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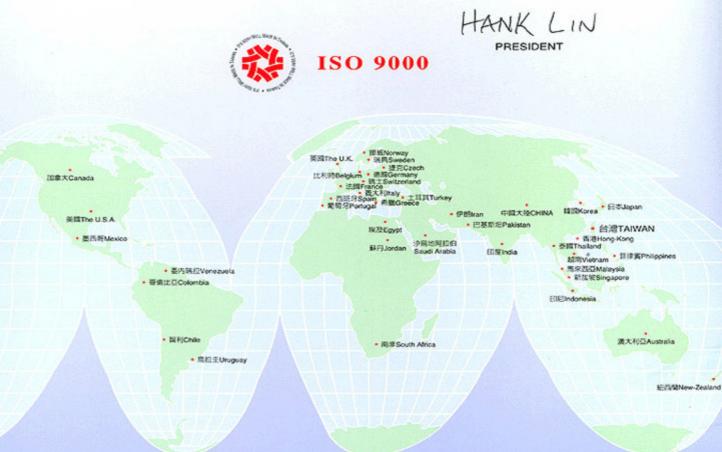
#### 感謝各位多年來的支持與愛護!

利高機械公司自1978年成立,一直是以生產CNC電腦車床及CAM凸輪式自動 車床為主,至今我們已多次獲得「台灣精品獎」以及國家級創新研發獎,而且 我們的銷售亦遍佈世界五十餘國,廣受各界好評。

我們稟持「品質至上,永續經營」的理念,不斷的提昇技術及服務品質, 提供最佳的售前加工方案及完善的售後服務,更可依客戶需求訂製完全加工之 整廠設備,進而為客戶創造最佳利潤,利高的用心,絕對讓您滿意。

#### Portrait

LICO Machinery Co., Ltd., established in 1978 under the leadership of president Mr. Hank Lin, is well known for manufacturing turning machines ranging from industrial cam operated single spindle automatic lathes to technical CNC turning centers. These machines are designed for the metalworking sector and have been adapted by various industries such as aviation, vehicles, computers, plumbing fittings, optical instruments and others. Today, LICO lathes become popular across the world thanks to in-house staff and satellite-contractors working in harmony with the management board.



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## CNC MULTI-ALIDE AUTOMATICS: LNA36T/LNA42T

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#### Simple CNC MultiSlide Autimatics



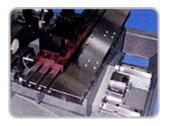
LICO, A leading manufacturer of automatics in Taiwan, announced a newly developed automatic bar machine. "The Simple CNC MultiSlide Automatics" models LNA36/42 T-SERIES. Thet combine the advantages of conventional cam-operated automatic lathes with modern multi-axis CNC controller and common CNC programming, provides fast set up and easy operation for both experienced operators and new comers.

The machine comprises double compound slides and a **gang slide**. They permit longitudinal turning, complex contouring, thread chasing, by simple carbide inserted tools for O.D. work as well as drilling, boring, threading, recessing and tapping for I.D. conventional form tool can be used.

Optional accessories, such as Parts Catcher, Chip Conveyor, Workpiece Belt Conveyor and available with caries brands Automatic Bar Feeder.

During the operation, there are  $2\sim3$  tools overlapping and working simultaneously, thus

dramatically reducing and optimizing cycle times as we or increase machining efficiency tremendously. On larger runs they are more economic than cam-operated sutomatics. On medium quantity runs they beat CNC lathes down.



#### X/Z Slides with Linear Way

Both X-axis and Z-axis are designed with line ar ways gained both benefits of chips-free and well lubrication as well as to achieve precision positioning and rapid movement. On the slide of X-axis can expand an option of economic gang tools with sub plate or the sophistic 8-position turret with thru coolant.

#### **Collet Chuck**

Standard spindle is equipped with F-type collet chuck. Option with 5C Chuck. For precision required parts can equipped with air chuck and apply spindle speed to 10,000rpm upon request.



