

TURN
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TDZ Turn

Swing diameter over bed
530 mm ~ 2,700 mm



**Horizontal HLC lathes
CNC controlled**

TDZ Turn

TDZ Turn is a Czech machining company based in Brno, specializing in the manufacture of its own series of both vertical and horizontal lathes. The company is primarily active on the Czech and Slovak markets, but also has presence in other European countries.

Established in 2006, TDZ Turn initially focused exclusively on the manufacture of robust vertical **VLC lathes with swing diameters of up to 4,500 mm**.

10 years later, in 2016, its vertical lathe portfolio was expanded to also include **smaller VSC machines**. Suitable for machining smaller and mid-sized series with **swing diameters of up to 1,200 mm**, in addition to piece production, these machines can in many ways replace machining centres.

Before then, 2014 saw the introduction of **manually operated horizontal HML lathes and horizontal CNC-controlled HLC lathes**.

We offer:

- Vertical **VSC** lathes
- Vertical **VLC** lathes
- Horizontal **HLM** lathes
- Horizontal **HLC** lathes

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TURN
vertikální a horizontální soustruhy



CNC HLC lathes 530 ~ 730

Bed 435 mm



		HLC 530	HLC 630	HLC 730
Basic parameters	Distance between centers	1,000/1,500/2,000/3,000/4,000 mm		
	Swing diameter over bed	530 mm	630 mm	730 mm
	Swing diameter over slide	310 mm	410 mm	510 mm
	Bed width	435 mm		
Main spindle	Flange, drilling, rpm	D1-8, 104 mm, L: 50-300, H: 300-1,500 rpm		
		D1-11, 130 mm, L: 50-300, H: 300-1,000 rpm		
	Spindle taper	MK10 or MK15		
Motor	Main motor	18.5 kW		
Travels	X-axis – transverse	360 mm		
	Z-axis – longitudinal	Distance between centers minus 300 mm		
	Y-axis (optional)	± 40 mm		
Fast feed	X-axis	5 m/min		
	Z-axis	7 m/min		
Tailstock	Tailstock diameter	90 mm		
	Tailstock travel	203 mm		
	Inner taper	MK5		
Dimensions	Length	3,390/3,890/4,390/5,390/6,390 mm		
	Width	2,180 mm		
	Height	1,730 mm		
	Approximate net weight	4,500/5,100/5,500/6,500/7,500 kg		

Load bearing capacity	In the chuck	Chuck+tailstock	Chuck+tailstock+rest	Chuck+ tailstock+2 rests
104 mm spindle drilling	500 kg	1,500 kg	3,000 kg	5,000 kg
130 mm spindle drilling	700 kg	1,700 kg	3,300 kg	5,300 kg

CNC HLC lathes 660 ~ 1100

Bed 558 mm



		HLC 660	HLC 760	HLC 860	HLC 1000	HLC 1100
Basic parameters	Distance between centers	1,000/1,500/2,000/3,000/4,000/5,000/6,000/7,000/8,000/9,000/10,000/11,000/12,000				
	Swing diameter over bed	660 mm	760 mm	860 mm	1,100 mm	1,100 mm
	Swing diameter over slide	310 mm	410 mm	510 mm	650 mm	750 mm
	Bed width	558 mm				
Main spindle	Flange, drilling, rpm	D1-11, 130 mm, L: 40-130, M: 130-400, H: 400-1,200				
		A2-11, 165 mm, L: 20-110, M: 110-320, H: 320-660				
		A2-15, 230 mm, L: 16-61, M: 50-190, H: 150-570		A2-15, 230 mm, L: 20-110, M: 110-320, H: 320-660		
		xxx		A2-20, 310 mm, L: 20-100, M: 100-200, H: 200-400		
		xxx		A2-20, 360 mm, L: 20-100, M: 100-200, H: 200-300		
	xxx		A2-28, 410 mm, L: 20-100, M: 100-200, H: 200-250			
	Spindle taper	MK15				
Motors	Main motor	22 kW				
Travels	X-axis – transverse	330 mm	380 mm	430 mm	500 mm	550 mm
	Z-axis – longitudinal	Distance between centers minus 350 mm				
	Y-axis (optional)	± 55 mm		± 65 mm		
Fast feed	X-axis	5 m/min				
	Z-axis	5 m/min				
Tailstock	Tailstock diameter	115 mm (160 mm optional)				
	Tailstock travel	270 mm				
	Inner taper	MK6				
Dimensions	Length	4,080/4,580/5,080/6,080/7,080/8,080/9,080/10,080/11,080/12,080/13,080/14,080/15,080/16,080/17,080/18,080/19,080 mm				
	Width	2,710 mm				
	Height	2,330 mm				
	Approximate net weight	7,700/8,400/9,100/10,500/11,900/13,300/14,700/16,100/17,500/18,900/20,300/21,700/23,100/24,500/25,900/27,300/28,700 kg				

