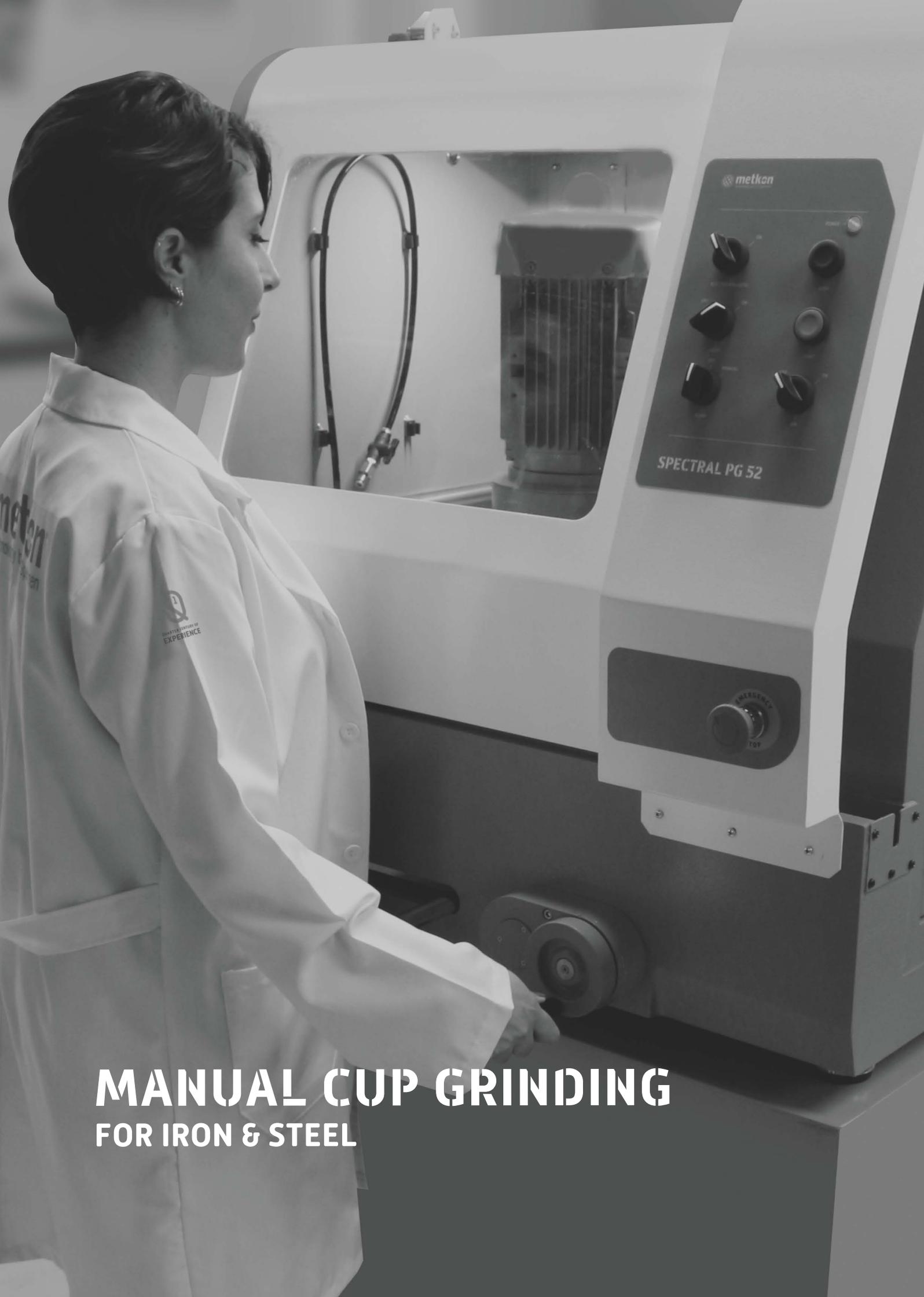




SAMPLE PREPARATION

# SPECTRAL PG 52





# MANUAL CUP GRINDING FOR IRON & STEEL

# SPECTRAL PG 52



Sample preparation of metals and materials have become more and more important because of the rapid development and improvement of both software as well as OES and XRF-devices during the past few years that shifts the detection limit for trace analyses. It is crucial to have the sample properly prepared. The sample needs to be both representative, homogeneous and with an even surface in order to eliminate factors that can influence the results.



## SPECTRAL PG 52

SPECTRAL PG 52 is a compact bench-top pendulum grinder for fast grinding of iron and steel samples for spectroscopic analysis. It has a simple and reliable design with low noise and dust generation levels. It is completely enclosed and dustproof with LED spot light. The front cover can be completely opened for easy access to all sides.

