

Product Brochure For L681

Centre Lathe - AL-335F

300 x 910mm Turning Capacity

Includes Foot Brake, Coolant Pump System & Cabinet Stand



ORDER CODE:	L681
MODEL:	AL-335F
Swing Over Bed (mm):	300
Distance Between Centres (mm):	910
Spindle Bore (mm):	38
Swing In Gap (mm):	450
Swing Over Cross-slide (mm):	178
Digital Readout System Fitted:	Optional
Quick Change Toolpost Fitted:	Optional
Leadscrew Covers Fitted:	~
Taper Turning Attachment:	~
Coolant System:	Yes
Tool Height To Suit (mm):	12
Centre Height (mm):	150
Spindle Nose Size or Type:	D1-4 Camlock
Bed Width (mm):	180
Headstock Spindle Taper (MT):	5
Tailstock Taper (MT):	3
Cross Slide Travel (mm):	170
Compound Slide Travel (mm):	85
Leadscrew Type:	Imperial
Metric Cross Feed (X-Axis) (mm/rev):	~
Imperial Cross Feed (X-Axis) (inch/rev):	0.02 - 0.33
Metric Longitudinal Feed (Z-Axis) (mm/rev):	~
Imperial Longitudinal Feed (Z-Axis) (inch/rev):	0.07 - 1.29
Metric Thread Steps & Pitch (No. / mm):	36 (0.4 - 7)
Imperial Thread Steps & TPI (No. / TPI):	45 (4 - 60)
3 Jaw Chuck Diameter (mm):	160
4 Jaw Chuck Diameter (mm):	200
Spindle Steps / Speeds (No. / rpm):	9 (75 - 1400)
Motor Power (kW / hp):	1.5 / 2
Voltage / Amperage (V / amp):	240 / 10
Nett Weight (kg):	500

Description

This new & improved AL-335F quality metal turning lathe and now includes a coolant system & foot brake for the serious enthusiastic home model engineer, general maintenance and small workshops. Featuring a precision ground, induction hardened bed, fully gear driven spindle with hardened and ground gears with a speed range of 75 - 1400rpm, selectable via the front of headstock mounted gear selection levers.

2hp single phase 240 volt motor is supplied on machine, taper roller spindle bearings, range of cross and longitudinal feed speeds selected on a separate gearbox, thread chasing dial, chuck guard with safety interlock, splash guard and work lamp.

Supplied with a large range of standard accessories including a 150mm(6") 3 jaw self centring chuck, 200mm(8") 4 jaw independent chuck, face plate and dead centres. 5 to 3 MT reduction sleeve, steady rest, follow rest, standard tool post, floor stand with a swarf tray. Change gears and toolbox with maintenance tools.

Features

- Gear driven headstock for quick change of spindle speeds
- Foot operated spindle brake with safety cut out switch
- Slide out front swarf tray for easy cleaning
- Coolant pump system with flexible hose & nozzle
- Precision V-beds are induction hardened and ground, incorporated with rigid webbed castings
- Low voltage halogen work light
- Change gears for metric and imperial thread cutting
- Adjustable taper roller bearings support the spindle
- 9 spindle speeds from 75 to 1400rpm

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- Saddle hand wheel mounted on right side of apron reducing swarf contacting the hand
- Inching button is incorporated on the control panel for convenient spindle speed selection
- Quick-action gearbox for thread cutting and auto feeding
- D1-4 camlock spindle for quick and accurate chuck removal and safe reverse direction turning. ISO standard
- External adjustable cross feed lead-screw nut
- Powered longitudinal and cross feeds
- Bed wipers on saddle
- Removable gap bed-way for larger diameter jobs
- Dual calibrated dials (except for saddle hand-wheel)
- Chuck guard fitted with safety micro switch
- Chuck & change gear guards are fitted with micro switches

Includes

- Foot brake system
- Coolant pump system
- Slide out front swarf tray
- Work light with flexible arm
- 3-jaw chuck with reverse jaws
- 4-jaw chuck
- Face plate
- Fixed steady
- Travelling steady
- Change gears
- Dead centre
- Thread-chasing dial
- Rear splash guard & swarf tray
- Safety chuck guard
- Cabinet stand
- Spanners
- Tool box
- Instruction booklet

