

www.kkl-cnc.com.tw

KKL- We make machines.
You make money.

KKL

CE

KKL Vertical Milling Centers

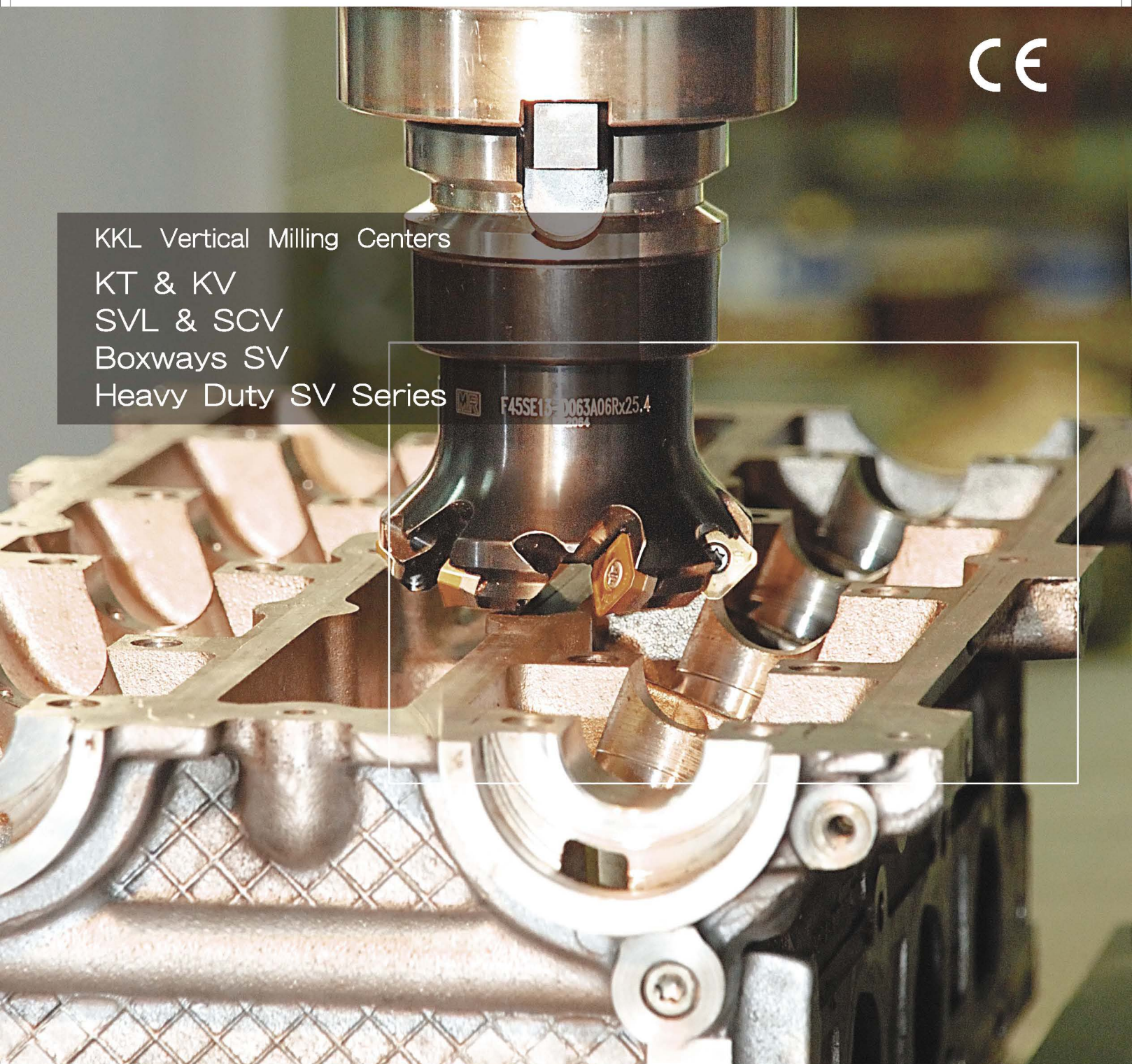
KT & KV

SVL & SCV

Boxways SV

Heavy Duty SV Series

F45SE13-0063A06Rx25.4
2004



SPECIFICATION

Model	Unit	SV-1600	SV-1800	SV-2000	SV-2200
Guideway construction	(X/Y/Z axis)	4 boxways	4 boxways	4 boxways + 2 linear ways	4 boxways + 2 linear ways
Controller	type	Mitsubishi	Mitsubishi	Mitsubishi	Mitsubishi
Travel					
X axis	mm	1600	1800	2000	2200
Y axis	mm	850	950	950	950/1050(Opt.)
Z axis	mm	700	750/ 900(Opt.)	750/ 900(Opt.)	750/ 900(Opt.)
Spindle nose to table	mm	200-900	200-950/ 200-1100(Opt.)	200-950/ 200-1100(Opt.)	200-950/ 200-1100(Opt.)
Spindle center to column	mm	910	1030	1030	1030/ 1150(Opt.)
Table					
Size	mm	1700 x 815	1900 x 900	2120 x 900	2350 x 900
T-slots (W x D x No.)	mm	18 x 150 x 5	18 x 150 x 6	18 x 150 x 6	18/ 22(Opt.) x 150 x 6
Max loading capacity	kg	2100	2500	3000	3500
Spindle					
Spindle speed	rpm	Gear 60-6,000	Gear 60-6,000	Gear 60-4,000/ 60-6,000(Opt.)	Gear 60-4,000/ 60-6,000(Opt.)
Spindle motor	kw	15/ 18.5(Opt.)	15/ 18.5(Opt.)	18.5	18.5
Spindle nose taper	type	BT50	BT50	BT50	BT50
Rapid traverse of X/Y/Z	m/min	15/15/12	15/15/12	15/15/12	15/15/12
Cutting feed rate	m/min	1-7	1-7	1-7	1-7
Tools					
No. of Tools / ATC	type	24 (32 Opt.) /Armless	24 (32 Opt.) /Armless	24 (32 Opt.) /Armless	24 (32 Opt.) /Armless
Max tool weight	kg	18	18	18	18
