

HAFCO-METALMASTER AL-410



Centre Lathe

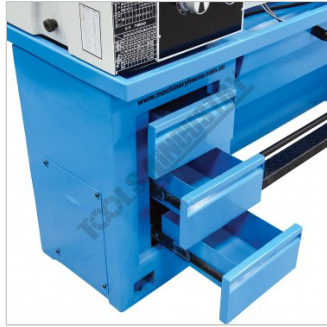
Ø400 x 1000mm Turning Capacity - Ø52mm Spindle Bore



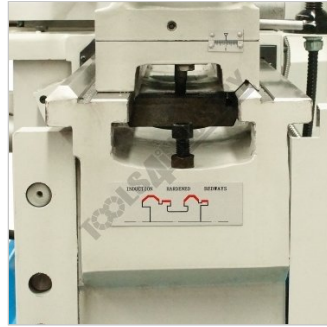
HAFCO-METALMASTER Centre Lathe AL-410



2 Axis Digital Readout



Three Tool Draws



Induction Hardened Bedways



Safety Chuck Guard



Quick Change Toolpost



Leadscrew Covers



Spindle Speed Levers

MODEL AL-410

Spindle Speed		r/min		
		1	2	3
H	A	400	2000	1200
	B	110	550	320
	C	308	1520	930
L	A	198	980	600
	B	55	270	165
	C	150	760	460

Spindle Speed Chart



Feed and Thread Gearbox



Saddle Right View



Saddle Stop



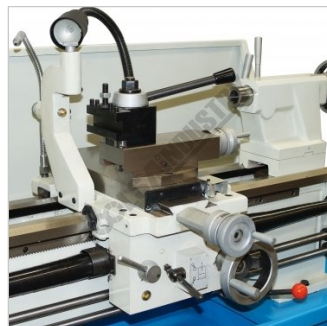
Coolant Hose and Worklight



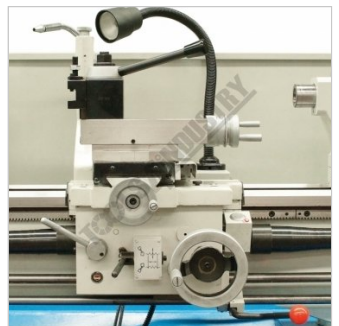
Coolant Pump



Compound Slide

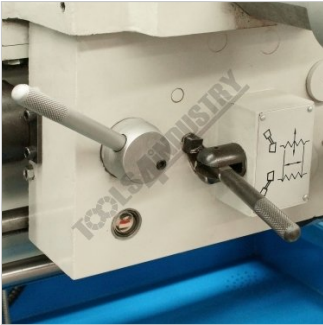


Saddle Left View



Saddle Front View

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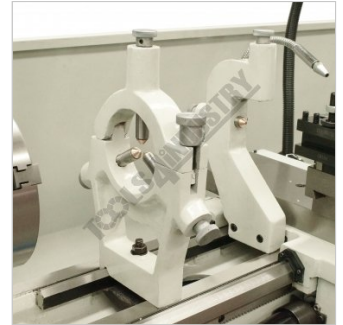
Feed and Thread Engagement Levers



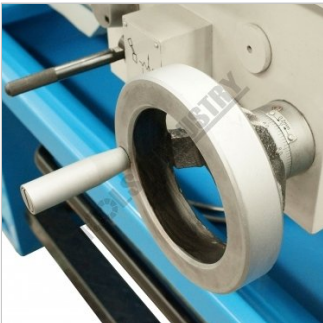
Thread Chasing Dial

INDICATOR TABLE					
T	mm	SCALE	T	mm	SCALE
0.5	1	1	0.45	1	1
0.6	1	1	0.9	1	1
0.75	1	1	1.25	1	1
1	1	1	1.8	1	1
1.5	1	1	2.25	1	1
3	1	1	2.50	1	1
0.4	1-8	1	4.50	1	1
0.8	1-3-5-7	5	5	1	1
1.2	1-8	0.7	1-5	1	1
1.6	1-5	1.4	1-5	1	1
2	1-8	1.75	1-5	1	1
2.4	1-3-5-7	2.8	1	1	1
3.2	1	3.5	1-5	1	1
4	1-3-5-7	7	1-5	1	1
4.8	1-5				
6	1-8				

