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ORS KOREA

“The world rotates with us”



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ORSKOREA'S pursuit is to take the next step in the development of smart machines.

Combining Korea's Mechanical Engineering skills and **Turkey's Bearing Manufacturing know-hows** to move forward.

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ORSKOREA'S next step for the next generation of Smart Machines.

With the constant development of Korea's technology, ORSKOREA has been manufacturing Grinding Machines that are of the highest standard. Working together with Korea's automobile and electronics industries. With nearly two decades of experience manufacturing Grinding Machines and Spindles. The new beginning of ORSKOREA starts with its new name.

At ORSKOREA
we build
our reputation and
trust with quality
and results.

Palman Daejanggyeong (Tripitaka Koreana)

Carved during the Goryeo Dynasty and today officially designated Korea's National Treasure No. 32, the wooden printing blocks of the Tripitaka Koreana are stored at Haein Temple in South Gyeongsang Province. These 81,258 woodblocks contain the world's oldest existing and most complete version of the Buddhist canon. The Tripitaka Koreana is also highly valued artistically for the beautifully carved rendering of the more than 52 million characters that it comprises. In 1995 the Tripitaka Koreana was officially registered by UNESCO as a World Cultural Property.

Company history

2000. 08	Founded (ZIMECS CO.)
2002. 06	Developed High Frequency Spindle 10,000~120,000 rpm Developed Taper Roller Back-face Grinder
2004. 10	Developed Hydro-Static Spindle
12	Developed Built-in type Air Spindle
2005. 12	Developed BRG. Grinder (Race, Rib, External, Centerless, Lapping)
2006. 08	Developed Orbital Forming Machine (Hub Bearing for Automobile)
2009. 07	Developed Super Finishing Machine for Taper Roller BRG.
2010. 02	Developed Face Grinding Machines for Engine Valve Developed Hydro-Static Guide Way Developed Bearing Grinding Spindle for wind power generation Developed Taper BRG. Race Grinding Machine
2011. 05	Renamed to SMSB Co., Ltd.
08	Acquired ISO 9001 certification
12	Started of export Grinding Machines for bearing First meeting of ORS & SMSB
2013. 08	Developed Double disc grinder & Thrust Bearing Race grinder
11	Exhibition MATOF 2013 (SGI120 & HF SPINDLES)
12	CE & KCS Mark Certificated
2015. 12	Deveolped Large size Centerless Grinder (SGC 500)
2016. 12	Deveolped 5-axis Screw Grinder
2018. 02	GrindTec Exhibitor
2019. 05	ORSKOREA LLC is established. (Joint venture: ORS BEARINGS + SMSB)
2020. 01	Development of Crack Tester
2021. 08	Development of Internal & External Simultaneous Grinding Machine
2021. 10	Exhibitor at EMO Milano 2021



ORS

ORSKOREA is the first local branch of ORS. In Korea, ORS is located in Ankara, the capital of Turkey. Since its establishment in 1982, ORS is now one of the top manufacturer and supplier to the European global carmakers.



Real solutions for real challenges.



KOREA

We design our products with our clients in mind. Our user-friendly interface and design allows the operation of our machines easily and intuitively. We are currently engineering and developing machines that are self-controlled and operated.



At ORSKOREA,
our products
quality and
performance is
our core value.
Strong,
high speed
and high precision.

At ORSKOREA, the quality and performance of our products is our core value. Strong, high speed and high precision. With creative idea implementation and user-oriented design. ORSKOREA has been a model for small and medium-size companies in the Grinding machines and spindle manufacturing industry. Our goal is to work with our clients for their constant growth and development. Let us show you the new possibilities.

Certifications & Patents





Grinding Machines

We at ORSKOREA understands that a great product involves many moving parts to work in synchronization. Great work comes from great detail and every step of our production is carefully tested for the highest standard in quality. Dedicated to developing cutting-edge Smart Grinding Machines. For machine used in the manufacturing of precision machinery parts such as bearings and other various automobile parts, ORSKOREA is your solution.





Internal Grinding Machine

SGI 40

Specifications

Part	Description
Grinding Type	NC oscillation or Plunge
Workpiece Mounting	Two Roll & One Shoe (or Air Chuck)
Machining Dia. Range	8 to 40
Machining Width Range	5 to 40
Machining Bore Range	5 to 30
LOADER	Flow Pusher Type
DRESS Type	Up-down Type Rotary Dresser
W/H Rotating Angle	± 1 °
Spindle Height	about FL 950
Work Spindle RPM	220 to 2,000 rpm
Hydraulic TANK Capacity	40 Liter
Outer Dimension	1600×1400×1800
Weight	3.0 Ton

Motor

Part	Description
Cross Slide	AC SERVO 1.5 kW
G.W Table	AC SERVO 1.5 kW
W/H Drive	0.2kW×4P
Dresser	H/F Spindle (BMR:GER)
G/W	ORSKOREA H/F Spindles
Oil Lubrication	0.7kW (Willy-Vogel)

* Option High Frequency Grinding Spindle. etc

Grinding Type



Internal Grinding Machine

SGI 150

Specifications

Part	Description
Grinding Type	NC oscillation or Plunge
Workpiece Mounting	Two Shoe & Magnetic Chucking
Machining Dia. Range	12 to 150
Machining Width Range	5 to 60
Machining Bore Range	5 to 30
LOADER	Flow Pusher Type or Cassette Type
DRESS Type	Up-down Rotary Dresser or Point Dresser
W/H Rotating Angle	0° to 30°
Spindle Height	About FL 1050
Work Spindle RPM	400 to 3,600 rpm
Hydraulic TANK Capacity	40 Liter
Outer Dimension	200×1875×1650
Weight	4.0 Ton

Motor

Part	Description
Cross Slide	AC SERVO 1.5 kW
G.W Table	AC SERVO 1.5 kW
W/H Drive	1.5kW 4P AV Motor
Dresser	Hydraulic Motor
G/W	ORSKOREA H/F Spindles
Oil Pressure	1.5kW 4P A.C Motor

