

## HAFCO-METALMASTER AL-336D DELUXE



### Centre Lathe

**Ø300 x 900mm Turning Capacity - Ø38mm Spindle Bore**



## HAFCO-METALMASTER Centre Lathe AL-336D DELUXE



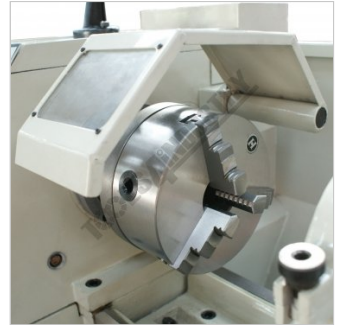
2 Axis Digital Readout



Quick Change Toolpost



Leadscrew Covers



Chuck Guard With Safety Micro Switch



Headstock

SPINDLE SPEED /min			
	1	2	3
I A	360	1810	1095
B	100	500	300
C	280	1400	840
II A	235	1200	700
B	65	330	200
C	180	910	550

18 Spindle speeds  
65-1810rpm

INDICATOR TABLE			
T	T-P-I	SCALE	T-P-I
4	8	8	8
15	24	24	24
32	40	40	40
48	56	56	56
16	8	14	2-4-6-8
9	4-8	15	4-8
5	8	18	2-4-6-8
6	4-8	19	8
6 1/2	8	20	1-8
7	4-8	22	2-4-6-8
7 1/2	8	26	2-4-6-8
9	4-8	28	1-8
9 1/2	8	30	2-4-6-8
10	2-4-6-8	36	1-8
11	4-8	38	2-4-6-8
12	1-8	44	1-8
13	4-8	52	1-8

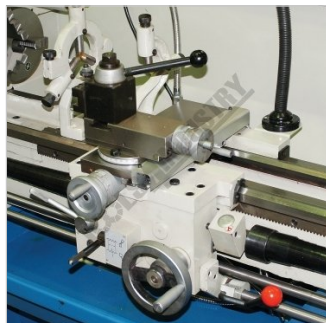
Thread Chase Indicator Table

METRIC THREAD PITCH LIST							
	B4	C4	C3	C2	A4	D2	E4
MI	0.4	0.45	0.5	0.5	0.7	0.75	
MI	0.8	0.9	1	1.2	1.25	1.4	1.5
MI	1.6	1.8	2	2.25	2.4	2.5	2.8
MI	3.2	3.6	4	4.5	4.8	5	5.6
MI	6	7	8	9	10	11	12
MI	16	18	20	22	24	26	28
MI	32	36	40	44	48	52	56
MI	60	64	70	75	80	85	90

Thread Charts

FEED CHART										
Position	E2	E3	A2	E4	E1	C3	C4	A3	D3	B3
S1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
S2	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
S3	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
S4	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
S5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
S6	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
S7	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
S8	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
S9	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
S10	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
S11	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
S12	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
S13	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
S14	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
S15	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
S16	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
S17	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
S18	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
S19	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
S20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
S21	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
S22	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
S23	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
S24	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
S25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
S26	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
S27	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
S28	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
S29	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
S30	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
S31	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
S32	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
S33	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65
S34	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70
S35	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
S36	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
S37	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
S38	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
S39	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
S40	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
S41	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05
S42	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
S43	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
S44	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
S45	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
S46	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30
S47	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35
S48	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
S49	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45
S50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
S51	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55
S52	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
S53	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65
S54	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
S55	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
S56	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80
S57	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85
S58	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90
S59	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95
S60	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

