



SCLEROS
HARD METAL PERFORMANCE SOLUTIONS

OMCD GROUP

drawing

For over 70 years Scleros has been designing and producing **high precision Hard Metal equipment**, mainly used for the **drawing of tubes and bars** for the ferrous and non-ferrous sector.

Drawing is a process of cold plastic deformation that a material undergoes by passing through a shaped matrix. The reaction forces exerted by the insides surfaces of the matrix produce wires, bars and cylindrical or special shaped tubes in a continuous way with millesimal dimensional tolerances, improving also the mechanical properties of the drawn material.

Hard Metal, thanks to its **wear resistance and toughness**, is the most suitable material for these operations because it can tolerate the high mechanical stress exerted during processing.

A deep technological knowledge of the production process and the use of state-of-the-art machinery, allow Scleros to produce **dies and mandrels with millesimal dimensional tolerances and high surface qualities**.



Scleros is the OMCD Group company specialising in the design and production of **high-precision finished carbide tools**, both standard and customised.

HIGH QUALITY

The modern industrial world prefers tungsten carbide components that improve production efficiency. Scleros is the right answer, offering products of the highest quality: high-performance, durable and with a high degree of precision and finish.

SOLID ROOTS AND ITALIAN HEART

Still owned by the Tedeschi family who founded it over 70 years ago, Scleros manufactures 100% Made in Italy products that it exports to over 50 countries around the world.

A GLANCE AT THE PAST, PROJECTED INTO THE FUTURE

While maintaining the company's historical principles and values, Scleros is a state-of-the-art company, equipped with the latest machinery and tools, which it constantly upgrades and increases.



tube drawing

Scleros is specialized in the **design and production** of:

- Round dies
(conic and toric geometry)
- Dies with shaped profiles
(hexagonal, flat, square, oval, six-lobed, three-lobed, lemon, york and special)
- Cylindrical and conical mandrels brazed or with mechanical fastenings
- Floating mandrels
- Helicoidal mandrels
- Complex shape mandrels
- Capillary mandrels



Bar and Tubes Surface Engineering C.V.D. and P.V.D. Technologies.

Costs reduction and increased productivity

The choice of the most suitable technology and coating type is determined by the characteristics of the processed material and by mechanical performance expectations. Our technical staff will advise you on the best solution for your needs.

C.V.D.: Chemical Vapour Deposition

- Suitable for heavy-duty cold-drawing
- Ideal for machining high strength Material
- High Hardness and wear resistance
- Tool life increase from 3 to 5 times
- Layer thickness range from 0,6 to 1,2 microns
- Coating temperatures range from 800 to 1050°C
- Excellent adhesion

P.V.D.: Physical Vapour Deposition

- Thin film with low friction coefficient
- Smooth surface and very low roughness
- Suitable for "non ferrous" (Al - Cu Alloys)
- High Hardness and wear resistance
- Tool life increase from 3 to 5 times
- Layer thickness range from 0,2 to 0,5 microns
- Coating temperatures range from 200 to 450°C
- Excellent adhesion



bar drawing

Scleros is specialized in the **design and production** of:

- Round die
- Dies with shaped profiles
(hexagonal, flat, square, trolley and special)
- Adjustable dies with blocks
- Adjustable dies with bearings and saddle
- Die blocks, shim, wedge, grain for adjustable dies





The OMCD Group, headed by the Tedeschi family for two generations, is a multinational company made up of 9 brands active in the field of Hard Metal, sintered copper/tungsten and precious metals.

Its centralized structure and synergy between each brand guarantees control of the entire production process, from the refining of minerals to the micro-finishing operations.

Technical competence, continuous innovation and focus on customer satisfaction are just some of the reasons why every day more and more companies rely on OMCD Group as their commercial business partner.



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