

Innovative solutions Indian values





## **INDEX**

| Sr. No. | Products  | Page No. |
|---------|---|----------|
| 01.     | High Feed A. SPLX 07/10/13 B. ZNMU1003 C. SDKW1304 D. XOGU1103 E. ZOMW06            | 103      |
| 02.     | Shoulder Milling A. LNKX09/12/17 B. LNKU1206 C. SNMU1206 D. WNMX08 E. XPKX 11/16/17 | 4 to 6   |
| ОЗ.     | Solid Carbide A. D/DH B. DH-S C. XIB  | 7 to 8   |
| 04.     | Threading A. XTM B. XTB C. Ground Line  | 9 to 10  |
| 05.     | Grooving A. XTGP B. XGDB/XGJ/XDT C. XGM   | 11 to 12 |
| 06.     | Drilling A. SPMG B. WCMX  | 13       |
| 07.     | XT225   | 14       |
| 08.     | PCD/CBN A. Brazed CBN B. Solid CBN C. Delta CBN D. XPD300                           | 15 to 16 |





## **HIGH FEED**

## SPLX 07/10/13



- 4 corner proprietary positive high feed insert 3 sizes
- SPLX07 Dia range from 16-32 mm endmill type
- SPLX10 Dia range from 25-32 mm (endmill type), Dia 40-63 mm (facemil type)
- SPLX13 Dia 50-125 mm (facemill type )
- Available 2 grades:
- (a) XT840  $\rightarrow$  steels and CI
- (b) XT930 → Stainless Steels and exotic materials

#### **Benefits & Features**

- With feed rates up to 2 mm / tooth, very high chip removal rates are achieved.
- Maximum tool life on exotic material thanks to special substrate of XT 930.
- Maximised economy thanks to 4 cutting edges.
- Reduced machining noise and vibration. light cutting geometries.
- First choice for all production application !!



For Technical Info Scan the QR Code

### • 4 corner rectanguler highfeed insert

- Dia range from 16 to 32mm endmill type.
- Available 3 grades :
- (a) XT830  $\rightarrow$  1st choice for general machining
- (b) XT110  $\rightarrow$  Economical entry point grade
- (c) XT930-C → 1st choice for stainless steel & Hardned materials
- (d) XT840 → For steel & Cast Iron



For Technical Info Scan the QR Code

### **Benefits & Features**

- Effective for high feed milling
- Anti-chatter properties, Extremely powerfull for sloting.
- Excellent machine effeciency

## **ZNMU 1003**







## **SDKW 1304**



4 corner square insert for high feed machining.

Dia range from 32 to 125mm Shoulder Milling.

1 grade XT830 for all materials.

For Technical Info Scan the QR Code



#### **Benefits & Features**

- Decreased cost with 4 cutting edges.
- It can take ap upto 2mm.
- Cutting force is reduced due to positive rake angle.
- Special geometry SDKT for low power machine.

## **XOGU 1103**

- Double-Sided insert: 4 cutting edges.
- Dia range from 16 to 32mm endmill type.
- Available in 3 grades
- (a) XT830 for all general application
- (b) XT930-C for Stainless steel & superalloys and Die mould
- (c) XT840 for steel & Cast Iron





For Technical Info Scan the QR Code

- ap max. = 1 mm.
- The convex cutting edge reduces impact while entering the workpiece.
- Good chip evacuation prevents chip-biting enabling trouble free operation.
- Multi-edge design allows for cost economy.
- Fully ground inserts help for high efficiency machining.





### ZOMW 06



Dia range from 08 to 14 mm endmill type.

2 Corner insert with Corner Radius 1

 $XT930 \longrightarrow 1$  grade for all materials, including Stainless Steels and superalloys

For Technical Info Scan the QR Code



- Can easily replace solid carbide on semi-finishing areas on account of
  - a) Higher productivity on account of higher feed speeds!
  - b) Economy on account of indexable solution v/s Solid Carbide!





## SHOULDER MILLING

## **LNKX 09/12/17**



4 corner 90° shoulder milling insert 3 sizes

LNKX090408 Dia range from 16-32mm endmill type

LNKX120508 Dia range from 25-32mm (endmill type) and Dia 40-63 (facemill type)

LNKX170608 Dia range from 50-250mm (facemill type)

1 Grade → XT480 for all materials

#### **Benefits & Features**

- High Positive rake allows for smooth cutting and chip operation
- Extremely powerful product for roughing in cast Iron materials

## **LNKU1206**

4 corner 90° shoulder milling insert

Dia range 25/32 mm endmill type and Dia 40-160mm facemill type

2 High performance grades a.XT840 (Steel/Cast iron) b.XT930 (Stainless Steel/Hard materials)



For Technical Info Scan the QR Code



- High precision 90° milling.
- Low power consumption, maximum chip removal rate.
- Chipbreaker optimised by FEM.
- · Soft cutting providing quiet machining & maximum spindle protection. Highly suitable for low power machines.