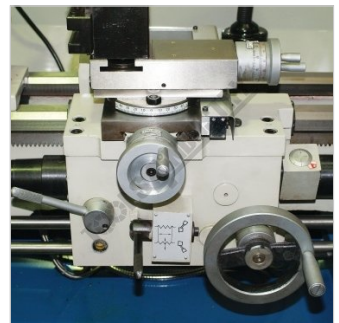
Feed Chart



Saddle Right View



Saddle Left View



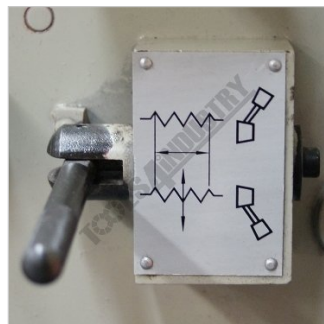
Saddle Controls



Thread Chasing Dial



Forward Reverse Spindle Lever



Feed Engagement Lever

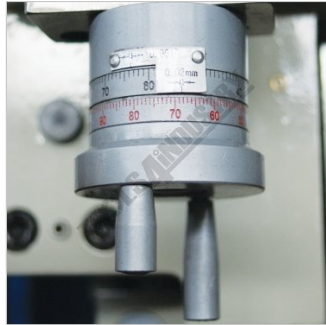


Saddle Hand Wheel

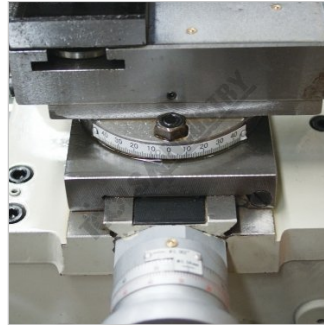
## HAFCO-METALMASTER Centre Lathe AL-336D DELUXE



Crossslide Hand Wheel



Compound Slide Hand Wheel



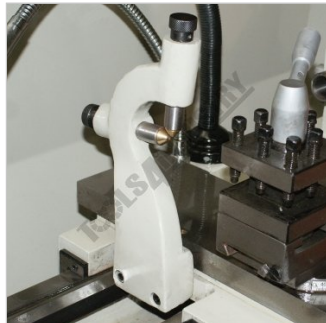
Swivel Compound Slide



Light and Coolant Hose



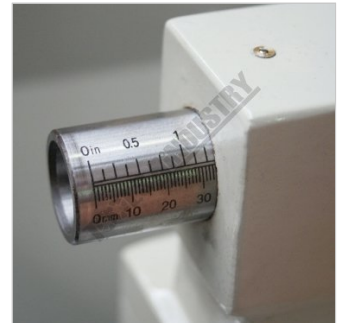
3 Point Fixed Steady



2 Point Travelling Steady



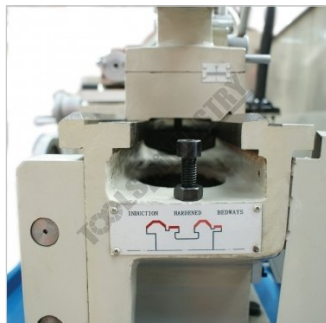
Tailstock



Tailstock Quill



Tailstock Hand Wheel



Induction Hardened Bedways



Included Accessories

### Description

The AL-336D deluxe high quality centre lathe with a turning capacity of  $\text{Ø}300 \times 900\text{mm}$  is well known in the industry for its metal turning capabilities & is suitable for the model engineer or general maintenance workshops.

Featuring a 2-Axis digital readout system for radius & longitudinal measurements (X & Y-Axis), the DRO counter is mounted above the headstock in a user friendly location allowing you to achieve precision work every time. The induction hardened vee bedways are precision ground that allows the saddle to smoothly slide over it, full gear driven spindle speeds ranging from 65 - 1810rpm are selectable via the gear selector levers that are accessible from the front of headstock for your convenience & certainly makes this lathe package well sort after.

The 2hp single phase 240V motor is ample power to drive the 3 & 4 jaw chucks, auto feed & screw cutting thread system and the adjustable taper roller spindle bearings ensures accuracy & smooth operation even when under cutting load. A great range of cross, longitudinal feed speeds & metric & imperial screw cutting threads are easy accessible & selected via the separate gearbox located underneath the headstock for your convenience.

Supplied with a large range of standard accessories including a quick change tool post with 4 tool holders, 150mm 3

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jaw self centring chuck, 200mm 4 jaw independent chuck with D1-4 camlock for quick change over, face plate, spindle safety foot brake, chuck guard with safety interlock switch, guarded leadscrew cover, thread chasing dial, rear splash guard, coolant pump system, work light, fixed & traveling steadies & that rounds up most of the great features on this fantastic centre lathe. The floor stand is equipped with a slide out swarf tray that makes it very easy to clean down and remove your waste material swarf.

