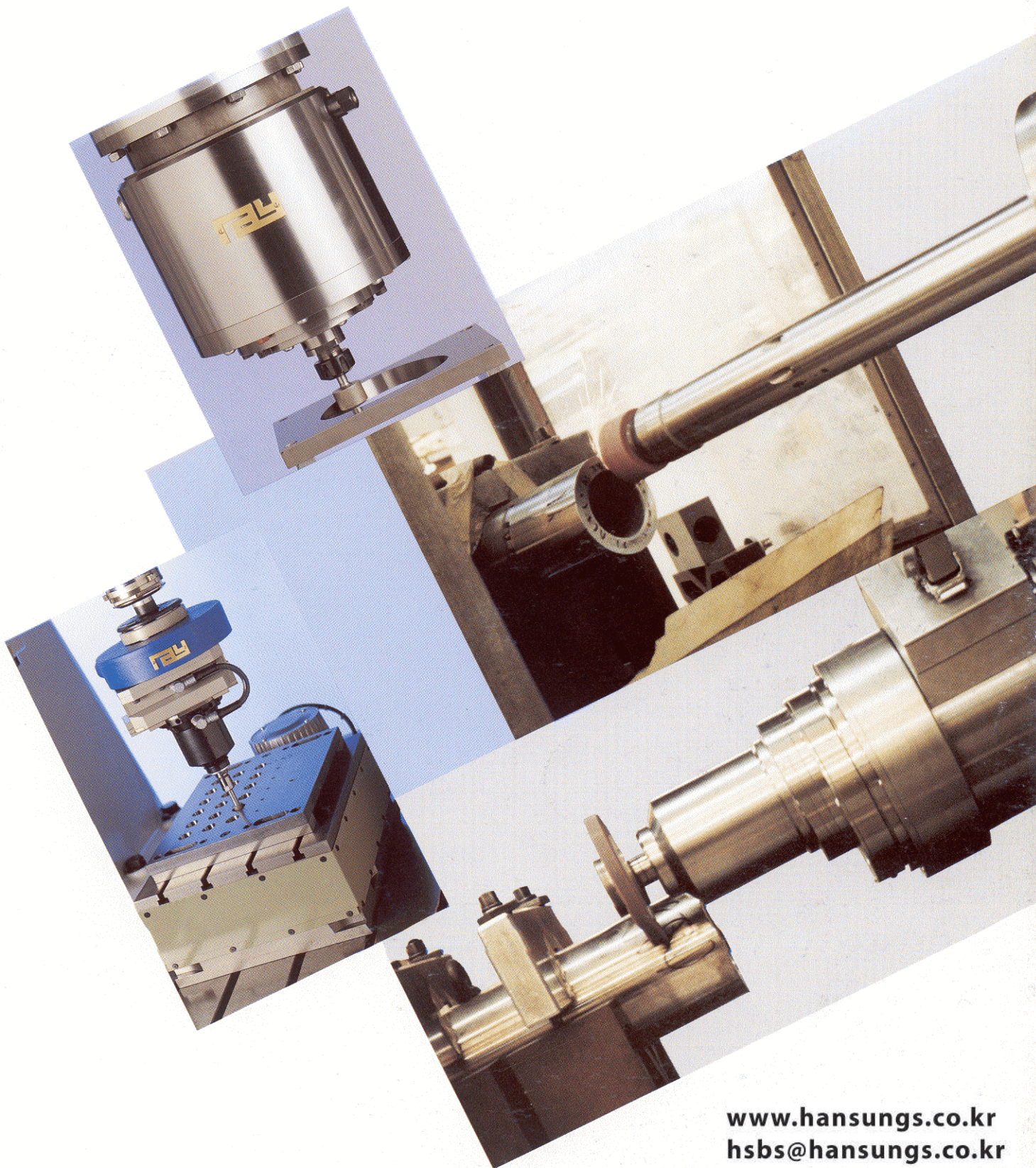


Eigenprodukte

JIG GRINDING ATTACHMENT & CAM GRINDER

Koordinatenschleifköpfe
Sonderausführungen für Luft-
und Raumfahrt
Kurvenschleifkopf
Hubtisch
Schnellaufspindel