Max tool diameter	mm	□125	□125	□125	□125
Miscellaneous					
Air source	kg/cm ²	6	6	6	6
Machine height	mm	3115	3255	3165	3165
Machine length x width	mm	4665 x 3560	5000 x 3810	5550 x 3810	5850 x 3810
Machine weight	kg	14200	16000	19000	19500/ 21000(Opt.)

* Design and specification are subject to change prior notice.

* OEM / Customized design is available.

STANDARD ACCESSORIES

- Armless type ATC
- Full-splash guard
- Spindle air blast system
- Heat exchange in control box
- Spindle BT40-6,000 rpm
- Working light
- Coolant pump
- Operator indication lamp
- Spindle arbor cleaning
- Tool box

OPTIONAL ACCESSORIES

- Controller: Heidenhain / Siemens
- Controller: Fanuc / Selca / Fagor
- Spindle automatic oiling device
- Arm type ATC
- 4th axis NC rotary table
- Chip conveyor
- Spindle speed 8,000/10,000 rpm
- Spindle: Direct couple 10,000/12,000/15,000 rpm
- Built-in 16,000 rpm
- Optical scale
- Transformer
- PL waterproof fluorescent worklight
- BED shower

Heavy Duty SV Series



Machining Report

Machining for: mold / die, 3C, optical, automotive, vehicle, aerospace, and other dynamic industries

Machining Condition: Spindle—Belt type, BT40-8,000 rpm

Spindle Motor: 7.5 / 11kw

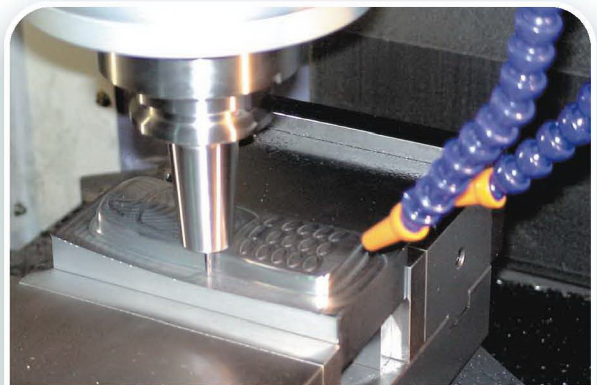
Face milling—S50C Steel



Chip elimination: 192 cc/min
Tool: Ø63 mm×6T
Spindle rotating speed: 1,500 rpm
Feeding: 800 mm/min
Cutting width: 60 mm
Cutting depth: 4 mm
Spindle load: 113%

