

GRINDING SYSTEM

HIGH QUALITY, INNOVATION, UNIQUENESS



SCAN-DIA GRINDING SYSTEM

The SCAN-DIA grinding system is an extensive, matched product line for the pre-grinding of materialographic sections.

Many years of research and constant innovation lead to the development of a streamlined system which offers a variety of preparation alternatives. Sample sections may be very different and various preparation methods may lead to a successful grinding result.

For pre-grinding, a simple SiC-grinding paper may be as good a choice as the diamond abrasive films/discs. Basis for decision-making is the sample type, the quantity, the desired **reproducibility**, as well as **the time factor**.

In its research efforts, SCAN-DIA puts the emphasis on **time savings, economic efficiency**, as well as on a demand for **high quality**. When selecting the raw materials for the diamond discs, we attach importance to properly classified, high purity micron powders made from natural as well as from synthetic diamond.

All abrasives are suitable for manual and automatic use, provide for high removal rates, and lead to **finest surfaces**.

STANDARD METHOD	RAPID METHOD Short preparation time	RAPID METHOD Short preparation times with very high sample throughput	LAPPING PROCESS
SiC P 80	Diamond abrasive films for pre-grinding D45	Diamond disc for pre-grinding D45	
SiC P 180			SiC P 180/400
SiC P 240			
SiC P 400			
SiC P 600			
SiC P 1000	SiC P 1000	SiC P 1000	PLAN DISC 15/6 μ

THE SCAN-DIA DIAMOND POLISHING SYSTEM

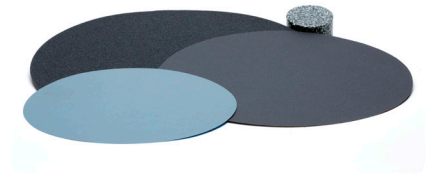
ABRASIVES

SIC GRINDING PAPER

The widely used SiC grinding paper is well-known as a good choice for **pre-grinding** materialographic samples.

SCAN-DIA exclusively offers **waterproof abrasive paper** in the grits P 80 to P 2500.

It is available as reels for the bench type wet grinding machine 3000 or as sheet material with Ø 200, Ø 250, and Ø 300 mm as self-adhesive material or without sticky backside.



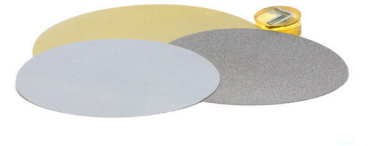
DIAMOND PRE-GRINDING FILM

The DIAMOND PRE-GRINDING FILM convinces with long service lives and constant removal rates.

Thus, it represents an **economical alternative** to SiC grinding paper.

The DIAMOND PRE-GRINDING FILM provides for **short preparation times with often just one grinding step**, so that the grinding paper does not even have to be changed.

It is available as round, self-adhesive films in grits 125, 75, 45, and 25 µ with Ø 200, Ø 250, and Ø 300 mm.



DIAMOND PRE-GRINDING DISC

The DIAMOND PRE-GRINDING DISC achieves best results with hard materials.

A 2 mm thick diamond coating provides for **very long service lives** as opposed to SiC grinding papers or diamond pre-grinding films.

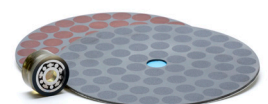
Grinding with the DIAMOND PRE-GRINDING DISC is a rapid and economical method for a **high sample throughput**. It is available with Ø 200, Ø 250, and Ø 300 mm in the grits 90, 65, 45, 25, and 15 µ.



PLAN-DISC

The self-adhesive PLAN-DISC lapping film is a hard polishing pad with inlaid pellets.

It is used where materials with various hardness values, such as electronic components or sandwich-structures, require a **level and fine sample surface**. It is available as PLAN-DISC H **for the lapping** of harder materials (composite materials, steels, ceramics, bronzes) and as PLAN-DISC S for the lapping of softer materials (aluminium and copper alloys, brass). Available as round, self-adhesive disc with Ø 200, Ø 250, or Ø 300 mm.



MAGNETIC SYSTEM

MAGNETIC QUICK CHANGE SYSTEM

For grinding and polishing discs

SCAN-DIA offers a magnetic change system which simplifies the replacement of grinding discs and polishing cloths.

The system comprises the following components:

MAGNETIC PAD

Self-adhesive, magnetic foil to be stuck on the respective supporting discs. Thus, you can quickly turn an ordinary supporting disc into a magnetic disc for working.

Plastic or aluminium based supporting discs may be used.

MAGNETIC ADAPT FIX

Adapter disc, preferably to hold self-adhesive grinding papers or polishing cloths.

The disc comes with a non-stick coating, so that grinding papers or polishing cloths may easily be removed after use.

This disc is suitable for **multiple use**.

MAGNETIC ADAPT

Adapter disc, preferably to hold self-adhesive polishing cloths, diamond pre-grinding films, or lapping films. It is a **single-use** supporting disc.

QUALITY

SCAN-DIA develops and tests all products at its facilities. Our laboratories perform **regular tests** and **long-term studies**. Results and findings lead to the optimal choice of raw materials and components for the SCANDIA quality products which are based on **decades of experience**. Constant further development of the products enables an economical and efficient work of our customers.

The production is also subject to constant and intense quality controls.

All inputs flowing into our products have been made based on a **quality-oriented corporate culture**. Permanent quality controls result in **top products** for best materialographic preparation. SCAN-DIA assists you in preparing samples and in finding solutions for complex tasks. In consultation with our customers, we also perform customer-specific laboratory tests. If required, we also give you **technical assistance** and help with your **employee training**.

GRINDING AND POLISHING EQUIPMENT



SCANDIMATIC

The grinding machines are based on **decades of experience** in grinding materialographic samples.

SCAN-DIA provides a **compact series** of grinding and polishing machines.

The SCANDIMATIC series comprises SCANDIMATIC series 33 which is suitable for discs with \varnothing 200 mm and SCANDIMATIC series 37 which is suitable for discs with \varnothing 250 or \varnothing 300 mm.

The device series have a **modular design**.

Manual devices are sufficient when it comes to occasional sample preparations.

Larger serial sample preparation is performed in a more economically efficient way by the use of automatic devices.

It is **recommended to simultaneously use multiple devices** when handling a very large sample amount.

In this case, every grinding step is provided for by a separate device.

This allows for time savings when it comes to cleaning and disc replacement.

SCANDIMATIC grinding machines have been specially designed for the materialographic application and are extremely solid.

They are mainly made of corrosion resistant materials.

The housing comes with a high quality lacquer coating.

The machine is driven by a very **powerful, low-noise, adjustable precision motor**.

SCANDIMATIC grinding machines may also partially be used for polishing.

For more information on SCANDIMATIC grinding and polishing machines, see our separate special brochure.

SCAN-DIA GmbH & Co. KG

Postfach 30 31
58030 Hagen | Germany

E-mail info@scan-dia.com
Internet www.scan-dia.com

Phone +49 (0) 2331 6 24 69 0
Fax +49 (0) 2331 6 24 69 29

Technical changes reserved
As of January 2014