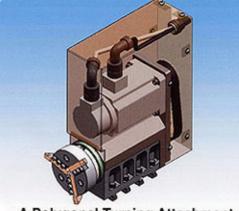


#### The LNA T-SERIES

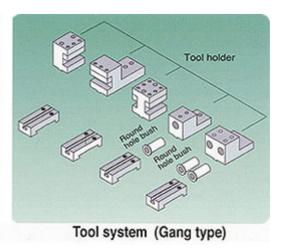
automatics are designed for the metalworking sector. It has been adapted by various industries such as aviation, vehicles, computers, plumbing fittings, optical instruments and others. With much wider materials choice, not only free cutting steel, brass, aluminum, but also alloy steel, stainless steel can be machined. An appropriate production proposal with production rate defined by tool arrangement, cycle time and attachments can be offered before your purchasing.



#### CNC MULTI-ALIDE AUTOMATICS: LNA36T/LNA42T



A Polygonal Turning Attachment





#### Wire Cabinet

A sizable wire cabinet with functional heat exchanger ensures a right temperature for every electronic component during intensively cuttings.

The succinct wiring design provides for maintenance, makes the job easier.

#### **CNC Control System**

User-friendly console offers an easy operation even for inexperienced trainees. Standard with for low aost CNC system PC-based T-1000, Mitsubishi M65, Siemens 840D, Fanuc 31i available upon request.





#### CNC MULTI-ALIDE AUTOMATICS: LNA36T/LNA42T

#### **Technical Data:**

Model	LNA 36T	LNA 42T
Unit	Metric (Inch)	
CAPACITIES		
Collet bar capacity, dia.(through bore)	Ø36 (1.42")	Ø42 (1.65")
Swing over bad	Ø150 (Ø5.9")	
Swing over alide	Ø350 (Ø13.8")	
Max. turning dia.(3-jaw power chuck)	Ø125 (Ø5")	
Max. turning length	100(4")	
SPINDLE		
Height of spindle center (approx.)	1,000(39.4")	
Spindle nose	A2-4	A2-5
Collet chuck type	F42	F48
Power chuck type	Ø5"	Ø6"
Spindle/ draw bar through bore	Ø37(1.46")	Ø45(1.77")
SPINDLE DRIVE		
Motor power cont.(Mitaubishi)	3.7/5.5kw (5/7.5 HP)	3.7/10kw (10/13.4 HP)
Max. spindle speed	6,000rpm	5,000rpm
SLIDE		
Cross silide travel(X-axis)	250mm(10")	
Longitudinal slide travel(Z-axis)	200mm(8")	
TOOL		
Turning tool section	16mm Sq.	
Boring tool reception	Ø20mm(3/4")	
SERVO MOTORS		
Working feeds, X-axis and Z	0~10,000 mm/min	
Rapid traverses, X-axis and Z	24 M/min	
Feed force, X-axis and Z (Mitsubishi)	4Nm	
MACHINE SPACE, WELGHT and POWER REQUIREMENTS		
Overall dimension (LxWxH)	1,530 x 1,260 x 1,620 (60.2"x49.6"x63.8")	
Machine weight	1,660 kg	
Hydraulic tank capacity	30L	
Hydraulic pump motor	0.75kw	
Coolant tank capacity	180L	
Coolant pump motor	0.187kw	
Lubrication capacity	2L, 10cc/10min	
Total power required (Mitsubishi)	11kVA	



#### CNC MULTI-ALIDE AUTOMATICS: LNA36T/LNA42T

#### INTEK T1000 PC-Based CNC Control System:

- \* tool path tracing & tool rad.
- \* Thread chasing & Multiple canned cycles
- \* Automatic chamfering & corner rounding
- \* Simultaneously controllable 10 axes
- \* Constsnt surface speed control
- \* Oriented spindle stop

#### Standard Equipment:

- 1. Spindle Collet Chuck System
- 2. 48-Pos Spindle Dividing System
- 3. Hydraulic System, Coolant System and Air Jet System
- 4. Automatic Lubricstion System
- 5. Work Lamp and Front Door Interlock
- 6. Tool Box and ToolKits
- 7. Control Cabinet Heat Exchanger