■ Machining video is shown in CD

3D mold for cell phone—NAK80



Tool: Ø4R1
Spindle rotating speed: 8,000 rpm
Feeding: 3,000 mm/min

■ Machining video is shown in CD

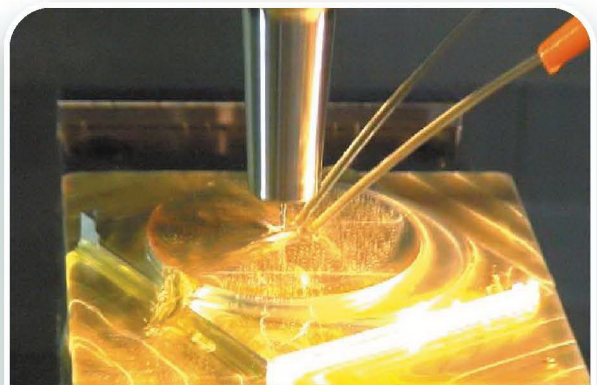
Tapping—S50C Steel



Tool: M24×3P
Spindle rotating speed: 80 rpm
Feeding: 240 mm/min
Spindle load: 68%

■ Machining video is shown in CD

Tapping—AL Aluminum

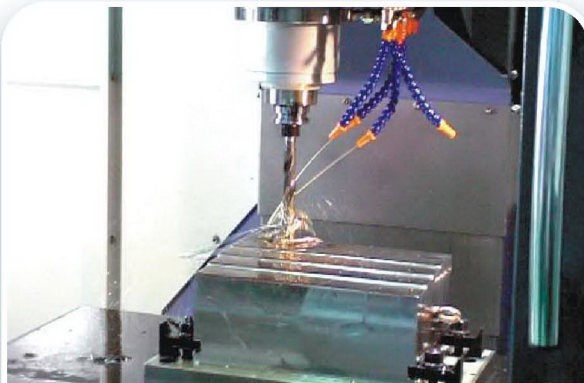


Tool: 0#80UNF
Spindle rotating speed: 1,200 rpm
Feeding: 381 mm/min

■ Machining video is shown in CD

Above cutting numbers are only for your reference.
To obtain most efficient machining, the tools are used under ultimate condition.
© King Kiang Li Machinery Industrial Co., Ltd.

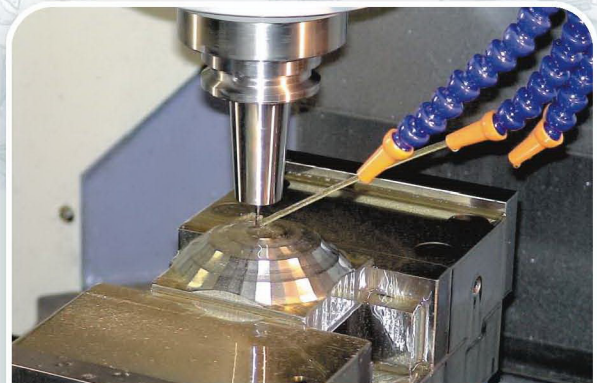
Drilling—S50C Steel



Chip elimination: 126 cc/min
Tool: Ø29.5 mm×2T
Spindle rotating speed: 272 rpm
Feeding: 65 mm/min
Spindle load: 100%

■ Machining video is shown in CD

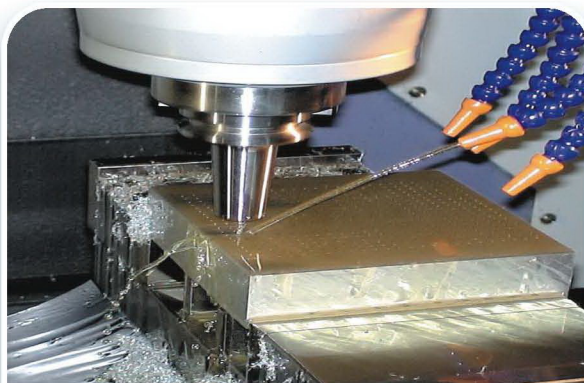
3D mold for automobile headlight



Material: NAK80
Tool: Ø3R1.5
Spindle rotating speed: 8,000 rpm
Feeding: 3,000 mm/min

