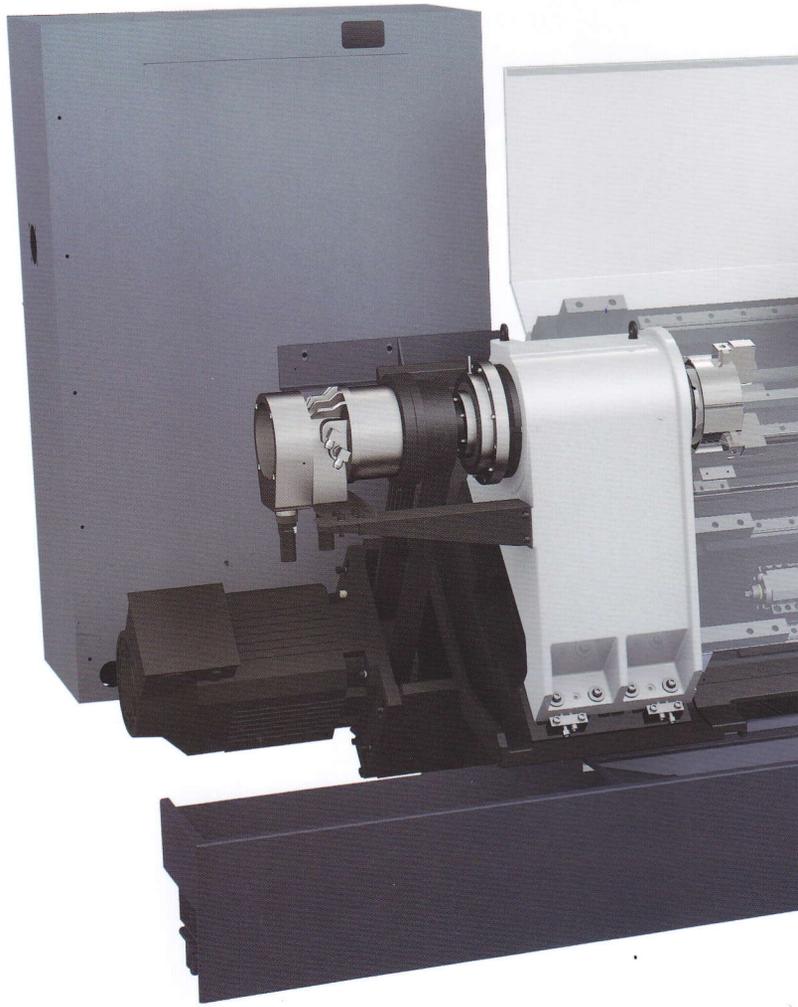
High quality cast iron bed, reasonable layout, with good rigidity 45 degrees inclined lathe, long front chip, chip removal effect is good

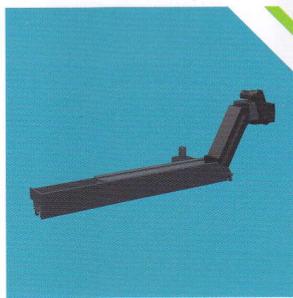
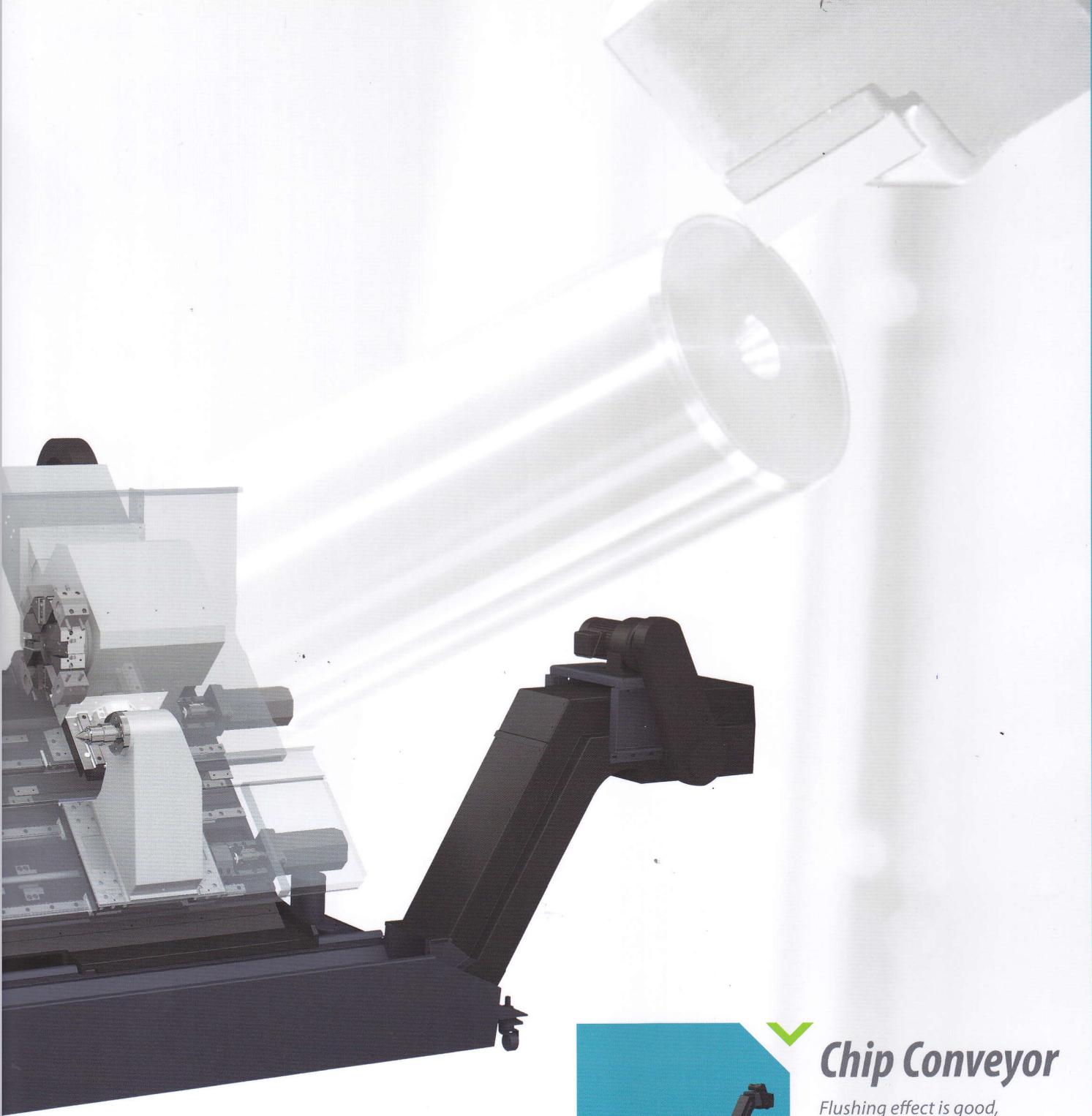
Spindle unit

