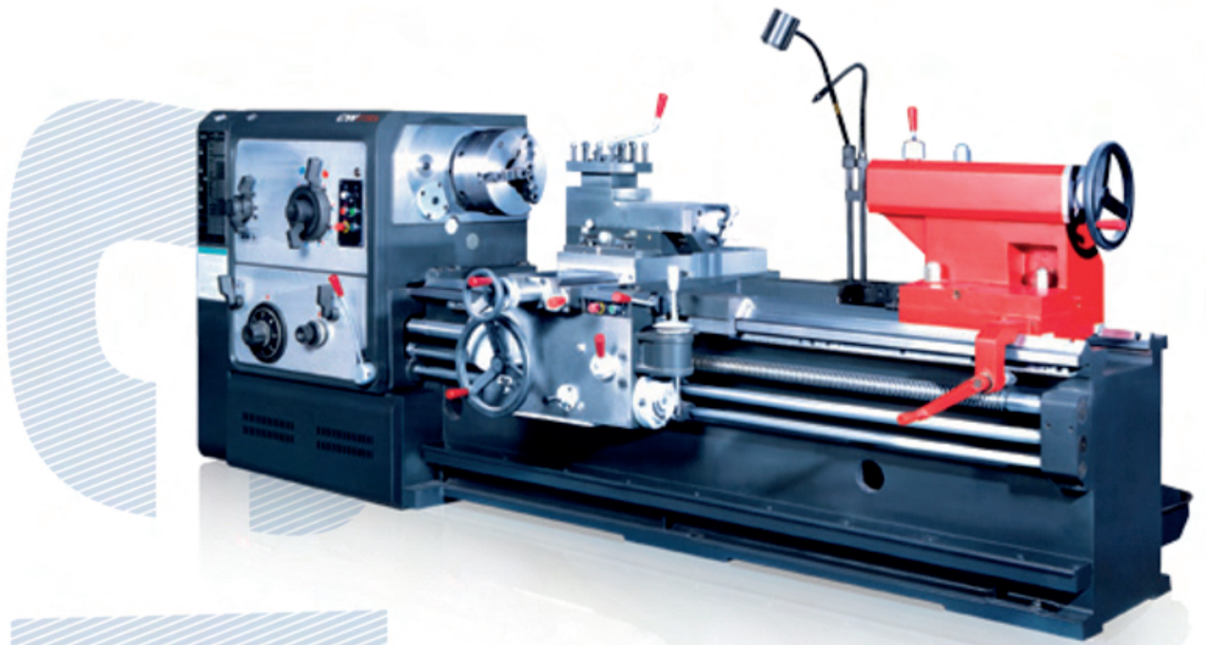
SMTCL



CW

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SMTCL

QUANTUM MAKİNA ve TAKIM TEZGAHLARI SAN. TİC. LTD. STİ.

İkitelli Org. San. Bölgesi Biksan Sanayi Sitesi A-2 Blok No:3 Başakşehir/ İstanbul

Tel:0533 667 85 85 - 0212 485 60 02

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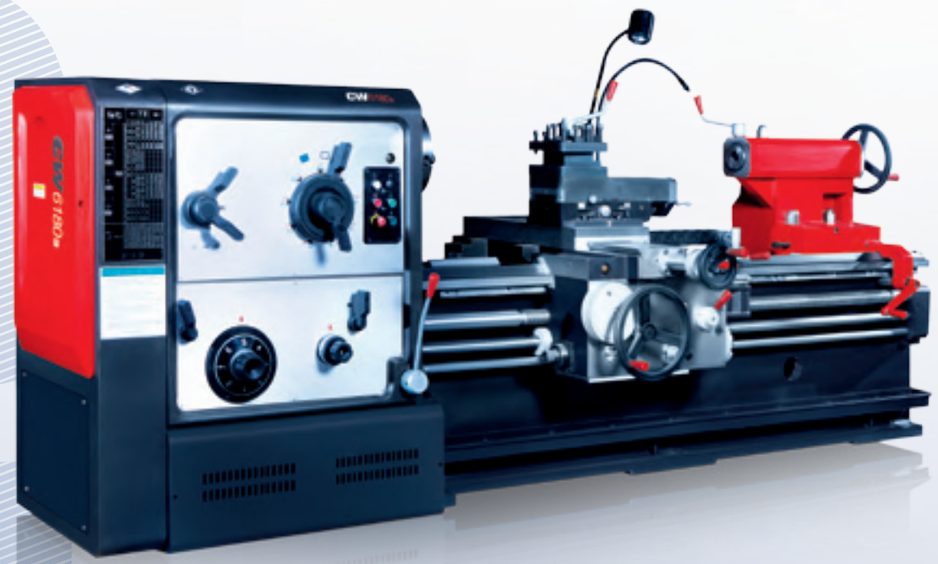
High Rigidity High Efficiency
Powerful & Stable