* Option High Frequency Grinding Spindle. etc

Grinding Type



Internal Grinding Machine

SGI 120

Specifications

Part	Description
Grinding Type	NC oscillation or Plunge
Workpiece Mounting	Two Shoe & Magnet Chucking
Machining Dia. Range	20 to 120
Machining Width Range	5 to 40
Machining Bore Range	12 to 100
LOADER	Flow Type or Cassette Type
DRESS Type	Up-down Type Point(rotary)Diamond Dresser
W/H Rotating Angle	± 1 ° /-2 to +30 °
Spindle Height	about FL 1050
Work Spindle RPM	220 to 800 rpm/500 to 2,000 rpm(Two Speed)
Hydraulic TANK Capacity	40 Liter
Outer Dimension	2100×1900×1950H
Weight	3.8 Ton

Motor

Part	Description
Cross Slide	AC SERVO 1.5 kW
G.W Table	AC SERVO 1.5 kW
Spindle Drive	1.5kW 2P A.C Motor
G.W(Belt Drive)	7.5kW 2P AC Motor
Oil Pressure	1.5kW 4P AC Motor

* Option High Frequency Grinding Spindle. etc

Grinding Type



Internal Grinding Machine

SGI 200

Specifications

Part	Description
Grinding Type	NC oscillation or Plunge
Workpiece Mounting	Two Shoe & Magnet Chucking
Machining Dia. Range	90 to 220
Machining Width Range	20 to 80
Machining Bore Range	60 to 200
LOADER	Cassette Type or ETC
DRESS Type	Up-down Type Point(rotary)Diamond Dresser
Spindle Rotating Angle	(OPTION : -2 to +30 degree)
Spindle Height	about FL 1050
Work Spindle RPM	220 to 800 rpm/500 to 2,000 rpm(Two Speed)
Cross Slide Stroke	
Hydraulic TANK Capacity	40 Liter
Outer Dimension	2100×1900×1950H
Weight	5.0 Ton

Motor

Part	Description
Cross Slide	AC SERVO 1.5 kW
G.W Table	AC SERVO 3.0 kW
Work Spindle	1.5kW 4P AC Motor
G.W(Belt Drive)	7.5kW 2P AC Motor
Oil Pressure	1.5kW 4P AC Motor

* Option High Frequency Grinding Spindle. etc

Grinding Type





Internal Grinding Machine SGI 200(W)

Specifications

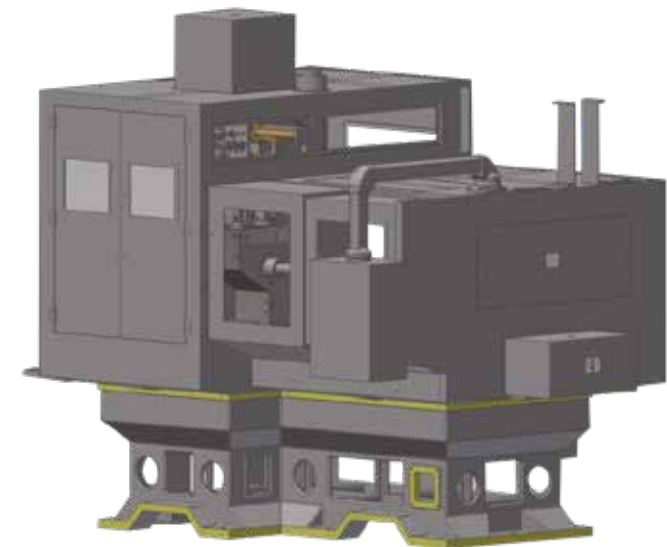
Part	Description
Grinding Type	NC oscillation or Plunge
Workpiece Mounting	Diaphragm Chucking(HYD' Chuck)
Machining Dia. Range	90 to 220
Machining Width Range	20 to 80
Machining Bore Range	60 to 200
LOADER	Double Arm Type(SERVO)
DRESS TYPE	Fixed Type Rotary Form Dresser(HYD)
Spindle Rotating Angle	± 1 ° (OPTION : -2 to +30 degree)
Spindle Height	about FL 1200 (1000)
Work Spindle RPM	Max 4,000 rpm(SERVO)
Hydraulic TANK Capacity	40 Liter
Outer Dimension	2100×1900×1950H
Weight	5.5 Ton

Motor

Part	Description
Cross Slide	AC SERVO 3.5 kW
G.W Table	AC SERVO 3.5 kW
Work Spindle	AC SERVO 7.0 kW
G.W	High Frequency Spindle
Hydraulic	1.5kW 4P AC Motor

* Option High Frequency Grinding Spindle, etc

Grinding Type



External Grinding Machine SGE 500

Specifications

Part	Description
Grinding Type	NC controlled Plunge
Workpiece Mounting	Two Shoe & Magnet Chuck
Machining Dia. Range	20 to 100
Machining Width Range	10 to 50
Loader	Single or Double Arm Type
Dresser	Forming Dresser Spindle
Spindle Angle Range	OPTION -6 to +35degree
Grinding Spindle	Hydro-Static or Rolling Bearing Type
Spindle Height	about FL 1150
Work Spindle RPM	150 to 1800 rpm
Grinding Wheel Spindle RPM	MAX. 2,200 rpm(3,000m/min)
Hydraulic TANK Capacity	40 Liter
Outer Dimension	2100×1900×1950H
Weight	5.5 Ton

G.W

Part	Description
Dia.	510 mm
Width	50 mm
Bore	304.8 mm

Motor

Part	Description
G.W Table	AC SERVO 3.0kW
Dress Table	AC SERVO 1.5kW
Spindle Drive	1.5kW 4P AC Motor
G.W(Belt Drive)	11kW 4P AC Motor
Oil Pressure	0.75kW 2P AC Motor

Grinding Type



External Grinding Machine SGE 400

Specifications

Part	Description
Grinding Type	NC controlled Plunge
Workpiece Mounting	Two Shoe & Magnet Chuck
Machining Dia. Range	10 to 65
Machining Width Range	6 to 50
Loader	Single or Double Arm Type
Dresser	Forming Dresser Spindle
Spindle Angle Range	OPTION -6 to +35degree
Grinding Spindle	Hydro-Static or Rolling Bearing Type
Spindle Height	about FL 1150
Work Spindle RPM	150 to 1800 rpm
Grinding Wheel Spindle RPM	MAX. 2,500 rpm
Hydraulic TANK Capacity	40 Liter
Outer Dimension	2100×1900×1950H
Weight	4.3 Ton