Load bearing capacity	Type series	In the chuck	Chuck+tailstock	Chuck+tailstock+rest	Chuck+ tailstock+2 rests
130 mm spindle drilling	HLC 660/760	800 kg	3,000 kg	5,000 kg	6,000 kg
165 mm spindle drilling	HLC 660/760	1,000 kg	3,200 kg	5,200 kg	6,200 kg
230 mm spindle drilling	HLC 660/760	1,400 kg	3,400 kg	5,400 kg	6,400 kg
165 mm spindle drilling	HLC 860/1000/1100	1,000 kg	4,000 kg	7,000 kg	10,000 kg
230-410 mm spindle drilling	HLC 860/1000/1100	1,400 kg	4,400 kg	7,400 kg	10,400 kg

CNC HLC lathes 1200 ~ 1500

Bed 692 mm



		HLC 1200	HLC 1300	HLC 1400	HLC 1500
Basic parameters	Distance between centers	1,500/2,000/3,000/4,000/5,000/6,000/7,000/8,000/9,000/10,000/11,000/12,000/13,000/14,000/15,000/16,000			
	Swing diameter over bed	1,200 mm	1,300 mm	1,400 mm	1,500 mm
	Swing diameter over slide	820 mm	920 mm	1,020 mm	1,120 mm
	Bed width	692 mm			
Main spindle	Flange, drilling, rpm	A2-11, 165 mm, L: 20-110, M: 110-320, H: 320-660			
		A2-15, 230 mm, L: 20-110, M: 110-320, H: 320-660			
		A2-20, 310 mm, L: 20-100, M: 100-200, H: 200-400			
		A2-20, 360 mm, L: 20-100, M: 100-200, H: 200-300			
		A2-20, 410 mm, L: 20-100, M: 100-200, H: 200-250			
Motors	Main motor	30 KW			
Travels	X-axis – transverse	600 mm	650 mm	700 mm	750 mm
	Z-axis – longitudinal	Distance between centers minus 650 mm			
	Y-axis (optional)	± 80 mm			
Fast feed	X-axis	5 m/min			
	Z-axis	7 m/min			
Tailstock	Tailstock diameter	140 mm (200 mm optional)			
	Tailstock travel	330 mm			
	Inner taper	MK6			
Dimensions	Length	4,930/5,430/6,430/7,430/8,430/9,430/10,430/11,430/12,430/13,430/14,430/15,430/16,430/17,430/18,430/19,430 mm			
	Width	2,730			
	Height	2,430			
	Approximate net weight	10,500/11,000/12,000/13,000/14,000/15,000/16,000/17,000/18,000/19,000/20,000/21,000/22,000/23,000/24,000/25,000 kg			

Load bearing capacity	In the chuck	Chuck+tailstock	Chuck+tailstock+rest	Chuck+ tailstock+2 rests
165 mm spindle drilling	1,500 kg	5,000 kg	8,000 kg	12,000 kg
230-410 mm spindle drilling	1,900 kg	5,400 kg	8,400 kg	12,400 kg

