

# Technical Data

		LZ 250 VS	LZ 280 VS	LZ 400 VS1	LZ 400 VS2
<b>Working range</b>					
Center height	mm	145	165	200	200
Swing over bed	mm	290	330	400	400
Swing over cross slide	mm	150	190	225	225
Turning diameter over carriage guidew.	mm	260	300	390	390
Distance between centers acc. to DIN 806	mm	500	670	1000	1000
Width of bed	mm	220	220	260	260
Height of bed	mm	220	220	260	260
Turning center above workshop floor	mm	1130	1165	1150	1150
<b>Work spindle</b>					
Spindle head DIN 55027	size	5	5	6	6
Spindle bore	mm	43	43	62	62
Inside diameter of collet (draw-in c. syst.)	mm	26	26	26	26
Inside diameter of collet (push-out c. syst.)	mm	42	42	60	60
Inner taper similar to DIN 228	mm	ME 50	ME 50	ME 70	ME 70
Standard/Maximum diameter of chuck	mm	140/160	160/200	200	200/250
Max. face plate and clamping plate diameter, stepless	mm	250	280	355	355
<b>Tool slide</b>					
Cross slide travel	mm	165	165	210	210
Top slide travel	mm	115	115	115	115
Swiveling range of top slide	degree	+75/-60	+75/-60	+180/-180	+180/-180
Tool system	size	A	A/B	B	B
Height of tool shank	mm	16	20	25	25
Lead screw spindle pitch	mm	6	6	6	6
<b>Tailstock with hand-wheel</b>					
Stroke of quill	mm	82	82	110	110
Diameter of quill	mm	45	45	60	60
Taper socket according to DIN 228		MT 3	MT 3	MK 4	MT 4
<b>Drive (infinitely variable AC-drive)</b>					
Gear steps		1	1	1	2
V speed range, infinitely variable	rpm				20-850
W speed range, infinitely var. (optional)	rpm	30-5000	30-4500/5000	30-4000	120-3500
Drive capacity (100 % ED at 50Hz / 87Hz)	kW	5,5	7	10,5	10,5
<b>Stepless feed range</b>					
Longitudinal feeds	mm/rev	0,01-1,0	0,01-1,0	0,01-1,0	0,01-1,0
Cross feeds	mm/rev	0,004-3,6	0,004-3,6	0,005-0,5	0,005-5
Thread pitches: metric, inch, modular, DP	mm	0,10-52	0,10-52	0,10-80	0,10-80
<b>Space requirements and weight</b>					
Length x width x height (incl. screen) approx.	mm	1450x1035x1800	1600x1035x1800	2100x1150x1800	2100x1150x1800
Weight as per version approx.	kg	1050	1200	1800	1800
<b>Standard painting</b>					
varnish		RAL 7035/ grey/ telegrey 2 RAL 7046			



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**LZ 400 VS1**  
comfortline

Product line  
**comfortline**

## Precision Centre Lathes

**LZ 250 VS**  
**LZ 280 VS**  
**LZ 400 VS1**  
**LZ 400 VS2**



The acceptance inspection of the lathe is performed in accordance with DIN 8605. Our values clearly fall below the authorized values – another proof of our high quality standard.

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## comfortline Details and Features

### Machine base and tool slide

- Induction-hardened machine bed made from grey-cast iron
- Ventilated control cubicle, easily accessible from the rear of the lathe
- Hardened and ground cross slide and top slide spindle feed screw, re-adjustable via divided feed screw nut
- Re-adjustable cross slide and top slide guideways via V-ledge

### Work spindle and feed drive

- Short braking and start-up times until maximum spindle speed due to integrated braking module
- Constant speed of up to 5000 rpm independent of load
- Drive over exterior belts to main spindle
- Steplessly variable feed drive due to a maintenance free distributor drive
- Three-phase induction motor with braking module and speed
- controlled frequency converter with actual value feedback
- Graphic support for feed and thread entries

### Safety and ergonomics

- Lockable main switch
- EMERGENCY-OFF mushroom-type push button
- Electrically-monitored protective chuck cover made from steel-sheet
- Position display, longitudinally displaceable
- Sliding protective cover equipped with safety glazing and tool tray can be displaced over the whole working area
- Independent disengaging of the corresponding hand-wheel for automatic longitudinal and cross feed and engaging of the split nut for the thread
- Integrated power management
- Two-channel safety technology



Safety and quality with seal of approval.



### Position display features & details

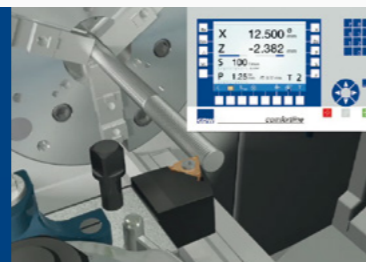
- 9" color screen
- Intuitive, self-explanatory user interface with simple templates for feed and thread entries
- Technology memory for 99 tools
- Oriented spindle stop by means of Teach-In
- C-axis for main spindle
- Optional entry of constant spindle speed or cutting velocity
- Error and status display of the lathe in plain text
- Entry of feed and thread pitches into a mask displayed on screen
- Programmable zero offset and overspeed control
- Thread cutting with electronic trip stop, automatic display of thread depth and change-over from external to internal threads



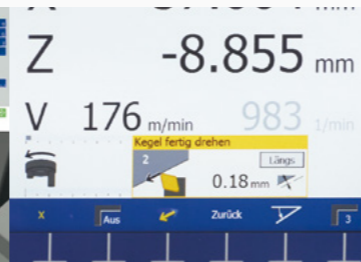
## comfortline

### The comfortable line

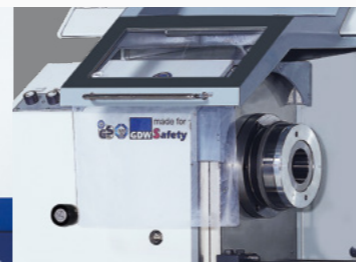
#### Intuitive operation, precise results



Individual software solutions for the comfortline user interface



Intuitive taper turning with finishing allowance and automatic feed shutdown



Headstock with back gear control for high torques (only at LZ 400 VS2)



Single-lever control with safety locking



Machine base with detachable chip pan and lockable tool cabinet for accessories



High-precision spindle bearing arrangement with 3 preloaded angular ball bearings for high load with additional belt tension relief