G.W

Part	Description
Dia.	510(450) mm
Width	50 mm
Bore	304.8 mm

Motor

Part	Description
G.W Table	AC SERVO 1.5kW
Dress Table	AC SERVO 1.5kW
Spindle Drive	1.5kW 4P AC Motor
G.W(Belt Drive)	7.5kW 4P AC Motor
Oil Pressure	1.5kW 4P AC Motor

Grinding Type



External Grinding Machine SGE 600(W)

Specifications

Part	Description
Grinding Type	NC controlled Plunge
Workpiece Mounting	Two Shoe & Magnetic Chucking
Machining Dia. Range	80 to 150
Machining Width Range	10 to 80
Loader	Double Arm Type
Dresser	Forming Dresser Spindle
Spindle Angle Range	OPTION -6 to +35degree
Grinding Spindle	Rolling Bearing Type
Spindle Height	about FL 1115
Work Spindle RPM	Max 1200 rpm
Grinding Wheel Spindle RPM	Max3,100 rpm
Hydraulic TANK Capacity	80 Liter
Outer Dimension	4000×3500×1950H
Weight	7.0 Ton

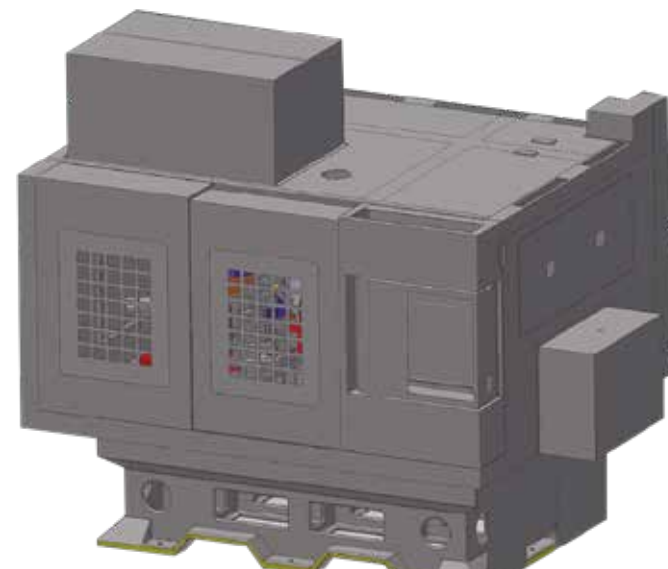
G.W

Part	Description
Dia.	610 mm
Width	50 mm
Bore	304.8 mm

Motor

Part	Description
G.W Table(X,Z)	AC SERVO 3.5kW×2axes
Dress Table	AC SERVO 2.0kW
Work Spindle Drive	AC SERVO 7.0kW
Loading (Stroke)	AC SERVO 1.4kW
Loading (Swing)	AC SERVO 1.6kW
G.W(Belt Drive)	37(22) kW 4P AC Motor
ROLL Dresser	0.75kW 2P AC Motor

Grinding Type





Centerless Grinding Machine

SGC 200

Specifications

Part	Description
Grinding Type	Centerless Through Feed or Infeed
Workpiece Mounting	Workrest Support
Machining Dia. Range	2 to 120
Max. Machining Length	max 200 mm
LOADING	Through Feeding or Infeed
DRESS Type	Traverse Type Point Diamond Dresser
Hydraulic TANK Capacity	60 Liter
Outer Dimension	2000×1600×1600H
Weight	4.0Ton

G.W

Part	Description
Dia.	510 mm
Width	255 mm
Bore	304.8 mm

R.W

Part	Description
Dia.	305mm
Width	255 mm
Bore	177.8 mm

Motor

Part	Description
G.W Table	AC SERVO 3.0kW
Dress Table	AC SERVO 1.5kW
Spindle Drive	1.5kW 4P AC Motor
G.W(Belt Drive)	11kW 4P AC Motor
Oil Pressure	0.75kW 2P AC Motor

Grinding Type



Centerless Grinding Machine

SGC 500

Specifications

Part	Description
Grinding Type	Centerless Through Feed (or Infeed)
Workpiece Mounting	Workrest Support
Machining Dia. Range	10 to 150
Max. Machining Length	max 500 mm
LOADING	Through Feeding (or Infeed)
DRESS Type	Traverse Type Point (Multi)Dia' Dresser
Hydraulic TANK Capacity	80 Liter
Outer Dimension	3500×2500×1800H
Weight	11 Ton

G.W

Part	Description
Dia.	610 mm
Width	510 mm
Bore	304.8 mm

R.W

Part	Description
Dia.	380 mm
Width	510 mm
Bore	254 mm

Motor

Part	Description
G.W Drive	45(37)kW 4P AC Motor
R.W Drive	5.5kW 4P (Gear Reducer Type)
Oil Pressure	0.1 kW
G/W SLIDE FEED	3.5kW AC SERVO
R/W SLIDE FEED	0.75kW AC SERVO
G/W Dia Traverse	0.75kW AC SERVO
G/W Dia Feed	0.75kW AC SERVO
R/W Dia Traverse	0.75kW AC SERVO

Grinding Type



Centerless Grinding Machine

SGC 300

Specifications

Part	Description
Grinding Type	Centerless Through Feed or Infeed
Workpiece Mounting	Workrest Support
Machining Dia. Range	4 to 120
Max. Machining Length	max 300 mm
LOADING	Through Feeding or Infeed
DRESS Type	Traverse Type Point Diamond Dresser
Hydraulic TANK Capacity	60 Liter
Outer Dimension	2500×2000×1700H
Weight	5.5 Ton

G.W

Part	Description
Dia.	610 mm
Width	305 mm
Bore	304.8 mm

R.W

Part	Description
Dia.	330 mm
Width	305 mm
Bore	203.2 mm

Motor

Part	Description
R.W Table	AC SERVO 3.7kW
G.W Drive	22kW 4P AC Motor
R.W Drive	2.2kW 4P (Gear Reducer Type)
Oil Pressure	

Grinding Type



Centerless Grinding Machine

SGC 500C

Specifications

Part	Description
Grinding Type	Centerless Through Feed (or Infeed)
Workpiece Mounting	Workrest Support
Machining Dia. Range	10 to 150
Max. Machining Length	max 500 mm
LOADING	Through Feeding (or Infeed)
DRESS Type	Traverse Type Point (Multi)Dia' Dresser
Hydraulic TANK Capacity	80 Liter
Outer Dimension	3500×2500×1800H
Weight	11 Ton