Indicator Table



Fixed & Travelling Steadies



Saddle Hand Wheel



Saddle Hand Wheel Graduation



Spindle Engagement Lever



Crossslide Hand Wheel



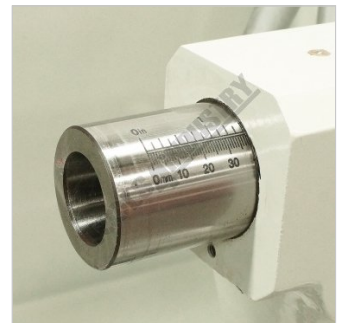
Compound Slide Hand Wheel



Swivel Compound Slide



Tailstock



Tailstock Quill



Tailstock Hand Wheel



Slide Out Drip Tray



Foot Brake

mm/1												
Position	E1	E2	A1	E1	E2	C1	A1	C1	A1	D1	D2	D3
SI	1.37	1.147	1.125	1.103	1.081	1.059	1.037	1.015	0.993	0.971	0.949	0.927
SI	1.29	1.245	1.201	1.157	1.113	1.069	1.025	0.981	0.937	0.893	0.849	0.805
SI	1.20	1.175	1.150	1.125	1.100	1.075	1.050	1.025	1.000	0.975	0.950	0.925
SI	1.12	1.107	1.092	1.077	1.062	1.047	1.032	1.017	1.002	0.987	0.972	0.957
SI	1.04	1.034	1.024	1.014	1.004	0.994	0.984	0.974	0.964	0.954	0.944	0.934
SI	0.96	0.959	0.953	0.947	0.941	0.935	0.929	0.923	0.917	0.911	0.905	0.899
SI	0.88	0.883	0.881	0.879	0.877	0.875	0.873	0.871	0.869	0.867	0.865	0.863
SI	0.80	0.803	0.801	0.800	0.799	0.797	0.796	0.795	0.794	0.793	0.792	0.791
SI	0.72	0.723	0.721	0.720	0.719	0.718	0.717	0.716	0.715	0.714	0.713	0.712
SI	0.64	0.643	0.641	0.640	0.639	0.638	0.637	0.636	0.635	0.634	0.633	0.632
SI	0.56	0.563	0.561	0.560	0.559	0.558	0.557	0.556	0.555	0.554	0.553	0.552
SI	0.48	0.483	0.481	0.480	0.479	0.478	0.477	0.476	0.475	0.474	0.473	0.472
SI	0.40	0.403	0.401	0.400	0.399	0.398	0.397	0.396	0.395	0.394	0.393	0.392
SI	0.32	0.323	0.321	0.320	0.319	0.318	0.317	0.316	0.315	0.314	0.313	0.312
SI	0.24	0.243	0.241	0.240	0.239	0.238	0.237	0.236	0.235	0.234	0.233	0.232
SI	0.16	0.163	0.161	0.160	0.159	0.158	0.157	0.156	0.155	0.154	0.153	0.152
SI	0.08	0.083	0.081	0.080	0.079	0.078	0.077	0.076	0.075	0.074	0.073	0.072

inch												
Position	E1	E2	A1	E1	E2	C1	A1	C1	A1	D1	D2	D3
SI	0.0531	0.0450	0.0429	0.0408	0.0387	0.0366	0.0345	0.0324	0.0303	0.0282	0.0261	0.0240
SI	0.0492	0.0462	0.0432	0.0402	0.0372	0.0342	0.0312	0.0282	0.0252	0.0222	0.0192	0.0162
SI	0.0453	0.0423	0.0393	0.0363	0.0333	0.0303	0.0273	0.0243	0.0213	0.0183	0.0153	0.0123
SI	0.0414	0.0384	0.0354	0.0324	0.0294	0.0264	0.0234	0.0204	0.0174	0.0144	0.0114	0.0084
SI	0.0375	0.0345	0.0315	0.0285	0.0255	0.0225	0.0195	0.0165	0.0135	0.0105	0.0075	0.0045
SI	0.0336	0.0306	0.0276	0.0246	0.0216	0.0186	0.0156	0.0126	0.0096	0.0066	0.0036	0.0006
SI	0.0297	0.0267	0.0237	0.0207	0.0177	0.0147	0.0117	0.0087	0.0057	0.0027	0.0007	0.0007
SI	0.0258	0.0228	0.0198	0.0168	0.0138	0.0108	0.0078	0.0048	0.0018	0.0008	0.0008	0.0008
SI	0.0219	0.0189	0.0159	0.0129	0.0099	0.0069	0.0039	0.0009	0.0009	0.0009	0.0009	0.0009
SI	0.0180	0.0150	0.0120	0.0090	0.0060	0.0030	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SI	0.0141	0.0111	0.0081	0.0051	0.0021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SI	0.0102	0.0072	0.0042	0.0012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SI	0.0063	0.0033	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SI	0.0024	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Feed Charts

