



Tools cut better with TIGRA

# Superior Solutions

for Tools and Wear Applications



## for Woodworking Tools



### Inserts and blanks for woodworking

#### Largest program worldwide

9 carbide grades for each application.  
Standard and customized.  
Large stock for all types of inserts.



### Carbide saw tips

#### In excellent quality

Comprehensive program with large variety of grades, close tolerances and best brazing features thanks to ideal coating! Pretinned available, too. Special dimensions upon request.



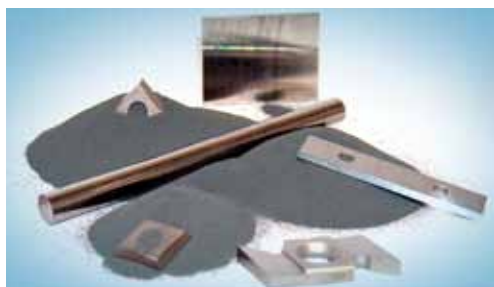
### Planer knives

#### HSS / Black Oxide and tungsten carbide

Suitable for the systems Tersa, Centrolock, Terminus, Centrostar, Variplan, Sinus and Enshin in tungsten carbide and several HSS grades. Produced with latest Black Oxide technology. Some systems also available as coils. Thin planer knives in HSS, High Performance Steel, T.C.T. and solid carbide.

## Take our advantages to your benefit!

#### ► Beste carbide grades



More than 20 different carbide grades and TIGRA alloy let you always find the best grade for your application. We are readily available to advise you.

#### ► Unique product range



To get all cutting materials from one reliable, high quality and inexpensive source saves much time and gives you security.

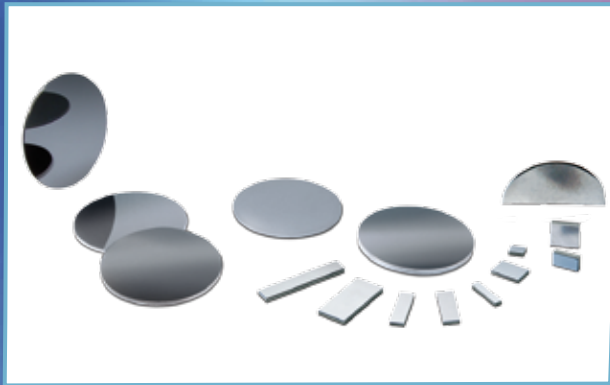
#### ► Best service



Dedication to customers' needs is our philosophy. Our friendly and competent people are trained to respond professionally and quickly to your individual request.

# TIGRA - Superior Solution

for Metal Working Tools



## PCD-Polycrystalline Diamond As blanks and segments

Special adapted grades for long lifetime and considerable reduced erosion time. Express delivery service for segments within three working days. Special grades available for wear applications, Sandwich PCD, laser weldable PCD as well as specially adapted grades for aluminium working.



## PcBN

### Blanks, segments and semi-finished inserts

PcBN blanks and segments in solid and single-sided versions in many grades, semi-finished inserts in solid and sandwich version, over the entire surface or tipped. Available in different work flow versions!

PcBN semi-finished milling tools for manufacturing PcBN drills, reamers etc..

Carbide inserts for tipping, pre-sintered and pre-ground available.



## Rods and bars

### Many dimensions on stock

Micrograin rods as sintered and ground, without and with coolant hole(s), straight or with helix.

Carbide grades for highly abrasive materials and for high speed cutters (HSC) on stock.

Flat and square bars in various dimensions and grades, as standard and due to customer's request.

## Tungsten carbide, HSS, PCD and PcBN

### ► Special individuality



Complex specialized carbide parts are our expertise. Thanks to individual programming we can produce almost every part according to customers' drawings. Just ask us!

### ► German quality standards



In our carbide manufacturing in Oberndorf am Lech, we produce due to the highest quality, safety and environmental standards. Each year several hundreds of tons of carbide are produced.

### ► Automated production



Our high-tech production enables us to offer highest quality at low prices. Our machinery is of the latest technological progress.

# For Wear and Special Applications

## Wear parts

### Individual according to customer's drawing

Ground and unground carbide parts for optimized wear protection in machines, for recycling and special applications in different industrial fields as per customer's drawing. Production batches from 1 to 1 million pieces!



## Special knives for textile, leather, foil and composite material working

### For long lifetimes

Carbide knives in special carbide grades for plotters, single and multilayer cutters for working and cutting foils, film, leather, textiles and composite materials.



## Injection molded parts

### For special parts produced in high quantities

Complex shapes can be produced particularly economically and in high precision with latest injection molding technology. The near-net-shape production enables sophisticated geometries and reduces grinding expenses.