G.W

Part	Description
Dia.	610 mm
Width	510 mm
Bore	304.8 mm

R.W

Part	Description
Dia.	380 mm
Width	510 mm
Bore	254 mm

Motor

Part	Description
G.W Drive	45(37)kw 4P AC Motor
R.W Drive	5.5kw 4P (Gear Reducer Type)
Oil Pressure	0.1 kW
G/W SLIDE FEED	3.5kW AC SERVO
R/W SLIDE FEED	0.75kW AC SERVO
G/W Dia Traverse	0.75kW AC SERVO
G/W Dia Feed	0.75kW AC SERVO
R/W Dia Traverse	0.75kW AC SERVO

Grinding Type





Centerless Grinding Machine

SGC 500K

Specifications

Part	Description
Grinding Type	Centerless Through Feed (or Infeed)
Workpiece Mounting	Workrest Support
Machining Dia. Range	10 to 150
Max. Machining Length	max 500 mm
LOADING	Through Feeding (or Infeed)
DRESS Type	Traverse Type Point (Multi)Dia' Dresser
Hydraulic TANK Capacity	None
Outer Dimension	3500×2600×1800H
Weight	11 Ton

G.W

Part	Description
Dia.	610 mm
Width	510 mm
Bore	304.8 mm

R.W

Part	Description
Dia.	380 mm
Width	510 mm
Bore	254 mm

Motor

Part	Description
R.W Table(Lower)	2.0kW AC SERVO
R.W Table(Upper)	0.75kW AC SERVO
G.W 구동	45kW(37kw) 4P AC Motor
R.W 구동	3.7(5.5)kW 4P (Gear Reducer Type)
DRESSER(Feed)	0.75kW AC SERVO
DRESSER(Traverse)	0.75kW AC SERVO

Grinding Type



Super Finishing Machine

SSF 85B(R)/150

Specifications

Part	Description
Machining Type	2Head Type Stone Oscillating
Workpiece Mounting	Arbor(Socket Ring) + Pressure Roller
Machining Dia. Range	25 to 85 (Outer Race) 15 to 60 (Inner Race)
Machining Width Range	6 to 40 (over ID PHI 10)
Loader	Index Type
Oscillating Unit	LM Bearing Slide
Oscillating Stroke	0~18° / 0~8mm
Oscillating Speed	50 to 2,500 fpm
Spindle RPM	MAX 3,000 rpm (Outer Race) MAX 2,500 rpm (Inner Race)
Hydraulic TANK Capacity	4.5 bar
Outer Dimension	1100×1200×2000H
Weight	2.0 Ton

Motor

Part	Description
Oscillation Drive	0.37 kW 2P AC Motor(R 0.8kW SERVO)
Spindle Drive	2.2 kW 2P AC Motor
Oil Pressure	0.37 kW 4P AC Motor(BRAKE)

Grinding Type



Super Finishing Machine

SSF 80RD

Specifications

Part	Description
Machining Type	2 Head Type Stone Oscillating
Workpiece Mounting	Two Shoe + Pressure Roller
Machining Dia. Range	O.D PHI 10 to 80 (Bore) Inner Ring ID 10 to 50
Machining Width Range	8 to 40
Loader	Cassette Type
Oscillating Unit	LM Bearing Slide
Oscillating Stroke	0.5, 1.0, 1.5, 2.0, 2.5
Oscillating Speed	150 to 1800 cpm
Spindle RPM	MAX 3,000 rpm (Outer Race) MAX 2,200 rpm (Inner Race)
Hydraulic TANK Capacity	40 Liter
Outer Dimension	1800×1000×1800H
Weight	2.5 Ton

Motor

Part	Description
Oscillation Drive	0.4kW AC Servo
Spindle Drive	0.75kW 4P AC Motor
Oil Pressure	0.05kW 4P AC Motor

Grinding Type



Super Finishing Machine

SSF 110

Specifications

Part	Description
Machining Type	2Head Type Stone Oscillating
Workpiece Mounting	Arbor(Socket Ring) + Pressure Roller
Machining Dia. Range	28 to 110 (Outer Ring) 17 to 90 (Inner Ring)
Machining Width Range	Max 50
Loader	CLAW Type 2 Direction Traverse
Oscillating Unit	LM Bearing Slide
Oscillating Stroke	10° to 35°
Oscillating Speed	60 to 500 cpm
Spindle RPM	500 to 5000 rpm (Outer Race) 900 to 9000 rpm (Inner Race)
Hydraulic TANK Capacity	4.5 bar
Outer Dimension	1800x1760x2200H
Weight	3.5 Ton

Motor

Part	Description
Oscillation Drive	0.4kW A.C Motor
Spindle Drive	0.75kW 4P A.C Motor
Oil Pressure	0.05kW 4P A.C Motor

Grinding Type





Super Finishing Machine

SSF 120 A/B

Specifications

Part	Description
Machining Type	Oscillating
Workpiece Mounting	Arbor (Socket Ring) / Pressure Roller & 2 Shoe
Machining Dia. Range	15 to 110
	15 to 90
Machining Width Range	6 to 65 (Cover ID PHI 10)
Loader	Cassette Type
Oscillating Unit	Air Bearing Slide
Oscilating Stroke	0.5, 1, 1.5, 2, 2.5
Oscilating Speed	300 to 2000 cpm
Spindle RPM	MAX 3000 rpm (Outer Race)
	MAX 2200 rpm (Inner Race)
Hydraulic TANK Capacity	40L
Outer Dimension	1800x1000x1800H
Weight	2.5 Ton

Motor

Part	Description
Oscillation Drive	0.4kW A.C Servo
Spindle Drive	1.5kW 4P A.C Motor
Oil Pressure	1.5kW 4P A.C Motor

Grinding Type



Super Finishing Machine

SLR 650(500)

Specifications

Part	Description
Machining Type	thru-feed fully automatic
Workpiece Mounting	support rool & feed roll
	(phi 152 x650L)
Machining Dia. Range	4.5 to 60
Machining Length Range	max1000
Oscillation	Air Bearing Slide
Oscillation Stroke	0.5, 1.0, 1.5, 2.0 ,2.5
Oscillation Speed	700 to 2,500 fpm
Stone Head Unit	Air cylinder Pressurizing type 6~8sets
S/H Pressure	1.0 to 4.0 kgf/cm2
Tilting Angle	± 5°
Swivel Angle	± 2°
Up-Down Stroke	90 mm
Outer Dimension	1600x900x2100H
Weight	2.5 Ton