#### DIMENSIONS

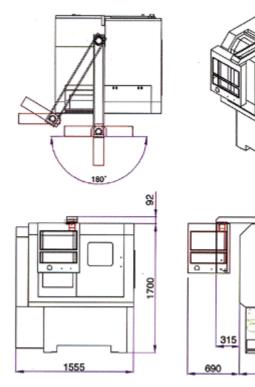
#### **Optional Accessories:**

1. Hollow Power Chuck Ø5"

1310

620

- 2. Precision Air Chuck Ø4"
- 3. Parts Catcher
- 4. Tool Turret 8-station (No Tool Driven)
- 5. Hydraulic Live Tool Unit (max. 1 set) HLT
- 6. Chip Conveyor with Cart CCS/CCP
- 7. Automatic Bar Feeder with Interface ABF
- 8. Polyonal Turning/Milling Attachmeut PTA





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#### 公司沿革 Company Profile

- 1978 利高機械工業股份有限公司正式在九月三日 於桃園成立。
- 1981 首次外銷單輪自動車床至美國及日本。
- 1984 利高機械首次参加馬來西亞機械展,積極拓展 東南亞業務市場。
- 1990 成立利根機械於潭子加工區。 成立美國利寶高公司,除銷售原有設備外, 並銷售汽車零件以服務美國市場。 研發CNC多滑軌自動車床。
- 1993 LNT-42 CNC 多滑座自動車床,榮獲第一屆 「台灣精品獎」, 並取得台灣、大陸、德國等專利。
- 1994 利高公司發展LA32H自動車床榮獲第二屆 「台灣精品獎」。
- 1995 利高公司取得ISO-9000國際品保認證。
- 1999 利高公司發展複合加工多功能CNC車床,榮獲 第八屆「台灣精品獎」。
- 2001 利高公司經英國Amtriveritas取得CE認識・ 編號9002。
- 2002 LNE42複合加工CNC車銑加工機・榮獲第九屆 國家級創新研發獎。
- 2004 利高開發LNT鎖胚自動送料,完全加工機。
- 2005 利高開發LNC-D自動棒材送料,有十二位複合 加工及副主軸背面加工之CNC自動車床。
- 2006 利高開發CNA36P小型低成本之主軸移動式CNC 車床,適用於長軸加工、不誘鋼球閥心軸含 Y銑、手工具之多邊車削成形。















## 利高機械工業股份有限公司 LICO MACHINERY CO., LTD.

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1978 LICO machinery co. was founded on Sep. 3, in Taoyuan by Hank Lin, Ray Cheng, Vic Lin , Knoll Chiu and other partners.

- 1981 LICO first exported single spindle automatic lathe to America and Japan.
- 1984 LICO attended Mex 1984 machine show at Kuala Lumpur, Malaysia, and set-up a sales net in the South-East Asian market.
- 1990 LICO invested and set-up a new company in the Tai-Chung Export Processing Zone (Taiwan)--Likon Machinery Co., Ltd. LICO invested and set-up a new company with LIPO in Texas, U.S.A. --Lipoco Enterprises Inc.to produce automobile parts and sales for the American market. LICO started to develop CNC machines, the first project was the "CNC Multi-Slide Automatic Bar Machine".
- 1993 LICO developed multi-slide LNT-42 CNC Lathe and got the prize of \* It's Very Well Made In Taiwan\* No.1. Got the patent from Taiwan, Mainland China and Germany.
- 1994 LICO developed LA32H Carn Automatic Lathe and got the prize of \* It's Very Well Made In Taiwan\* No.2.
- 1996 LICO was passed the international quality assurance licence of ISO- 9000.
- 1999 LICO Developed functional complex CNC lathe and got the prize of " It's Very Well Made In Taiwan" No.8.
- 2001 The CE Mark approved by Amtriveritas in the UK.
- 2002 LNE42 awarded the prize of "Innovative Research Award of SMEs" hosted by Taiwan Ministry of Economic Bureau.
- 2004 LICO developed LNT forged blank with automatic loading complete machining machine.
- 2005 LICO developed LNC-D automatic bar feeding with 12-position live tools and sub-spindle back machining CNC automatics.
- 2006 LICO developed campact, affordable head stock sliding CNC automatic lathe for long shaft machining, stainless steel ball valve stem with Y-mill and hand tools with polygonal turning.



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