Specific Features



Front View



Left View



Headstock



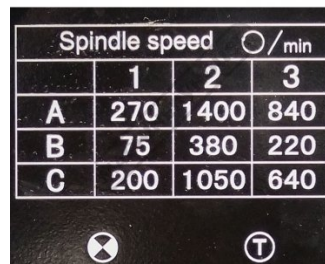
Spindle Speed Levers



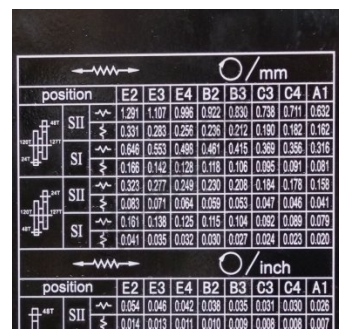
Control Panel Switches



Feed and Thread Gearbox



Spindle Speed Chart



Metric Feed Chart

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position	E2	E3	E4	B2	B3	C3	C4	A1
SI	0.083	0.071	0.064	0.050	0.063	0.047	0.046	0.041
SI	0.161	0.138	0.125	0.115	0.104	0.092	0.089	0.079
SI	0.041	0.035	0.032	0.030	0.027	0.024	0.023	0.020

position	E2	E3	E4	B2	B3	C3	C4	A1
SI	0.054	0.046	0.042	0.038	0.035	0.031	0.030	0.026
SI	0.104	0.091	0.081	0.070	0.068	0.060	0.058	0.050
SI	0.027	0.023	0.021	0.019	0.017	0.015	0.015	0.013
SI	0.007	0.006	0.006	0.005	0.005	0.004	0.004	0.003
SI	0.015	0.012	0.010	0.010	0.009	0.008	0.007	0.007
SI	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002
SI	0.006	0.006	0.005	0.005	0.004	0.004	0.004	0.003
SI	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001

position	D4	C4	C3	C2	A4	B2	E4	A2	E2
MI	0.4	0.45	0.5	0.5625	0.6	0.6562	0.7	0.75	0.8125

Imperial Feed Chart

THREADS METRIC PITCHES mm									
position	D4	C4	C3	C2	A4	B2	E4	A2	E2
 MI	0.4	0.45	0.5	0.5625	0.6	0.6562	0.7	0.75	0.8125
 MI	0.8	0.9	1	1.125	1.2	1.25	1.4	1.5	1.75
 MI	1.6	1.8	2	2.25	2.4	2.5	2.8	3	3.5
 MI	3.2	3.6	4	4.5	4.8	5	5.6	6	7

THREADS IMPERIAL PITCHES 1/inch								
	A2	A3	C3	A4	C3	C3	A1	D4
 Z	24	24	36	24	22	24	26	24
 MI	4	4 1/2	9 1/2	5	5 1/2	6	6 1/2	7 1/2
 MI	8	9	19	10	11	12	13	14
 Z	48	48	36	48	44	48	52	48
 MI	16	18	19	20	22	24	26	28
 MI	32	36	38	40	44	48	52	56

Metric and Imperial Thread Charts

INDICATOR TABLE			
1/16 inch	SCALE	1/16 inch	SCALE
4	1-8	13	1*5
4 1/2	1	14	1*3*5*7
5	1*5	15	1*5
6	1*3*5*7	16	
7	1*5	18	1*3*5*7
8		19	1*5
9	1*5	20	1-8
10	1*3*5*7	22	1*3*5*7
11	1*5	24	
12	1-8	28	1*3*5*7

