

Tungaloy

Member IMC Group

TECHNICAL
solutions

IMPROVE YOUR SETUP TIME!!

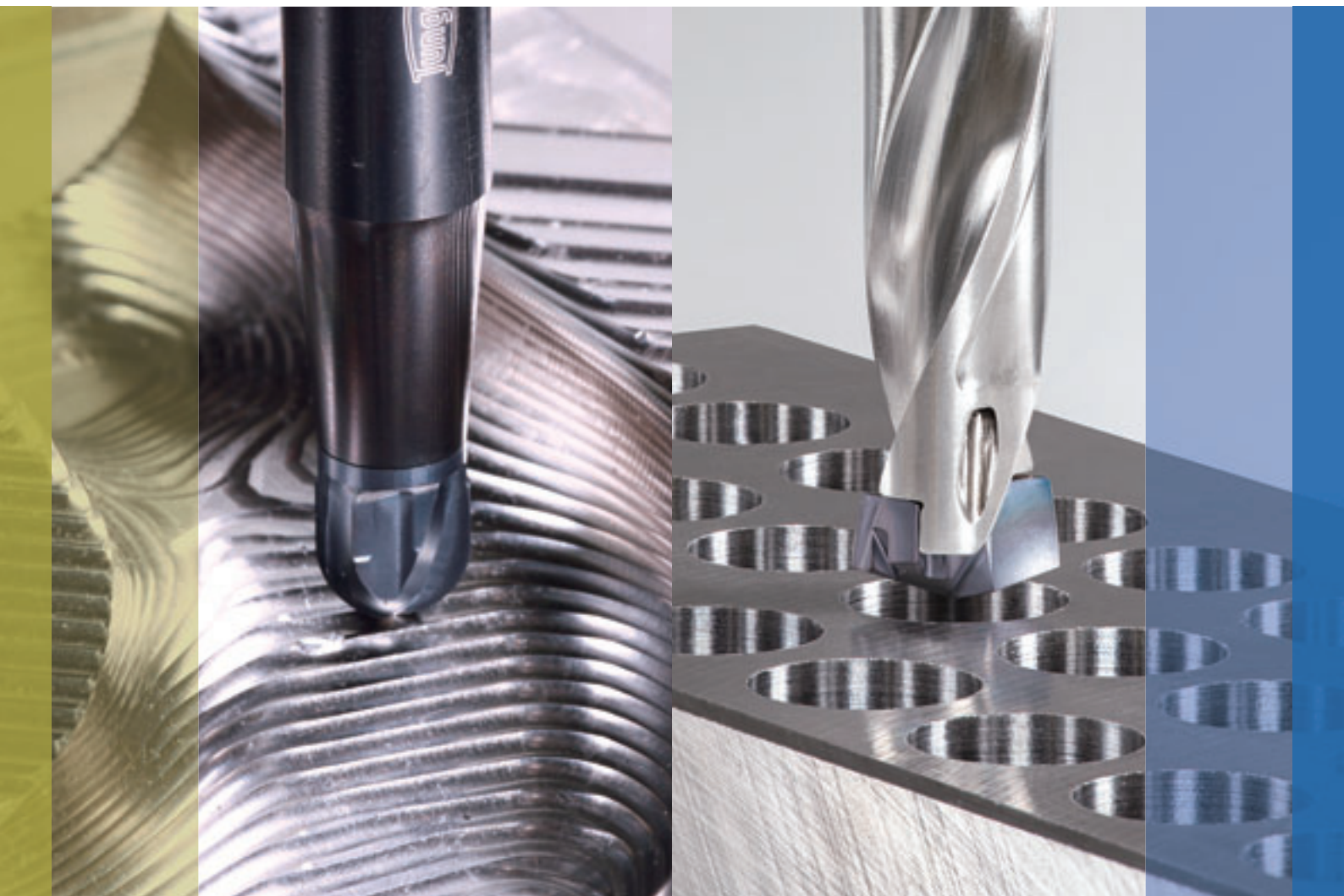
Innovative Exchangeable Head System

■ MillLine

TUNGMEISTER

■ DrillLine

DRILLMEISTER



Quick Change Milling Head

Others **Vs** Tungaloy's System

Costly



Solid Carbide Endmill



Economical

Use a short carbide head as needed for the application

Replaceable Carbide Head

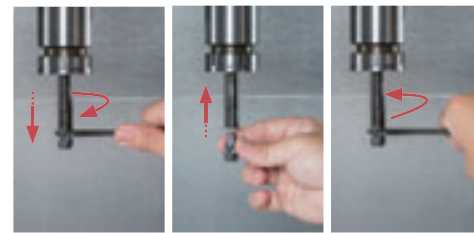


Inefficient



No Setup Time

Reduce machine downtime by replacing the head on the machine *with exchange accuracy within 0.02 mm*



< 1 min

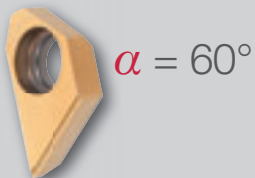
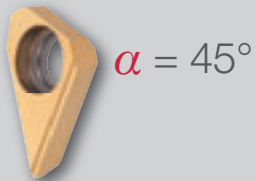
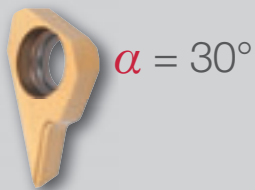
Versatile Hundreds of combinations available with wide range of heads in different shapes and sizes!