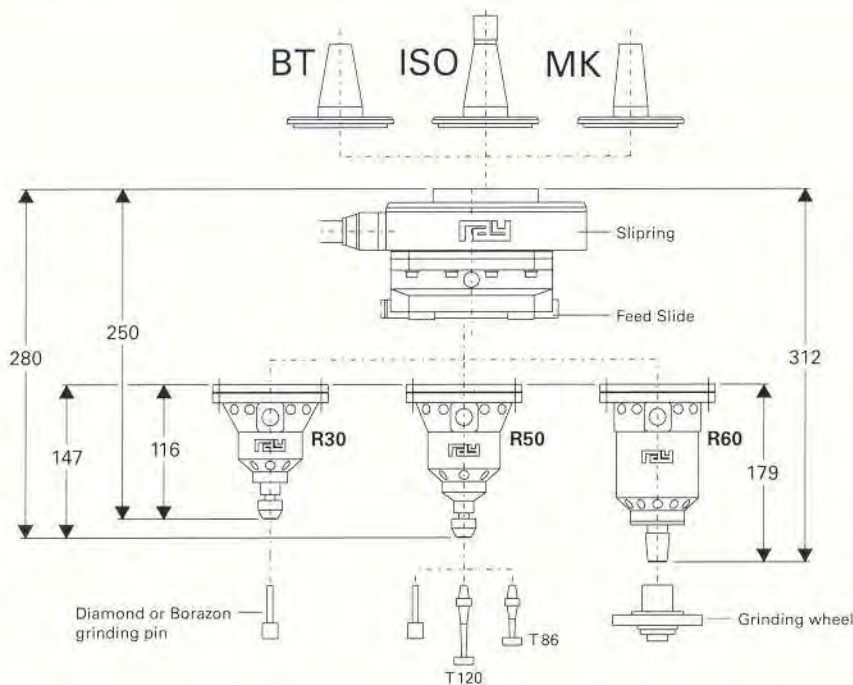
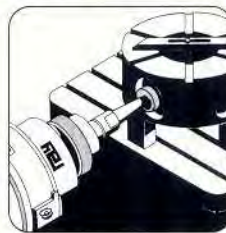
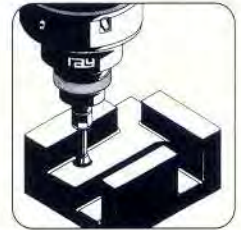
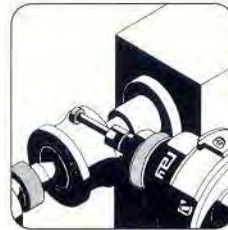


RAY KSK 1000

Bores, surfaces and slots the flexible accessory to solve nearly all your precision grinding problems.



The **RAY coordinate grinding head KSK 1000** is made of high quality aluminium alloy and weighs together with spindle R50 only approx. 9 kg (20 lbs.). The sturdy and high precision unit can be mounted to almost any spindle head of vertical or horizontal NC- and CNC-controlled machine tools by various interchangeable fixing cones. Thus, application possibilities are opened to the user which normally can only be realised with expensive special machines.



Änderungen vorbehalten

Bore diameter
max. 230 mm (9")

Bore depth
max. 120 mm (5")

Accuracy
0.001 mm (0.00004")

Weight
approx. 9 kg (20 lbs.)

Spindle R30

25 000–100 000 r.p.m.
600 W
Collets $\varnothing$ 3/4 mm

Weight 1.8 kg

Spindle R50

10 000–40 000 r.p.m.
1 200 W
Collets $\varnothing$ 3/4/6/8 mm
 $\varnothing$ 10 mm