HAFCO-METALMASTER Centre Lathe AL-410

METRIC THREAD PITCH LIST									
	B4	C4	C3	C2	A4	D2	E4	A2	E2
MI	0.4	0.45	0.5		0.6		0.7	0.75	
MII	0.8	0.9	1		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
MII	3.2	3.6	4	4.5	4.8	5	5.6	6	7

Metric Thread Pitch Chart

THREAD PER INCH									
	A2	A3	C3	A4	C3	C3	A5	B4	
Z	24	24	38	24	22	24	26	24	24
MII	4	4½	9½	5	5½	6	6½	7	7½
MI	8	9	19	10	11	12	13	14	15
Z	48	48	38	48	44	48	52	48	48
MII	16	18	19	20	22	24	26	28	30
MI	32	36	38	40	44	48	52	56	60

Imperial Thread Chart

MODULE THREAD									
	B4	C4	C3	C2	A4	D2	E4	A2	E2
MI	0.4	0.45	0.5		0.6		0.7	0.75	
MII	0.8	0.9	1		1.2	1.25	1.4	1.5	1.75
MII	1.6	1.8	2	2.25	2.4	2.5	2.8	3	

Module Thread Chart

D.P. THREAD												
	A2	A3	A4	A1	B3	A5	B4	C1	B1	B5		
MII	16	18	20	24	27	28	30	32	36	42		
MI	32	36	40	48	54	56	60	64	72	84		
T1	66	66	66	66	E3 41	66	66	E2 47	E5 48			
T2	21	21	21	21	21	22	21	24	28			
MII	8	9	10	12	13	14	15	11	22			
MI										22	44	

DP Thread Chart

Features

- 2 Axis digital readout system
- Quick change toolpost with 5 holders
- Concertina leadscrew cover
- Gear drive headstock for quick change of spindle speeds
- Precision 'V'-beds are hardened and ground, incorporating a rigid webbed casting
- 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
- 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
- D1-5 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
- Coolant system with flexible hose
- Slide out swarf tray

Includes

- 2 Axis digital readout system
- Concertina leadscrew covers
- Slide out front swarf tray
- Quick change tool-post with 5 holders
- 200mm 3-jaw chuck with reverse jaws
- 200mm 4-jaw chuck
- Face plate
- Fixed steady
- Travelling steady
- Change gears
- Dead centres
- Thread-chasing dial
- Work light
- Stand

HAFCO-METALMASTER Centre Lathe AL-410

- Rear splash guard & swarf tray
- Tool box
- Instruction booklet

Specifications

ORDER CODE	L569D
MODEL	AL-410
Swing Over Bed (mm)	400
Distance Between Centres (mm)	1000
Spindle Bore (mm)	52
Swing In Gap (mm)	520
Swing Over Cross-slide (mm)	250
Digital Readout System Fitted	Yes
Quick Change Toolpost Fitted	Yes
Leadscrew Covers Fitted	Yes
Taper Turning Attachment	~
Coolant System	Yes
Tool Height To Suit (mm)	16
Centre Height (mm)	200
Spindle Nose Size or Type	D1-5 Camlock
Bed Width (mm)	218
Headstock Spindle Taper (MT)	6
Tailstock Taper (MT)	4
Cross Slide Travel (mm)	250
Compound Slide Travel (mm)	80
Leadscrew Type	Metric
Metric Cross Feed (X-Axis) (mm/rev)	0.011 - 0.276
Imperial Cross Feed (X-Axis) (inch/rev)	~
Metric Longitudinal Feed (Z-Axis) (mm/rev)	0.052 - 1.291
Imperial Longitudinal Feed (Z-Axis) (inch/rev)	~
Metric Thread Steps & Pitch (No. / mm)	32 (0.4 - 7)
Imperial Thread Steps & TPI (No. / TPI)	36 (4 - 60)
3 Jaw Chuck Diameter (mm)	200
4 Jaw Chuck Diameter (mm)	200
Spindle Steps / Speeds (No. / rpm)	18 (65 - 2000)
Motor Power (kW / hp)	2.4 / 3.2
Voltage / Amperage (V / amp)	415
Nett Weight (kg)	850