



# YOUR SETUP TIME!!

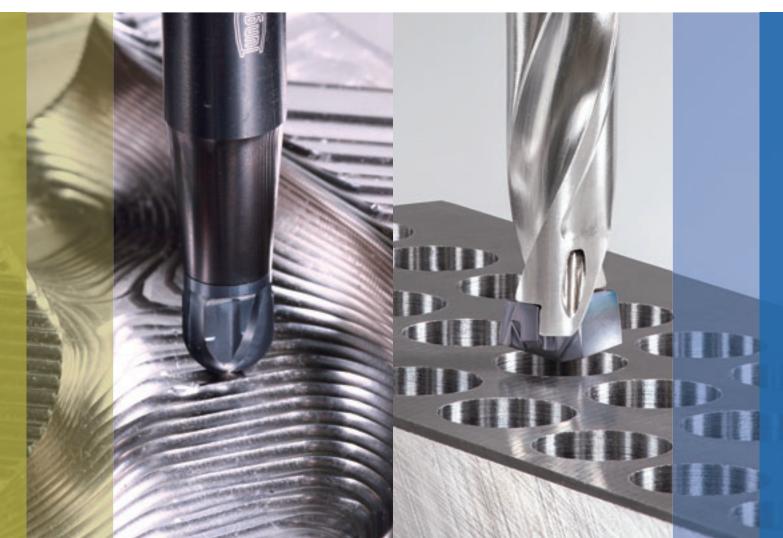
Innovative Exchangeable Head System

**Mill**Line

TUNGMEISTER

**Drill**Line





# MillLine TUNGMEISTER

# Quick Change Milling Head

**Others** 



Tungaloy's System

# Costly



# Economical

Use a short carbide head as needed for the application



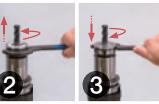


### Replaceable Carbide Head



# Inefficient





> 10 min



# No Setup Time

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







< 1 min



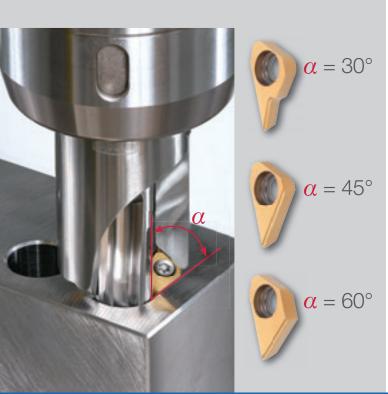




# Combine drilling and chamfering operations, therefore reducing to one operation



# Chamfering inserts



# Drill body types

Flange type TID:

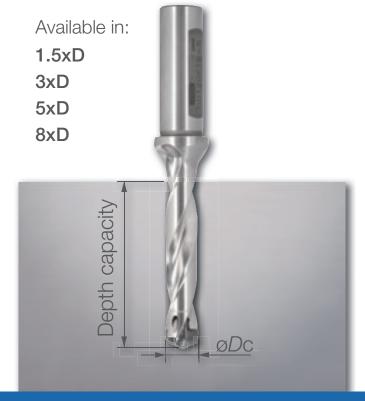
for general drilling operation

Straight type TIDC:

for pre-thread hole or with chamfer



# Tool depth capacity



# TUNGMEISTER

# No setup time and machine downtime



Center drilling + chamfering VDP head

2 flutes for center drilling + chamfering (DIN332)

- Range: from ø3.28 to ø6.46 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 ø8 to ø20 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 ø8 to ø20 mm with concave radii of R1 to R6 mm





# Quick Change Drilling Head

### Tungaloy's System



**Others** 

# Economical

Use a short carbide head needed for the drilling operation

# Costly

Expensive full carbide drill





Solid Carbide Drill



# No Setup Time

Reduce machine downtime by replacing the head on the machine









## Inefficient









> 10 min



Versatile Tool range in increments of 1 mm covers from ø10 to ø19.9 mm; 10 different heads in 0.1 mm increments mount on each drill body



**x 10 =** Covers for hole diameter range from Ø10 to Ø19.9 mm

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