Motor

Part	Description
Oscillation	0.6kW 4P AC Motor
Roll Drive	3.7kW 4P AC Motor

Grinding Type



Super Finishing Machine

SSF 150(V)

Specifications

Part	Description
Machining Type	2Head Type Stone Oscillating
Workpiece Mounting	Arbor(Socket Ring) + Pressure Roller
Machining Dia. Range	85 to 200 (Outer Race)
	70 to 150 (Inner Race)
Machining Width Range	20 to 80
Loader	CLAW Type 2 Direction Traverse
Oscillating Unit	LM Bearing Slide
Oscilating Stroke	0~18° / 0~8mm
Oscilating Speed	60 to 500 spm
Spindle RPM	MAX 3,000 rpm (Outer Race)
	MAX 2,500 rpm (Inner Race)
Hydraulic TANK Capacity	4.5 bar
Outer Dimension	2000x2300x2100H
Weight	3.5 Ton

Motor

Part	Description
Oscillation Drive	1.5kW SERVO
Spindle Drive	1.5kW 2P AC Motor
Oil Pressure	1.5kW SERVO (Brake)

Grinding Type



T/R Back Face Grinding Machine

SGRB 350(250)

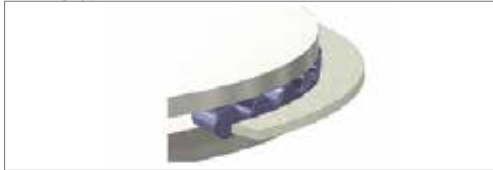
Specifications

Part	Description
Machining Type	Pressing Upper Ring + Lower Ring
	Idle carrier
Machining Dia. Range	Max 25 (15)
Machining Length Range	Max 40 (30)
R Range	Max R350 (R230)
Speed Control	Differential Drive Gear
Main Spindle	100 – 400 rpm
Lower Spindle	100 – 400 rpm
Hydraulic TANK Capacity	60 Liter
Outer Dimension	1200x1200x1800H
Weight	2.5 Ton

Motor

Part	Description
Main	11kW 6P AC Motor
Differential	0.4kW 4P Stepless
Oil Pressure	1.5kW 4P AC Motor

Grinding Type





Horizontal Type Double Disc Grinding M/C

SGDH 585

Specifications

Part	Description
Grinding Type	Thru Feed (or Rotary Carrier)
Machining Dia. Range	Max 135
Machining Width Range	Max 50
Grinding Wheel	O.D 585×10×75W
Wheel Speed	Max 900rpm
Carrier Size	Max 1,050
Carrier Speed	0.5 – 3 rpm
Space between L/R Wheels	130
Dresser	Swing Arm type Point Dresser
Outer Dimension	3000×2800×1750H
Weight	7.5 Ton

Motor

Part	Description
G.W Motor	22kW 4P
Carrier	0.75kW 4P
Dresser	0.1kW 4p (Speed Control)
G. W Feed	0.5kW A.C Servo

Grinding Type



Vertical Type Double Disc Grinding M/C

SGDV 360

Specifications

Part	Description
Grinding Type	IN-FEED
Machining Dia. Range	Max 50
Machining Width Range	Max 40
Grinding Wheel	O.D 355(305)×205×50T(CBN:3T)
Wheel Speed	MAX 1800rpm(INVERTER C.W/C.C.W)
Loading	Swing Arm
Space between UP/Dn Wheel	100
Dresser	ROTARY Dresser
Outer Dimension	1500×1800×2500H
Weight	4.5 Ton

Motor

Part	Description
G.W Motor	7.5kW 4P×2SETS
R/D Rotating	0.9kW Speed Variable
Index Carrier	1.0kW A.C Servo
Work Drive	0.4kW A.C Servo×2SETS
G. W Feed	0.4kW A.C Servo×2SETS
Loading	0.5kW A.C Servo

Grinding Type



Horizontal Type Double Disc Grinding M/C

SGDH 760

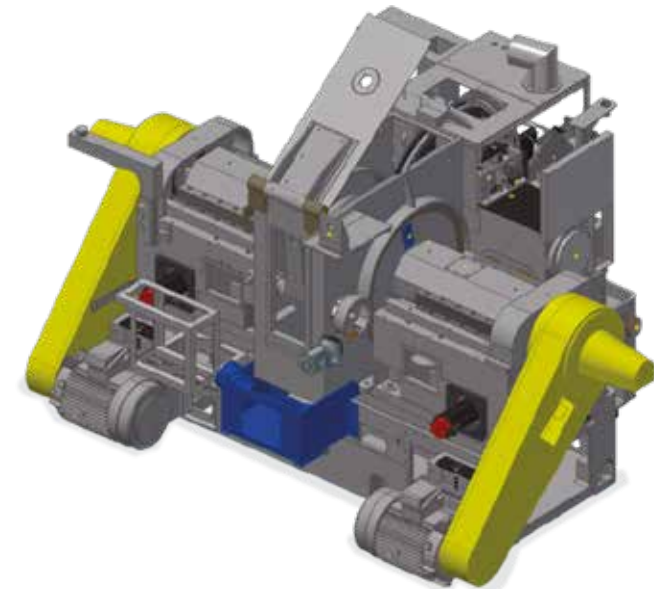
Specifications

Part	Description
Grinding Type	Rotary Carrier or Thru Feed
Machining Dia. Range	Max 180
Machining Width Range	Max 70
Grinding Wheel	O.D 760×80×270
Wheel Speed	Max 700rpm
Carrier Size	Max 1,050
Carrier Speed	0.5 – 3 rpm
Space between L/R Wheels	130
Dresser	Swing Arm type Point Dresser
Outer Dimension	3000×4000×1850H
Weight	12 Ton

Motor

Part	Description
G.W Motor	30kW 4P
Carrier	0.75kW 4P
Dresser	0.1kW 4p (Speed Control)
G. W Feed	1.0kW A.C Servo
G.W Cover	0.1kW 4p