Spindle speed 4500, two axis acceleration 1g, high rigidity, high torque, maximum torque up to 178Nm high precision, easy installation, maintenance

Imported linear ball screw and guide rail

With high rigidity and good dynamic performance and accuracy Can reach 30m/min, effectively improve the work efficiency





Chip Conveyor

Flushing effect is good, long chip, smooth chip, sub structure, and In disassembly and maintenance, the chip can be divided into left and right, flexible layout



Servo turret

Simple structure, strong rigidity, fast transposition, adjacent station transfer time 1.4s



Hydraulic station

Compact structure, easy maintenance, high stability, low failure rate

i5T5 Technical Specifications

Item	Name	Unit	i5T5.1	i5T5.2		i5T5.4	
Main specification	Max Swing Over Bed	mm	Φ420	Φ560	Φ560	Φ720	
	Max Cutting Length	mm	350	500/1000	500/1000	1500	
	Max Cutting Diameter	mm	Φ280	Φ350	Φ350	Φ500	
	Max Swing Over Slide	mm	Φ350	Φ350	Φ350	Φ500	
Spindle	Nose Type	—	A2-6	A2-6	A2-8	A2-8	
	Spindle Hole Diameter	mm	Φ65	Φ65	Φ80	Φ80	
	Max Spindle Speed	r/min	4500	4500	4000	3000	
	Max Spindle Output Torque	N.m	125(769 r/min)	178(730 r/min)	260(730 r/min)	325(833 r/min)	
	Max Motor Output Power (continuous/15min)	kW	7.5/11	11/15	15/22	22/30	
	Chuck Diameter	inch	6	8	10	10	
Feed	X/Z Axis Rapid Traverse	m/min	30	30	30	30/20 (1500min)	
	X Axis Travel	mm	175	200	200	280	
	Z Axis Travel	mm	410	560/1050	560/1050	1570	
Tailstock	Tailstock Body Travel	mm	300	450/950	450/950	1200	
	Tool Size	mm	25×25/Φ40	25×25/Φ40	25×25/Φ40	25×25/Φ40	
	Machining Accuracy	—	IT6	IT6	IT6	IT6	
	Positioning Accuracy	X axis	mm	0.008	0.008	0.008	0.01
		Z axis	mm	0.008	0.008/0.01	0.008/0.01	0.020
	Repeatability	X axis	mm	0.004	0.004	0.004	0.005
		Z axis	mm	0.005	0.005	0.005	0.013
	Max Load Disc/Shaft	kg	100/200	200/500	200/500	600	
Machine Weight (machine)	kg	3000	3600/4300	4050/4750	9500		
Overall Dimension (Not include Chip Conveyor)	mm	2130X1585X1750	2750×1890×1900 3570×1890×1900	2870×1890×1900 3590×1890×1900	4700×2250×2250		

Technical parameters based on supply plan you purchase