Weight 2.6 kg

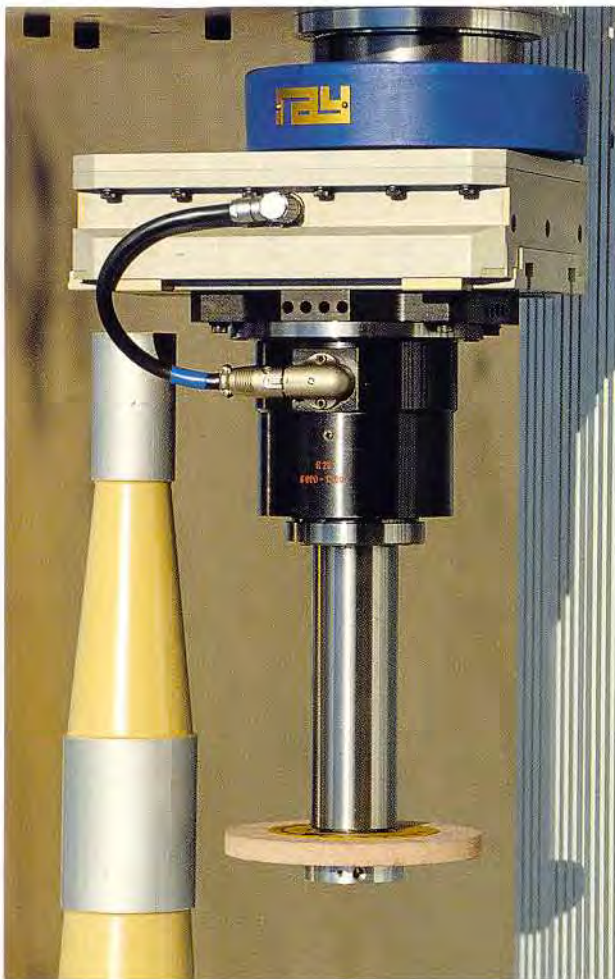
Spindle R60

7 000–15 000 r.p.m.
1 500 W
Holding device for grinding wheel flange
Collets on request
Weight 4.5 kg



Coordinate Grinding Head

RAY KSK 4000



Capacity

Bore diameter maximum 310 mm
Bore depth maximum 250 mm

Concentricity

0,001 mm

High-frequency spindles

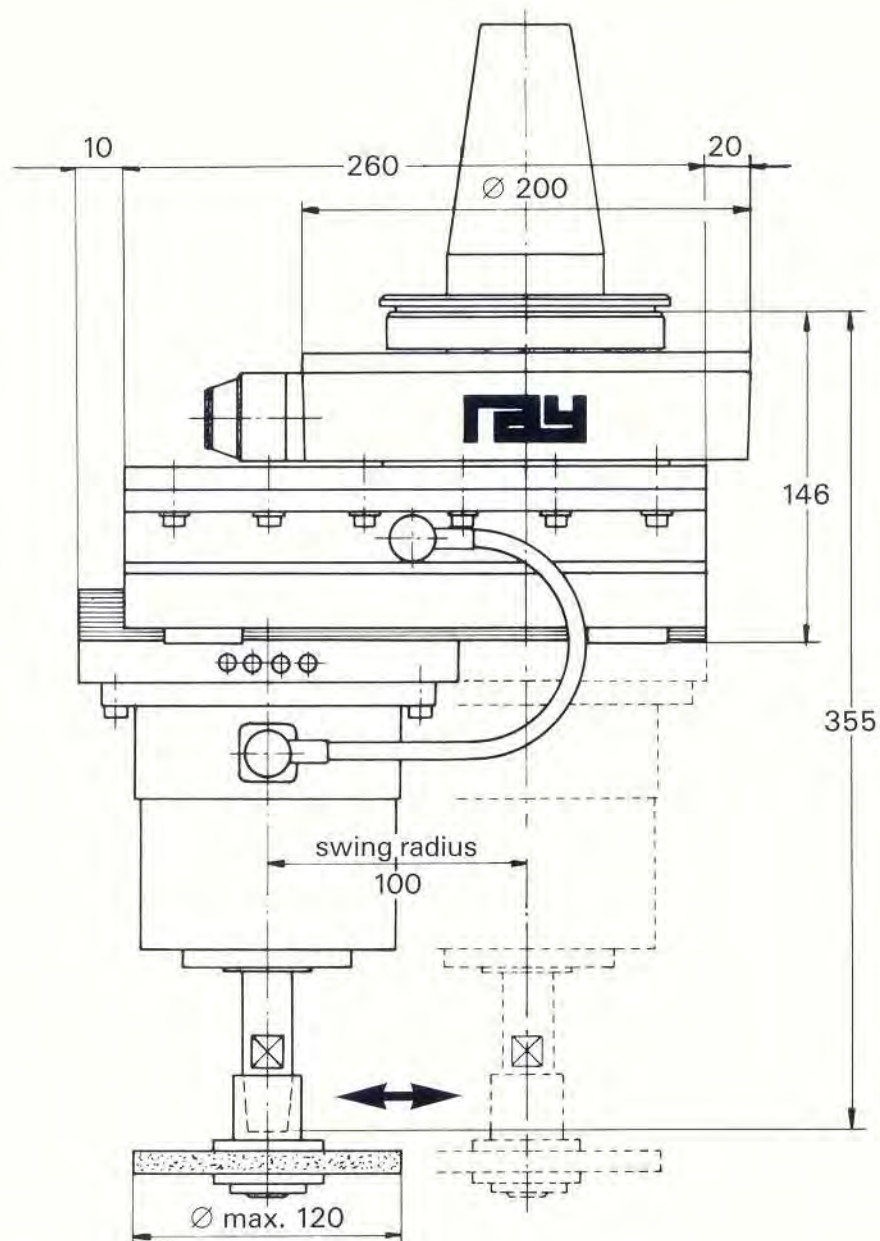
R 250 (6 000–15 000 r.p.m)
R 170 (15 000–40 000 r.p.m)