Grinding Type



Vertical Type Double Disc Grinding M/C

SGDV 510

Specifications

Part	Description
Grinding Type	Thrufeed(Carrier)
Machining Dia. Range	Max 60
Machining Width Range	Max 15
Grinding Wheel	O.D 510×205×50T
Wheel Speed	MAX 1040rpm(INVERTER C.W/C.C.W)
Loading	Carrier (O.D 670)
Carrier Speed	4000rpm
Space between L/R Wheel	70
Dresser	Swing Arm Typr Point Dresser
Outer Dimension	1555w×1625L×2200H
Weight	7.5 Ton

Motor

Part	Description
G.W Motor	11kW 4P×2SETS
R/D Rotating	0.9kW Speed Variable
Index Carrier	1.0kW A.C Servo
G. W Feed	0.4kW A.C Servo×2SETS

Grinding Type





Vertical Type Double Disc Grinding M/C SGDV 585

Specifications

Part	Description
Grinding Type	Rotary Carrier
Machining Dia. Range	Max 135
Machining Width Range	Max 50
Grinding Wheel	O.D 585×75×195
Wheel Speed	300 – 900 rpm
Carrier Size	O.D 820
Carrier Speed	0 – 10 rpm(0 – 28.3m/min)
Space between UP/Dn Wheel	80
Dresser	Swing Arm type Point Dresser
Hydraulic TANK Capacity	60 Liter
Outer Dimension	3500×2400×2990H
Weight	8.5 Ton

Motor

Part	Description
G.W Motor	22kW 4P
Carrier	Hydraulic Motor
G. W Feed	2.0kW A.C Servo
Oil Pressure	3.7kW 4P AC Motor

Grinding Type



Vertical Type Double Disc Grinding M/C SGDV 760

Specifications

Part	Description
Grinding Type	Rotary Carrier
Machining Dia. Range	Max 150 PHI
Machining Width Range	15 to 50
Grinding Wheel	O.D 750×75×300
Wheel Speed	300 to 700 rpm
Carrier Size	1020 PHI
Carrier Speed	0 – 10 rpm(0 – 28.3m/min)
Space between UP/Dn Wheel	80
Dresser	Swing Arm type Point Dresser
Hydraulic TANK Capacity	40 Liters
Outer Dimension	3200×3500×4200
Weight	15 Tons

Motor

Part	Description
G.W Motor	37kW 4P A.C Motor
Carrier	1.5kW A.C Servo
G. W Feed	2.0kW A.C Servo
Oil Pressure	1.5kW 4P A.C Motor

Grinding Type



Vertical Type Double Disc Grinding M/C SGDV 585i

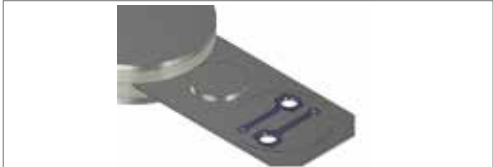
Specifications

Part	Description
Grinding Type	Rotary Carrier
Machining Dia. Range	30 to 100 PHI
Machining Width Range	15 to 50
Grinding Wheel	O.D 585×75×195
Wheel Speed	300 to 1000 rpm
Carrier Size	OD 840
Carrier Speed	0 – 10 rpm(0 – 28.3m/min)
Space between UP/Dn Wheel	80
Dresser	Swing Arm type Point Dresser
Hydraulic TANK Capacity	None
Outer Dimension	2600x2200x3200H
Weight	8.5 Ton

Motor

Part	Description
G.W Motor	22kW 4P A.C Motor
Carrier	0.85 A.C Servo
G. W Feed	2.0kW A.C Servo
Oil Pressure	None

Grinding Type



Screw Grinding Machine SGS 1000

Specifications

Part	Description
Machining Type	Plunge
Workpiece Mounting	Center (BRG. Housing support)
Machining Dia. Range	Max 350
Machining Length Range	Max 950 (G/W 폭 : 50 기준)
Distance between length	Max 1,150
Machining og Pitch	0 to 360
Loading	Manual
Dress	2-axis Point(rotary)Diamond Dresser
G/W Tilting	± 40 °
Diameter of G/W	O.D Ø500 I.D Ø203 (max50W)
Work spindle speed	0.2 to 100 rpm
Dress Feed Slide Stroke	80 mm
Outer Dimension	6000×3100×2000H
Weight	9.5Ton

Motor

Part	Description
Work Slide	AC SERVO 2.0kW
G.W Table	AC SERVO 1.5kW
Work Spindle	AC SERVO 3.5kW
Dress Feed	AC SERVO 0.5kW
Dress Traverse	AC SERVO 0.5kW
G/W Tilting	AC SERVO 0.5kW
G.W Drive	7.5kW 2P AC Motor

Grinding Type





Window Cage Grinding Machine

SGCW 100

Specifications

Part	Description
Machining Type	Plunge
Workpiece Mounting	WIDTH CLAMP(PNEU)
Machining Dia. Range	PHI 43~ 100
Machining Length Range	MAX 55
Work Slide Stroke	60
G/W Slide Stroke	70
Loading	Gantry Type
Dresser	Rotary Dresser on the Work Spindle
Outer Dimension	2200×2100×1900H
Weight	4.5 TON

Motor

Part	Description
Work Slide	AC SERVO 2.0kW
Work spindle	AC SERVO 1.5kW
G/W Spindle (R)	AC SERVO 3.5kW
G/W Spindle (L)	AC SERVO 0.5kW
Loading	AC SERVO 0.5kW

Grinding Type



Hydraulic Single Spindle Turning M/C

SLB 80(120)

Specifications

Part	Description
Machining Dia. Range	Max 60(90)
Machining Width Range	Max 40
Center Height	F.L 1,010 mm
Control	PLC
Hydraulic Chuck Size	6", 8", 9"(Collet or Mandrell)
Spindle Dia	80(120)
Slide	#1, #2
Work Spindle Speed	Max 2,000 rpm
Slide Size	250 W
Outer Dimension	1200×2200×1700H
Weight	3 Ton

Motor

Part	Description
W.H	7.5kW 8P
HYD	2.2kW 4P



C.V.J Inner Ring Ball Track Grinder

SGBT 100

Specifications

Part	Description
Machining Type	2 Head Arc
Workpiece Mounting	Hydraulic
Machining Dia. Range	Max 80 (Min 50)
G/W (Speed)	Max 200 Phi
	H.F SPINDLE 8,000 rpm/17kw ×2SET
Center Height	Max 1,150
Index (등분)	6 HYD Index (8 Servo)
Loading	Gantry or Robot
DRESS 방식	Rotary Form Dresser(phi 125)
DRESS Speed	Max 3,000rpm
Work Slide Stroke	350 mm
G/W Slide Stroke	475 mm
Outer Dimension	2700×1900×2200H
Weight	6.5Ton