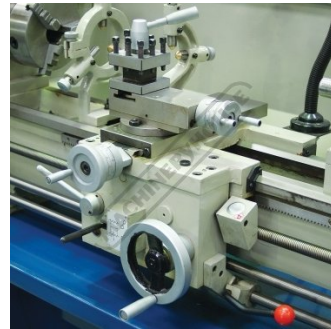
Indicator Table



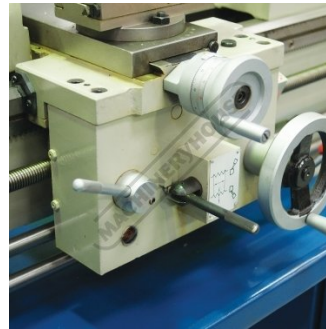
Chuck Guard



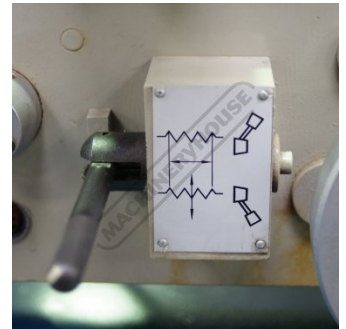
3 Point Steady



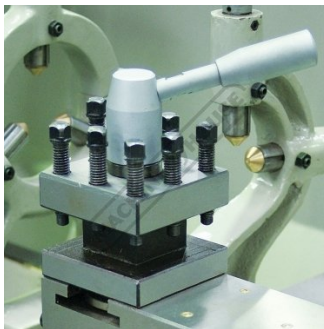
Saddle



Saddle Left View



Feed Engagement Lever



Toolpost



2 Point Steady



Halogen Light and Coolant System



Thread Chasing Dial



Compound Slide Hand Wheel



Cross Feed Handle



Saddle Hand Wheel



Compound Slide

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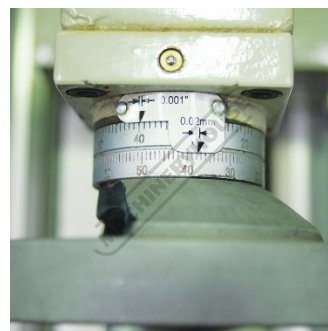
Forward Reverse Spindle Lever



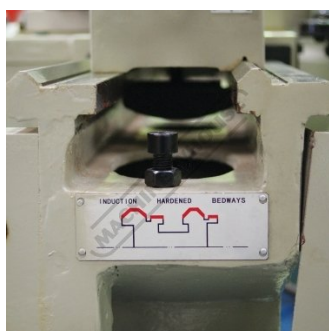
Tailstock



Tailstock Quill



Tailstock Handle



Induction Hardened Bedways



Safety Footbrake



Slide Out Swarf Tray



Side Access Door to Change Gears



Safety Micro Switch on Side Access Door

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Recommended Accessories

D695

3-Axis Optimum Digital Readout Counter - 1µm



D694

1500mm Optimum Magnetic Digital Readout Scale



D720C

200mm Easson Digital Readout Scale



D728

600mm Easson Digital Readout Scale



P235

Coolant Pump & Tank



L292

Quick Change Toolpost



L295

Quick Change Toolpost



L277

Vertical Mill Slide



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C980

5C Collet Lathe Adaptor



L015

Right Hand Turning Tool Holder



L016

Left Hand Turning Tool Holder



L0099

Lathe Turning Tool Kit - 7 piece Insert Type



L450

Lathe Turning Tool Kit - 3 piece Insert Type



L456

Lathe Threading Tool Kit - Insert Type



L464

Professional Lathe Parting Tool Kit - Insert Type



L073

Parting Tool Holder - Suits 1/2" HSS Tool Bit



L076

Knurling Tool Holder Kit



C052

3MT Live Centre



C045

3MT Pipe Centre - 70° Cone



C290

Heavy Duty Drill Chuck - Keyed Type



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D443A

3MT x JT3 Drill Chuck Arbor



D1272

Metric 135° Precision HSS Drill Set - 25 Piece



D1282

Imperial 135° Precision HSS Drill Set - 29 Piece



D126

Metric 135° Precision HSS Drill Set - 170 Pieces



S090A

Soluble Metal Cutting Fluid - 1 Litre



S090

Soluble Metal Cutting Fluid - 5 Litre



S076

Cutting Tool Lubricant Fluid - 500ml



S077

Drilling, Tapping & Cutting Tool Lubricant Spray - 400g



S075

Cutting Tool Lubricant Paste - 200g



S074

Cutting Tool Lubricant Paste - 500g



G660

Lathe Leadscrew Cover Kit



G659

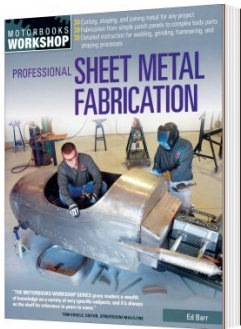
Lathe Leadscrew Cover Kit - Concertina



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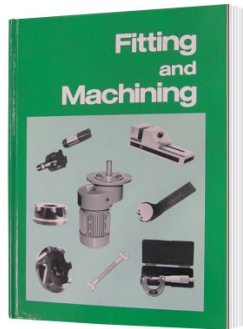
L3455

Professional Sheet Metal
Fabrication Book



L341

Fitting and Machining Technical
Book



L300

Magnetic Swarf Remover



M9991

Magnetic Floor Sweeper



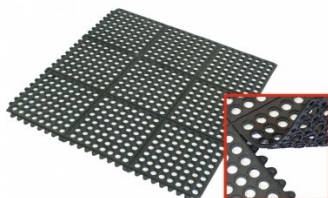
M800

Rubber Mat - Anti-Fatigue



M805

Rubber Mat - Anti-Fatigue



O000

SpillFix Universal Organic
Absorbent



O043

Rust & Corrosion Preventive



O042

General Purpose Lubricant &
Corrosion Inhibitor



O040

Rust & Corrosion Preventive



O044

Rust & Corrosion Preventive