HIGH INTENSITY

HIGH RIGIDITY

HEAVY CUTTING

STABILITY



The CW Series is a refined design of a popular classic. This series demonstrates stability, reliability, wide functionality, and ultra-long service life. It is the absolute best value among conventional lathes.

Ergonomic Design

Our engineers continuously refine the design with the customer in mind, making the CW Series the most reliable, well-laid-out conventional lathes available.

Operator Friendly

The latest controls and careful craftsmanship combine to provide a comfortable and intuitive machining experience.

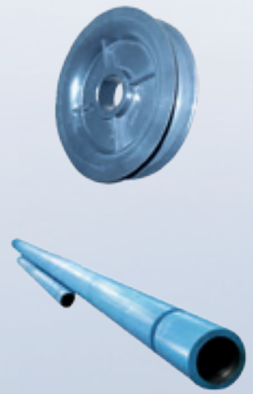
Powerful Cutting

With guideways starting at 6000mm wide, the stable design ensures high rigidity. The 11 Kw main motor and speed reducing headstock create massive torque for heavy cutting needs.

Reliable Performance

Built to ISO 9000 specifications, the CW series lathes are long-lasting, hard working machines.

Workpiece Sample: Cast Steel Valve



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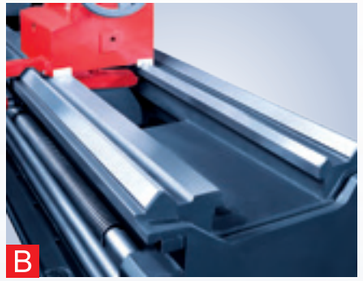
New Design New Experience

A

Headstock High torque and high speed in the same package. The spindle forward speed ranges from 5.4 to 720 rpm with 18 speed settings. The highly rigid spindle offers a maximum torque of 2233 Nm.



B

Bed High rigidity from 600mm wide guideways which are ground and fire hardened. Digital readout for bed, carriage, and turret ensures ease of use and great accuracy.

C

Slide carriage Easily operated, the slide carriage comes with a safety clutch to avoid overload cutting, thereby prolonging tool life.

D

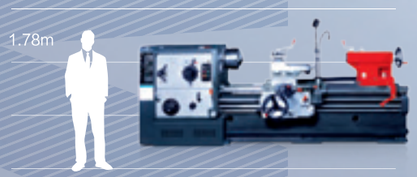
Illuminating system A halogen light ensures strong light for safety and comfortable operation

E

Tailstock With a cast iron design, the tailstock imparts great stability and rigidity.

Accessories A follow rest, steady rest, 4-jaw chuck and faceplate are available according to customer needs. See chart for standard and optional accessories.

Electric elements World class components are presented in a safe, simple layout for worry-free performance and maintenance.