■ Machining video is shown in CD

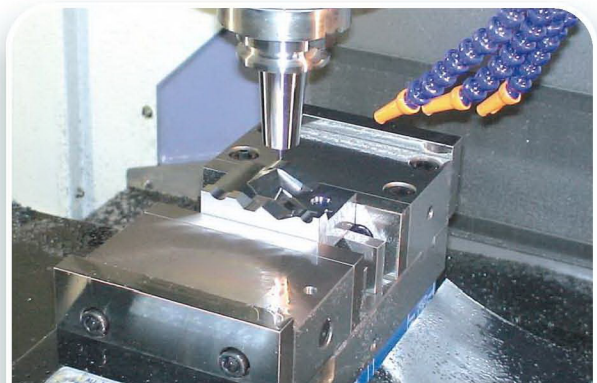
Tapping 500 bores —AL Aluminum



Tool: 0#80UNF
Spindle rotating speed: 1,200 rpm
Feeding: 381 mm/min

■ Machining video is shown in CD

3D mold for test —NAK80



Tool: Ø4R1
Spindle rotating speed: 8,000 rpm
Feeding: 3,000 mm/min

■ Machining video is shown in CD

King Kiang Li Machinery Industrial Co., Ltd.

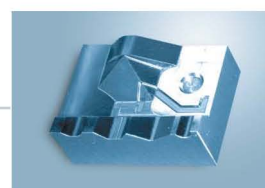
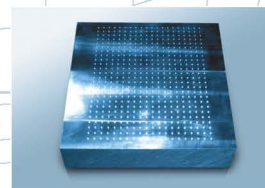