CNC HLC lathes 1600 ~ 1900

Bed 888 mm

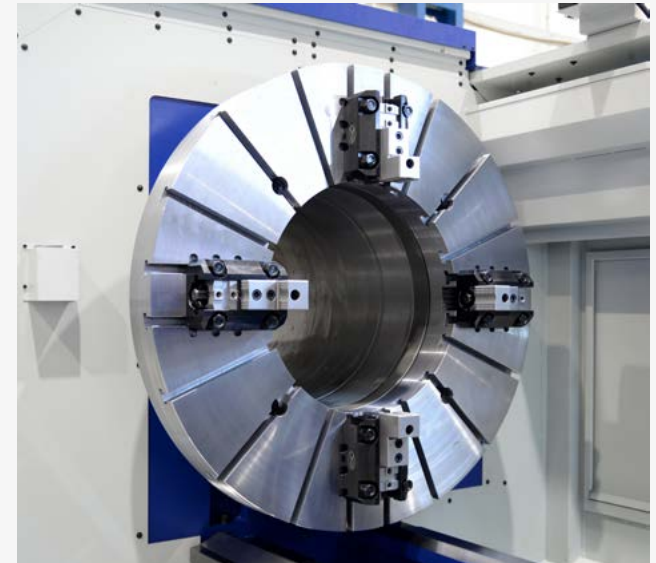


		HLC 1600	HLC 1700	HLC 1800	HLC 1900
Basic parameters	Distance between centers	1,500/2,000/3,000/4,000/5,000/6,000/7,000/8,000/9,000/10,000/11,000/12,000/13,000/14,000/15,000/16,000			
	Swing diameter over bed	1,600 mm	1,700 mm	1,800 mm	1,900 mm
	Swing diameter over slide	1,120 mm	1,220 mm	1,320 mm	1,420 mm
	Bed width	888 mm			
Main spindle	Flange, drilling, rpm	A2-15, 230 mm, L: 20-100, M: 100-200, H: 200-400			
		A2-20, 310 mm, L: 5-20, M: 20-70, H: 70-300			
		A2-20, 360 mm, L: 5-20, M: 20-70, H: 70-250			
		A2-28, 410 mm, L: 5-20, M: 20-70, H: 70-250			
Motors	Main motor	37 kW			
Travels	X-axis – transverse	800 mm	850 mm	900 mm	950 mm
	Z-axis – longitudinal	Distance between centers minus 650 mm			
	Y-axis (optional)	± 80 mm			
Fast feed	X-axis	5 m/min			
	Z-axis	5 m/min			
Tailstock	Tailstock diameter	200 mm (300 mm optional)			
	Tailstock travel	450 mm			
	Inner taper	MK6			
Dimensions	Length	4,930/5,430/6,430/7,430/8,430/9,430/10,430/11,430/12,430/13,430/14,430/15,430/16,430/17,430/18,430/19,430 mm			
	Width	2,830			
	Height	2,700			
	Approximate net weight	10,500/13,000/15,100/17,200/19,300/21,400/23,500/25,600/27,700/29,800/31,900/34,000/36,000/38,200/40,300/42,400 kg			

Load bearing capacity	In the chuck	Chuck+tailstock	Chuck+tailstock+rest	Chuck+ tailstock+2 rests
230 mm spindle drilling	3,000 kg	10,000 kg	15,000 kg	20,000 kg
310-410 mm spindle drilling	3,400 kg	10,400 kg	15,400 kg	20,400 kg

