

Ready-to-press powders for wear parts, tools, and specialty cemented carbide products



# HYPERION - YOUR CARBIDE PARTNER

Hyperion Materials & Technologies is an engineering company with decades of experience with hard and superhard applied materials, including cemented carbides, diamonds, and cubic boron nitrides. Hyperion's products are engineered to increase productivity and improve the performance of our customers' products.

Our global manufacturing and supply chain organization is supported by in-house carbide manufacturing with advanced production capabilities in powder processing, pressing, sintering, and finishing. Hyperion can satisfy all your needs for ready-to-press powder solutions.

## **READY-TO-PRESS POWDERS**

Hyperion Materials & Technologies is truly an expert in cemented carbide. Although it has been more than 80 years since the first cemented carbide material was marketed, the pace of development in the field remains rapid. Hyperion has been manufacturing ready-to-press powders throughout the world for over 40 years and is at the forefront of this development, regularly patenting and releasing new grades with improved performance. Who better to teach you about cemented carbide?

Ready-to-press powders are free flowing tungsten carbide/cobalt-based powders used as starting materials in the production of cemented carbide wear parts, tools, and other products. We partner with our clients to design the grades needed by varying the composition and tungsten carbide grain size. We offer a range of binders, including but not limited to, cobalt and nickel and additives such as chromium/vanadium carbide, titanium carbide, and tantalum/niobium carbide.

Hyperion's ready-to-press powders are recognized for their consistency and quality. We continuously invest in our technology at our production facilities. Our spray drying techniques produce powders with high sphericality, allowing for optimal flow of the finished powder.

Our production facilities are operated year round, without regard to market fluctuations, which makes us a reliable supplier. Our local and consistent inventories of raw materials lead to short delivery times that help you to reduce and simplify your stock, as well as your work in progress.

# READY-TO-PRESS POWDER PRODUCTION PROCESS



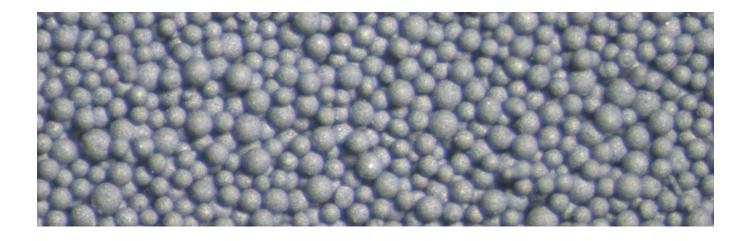




Drying



Weighing of Milling
Ingredients



## WHAT WE OFFER

We provide exceptional ready-to-press powder solutions for your applications including development of new carbide grades and technical support on how to use our powders.

## PREMIUM QUALITY GRANULES

Hyperion's ready-to-press powders are consistently spherical and have highly uniform dimensions to ensure optimal and consistent flow and excellent compacting properties.

#### STANDARD PRODUCTS

Hyperion's standard grades cover a wide range of cemented carbide applications. These products are routinely available when you need them with short delivery times from our production site in Europe.

#### **CUSTOMIZED PRODUCTS**

Hyperion offers ready-to-press powder grades manufactured to customer specifications at both our North American and European facilities. Customized grades can be based on virgin powders or on a mixture of virgin and recycled powders.

### **CUSTOMER SERVICE**

Hyperion offers short delivery times from our production sites in North America and Europe, as well as flexibility and technical support on how to use our powders. Through our local sales offices worldwide, we work hard to meet our customers' requirements while guaranteeing the best in service.

#### POWDER TESTING AND CERTIFICATION

Hyperion's ready-to-press powders undergo thorough quality control testing before delivery. With each lot of ready-to-press powder, we provide a certificate reporting the following:

- Nominal chemical composition of the grade
- Powder properties: Hall flow/apparent density
- Pressing properties
- Physical properties after sintering: density, magnetic properties, hardness, porosity, etc.

## SUPPORTING YOUR ENVIRONMENT AND SAFETY NEEDS

Hyperion manufactures ready-to-press powders with state-of-the-art equipment while observing all environmental and safety regulations.

At Hyperion, we are serious about sustainability and our efforts to minimize our impact on the environment. One way we are making a difference is by offering the carbide recycling program to our customers. By using state-of-the-art technology, we are able to internally recycle and convert into ready-to-press powders your by-products such as pressed parts or powders. Another way we can minimize your risks is by buying your tungsten-based scraps and recycling it.

Contact your Hyperion carbide expert to learn more about our ready-to-press tungsten carbide powders.