Motor

Part	Description
Work Slide	AC SERVO 2.4. kW ×2 HEAD
G.W Table	AC SERVO 2.4 kW ×2 HEAD (Brake)
Loader	AC SERVO 1.0 kW ×2 HEAD
Dress Feed	Installed By Work Slide
Dress Rotate	0.75kW 2P AC Motor
HYD	3.7kW 4P AC Motor
LUB	0.7kW Willy Vogel

Grinding Type



CNC Single Spindle Turning M/C

SLB 80(120)CNC

Specifications

Part	Description
Machining Dia. Range	Max 60(90)
Machining Width Range	Max 40
Center Height	F.L 1,010 mm
Control	CNC (Mitsubishi, Fanuc)
Hydraulic Chuck Size	6", 8", 9"(Collet or Mandrell)
Spindle Dia	80(120)
Slide	#1 or #2
Work Spindle Speed	Max 2,000 rpm
Slide Size	300 W
Outer Dimension	1200×2000×1700H
Weight	3 Ton

Motor

Part	Description
W.H	11kW 6P
HYD	2.2kW 4P





Automation system

- Eddy Current Crack Testing M/C
- Post Process Gauge M/C
- Automatic Assembly M/C
- Ultrasonic Washing M/C
- Workpiece Inspection M/C
- Combining M/C
- Cage Assembly M/C
- Demagnetizing M/C
- Conservation Oil & Visual Inspection M/C
- Radial Clearance Inspection M/C
- Noise & Vibration Tester M/C
- Centrifugal Drying M/C
- Laser Marking M/C
- Greasing & Shielding M/C
- Auto Conveyor Loading System & Line System
- Cup Type Washing + Drying + Sensitivity Checking



High Precision Spindles

High Precision, High Frequency Spindles design and manufacturing is not possible without the Highest Quality Bearings. ORSKOREA applies unique mechanisms and the highest quality bearings to manufacture our High Frequency Spindles. Our spindles reach speeds of up to 120,000 rpm. We are proud to say that this is the Highest Speed Spindle that is manufactured in Korea

Belt design precision spindles and High Frequency Spindles that can operate at High Speed and different speed settings. Large Capacity Built-in Motor Spindles to Hydro-dynamic (static) spindles. ORS BEARINGS, with over 30 years of experience in the Bearing Industry. Combined with ORSKOREA'S experience of machine and spindle manufacturing for nearly 2 decades. We are providing high quality grinding machines and spindles to the world of engineering.



ORSKOREA'S Grinding Machines & Spindles

ORSKOREA is the best choice for spindles.

01
ORSKOREA leads the spindles manufacturing technology in Korea. Our high frequency spindles reach speeds of 120,000 rpm. Our spindle is the highest speed spindle manufactured in Korea.

03
In order to ensure the highest output and durability, we use hybrid ceramic angular bearings from Germany for our spindles. We always provide our clients with the highest DMN standard products.

05
To reduce vibration, we engineered and built our spindles with VPT (Vibration Prevention Technology) to completely prevent the weight from being unbalanced. This process is done by Static and Dynamic Balancing.

07
ORSKOREA is a holder of a diverse spindle patent portfolio. We currently have five patents for high-frequency motor spindles. We apply for patents annually.

09
Our comprehensive design and manufacturing capabilities can accommodate different needs of our clients. Our line of spindles ranges from 10,000 rpm to 120,000 rpm.

02
We are the only company in Korea that has a technological partnership with ORS Inc. By combining the know-hows of machine and spindle manufacturing with precision bearing manufacturing and production. We are able to understand the machine operators and engineers alike.

04
We use Ultra-precision bearings (ISOP2) for our spindles. For top quality spindles this is the industry standard which ORSKOREA abides.

06
ORSKOREA'S spindles are manufactured with the highest quality parts. This allows our spindles to operate at the highest level of accuracy and precision.

08
Applying extensive innovative ideas and with experience in spindles manufacturing, we continuously invest in research and development to further expand our knowledge in the production of spindles.

10
ORSKOREA is a reliable partner for your spindle requirements. From Built-in (HF) motor spindles, Hydro-Static/ Dynamic spindles to Belt-Driven spindles and more. ORSKOREA is your spindle solution.