CNC HLC lathe 2000 ~ 2300

Bed 1,150 mm

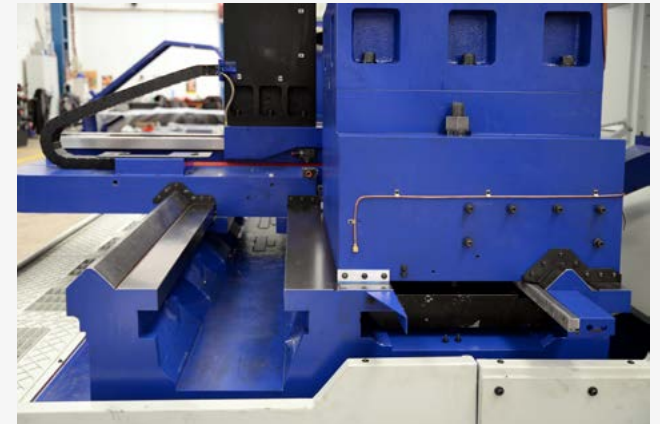


		HLC 2000	HLC 2100	HLC 2200	HLC 2300
Basic parameters	Distance between centers	2 000/3 000/4 000/5 000/6 000/7 000/8 000/9 000/11 000/12 000/13 700 kg			
	Swing diameter over bed	2,000 mm	2,100 mm	2,200 mm	2,300 mm
	Swing diameter over slide	1,460 mm	1,560 mm	1,660 mm	1,760 mm
	Bed width	1,150 mm			
Main spindle	Flange, drilling, rpm	A2-15, 230 mm, L: 20-97, M: 97-200, H: 200-400			
		A2-20, 310 mm, L: 20-97, M: 97-200, H: 200-350			
		A2-20, 360 mm, L: 20-97, M: 97-200, H: 200-300			
		A2-28, 410 mm, L: 20-97, M: 97-200, H: 200-250			
Motors	Main motor	45 kW			
Travels	X-axis – transverse	1,000 mm	1,050 mm	1,100 mm	1,150 mm
	Z-axis – longitudinal	Equal to center distance			
	Y-axis (optional)	± 80 mm			
Fast feed	X-axis	5 m/min			
	Z-axis	5 m/min			
Tailstock	Tailstock diameter	250 mm			
	Tailstock travel	450 mm			
	Inner taper	MK6 (MK7 optional)			
Dimensions	Length	7,430/8,430/9,430/10,430/11,430/12,430/13,430/14,430/15,430/16,430/17,430/18,430/19,430/20,430/21,430 mm			
	Width	3,405 mm	3,505 mm	3,605 mm	3,705 mm
	Height	3,020 mm	3,070 mm	3,120 mm	3,170 mm
	Approximate net weight	19,000/22,000/25,000/28,000/31,000/34,000/37,000/40,000/43,000/46,000/49,000/52,000/55,000/58,000/61,000 kg			

Load bearing capacity	In the chuck	Chuck+tailstock	Chuck+tailstock+rest	Chuck+ tailstock+2 rests
230 mm spindle drilling	4,500 kg	18,000 kg	28,000 kg	34,000 kg
310-410 mm spindle drilling	4,900 kg	18,400 kg	28,400 kg	34,400 kg

CNC HLC lathe 2400 ~ 2700

Bed 1,400 mm



		HLC 2400	HLC 2500	HLC 2600	HLC 2700
Basic parameters	Distance between centers	2,000/3,000/4,000/5,000/6,000/7,000/8,000/9,000/10,000/11,000/12,000/13,000/14,000/15,000/16,000			
	Swing diameter over bed	2,400 mm	2,500 mm	2,600 mm	2,700 mm
	Swing diameter over slide	1,810 mm	1,910 mm	2,010 mm	2,110 mm
	Bed width	1400 mm			
Main spindle	Flange, drilling, rpm	A2-15, 230 mm, L: 10-97, M: 97-200, H: 200-400			
		A2-20, 310 mm, L: 10-97, M: 97-200, H: 200-350			
		A2-20, 360 mm, L: 10-97, M: 97-200, H: 200-300			
		A2-28, 410 mm, L: 10-97, M: 97-200, H: 200-250			
Motors	Main motor	51 kW			
Travels	X-axis – transverse	1,200 mm	1,250 mm	1,300 mm	1,350 mm
	Z-axis – longitudinal	Equal to center distance			
	Y-axis (optional)	± 80 mm			
Fast feed	X-axis	5 m/min			
	Z-axis	5 m/min			
Tailstock	Tailstock diameter	300 mm			
	Tailstock travel	450 mm			
	Inner taper	MK7			

Load bearing capacity	In the chuck	Chuck+tailstock	Chuck+tailstock+rest	Chuck+ tailstock+2 rests
230 mm spindle drilling	4,500 kg	25,000 kg	35,000 kg	42,000 kg
310-410 mm spindle drilling	4,900 kg	25,400 kg	35,400 kg	42,400 kg



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