

Industrial Solution IR002-E



Medical



Tungaloy Corporation

Door Opening Solutions for Ultimate **Medical Parts** Machining



www.tungaloy.co.jp



Ask for More of Tungaloy's
Door Opening Solutions

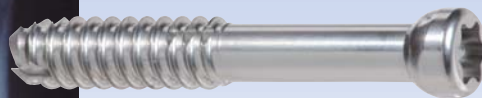
The ultimate tools for machining medical parts

Tungaloy is producing its latest cutting tools based on technologically advanced materials and cutting-edge process techniques that have been cultivated with over 70 years of expertise. This blend enables Tungaloy's products to deliver exceptional machining results with medical components

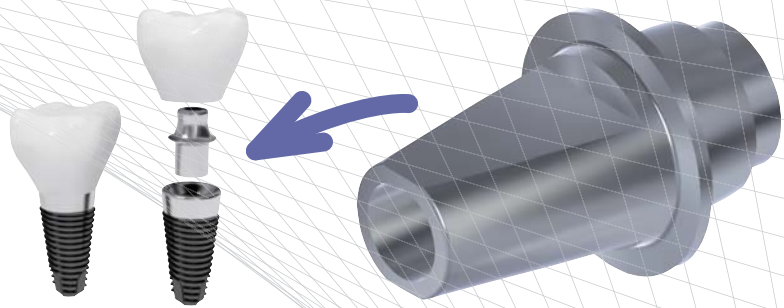
1. Joint implants



2. Bone screws



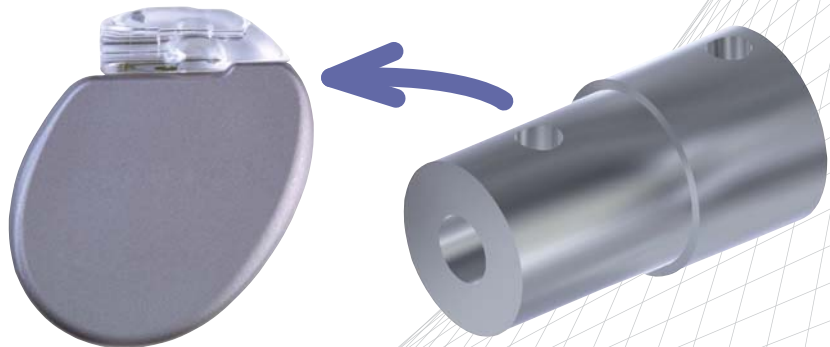
3. Dental implants



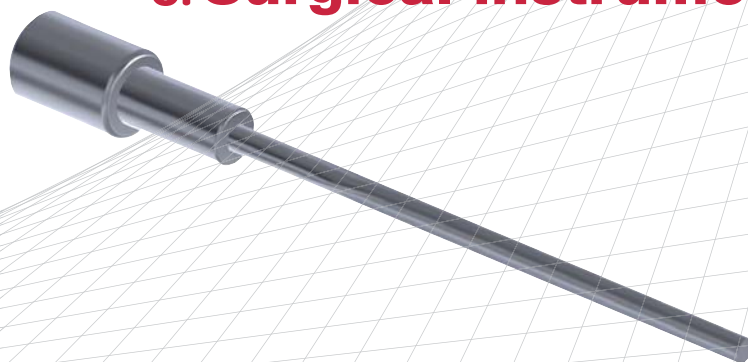
4. Implant plates



5. Pacemaker components



6. Surgical instruments



1. Joint implants

**Significantly reduce
tool changeover times**

Tungaloy introduces its new indexable
“TungMeister” endmills for highly
productive profiling.



Stainless steel & Titanium alloys



TUNGMEISTER

Indexable endmill

Drastically reduces tool changeover times
and delivers highly accurate repeatability.
With hundreds of cutting heads, the
TungMeister can be applied to any endmilling
application.



Joint implant tooling

HYBRIDTACMILL
Endmilling



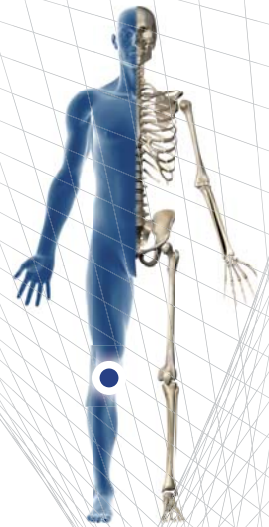
TUNGMEISTER
Profiling



2. Bone screws

Reduced set-up times

Back clamping toolholders suitable for small lathes and other easy operating tools drastically reduce the set-up time.