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MAIN TECHNICAL SPECIFICATIONS

Item	Specification	CW6163B	CW6263B	CW6180B	CW6280B	CW6193B	CW6293B	CW61110B	CW62110B
3-jaw chuck	∅ 315	•	•	•	•	•	•	•	•
	∅ 380	★	★	★	★	★	★	★	★
	∅ 400	★	★	★	★	★	★	★	★
	∅ 500	★	★	★	★	★	★	★	★
4-jaw chuck	∅ 400	★	★	★	★	★	★	★	★
	∅ 500	•	•	•	•	•	•	•	•
	∅ 630	★	★	★	★	★	★	★	★
	∅ 800					★	★	★	★
	∅ 1000							★	★
Face plate	∅ 650		•		★				
	∅ 800			★	•	★	★	★	★
	∅ 930					•	•	★	★
	∅ 1120							•	•
Steady rest	∅ 20-170	•	•	★	★				
	∅ 40-320			•	•				
	∅ 30-420					•	•		
	∅ 40-460							•	•
	∅ 160-350	★	★						
	∅ 120-450			★	★				
	∅ 150-500			★	★				
	∅ 300-640					★	★	★	★
Follow rest	∅ 20-130	•	•						
	∅ 30-130			•	•				
	∅ 30-180					•	•	•	•
	∅ 50-220			★	★				
	∅ 200-310	★	★						
Center and Sleeve	Mertic120; Morse No.5	•	•	•	•	•	•	•	•
Illumination, cooling		•	•	•	•	•	•	•	•
Tools		•	•	•	•	•	•	•	•
Thread cutting dial		★	★	★	★	★	★	★	★
Taper attachment	L=500	★	★	★	★	★	★	★	★
Digital display unit		★	★	★	★	★	★	★	★
Adjustable pads		★	★	★	★	★	★	★	★

• Standard accessories ★ Optional accessories

Note: 1 On machines sized 750~1,500mm, the follow rest and steady rest are not standard accessories.
2 On machines sized 8,000~10,000mm, two steady rests are standard. On machines ≥11,000mm, four steady rests are standard. On machines ≥8,000mm, adjustable metal pads are standard.
3 380mm three-jaw chuck is standard on C-type machines. All other C-type standard accessories are identical to B-type.

Item	Specification	CW61100B	CW61125B	CW61160	CW61200
3-jaw chuck	∅ 500	★	★		
4-jaw chuck	∅ 500	★	★		
	∅ 630	★	★		
	∅ 800	★	★		
	∅ 1000	•	•	★	★
	∅ 1600			•	•
	∅ 2000				★
Rolling steady rest	∅ 50-300		★		
	∅ 50-400	•			
	∅ 50-540		•		
	∅ 80-500				★
	∅ 80-800			•	
	∅ 180-600	★	★		
	∅ 300-800				★
	∅ 360-850		★		
	∅ 500-1000				•
	∅ 1000-1500				★
Follow rest	∅ 50-220	•	•		
	∅ 80-350			•	★
Face plate	∅ 1000	★	★		
Center and Sleeve	Metric 140; Morse No.6	•	•		
Live center	Morse No.6	•	•		
	Metric 80			•	•
Illumination, cooling		•	•	•	•
Tools		•	•	•	•
Thread cutting dial		★	★	★	★
Roller support		★	★	★	★
Digital display unit		★	★		
Adjustable pads		★	★	★	★

• Standard accessories ★ Optional accessories

Note: 1 CW61100B/1500mm and CW61125B/1500mm machines have no option for follow rest and steady rest.
2 On machines sized 8,000~10,000mm, two steady rests are standard. On machines ≥11,000mm, four steady rests are standard. For CW61160/CW61200 ≥6,000mm and CW61100B/CW61125B ≥8,000, adjustable metal pads are standard.

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MAIN TECHNICAL SPECIFICATIONS

Item	Specification	S1-170B 1500	S1-245B 1000/1500	S1-262A 1000/1500	S1-262A 3000	S1-320 1500	S1-320 3000
4-jaw chuck	∅ 630		•				
	∅ 785			•	•		
	∅ 1000					•	•
	∅ 1400	•					
Cooling		•	⋆	⋆	•	•	•
Illumination		•	•	•	•	•	•
Electric cabinet		•	•	•	•	•	•
Oil gun		•	•	•	•	•	•
Tools		•	•	•	•	•	•
Center	5 S25-2		•	•	•	•	•
Jaws			•	•	•	•	•
Taper attachment			•	•	•	•	•
Adjustable pads			⋆	⋆	⋆		
Digimatic micrometer			⋆	⋆	⋆		
T-slot slide			⋆	⋆	⋆		
Steady rest	∅ 40- ∅ 350		⋆				
	∅ 80- ∅ 330			⋆	⋆		
	∅ 100- ∅ 350			⋆	•		
	∅ 140- ∅ 260			⋆	⋆		
	∅ 219- ∅ 508					⋆	•
	∅ 219- ∅ 520			⋆	⋆		
Thread cutting dial			⋆	⋆	⋆		