**Features**

- 2 Axis digital readout
- Quick change toolpost with 4 holders
- Gear drive headstock for quick change of spindle speeds
- Precision 'V'-beds are hardened and ground, incorporating a rigid webbed casting
- Concertina leadscrew cover
- Slide out swarf tray from front of machine
- Low voltage work light
- Foot operated spindle brake with safety cut out switch
- Slide out front swarf tray for easy cleaning
- Change gears for metric and imperial thread cutting
- Oil sight glass for head stock and gearbox
- Adjustable taper roller bearings support the spindle
- 18 spindle speeds from 65 to 1810rpm
- Inching button is incorporated on the control panel for convenient spindle speed selection
- Enclosed quick action gearbox for thread cutting and auto feeding
- Powered longitudinal and cross feeds
- D1-4 camlock spindle for quick chuck changes and safe reverse direction turning. ISO standard
- Removable gap bed-way for larger diameter jobs
- Dual calibrated dials (except for saddle hand-wheel)
- Chuck & change gear guards are fitted with micro switches

**Includes**

- 2 Axis digital readout system
- Concertina leadscrew cover
- Quick change toolpost with 4 holders
- Slide out front swarf tray
- 3-jaw chuck with reverse jaws
- 4-jaw chuck
- Face plate
- Fixed steady
- Travelling steady
- Coolant system
- Change gears
- Dead centres
- Thread-chasing dial
- Safety chuck guard
- Work light
- Stand
- Foot brake
- Rear splash guard & slide out swarf tray
- Tool box
- Instruction booklet

## HAFCO-METALMASTER Centre Lathe AL-336D DELUXE

### Specifications

<b>ORDER CODE</b>	L682D
<b>MODEL</b>	AL-336D-DELUXE
<b>Swing Over Bed (mm)</b>	300
<b>Distance Between Centres (mm)</b>	900
<b>Spindle Bore (mm)</b>	38
<b>Swing In Gap (mm)</b>	450
<b>Swing Over Cross-slide (mm)</b>	180
<b>Digital Readout System Fitted</b>	Yes
<b>Quick Change Toolpost Fitted</b>	Yes
<b>Leadscrew Covers Fitted</b>	Yes
<b>Taper Turning Attachment</b>	~
<b>Coolant System</b>	Yes
<b>Tool Height To Suit (mm)</b>	12
<b>Centre Height (mm)</b>	150
<b>Spindle Nose Size or Type</b>	D1-4 Camlock
<b>Bed Width (mm)</b>	180
<b>Headstock Spindle Taper (MT)</b>	5
<b>Tailstock Taper (MT)</b>	3
<b>Cross Slide Travel (mm)</b>	170
<b>Compound Slide Travel (mm)</b>	75
<b>Leadscrew Type</b>	Imperial
<b>Metric Cross Feed (X-Axis) (mm/rev)</b>	~
<b>Imperial Cross Feed (X-Axis) (inch/rev)</b>	0.009 - 0.236
<b>Metric Longitudinal Feed (Z-Axis) (mm/rev)</b>	~
<b>Imperial Longitudinal Feed (Z-Axis) (inch/rev)</b>	0.04 - 1.2236
<b>Metric Thread Steps &amp; Pitch (No. / mm)</b>	32 (0.4 - 7)
<b>Imperial Thread Steps &amp; TPI (No. / TPI)</b>	36 (4 - 60)
<b>3 Jaw Chuck Diameter (mm)</b>	160
<b>4 Jaw Chuck Diameter (mm)</b>	200
<b>Spindle Steps / Speeds (No. / rpm)</b>	18 (65 - 1810)
<b>Motor Power (kW / hp)</b>	1.5 / 2
<b>Voltage / Amperage (V / amp)</b>	240 / 10
<b>Nett Weight (kg)</b>	595