Stainless steel & Titanium alloys

J-SERIES

JT type toolholders

Back clamping system offers easy insert changeovers and excellent repeatability.



■ Bone screw tooling

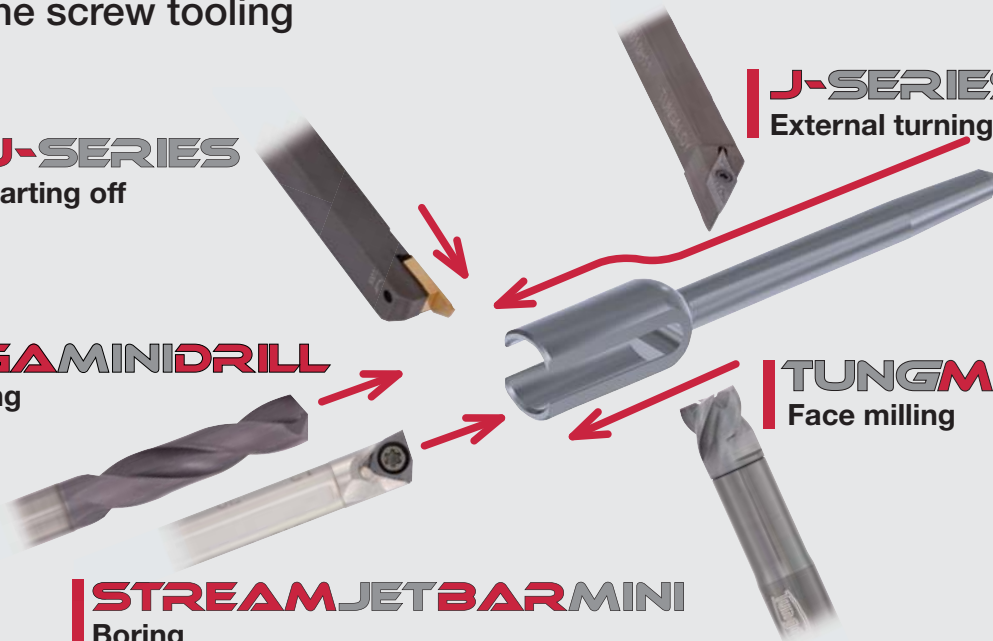
J-SERIES
Parting off

J-SERIES
External turning

GIGAMINIDRILL
Drilling

TUNGMEISTER
Face milling

STREAMJETBARMINI
Boring



3. Dental implants

**High
Productivity**

Newly introduced grooving tools have a highly rigid clamping system that leads to stable tool life and high accuracy when machining stainless steel and titanium alloys.



Stainless steel & Titanium alloys



GIGAMINIDRILL

DSM type

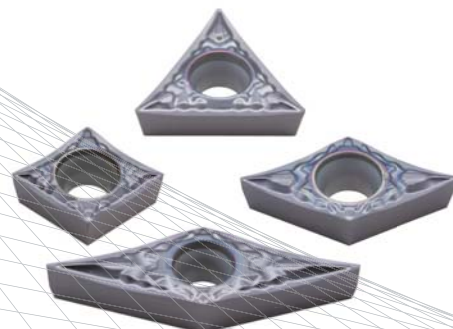
DSM type small diameter solid drills reduce cutting time and improve tool life when machining in the $\varnothing 0.1$ mm ~ $\varnothing 3.0$ mm diameter range.