Weight

approx. 31 kg

To use on jig borer, horizontal boring machines and machining centers.

- Completely electronically controlled by means of a mobile switch board.
- High frequency spindles exchangeable and movable.
- Strong construction, no maintenance.
- Fixing cone interchangeable.



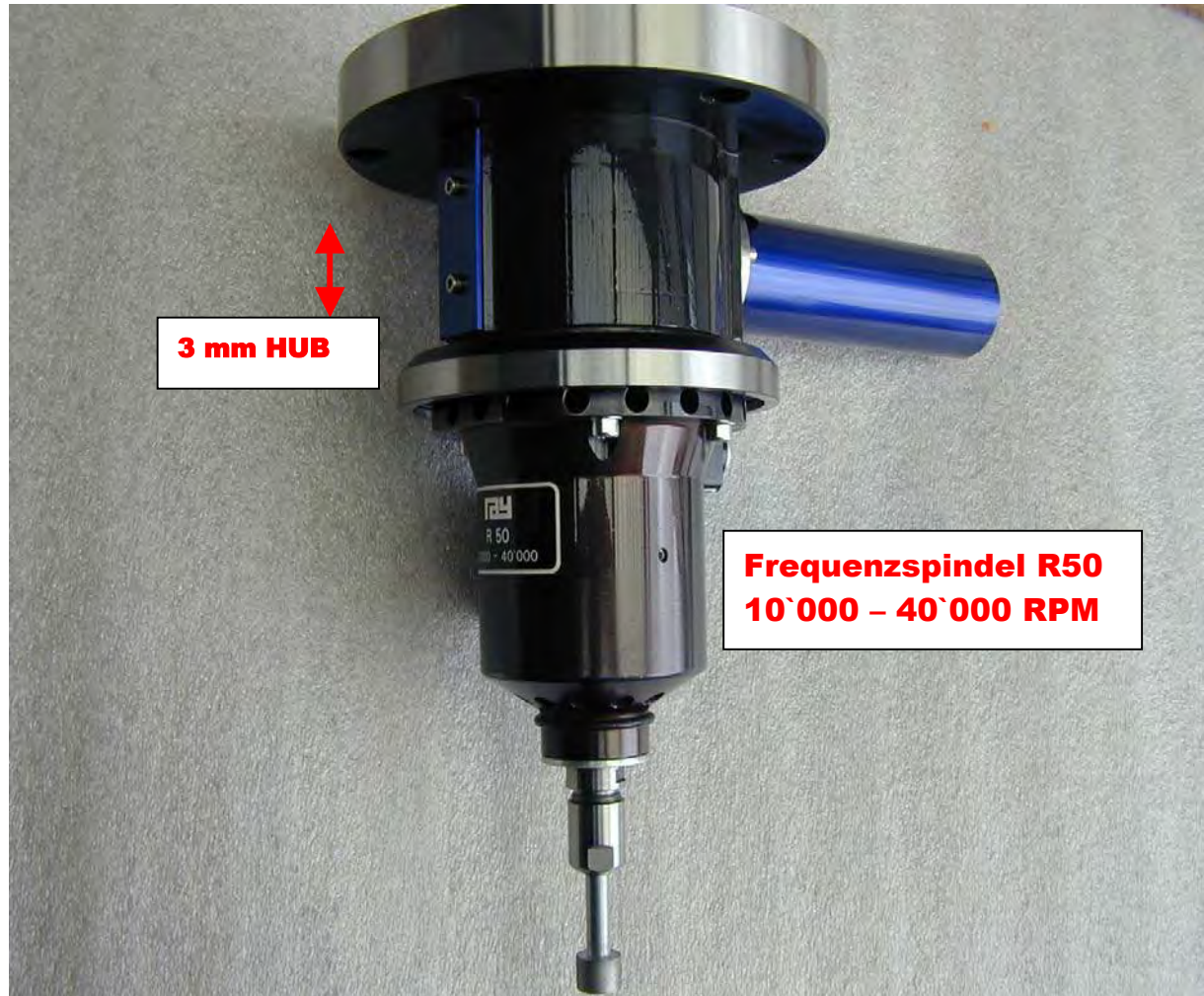
Spindle R 250

Power 1 000 Watt
 Speed 6 000–15 000 r.p.m.
 Wheel flange $\varnothing 20$ mm
 Prolonging device T 150 (150 mm)
 Collets $\varnothing 1$ –10 mm on request