• Standard accessories ⋆ Optional accessories

Item			Unit	CW6163B/C CW6263B/C	CW6193B/C CW6293B/C	CW6180B/C CW6280B/C	CW61110B/C CW62110B/C
Max. swing diameter over bed			mm	630	930	800	1100
Max. swing diameter over carriage			mm	350	650	480	800
Max. workpiece length			mm	1500, 3000, 4000, 5000, 7000	1500, 3000, 4000, 5000, 7000	1500, 3000, 4000, 5000-14000	
Max. swing diameter and width in gap			mm	800/300	1100/300	1000/310	1300/310
Spindle bore and nose				104, D11 (B series) 130, D11 (C series)			
Taper in spindle nose and center				120 (B series) 140 (C series), Morse No.5			
Steps and range of spindle speeds			RPM	18speeds 7.5-1000 (B series) 18speeds 8.5-800 (C series)	18speeds 6-800 (B series) 18speeds 8.5-800 (C series)	18speeds 5.4-720	18speeds 4.8-640
Steps and range of longitudinal feeds			mm/r	64feeds 0.05-24.3	64feeds 0.05-24.3	64feeds 0.06-24.3	64feeds 0.05-24.3
Range 1:1			mm/r	0.1-1.52			
Range 16:1			mm/r	1.6-24.3			
Range of fine feed with change gears			mm/r	0.05-0.912		0.06-0.912	0.05-0.76
Longitudinal and cross feed rate				1/2			
Rapid speed of carriage			mm/min	4000			
Pitch of leadscrew				12(Metric); 1/2"(Inch system)			
Number, range of metric thread			mm	50kinds 1-240 (There are additional 14 kinds non-standard threads)			
Number, range of whitworth thread			t.p.i	26kinds 14-1			
Number, range of module thread			mm	53kinds 0.5-120			
Number, range of diametral thread			D.P	24kinds 28-1			
Max. cross travel of lower slide			mm	420	500	500	500
Max. travel of top slide			mm	200	200	200	200
Max. travel of tailstock quill			mm	250	250	250	250
Taper of tailstock quill				Morse No.5	Morse No.5	Morse No.5	Morse No.5
Width and hardness of bed guideways			mm	550 RC52	550 RC52	600 RC52	600 RC52
Main motor power			kW (hp)	11 (14.8)	11 (14.8)	11/15 (14.8/20.1)	11/15 (14.8/20.1)
Rapid motor power			kW (hp)	1.1 (1.48)	1.1 (1.48)	1.1 (1.48)	1.1 (1.48)
Power of coolant pump motor			W	120	120	120	120
Machine W×H/Packing W×H			mm	1380×1450/1780×1890	1440×1835/1700×2100	1550×1630/1880×1910	1560×1900/1800×2140
Machine length/ Packing case length(mm)	Max. length of workpiece	1500	mm	3690/4240	3690/3900	3700/4150	3700/3900
		3000	mm	5190/5740	5190/5400	5250/5650	5250/5400
		4000	mm	6120/6640	6100/6350	6250/6650	6250/6450
		5000	mm	7200/7750	7200/7430	7250/8050	7250/7630
N. W/G. W of machine(kg)	Max. length of workpiece	1500	mm	3700/4700	4200/4950	4900/6000	5500/6350
		3000	mm	4700/5900	5200/6250	5500/6900	6100/7250
		4000	mm	5800/7700	6300/7500	6100/8000	6700/8150
		5000	mm	6800/8800	7300/8700	6900/9000	7500/9200
Max. weight of workpiece			kg	2500	2500	2500	2500

Note: 1 CW(93B/C, 110B/C) series lathes are height increased products developed basing on CW(63, 80) series lathes respectively.
2 For machine of distance between centers≥11000mm, the standard accessories include double saddles, double turrets and double carriages.