Combine drilling and chamfering operations, therefore reducing to one operation



Chamfering inserts



Drill body types

Flange type TID:

for general drilling operation

Straight type TIDC:

for pre-thread hole or with chamfer



Tool depth capacity

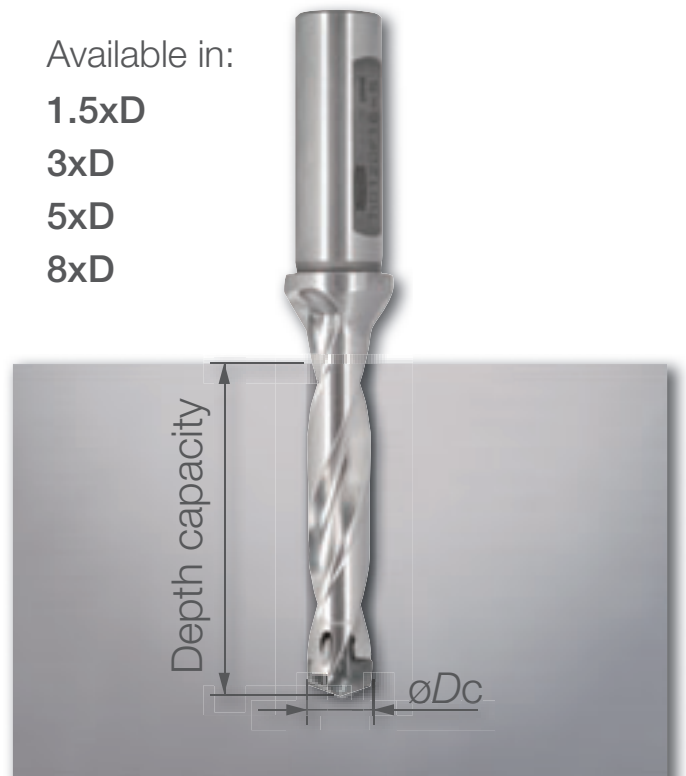
Available in:

1.5xD

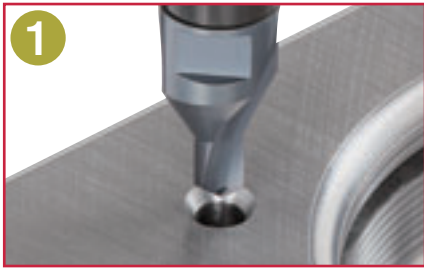
3xD

5xD

8xD



No setup time and machine downtime

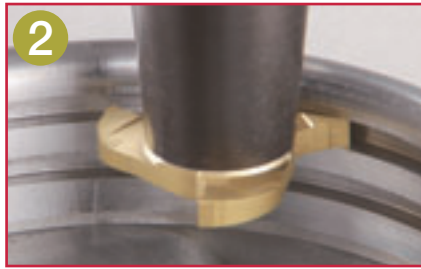


Center drilling + chamfering

VDP head

2 flutes for center drilling + chamfering (DIN332)

- **Range:** from $\varnothing 3.28$ to $\varnothing 6.46$ mm with 60° chamfer



Shallow slotting

VST head

3, 4, 6 flutes for slot milling solution

- Form slotting operation
- Chamfering operation
- **Width range:** from 0.76 to 10 mm with slotting **depth** up to 6 mm



T-Slot milling

VTB head

6 flutes for high productivity

- Form slotting operation
- Slotting with corner radius and chamfer
- **Width range:** from 2 to 8 mm with slotting **depth** up to 5.9 mm



Roughing & finishing combination head

VEE-C head

4 flutes / 45° helix

- Reduces cutting load and vibration due to combined roughing and finishing flutes
- **Range:** from $\varnothing 8$ to $\varnothing 20$ mm with possibility to machine almost any material



Concave radius milling

VCR head

2 flutes with concave radius

- For edge breaking and deburring
- Useful for machining edges of pockets or holes for easy entry of male parts in an assembly
- **Range:** from $\varnothing 8$ to $\varnothing 20$ mm with concave radii of **R1** to **R6** mm



Quick Change Drilling Head

Tungaloy's System Vs **Others**

Economical

Use a short carbide head needed for the drilling operation



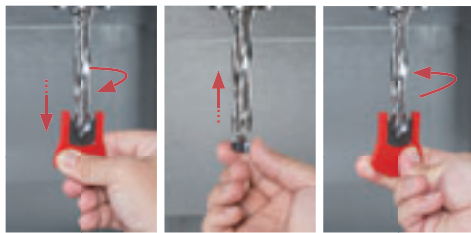
Costly

Expensive full carbide drill



No Setup Time

Reduce machine downtime by replacing the head on the machine



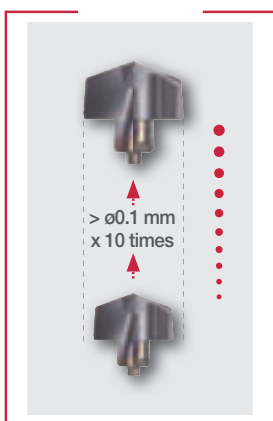
< 1 min

Inefficient



> 10 min

Versatile Tool range in increments of 1 mm covers from $\varnothing 10$ to $\varnothing 19.9$ mm; 10 different heads in 0.1 mm increments mount on each drill body



> $\varnothing 0.1$ mm
x 10 times



x 10 = Covers for hole diameter range from $\varnothing 10$ to $\varnothing 19.9$ mm