 Weight approx. 8 kg

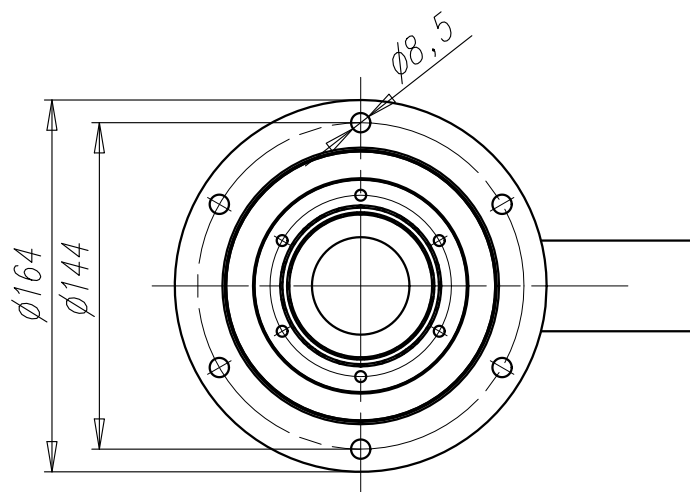
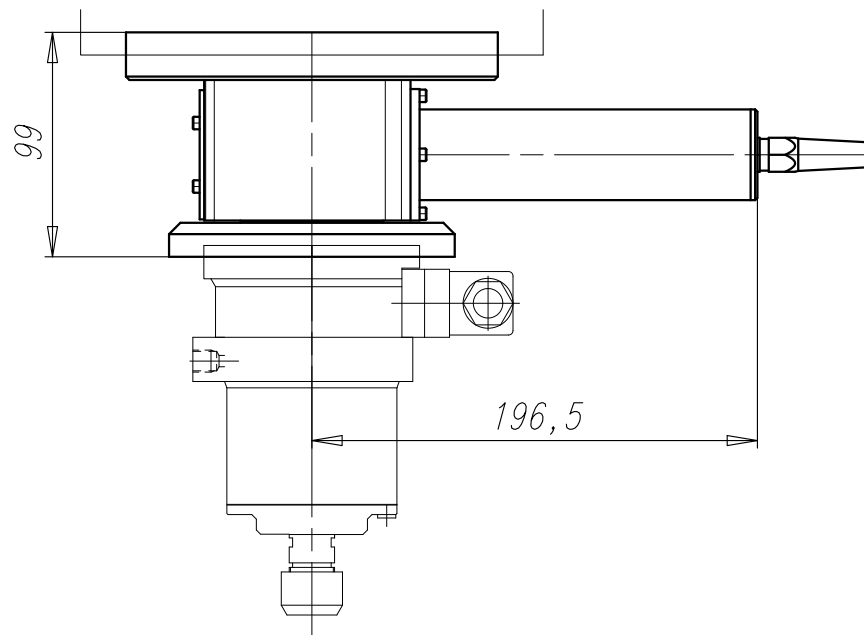
Spindle R 170

Power 500 Watt
 Speed 15 000–40 000 r.p.m.
 Collets $\varnothing 3/4/6/8$ mm
 Prolonging device T 120 (120 mm)
 T 86 (86 mm)
 Weight approx. 4 kg

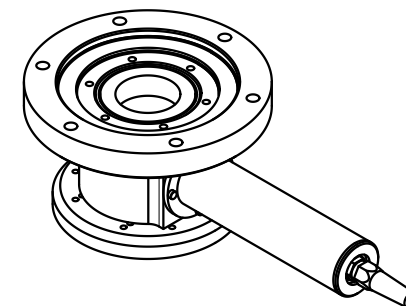
NEW RAY CAM - GRINDER

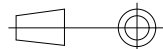


Diese Zeichnung ist unser geistiges Eigentum.
Sie darf weder kopiert, vervielfältigt noch
Drittpersonen zugänglich gemacht werden.