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MAIN TECHNICAL SPECIFICATIONS

Item		Unit	CW61100B CW61125B	CW61160	CW61160A	CW61200
Max. swing diameter over bed		mm	1000/1250	1600	1600	2000
Max. length of workpiece (L)		mm	1500/3000/5000-15000	3000/5000-16000	5000/6000/8000	3000/5000-16000
Max. swing diameter over carriage		mm	610/865	1200	1200	1580
Max. swing diameter over gap		mm	–	–	–	–
Gap length		mm	–	–	–	–
Spindle bore		mm	130, $A_2$15	130, $A_2$15		130, $A_2$15
Taper in spindle nose			Metric 140	Metric 140	Metric 140	Metric 140
Number of speeds	Forward		21kinds	21kinds		21kinds
Number of speeds	Reverse		12kinds	12kinds		12kinds
Spindle speed range (Eifher of the following ranges may be selected by users as required)						
n^1★Forward		RPM	3.15-315	2-200	1-160(3-gearshit,stepless)	2-200
n^1★Reverse		RPM	3.5-278	2.24-178	1-160(3-gearshit,stepless)	2.24-178
n^2Forward		RPM	2-200			
n^2Reverse		RPM	2.24-178			
Range of feeds per spindle revolution			56kinds	56kinds	56kinds	56kinds
Longitudinal		mm	0.1-12	0.1-12	0.1-12	0.1-12
Cross		mm	0.05-6	0.05-6	0.05-6	0.05-6
Top slide		mm	0.025-3	0.025-3	0.025-3	0.025-3
Number, range of metric threads		mm	44kinds 1-120	44kinds 1-120	44kinds 1-120	44kinds 1-120
Number, range of whitworth threads		t.p.i	31kinds 24-1/4	31kinds 24-1/4	31kinds 24-1/4	31kinds 24-1/4
Number, range of module threads		mm	45kinds 0.5-60	45kinds 0.5-60	45kinds 0.5-60	45kinds 0.5-60
Number, range of diametral pitch threads		D.P	38kinds 1/2-56	38kinds 1/2-56	38kinds 1/2-56	38kinds 1/2-56
Max. travel of saddle		mm	L-50	L-200	L-200	L-200
Max. cross travel of lower slide		mm	520/630	960	960	1010
Max. travel of mid slide		mm		300	300	300
Max. travel of top slide		mm	300	200	200	200
Rapid traverse speed of tool post Longitudinal/Cross		mm/min	3740/1870	3740/1870	3740/1870	3740/1870
Mid slide		mm/min	935	935	1082	935
Diameter of tailstock quill		mm	160	180	280	180
Max. travel of tailstock quill		mm	300	300	300	300
Taper in bore of tailstock quill			Morse No.6	Metric 80	Metric 80	Metric 80
Power of main motor		kW (hp)	22 (29.5)	22 (29.5)	45 (60.3)	22 (29.5)
Overall dimensions	Length	mm	L+3100	L+3400	L+3400	L+3400
	Width	mm	2150	2320	2320	2410
	Height	mm	1700/1825	2600	2600	2770
Width of bed		mm	755	1100	1100	1100
Max. torque		kN.m	12.85	12.85	54	12.85
Max. weight of workpiece		kg	5000	12000	18000	12000

* Standard rotating speed

Note: 1 For machine length over 10000mm, the standard spindle speed is 2-200r/m.
2 When machining shafts, adding a roller support under center increases load capacity by 2 tons; adding two roller supports increases load capacity 4 tons.
3 For machine of distance between centers≥11000mm, the standard accessories include double saddles, double turrets and double carriages.
4 To machine a disk part, the maximum load is 2 tons.

