LIDKÖPING
SGP62B

Flexible, fast resetting precision external plunge grinder

SGP62B

KMT Precision Grinding is Sweden's largest machine tool manufacturer. We specialise in the manufacture of precision grinding systems.

Our goal is to give you accuracy, efficiency and reliability through our products, our process knowledge and development, and our customer support and service. Through close cooperation with end-users, we ensure a correct and profitable solution for you, the customer.

SGP62B

The LIDKÖPING SGP62B is a precision external plunge grinder that offers increased machine flexibility at the same time it gives uniformly superior finished work piece quality.

Thanks to its range of modular preset cassettes for work head, dresser and grinding wheel, short re-setting time can be achieved. This means more productive machine uptime, whether for short or long production runs. If the machine is supplied without the cassette, then resetting is done internally to the machine. The time needed is then *30 minutes*. The SGP-62B's machine concept makes it possible to load the work piece during dressing, thus minimising passive times.

Hydrostatic slide

Hydrostatic module slide with a stroke of *230 mm*, equipped with a linear motor with a feedrate of max *500m/s*. Precision linear glass scale with a resolution of *0.01 µm*.

Resetting

Resetting of dressing unit is possible outside the machine.

Dressing unit

Full profile diamond roller or cup wheel dresser, fixed to the base of the machine, with dressing performed during work piece loading.

Handling

Handling system with inlet chute and ejector onto a range of outlet systems.

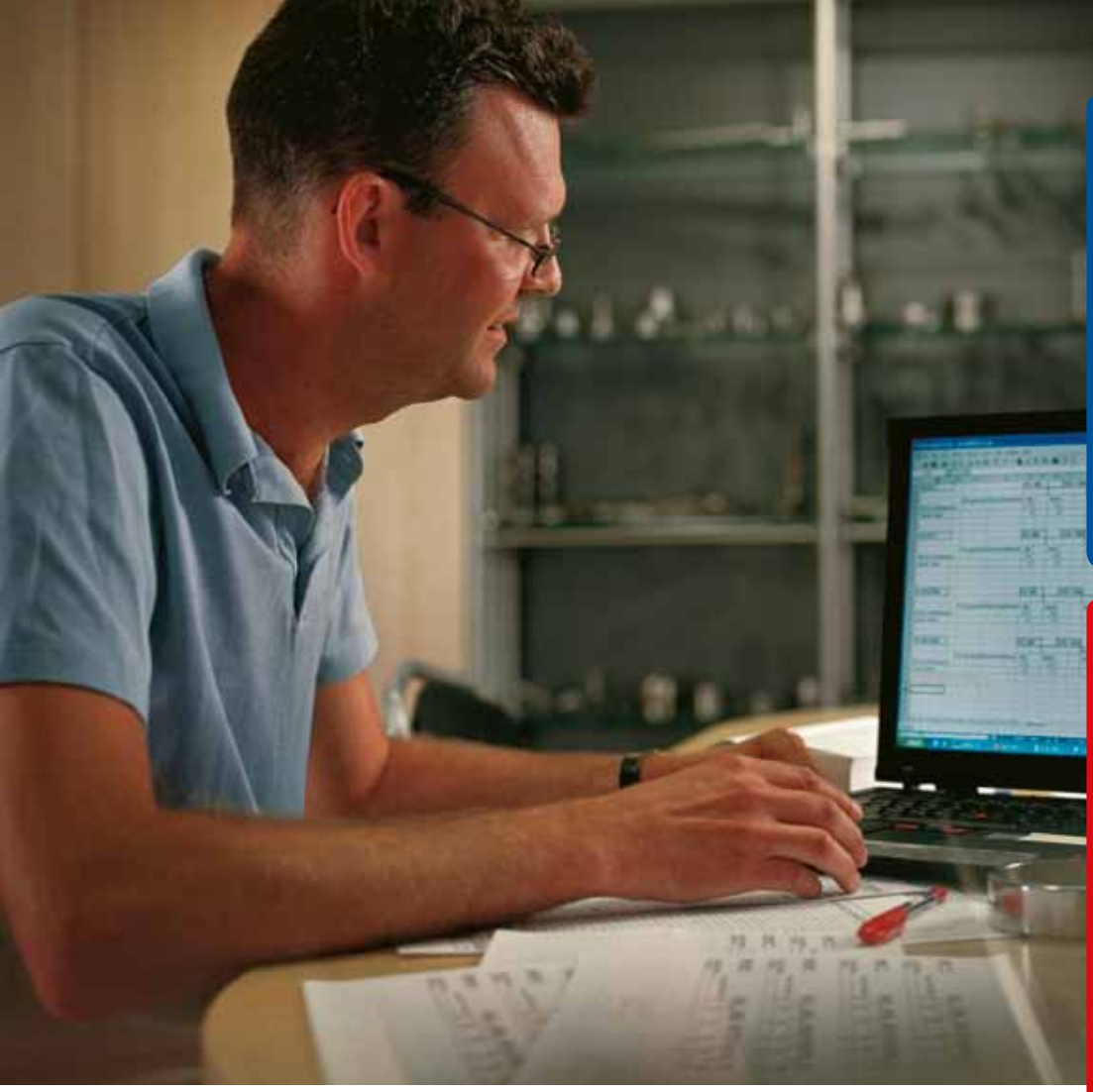
Control system

Graphical user interface provides user-friendly controls and Integrated Program Generator IPG. Control System, Siemens 840D sl.