Hub: 3mm fest
Geschw: max 350 H/min
Geeignet für: R50
R50U(Wassergekühlt)
R3
R30W(Wassergekühlt)



Bemerkungen: ...			
	Gezeichnet durch: <i>Shr</i>	Gewicht: inkl. Spindel R50U 9,1 Kg	
	Datum: <i>13.04.04</i>		
Massstab: /			
Titel CAM Gr i n d e r Massblatt			
WERKZEUG- UND MASCHINENFABRIK RAY AG Telefon 01/ 940 55 66			
Machine:	Zusammenstellung sehe Nr: . Z	Zeichnungs Nr: SPR 828	





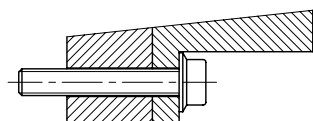
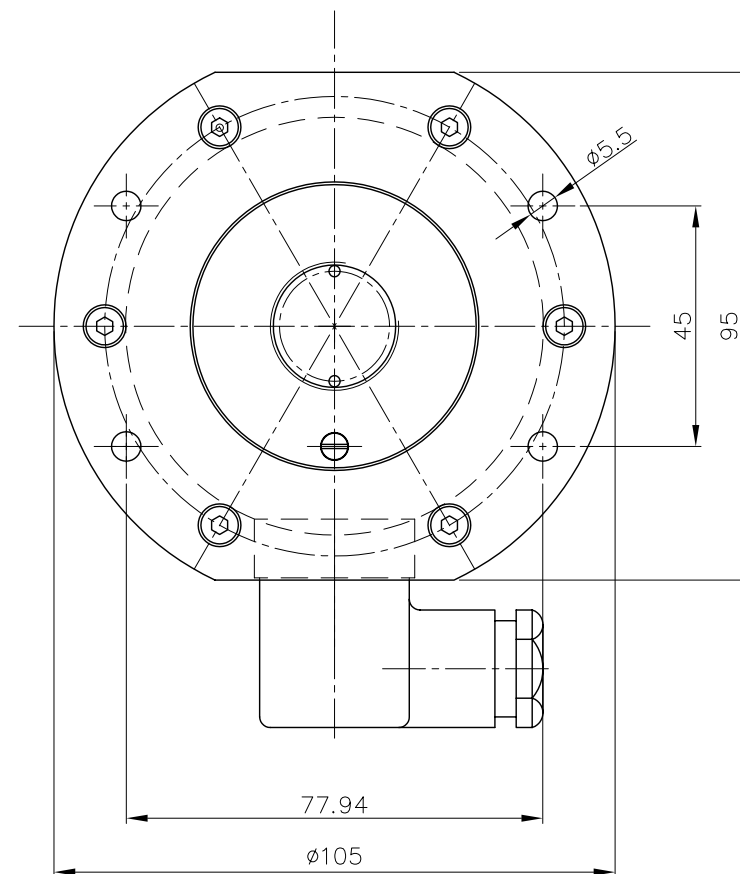
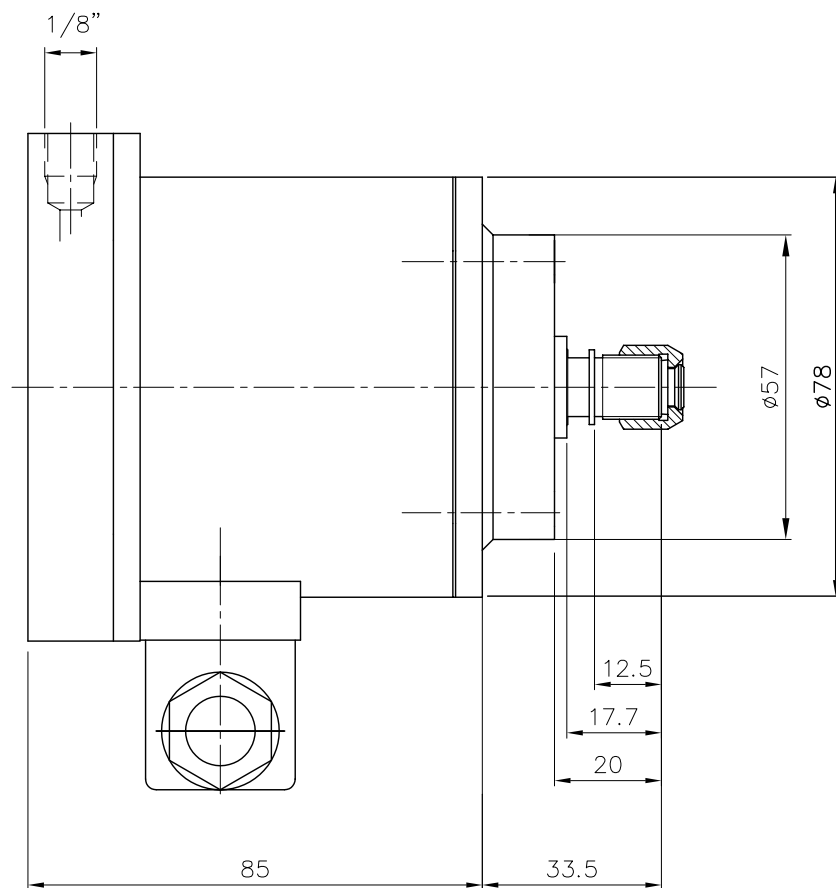
No: 2501