		1.5m	3m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m
Machine net weight (kg)	CW61100B	9200	10700	13000	13700	–	15700	–	–	18900	19700	–	21300	22100
	CW61125B	10200	11900	14500	15400	–	17900	–	–	20400	21200	–	22800	23600
	CW61160	–	21500	23600	24500	25700	27000	28200	29400	31500	32700	33900	35100	36300
	CW61200	–	23500	25600	26500	27700	29000	30200	31400	33500	34700	35900	37100	38300

Item		Unit	S1-170B
Max. swing diameter over bed		mm	1400
Max. length of workpiece (L)		mm	1500
Max. swing diameter over carriage		mm	800
Max. swing diameter over gap		mm	1600
Gap length		mm	440
Spindle bore		mm	100
Taper in spindle nose			Metric120 Taper: 120
Number of speeds	Forward		21kinds
Number of speeds	Reverse		12kinds
n^1★Forward		RPM	2-200
n^1★Reverse		RPM	2.24-178
Range of feeds per spindle revolution			56kinds
Longitudinal		mm	0.06-7.2
Cross		mm	0.03-3.6
Top slide		mm	0.015-1.8
Max. travel of saddle		mm	1500
Max. cross travel of lower slide		mm	980
Max. travel of mid slide		mm	300
Max. travel of top slide		mm	200
Rapid traverse speed of tool post Longitudinal/Cross		mm/min	3740/1870
Mid slide		mm/min	935
Power of main motor		kW (hp)	22 (29.5)
Overall dimensions	Length	mm	4287
	Width	mm	2370
	Height	mm	2030
Width of bed		mm	1100
Max. weight of workpiece		kg	1500

Item	Unit	S1-245B	S1-262A	S1-320
Max. outer diameter of pipe	mm	60-219	114-340	219-508
Max. length of turning (travel of saddle)	mm	1000/1500	1000/1500/3000	1500/3000
Max. center distance (for tailstock)	mm	1000/1500	1000/1500/3000	1500/3000
Height from spindle center to guideway surface	mm	400	450	500
Height from spindle center to ground	mm	1100	1150	1200
Dia. of spindle bore	mm	240	355	515
Taper in front and rear taper bore of spindle bore		1:50	1:50	1:50
Step of spindle speeds		12	12	12
Range of spindle speeds	RPM	8-306	5.6-254	6-200
Amount of longitudinal and cross feed: number of kind		32	32	32
Range of longitudinal feed	mm/r	0.095-1.44	0.095-1.44	0.1-1.5
Range of cross feed	mm/r	0.095-1.44	0.095-1.44	0.1-1.5
Range of whitworth threads	t/in	1-14	1-14	2-28
Range of metric threads	mm	1-15	1-15	1-15
Range of module threads	mm	0.5-7.5	0.5-7.5	0.5-7.5
Range of diametral pitch threads	t/in	28-2	28-2	56-4
Vertical distance from spindle center to tool bearing surface	mm	33	33	48
Cross-section dimension of tool	mm	32×32	32×32	45×45
Swing angle of middle slide	°	±90	±90	±90
Max. cross travel of lower slide	mm	300	300	560
Max. travel of top slide	mm	200	200	300
Cross rapid moving speed of tool post	m/min	4	4	4
Max. length of taper of continuous turning workpiece	mm	500	500	500
Max. lateral taper attachment adjustment	mm	100	100	100
Diameter of center quill	mm	100	100	160
Travel of center quill	mm	250	250	800
Taper in center quill		Morse No.5	Morse No.5	Morse No.6
Taper in center		Morse No.5	Morse No.5	Morse No.6
Distance of cross moving of tailstock	mm	±15	±15	±20
Power of main motor	kW (hp)	18.5 (24.8)	18.5 (24.8)	22 (29.5)
Speed of main motor	RPM	1500	1500	1500
Length	mm	3882.5/4190	3700/4190/5720	4829/6309
Width	mm	1908/1974	1908/1974/1974	1750/1832
Height	mm	1500/1500	1620/1620/1620	2230/2230
Net weight of machine	kg	7876/8500	7876/8500/11200	12500/15000