## **SNMU 1206**



#### Double sided 8 corner 88° milling insert

Dia range from 50-200mm

1 Grade → XT430 for all materials!

New grades in devlopment for Stainless Steel and cast iron

For Technical Info Scan the QR Code



#### **Benefits & Features**

- Double Sided 8 Corner negative insert
- 88° insert design enables low cutting force while machining to reduce chattering

## **80XMNW**

#### 6 corner 90° shoulder milling insert

#### Dia range from 50-250mm in facemill type

Multiple high performance grades

- a. XT840, XT820 for Steel
- b. XT125/XT930-C for Stainless Steel
- c. XK3121/XT430 for cast iron
- d. XT930-C for Superalloys and Hard materials (52HrC)
- e. WNGX for Finishing also available.



For Technical Info Scan the QR Code



- New PRE bodies have Integrated cutter and Insert design which will ensure almost perfect 90°.
- This will result in negligible runout, better tool life, lower load on machine and improved fininsh on the workpiece.
- Idealy Suitable for Shoulder milling & wall finishing.





## XPKX11/16/17





For Technical Info Scan the QR Code



Available in 0.4/0.8 corner radius

#### **Dia Range**

16-32 (endmill)

#### **XT125**

XT125 for all SS/Die-mould applications

#### XPKX11T3PDSR

Available in 0.5 corner radius

#### **Dia Range**

16-32 (endmill)

#### 1 Grade

XT830 for all materials

#### XPKX16

Available in 0.8/1.2/1.6/2.4 radius

#### **Dia Range**

25-32 (endmill), Dia 40-125 (face-mill)

#### 1 Grade

XT830 for all materials

#### XPKX17

Available in 0.8 corner radius

#### **Dia Range**

25-32 (endmill), Dia 40-125 (face-mill)

#### 1 Grade

XT125 for all SS/Die-mould applications

- 2 corner 90° shoulder milling insert
- Endmill type cutter from 16 to 32 Dia
- Extremely popular product for shoulder milling in Die & mould as well as in general engineering application.





## SOLID CARBIDE

## DM/DH



#### **Endmill & Ballnose Range**

- (a) 4 flute Endmill (Standard & Long)
- (b) 2 flute Ballnose (Standard & Long)
- (c) 4 flute corner radius endmil (Standard & Long)
- (d) Rib Endmill & Ballnose (2 flute)

#### **Benefits & Features**

- Speciality for Deep Cavity Machining
- DH Works on all materials upto 55HrC
- DM for all materials upto 40HRC

#### • Works on materials from 50-68 HrC

- Available in
- (a) 4 flute (standard and long lengths)
- (b) 2 flute ballnose (standard and long lengths)
- (c) 4 flute corner radius (standard and long lengths)
- Can compete with all competitors on performance



For Technical Info Scan the QR Code

#### **Benefits & Features**

- Works on Die and mould applications as well as stainless steels with high chromium content
- Higher helix and negative rake allows for smoother operation
- Can be even used with coolant as well for certain materials

DH-S





## **XIB**



Indexable ball insert for roughing as well as fininshing.

Dia range From 08-32 mm.

Carbide shank bodies available on request.

D & DH grades available.



For Technical Info Scan the QR Code

- Two Grades covering all materials (Soft as well as Hard)
- High Accuracy Insert Positioning and High Rigidity Clamping
- Significant reduction in Tooling Cost for semi finish and finishing applications
- Popular in Die & Mould and General engineering applications.





## **THREADING**

### **MTX**



Moulded Insert with Chip-breaker (similar to TF geometry of kyocera / B type insert of carmex and chip-breaker insert of Taegutec)

#### **Benefits & Features**

- Special double layer coated insert with a combination AlCrN and TiSi
- Works especially well on various Stainless Steel and exotic materials including SS300 & 400 series
- Best for Production Applications.

**XTB** 

Black Moulded Insert (with chip-breaker).

Special TiAIN coating for enhanced life.

Complete Range available in 16 size (NPT/UN/ISO/W/Partial profile)



- Special TIAIN Coating with added toughness.
- Universal grade which works on all materials and all applications.
- Wide Variety of threads including ISO, UN, W,NPT, BSPT and Partial Profiles.
- Best Suited for continuous auto/valve batch production.





## **GROUND LINE**



#### **New Threading Line**

- Thread turning
- Indexable Thread Milling
- Solid Carbide Thread Mills
- Tiny tools



## For Technical Info Scan the QR Code

#### **Thread Turning**

- Completely Ground Thread Turning Inserts
- Available from 06 to 27 Size
- Circlip inserts also available.

#### **Indexable thread Milling**

- Works on all material
- Steel bodies available
- Insert size from 12, 14, 21, 30 & 40.

#### **Solid Carbide Thread Mills**

- Both Thru and non thru coolant Solid Carbide available
- Available in ISO/UN/NPT/W as well as hardened materials

#### **Tiny tools**

- Small diameter solid carbide tools used for boring, turning, profiling, chamfering and grooving
- Designed for high tech, medical and small component industries.





## **GROOVING**

### **XTGP**



Proprietary grooving insert.

Insert range from 2 to 6mm.