The SINUMERIK 840D sl is a distributed, scalable, open and interconnecting control system that offers a wide range of functions. This flexible, universal CNC can be used for up to 31 axes.

Grinding wheel area

Grinding wheel center with balacing unit



Key features

Key features that guarantee accuracy, output, life cycle economy and safety.

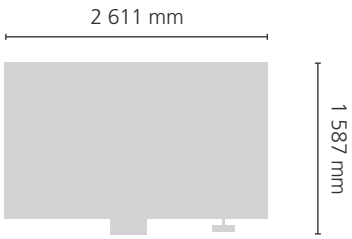
- Suprior finished work piece quality
- Precision linear glass scale with resolution of 0,01 µm
- Hydrostatic module slide with a stroke of 230 mm
- Slide with linear motor with a feedrate of max 500m/s.

About us

KMT Precision Grinding develops, markets, manufactures, and installs high-precision grinding machines with surrounding equipment within the area of high precision grinding. We market our products under the trademarks LIDKÖPING and UVA. KMT business areas include grinding machines, and complete aftermarket solutions that include service, productivity-enhancing upgrades, and rebuilds.

KMT has delivered over *10 000 machines*, and is represented in every part of the industrialized world. With over a *100 year* old tradition of engineering excellence, KMT is today a high-technology company in the vanguard of grinding research and development.

Extensive knowledge and grinding experience gives KMT a powerful technological advantage and our products are recognized for their consistently high performance and quality. Customers include many of the world's leading producers in the bearing, automotive and hydraulic industries.



SGP62B

Outer Ring DGBB
Bearing - External

Inner Ring DGBB
Bearing - External

Inner RIng DGBB
Bearing - External

Technical data

Please note that all data stated are correct at time of printing but are subject to change.

Working range

External diameter	7-62 mm [1]
Work piece width	5-40 mm [2]

Grinding wheel

Peripheral surface speed	80, 100 or 125 m/s maximum
External diameter	425 mm maximum
Width	40 mm maximum

Dressing units

Full profile diamond roller unit with a fixed position onto the base of the machine. The dresser accepts diamond rollers with an OD of 95 mm. A cup wheel dressing unit is also available.

Work head spindle

Hydrostatic spindle, belt-driven with servomotor, maximum spindle speed	8 000 rpm
Swivelling of work head spindle	A max. 20 ° B max. 40 °

Grinding spindle

Belt-driven hydrostatic spindle.

Grinding slide

Hydrostatic module slide with a stroke of 230 mm

Machine control

Siemens 840D

Gaughing method

In-process 1-finger electronic guaging head

Pneumatic system

Consumption, momentary	900 l free air/min
Consumption, average	200 l free air/min
Pressure	0.5-0.7 MPa
Quality	Class 3.4.4 (ISO 8573-l)

Hydraulic system

Flow	7 Mpa (±0.5) 20 litres/min 14 Mpa (±0.5) 48 litres/min
Filter	3 µm
Temperature [3]	Ambient ±5°C Max 40°C

Coolant

Pressure	0.25-0.6 MPa
Consumption	80-120 litres/min
Temperature	ambient ±2.5°C
Filter	20 µm
Maximum dirt content	25 mg/l

Cooling water: To work head motor

Pressure	0.3-0.6 MPa (3-6 bar)
Consumption	6 litres/min
Filter	50 µm
Maximum temperature	18-25°C

Cooling water: To hydraulic unit

Pressure	0.2-0.6 MPa (3-6 bar)
Consumption	30 litres/min
Filter	50 µm
Maximum temperature	18-25°C

Exhaust

Volume	600 m^3/h (P = vacuum - 800 Pa)

Electrical data

Grinding motor	30 kW
Work head motor	5.5 kW
Main connection	55 kVA

Various

Noise level	75 dB (A)
Machine weight (net)	5 600 kg

[1] 74 mm is possible. Contact LIDKÖPING for further information
[2] Application may restrict width
[3] Shell Tellus Oil 22 or equivalent Viscosity ISO VG 22. Indicated oil volumes are valid at room temperature 25°C and oil temperature 30°C. Oil consumption increases at higher oil temperatures. Oil temperature must be kept between room temperature and up to maximum 10°C above room temperature.

Best in grinding