SPECTRAL PG 52 is suitable for wet and dry grinding with minimum maintenance required which is mainly cleaning. It is possible to attach an external dust exhauster to the standard outlet at the rear side. The grinding arm is placed just in front of the machine making it ergonomic and easy to handle. SPECTRAL PG 52 is especially suitable to grind hard materials like white cast irons. It is also possible to prepare other materials by using special stone cup wheels which are easy to exchange.

Vertical movement (Z-axis) of grinding head is by handwheel in front and positioning with 0,01 mm accuracy is possible. Reproducible flat surfaces are achieved with column mounted on taper bearings. Manual V-shaped clamping vice and Mechano-magnetic plates are available as accessories.

Spectral PG 52 is equipped with braking device permitting a rapid stop of the grinding wheel. The machine is fitted with an interlocking safety device not allowing the hood being opened before the grinding motor is stopped.



SPECTRAL PG 52 Grinding Machine



Mechanical 3-jaw Chuck



Mechanical Clamping Device



Electromagnetic Clamping Device



Ergonomic Operation



### Sample Preparation for Spectroscopy

Optical emission spectrometry (OES) and X-Ray fluorescence are most commonly used techniques for the analysis of metals and solid samples.

Sample preparation of metals and materials have become more and more important because of the rapid development and improvement of both software as well as OES and XRF-devices during the past few years that shifts the detection limit for trace analyses. It is crucial to have the sample properly prepared.

The sample needs to be both representative, homogeneous and with an even surface in order to eliminate factors that can influence the results. For the preparation of solid metal samples METKON offers manual and automatic sample preparation machines - from the small table-top disc surface grinder to automatic milling machine. With METKON Sample Preparation Machines, you feel yourself ready for the analysis.



## SPECIFICATIONS

ORDER NO	81 03
MODEL NO	PG 52
Grinding motor power, Kw, (S1)	3
Grinding wheel Speed, (rpm)	2800
Cup wheel Diameter, (mm)	150
Radius of arc	68
Travel, mm	203
Z-Axis Stroke, (mm)	60
Operation	Manual
Dimensions, WxDxH, (cm)	94 x 83 x 97
Dimensions, WxDxH, (cm),with cabinet	94 x 83 x 175
Weight, (kgs)	300
Weight, (kgs),with cabinet	385

### 81 03

#### — SPECTRAL PG 52

Swing Grinding Machine for fast spectroscopic sample preparation of iron and steel samples, bench top compact design, closed housing, max. safety provided with interlocking switch, robust column mounted in taper roller bearings, low noise with motor of 3 kW and 2800 rpm, with electronic brake system and overload protection, extraordinary access with sliding door, easy handling with sample swing movement from the front side of the machine, vertical precision positioning of the grinding head with an accuracy of 0.01 mm, large working space with LED lamp, standard outlet for dust exhauster, sample cooling available with water cooling and/or compressed air, complete and ready for operation. Standard packing included. Without clamping devices. Without cooling tank. 400V, 3-phase, 50 Hz.

#### Accessories for Spectral PG 52

- GR 1943** — Mechanical 3-jaw chuck
- GR 1801** — Mechanical clamping device for samples up to 60 mm.
- GR 1948** — Universal Jaws for Mechanical Clamping Device (GR 1801)
- GR 1949** — Jaws for Thin Specimens for Mechanical Clamping Device (GR 1801)
- GR 1942** — Permanent Magnetic Clamping Device, 100x150 mm.
- GR 1820** — Electromagnetic clamping plate
- GR 1907** — Floor Cabinet for FORCIPLAN 52/SPECTRAL MM/PG/AG 102
- GR 1945** — Recirculating coolant tank, stainless steel, 55 lt. capacity, with pump, hoses etc.
- YM 8813** — Fine filter sheets for recirculation cooling tank (GR 1945), 10 pcs
- GR 1540** — Magnetic collector rod for recirculation cooling tank
- GR 1397-00** — Water Filtering and Pressure Regulator System for city water inlet. Keeps the water pressure at the appropriate level and protects from sudden pressure spikes. Filtering out impurities in the water and prevents calcification.
- YM 3824-00** — Spare Siliphos Cartridge Filter (for Water Filtering and Pressure Regulator System (GR 1397-00))

#### GR 1944 — Spare Part Kit for SPECTRAL PG 52

- Recommended Set of Spare Parts, SPC PG 52

\* Other voltages and frequencies available upon request. Please state when ordering. All specifications are subject to change without notice.