RAY

R 50U

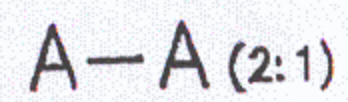
10'000 - 40'000





Drehzahl 25,000~ 80'000 rpm
 Vorspannung Lager 15N
 max Spannange-Ø: 6,00 mm
 1/4"

Schnellfrequenzspindel R 30 W (D10)	2:1	01.02.99	Str
Werkzeug- und Maschinefabrik Ray AG Telefon (01) 905 70 60		SPR 678-m	



Drehzahl
Vorspannung für Lager
HSS7002 und HCS7002

10000-40000 rpm
75 N

A2										
	Schnellfrequenzspindel									
	R 50 U									1:1 (2:1)
										02.06.85
										SPR
	Werkzeug- und Maschinefabrik									
	Ray AG									
	Telefon (01) 940 55 49									
										SPR 720



Cam grinding head KUS 2500



Cam grinding head KUS 2500



Coordinate grinding head KSK 4000

RAY solves the problems of
internal grinding **surface grinding**
cam grinding **slot grinding**
external grinding

RAY Ltd. offers the coordinate grinding head in three sizes, the small head with a weight of 9 kg, the bigger one with 265 kg. Apart from coordinate grinding heads, we also manufacture high-frequency spindles for speeds of 6000 to 100 000 r.p.m. with a power range of 250 to 1500 Watt.

For the working of cams, we have developed the cam grinding head. Where this head cannot be employed any more, there is the possibility of using the oscillating apparatus.

Ask for the corresponding leaflets, or even better ask your agent for a demonstration without obligation.



www.hansungs.co.kr
hsbs@hansungs.co.kr

(주)한성GT 435-831 경기도 군포시 고래들길 48번지
 TEL. 031-428-8200 FAX. 031-455-1818
 공장 경기도 화성시 마도면 쌍송리 마도공단로 5길 53

창원사무소 TEL. 055-296-1634 FAX. 055-274-1654
 부산사무소 TEL. 051-319-4525 FAX. 051-319-4527
 광주사무소 TEL. 062-524-1364 FAX. 062-524-1365
 익산사무소 TEL. 063-833-2278 FAX. 063-833-2279
 대구사무소 TEL. 053-551-0660 FAX. 053-551-0661
 울산사무소 TEL. 052-257-0661 FAX. 052-257-0689



RAY Ltd. Tool and Machine Factory

Stationsstrasse 77

CH-8606 Nänikon ZH

Phone +41 (0)1 940 55 66

Fax +41 (0)1 941 14 53

www.rayag.com

info@rayag.com