**- all from one supplier!**

### ► Low prices



A high degree of automation enables great advantages to our customers, both in price and quality. Continuous improvements in production to customers' benefit is our constant concern.

### ► Highest quality



Automatic quality control with latest camera and laser technology in the production process and automatic re-adjusting guarantees the best possible precision.

### ► Quick delivery



Our optimized storage allows short delivery times, even for non-standard. Express delivery service for tips for brazing and PCD segments in just 3-5 days, cut special parts within 2-3 weeks!

**TIGRA – A family owned company with the tradition of putting your needs first**

Since its foundation in 1982 TIGRA has expanded at a rapid pace. We have been recognized with prestigious Economic Awards for being the most innovative regional company in Bavaria and obtained certification to become a training enterprise. We are very proud of this honor we achieved by using the resources of being a medium-sized company and our model character that has always been a part of our company. From our inception, TIGRA has specialized in the production and machining of hard materials for the tool industry as well as in special applied carbide parts.

Due to our method of business using our comprehensive knowledge of tungsten carbide production and machining, innovative self-developments, and the latest technologies in manufacturing today, we have captivated the market. TIGRA's flexible production capabilities and a large choice of grades in all material groups are well-known standing for high quality and inexpensive precision parts, which are used in several industrial fields. TIGRA is considered as one of the major carbide manufacturers and suppliers of ultra-hard cutting materials concerning optimized manufacturing and assembly of milling, chipping and cutting tools as well as industrial knives for high-precision profiling and planing. Small batches of less than 10 parts by mass production in millions will be produced and delivered in the factory in Oberndorf, Germany. Continuous improvements in latest pressing, sintering and grinding techniques with highest level of automation, current quality control by camera and laser up to automatic packaging and labeling allow the company short production times, individuality and flexibility. Thanks to intensely promoted self-innovations the Bavarian company is now world-leading in many areas of cutting materials. TIGRA's well-trained sales team serves customers in over 70 countries around the world.

TIGRA's product range includes cutting inserts and tips for brazed tools for woodworking, blanks for metal and composite material working cutters, carbide inserts for tipping with ultra-hard cutting materials, carbide wear parts of various types, knives for the foil, textile, leather and composite material working industry and all types of carbide products due to the customer's specific drawing. Through intensive collaboration with leading partners, the product range is completed with PCD, PCBN, High Speed Steel (HSS) and other materials, which are offered as raw materials, semi-finished and finished articles.

Headquartered in Bavaria, daughter companies in the USA, Brazil, and China, and reliable international partners the company underlines its constant demand for expansion and innovation. The two Managing Directors Helge Motzer, and son Bernd Motzer, are in complete agreement regarding the further development of their enterprise. The quality, reliability, short delivery time and favorable pricing are some of the decisive factors keeping us ahead of our competition. „We will continue to strive to fulfill every need of our customers worldwide, and to exceed all expectations and find new and improved methods, products and services to grow with our customers in the future.“



Helge and Bernd Motzer (from right to left)  
TIGRA's Managing Directors



[www.tigra.de](http://www.tigra.de)

## TIGRA GmbH

Gewerbering 2  
D-86698 Oberndorf am Lech  
Germany

Tel. +49 (0)9090 9680 - 01  
Fax +49 (0)9090 9680 - 50  
[www.tigra.de](http://www.tigra.de)  
[sales@tigra.de](mailto:sales@tigra.de)

## TIGRA USA, Inc.

1106 8<sup>th</sup> ST CT SE  
Hickory, NC 28602  
USA

Phone +1 828-324-8227  
Fax +1 828-324-8097  
[www.tigra-usa.com](http://www.tigra-usa.com)  
[sales@tigra-usa.com](mailto:sales@tigra-usa.com)



## TIGRA do Brasil Ltda.

Rua Isaías Régis de Miranda 1193  
Vila Hauer  
81630-050 Curitiba / PR  
Brasil

Tel. +55 41 3276 3731  
Fax +55 41 3377 3075  
[www.tigra.de](http://www.tigra.de)  
[tigra@tigradobrasil.com.br](mailto:tigra@tigradobrasil.com.br)



## TIGRA China Co. Ltd.

1-1-101 Hua Long Mei Shu  
No.15 Jian Guo Road  
ChaoYang District  
Beijing, 100024  
P.R. China

Tel. +86 10 5921 4353  
Fax +86 10 5921 4352  
[www.tigra-china.com](http://www.tigra-china.com)  
[sales@tigra-china.com](mailto:sales@tigra-china.com)