3 different geometries:

P - For Parting

**GT - For Groove turn** 

R - For Radius

#### For Technical Info Scan the QR Code



#### **Benefits & Features**

- Available in 3 grades :
  - 1. XT830 The Universal high-performance grade for steel, austenitic steel, cast iron and heat-resistance alloys.
  - 2. XT930 The reliable choice for the machining of Steel and Stainless Steel.
  - 3. XP7125 The reliable solution for steel and austenitic steels under unstable conditions.

## XGDB/XGJ/XDT

#### 2 Corner Dog Bone Grooving Insert

1 Grade → XT310 for all materials

Insert available in 2/3/4 mm



- Different inserts for different applications
  - a. XGDB  $\longrightarrow$  For parting for Steel and Cast Iron
- b.  $XGJ \rightarrow Parting$  with sharper geometry for Softer materials, better chipbreaking
- c. XDT  $\longrightarrow$  For Groove and Turn applications.
- External Holders available in 2020 and 2525 shank with different depth range.





## XGM



**Popular Grooving insert.** 

Insert Range from 2 to 5mm.

- XGM in 2 grades
- (a) XP7125 Mass Production
- (b) XT125 Batch Production
- MGMN in XT310 Multipurpose Grade





## DRILLING

### **SPMG**



4 corner Drilling insert

Insert size ranges from 05-14mm

U Drill size ranges from 13-50mm

#### **Benefits & Features**

- 4 corners allows cost economy
- U- Drills readily available in L/D 2,3 & 4
- Multiple grades available!
- XT830 → With Chipbreaker, first choice for standard applications
- XT110 → Economical entry point multipurpose grade
- XT840 → New Grade for Steel and Cast Iron
- •XT930-C → New Grade for Stainless Steel machining

### WCMX

#### 3 corner Drilling insert.

#### **Available in 2 Grades**

- (a) XT830 → First choice for all premium applications
- (b) XT110 → Economical entry point grade first choice for Cast Iron
- (c) Sizes ranging for 03-08mm



- Insert design gives better rigidity in centre, leading to lesser chipping.
- Can be made in larger Diameters in cartridge type with longer L/D's as well.





### **XT225**



#### **New PVD Grade for Turning!**

Improved version of popular grade XT125

Suitable for tough steels, stainless steels and difficult to cut materials!



For Technical Info Scan the QR Code

#### **Benefits & Features**

- Improved version of XT125.
- New, reliable and tough grade for tough steels, stainless steels & difficult-to-cut materials.
- Strong Geometries like GM/GR reduce sudden fracture from interrupted machining.
- Allows for stable operation and longer tool life.
- $\bullet$  2-4  $\mu$  ALCrN+AlCrSIN PVD Coated, combining with ultra fine particles' substrates with High-Toughness
- Suitable for all materials in light & medium load turning.
- Suitable stainless steel & High-Temprature high hardness alloy in finishing, semi finishing.

Available in all positive inserts in HM geometry, negative inserts in BM/MA/GM/GR geometries





# PCD / CBN

## **BRAZED CBN**



**Grades for Hardened Steel as well as Cast Iron** 

Special Coating Done to increase parameters as well as tool life!!

All standard Positive and negative inserts available

#### **Benefits & Features**

- Available in regular as well as multi corner Popular Grades as below
- XBK7550(C06)  $\rightarrow$  Fist choice for hardened steel
- XBK7560(C07) → first choice for hardened steel on heavy interruption applications.
- XBK3015  $\longrightarrow$  First choice for Cast Iron Boring applications
- Can Develop special chamfers on request.
- Popular in automotive applications such as gears, hubs, and Cylinder blocks.

## **SOLID CBN**

#### Different grades for Different applications

Available in Round, as well as Turning and Milling inserts!

Can Increase productivity and tool life against most competitors in the market!

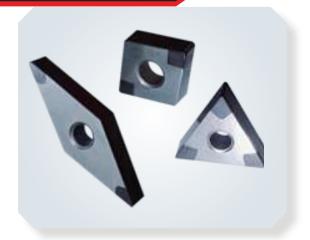


- High performance at competitive price
- Very popular in mining and impeller industry with Round inserts
- Cast Iron inserts are very popular on brake drum and liner applications
- Square Milling inserts very popular in pump and housing applications!





## **DELTA CBN**



#### **Brazed CBN for standard applications**

#### Available in CNGA, TNGA & VNGA 2 Grades

- a. XBK7000 Hardened Steel
- b. XBK3000 Cast Iron



For Technical Info Scan the QR Code

#### **Benefits & Features**

- Economical option, especially against carbide areas
- More corners than standard brazed inserts!
- Works on continuous as well as medium interruption applications!

## **XPD300**

#### **PCD Grade for Aluminium and CI machining**

#### **Single Corner Insert**

All standard Positive and negative inserts available!!



- Lethal Combination of performance and price
- First choice for AL with <13% Si and Cast Iron machining for finishing.
- Turning inserts with Chipbreaker on request.
- ISO Milling and Grooving inserts in pipeline!





Contact us: Mobile: +91 8879640290

Website: www.x-cut.in Email: Contact@x-cut.in