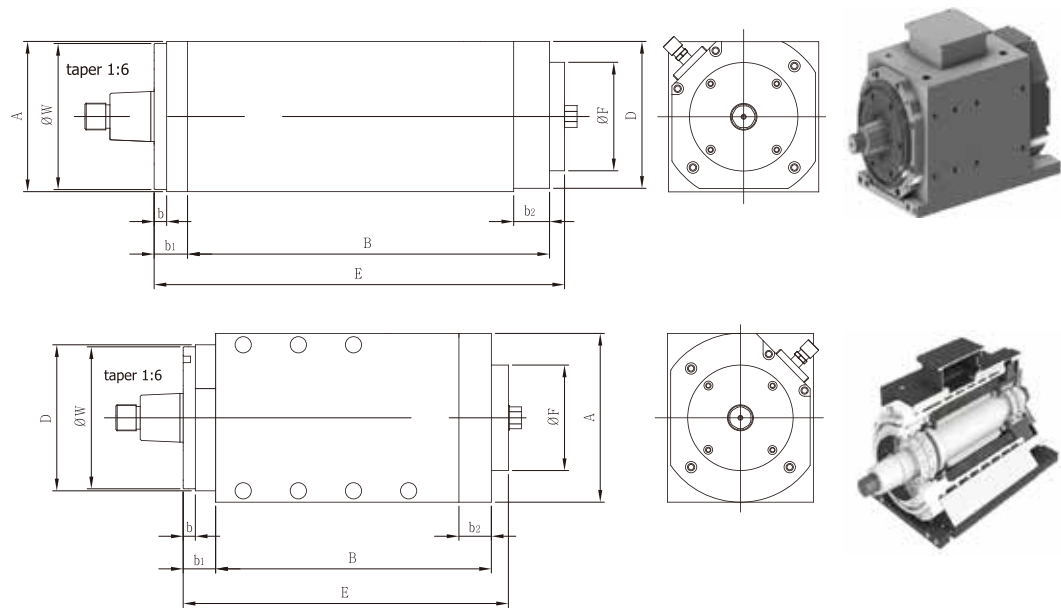
High Frequency Spindles Model : SHS

Model	SPEED MAX.	POWER SPECIFICATIONS						DIMENSION											Without flange	
		Torque	Output 56-60% at speed		Voltage at frequency between															
								A	B	b	D	W	W1	Z	SW	b1	E			
	Nmax [RPM]	M1/6 [NM]	P1/6 [kW]	n [RPM]	V [V]	f k [Hz]	f max [Hz]													
SHS15-18/17	18000	14.8	17	11000	350/(220)	367	600	150	380.5	63.5	150	63.5	65	16	55	80.5	280			
SHS15-30/16	30000	8.5	16	18000	350/(220)	600	1000	150	378.5	61.5	130	53	55	14	48	78.5	280			
SHS15-30/23	30000	12.2	23	18000	350/(220)	600	1000	150	378.5	61.5	130	53	55	14	48	78.5	280			
SHS12-42/12.5	42000	4.0	12.5	30000	350/(220)	1200	1400	120	314	51	100	38.5	40	11	32	65	229			
SHS12-51/12.5	51000	4.0	12.5	30000	350/(220)	1200	1700	120	306.5	43.5	100	28.5	30	9	24	57.5	229			
SHS12-60/7	60000	1.1	7	60000	350/(220)	1000		120	262	38	90	23.5	25	9	20	52	190			
SHS10-75/5	75000	0.6	5	75000	350/(220)	1250		100	227	38	80	18.5	20	8	16	52	155			
SHS10-90/3	90000	0.3	3	90000	350/(220)	1500		100	242.5	36.5	80	18.5	20	8	16	48.5	154.5			

High Frequency Spindles Model : SHX(New Model)

Model	SPEED MAX.	POWER SPECIFICATIONS						DIMENSION											Without flange	
		Torque	Output 56-60% at speed		Voltage at frequency between															
								A	B	b	D	W	W1	Z	SW	b1	E			
	Nmax [RPM]	M1/6 [NM]	P1/6 [kW]	n [RPM]	V [V]	f k [Hz]	f max [Hz]													
SHX 15-30/9	30000	2.7	9	30000	350/(220)	500	1000	120	341.5	47.5	100	33.5	35	9.3	30	61.5	235			
SHX12-30/11.5	3000	4.6	11.5	24000	350/(220)	800	1000	120	388.5	55	119.8	53.5	55	14	48	70.5	253			
SHX12-45/18	45000	5.7	18	30000	350/(220)	1000	1500	120	370	54.5	120	43	45	12.5	38	70	235			
SHX12-60/12	60000	2.2	12	51000	350/(220)	850	1000	120	337.5	43.5	100	28.5	30	9	24	57.5	215			
SHX12-75/7	75000	0.9	7	75000	350/(220)	1250		120	300	38	90	23.5	25	9	20	52	183			
SHX12-90/3	90000	0.3	3	90000	350/(220)	1500		120	324.5	27.5	70	16	17	6.5	14	42.5	14.5			
SHX10-105/2	105000	0.2	2	105000	350/(220)	1750		100	201.5	23.5	80	16	17	6	14	31.5	145			
SHX10-120/1.2	120000	0.1	1.2	120000	350/(220)	2000		100	191.5	23.5	80	11	12	6	8	31.5	135			

Built in Motor Spindles



Model	SPEED MAX. N _{max} [RPM]	POWER SPECIFICATIONS					DIMENSION								
		Torque M _{S6} [NM]	P _{S6} [kW]	n [RPM]	Voltage at frequency V [V] f _{max} [Hz]		A	B	b	b ₁	b ₂	D	E	F	W
SRG500-2X	2000	38.2	8	2000	350/(220)	1200	180	434	15	40	43	176	492	130	175
SRG500-2YZ							208	340	15	40	40	180	401	130	175

Hydro-Static / Dynamic Spindles

- Designing and manufacturing of Hydro Dynamic / Static Grinding Spindles.
- Repairing and/or modifying of Hydro-Dynamic / Static Spindles of the leading brands. This includes TOYO, KOYO, ISMUI, OKUMA, LIDKOPING and many more for the domestic market.
- ORSKOREA is the holders of patents on Air-Floating High-Frequency Spindle. (A joint ownership with Schaeffler Korea)
- OEM partnership with machine manufacturers.



Rolling Bearing Type Spindles

- Repairing and manufacturing of all types of high-end spindles.
- Designing and manufacturing of centerless grinding spindles equipped with high-precision bearings.
- Repairing and refurbishing of various types of machine and high-precision spindles.
- Designing and developing customized spindles.
- OEM partnership with machine manufactures.



Repair Service

Check & Disassemble

- Check for internal and external damages that occurred from use
- Disassemble - each step is photographed and analyzed in detail
- Each part is inspected and analyzed to determine if a replacement is needed or if it can be repaired
- Quotation will be provided for the client's approval



Repair Service

- Cleaning of the disassembled parts (by hand with ultrasonic wave and anti-rust chemicals)
- Purchasing of parts (bearings and/or other necessary parts)
- Refurbishing and necessary process as needed
- Design and manufacture of damaged parts (Done by qualified ORSKOREA'S members from design and manufacturing team)
- Balancing of the parts including the shaft (balancing grade 1G or below based on ISO standard)
- Equipment's use in the process: SCHENCK & SHIMATSU B.M brands
- Assembly and inspection (bearing is assembled according to appropriate preload level)



Precision Test & Trial Operation

- Accuracy test and test run are performed before delivery
- Static precision test (run-out check)
- No-load test (minimum of 6 hours)
- Test run (check for bearings noise level and vibration using German SCHENCK equipment)
- Additional processing if balancing operation is needed
- Test run report will be provided including all data and work history
- Rust control and air sealed packaging for delivery





ORSKOREA
understands
the importance of
quality service.
Where ever you are,
we will be there.

Service and Support

After-sales & Service

After-sales service is considered with utmost importance and priority. Immediate attention is therefore given to all requests for service and spare parts. With our network of logistics partners located all around the globe, the parts will be delivered in the shortest time possible. If service is needed, our service engineers are sent out on request to operating sites around the globe. All inquiries will be responded within 24 hours and a schedule will be made for needed service.



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