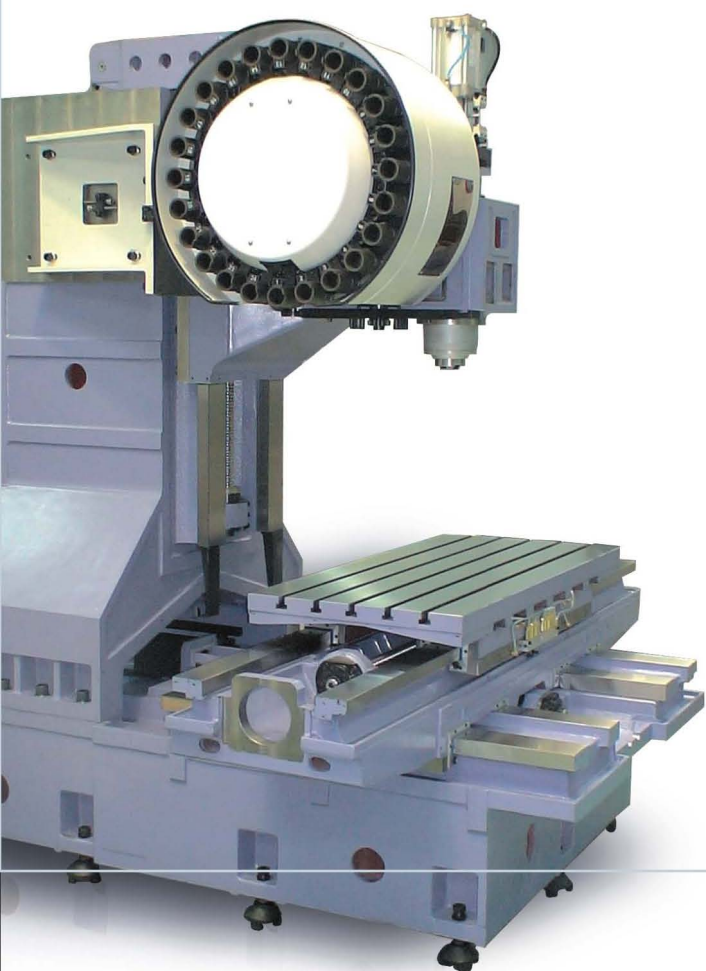
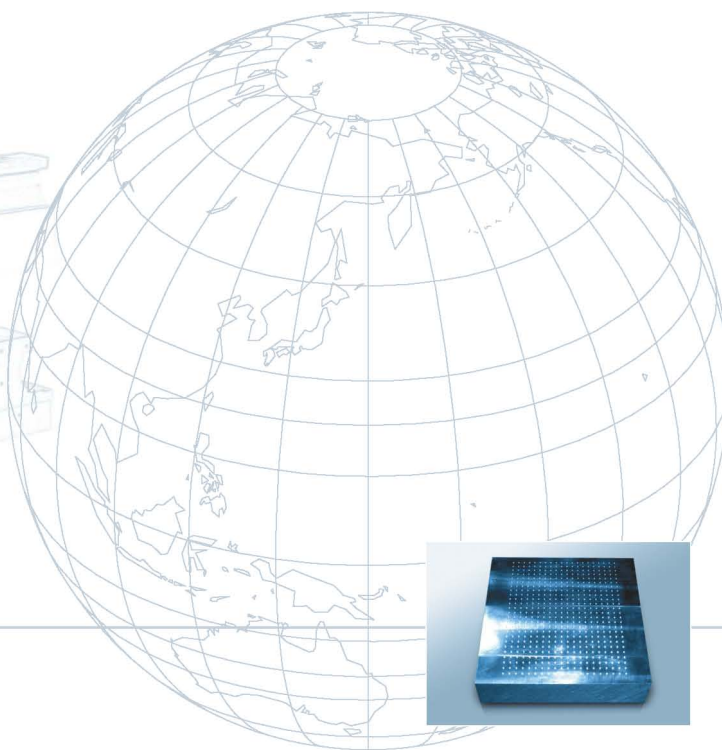
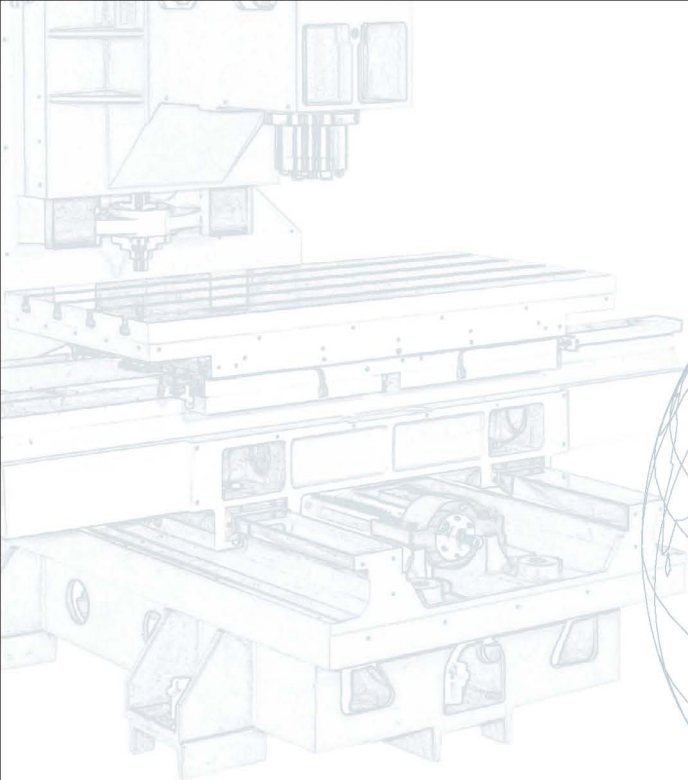
No.424, TA CHEE ROAD, TAICHUNG 401, TAIWAN

TEL: 886-4-22810688 FAX: 886-4-22817958

E-mail: sales@kkl-cnc.com.tw

<http://www.kkl-cnc.com.tw>

© King Kiang Li Machinery Industrial Co., Ltd.



KKL[®] Mcteck[®]

No. 424, Ta Chee Rd., Taichung 401, Taiwan

Tel: 886-4-22810688 Fax: 886-4-22817958

e-mail: sales@kkl-cnc.com.tw

Website: www.kkl-cnc.com.tw