J-SERIES

JS type chipbreaker

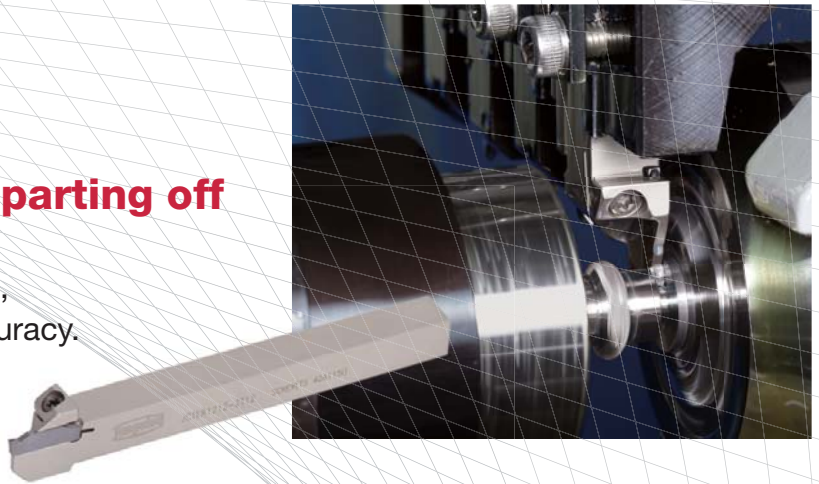
Provides stable turning performance in difficult-to-cut materials even with a fluctuating depth of cut.



TUNG CUT

The complete grooving & parting off solution

Sharp edges reduce the cutting forces, leading to stable tool life and high accuracy. The 1.4 mm width is available as the minimum size.

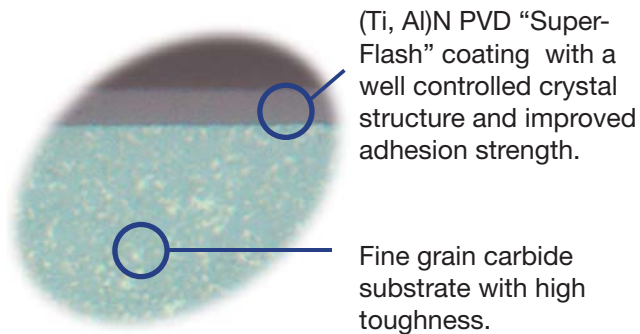


Grades

New PVD coated grade AH725



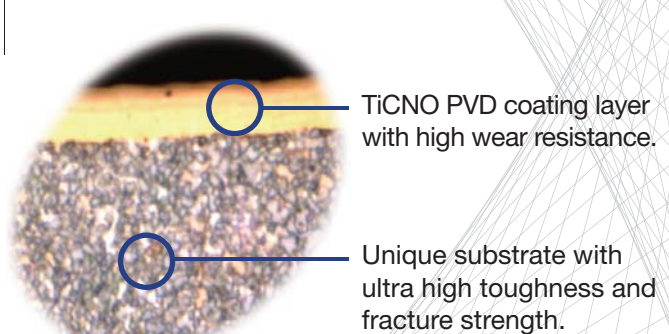
An all-round grade for most materials



New PVD coated grade GH130



Suitable for interrupted or tough cutting



Dental implant tooling

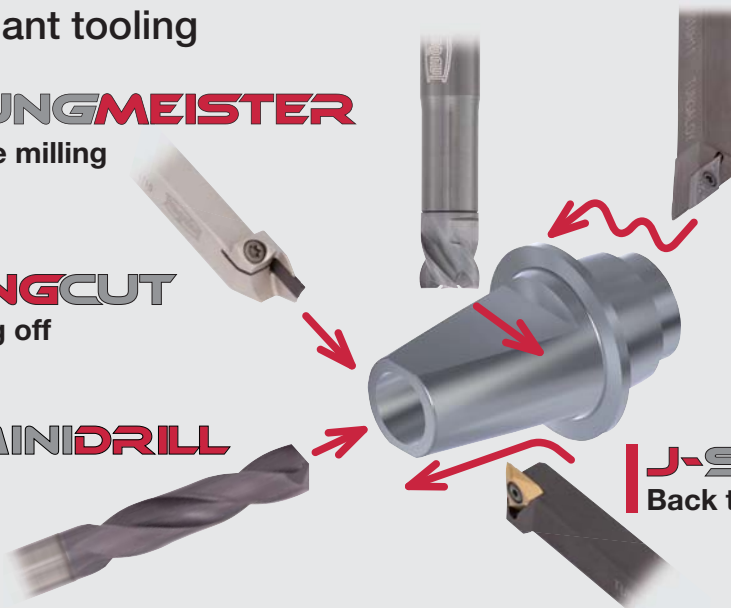
TUNGMEISTER
Face milling

TUNG CUT
Parting off

GIGAMINIDRILL
Drilling

J-SERIES
External turning

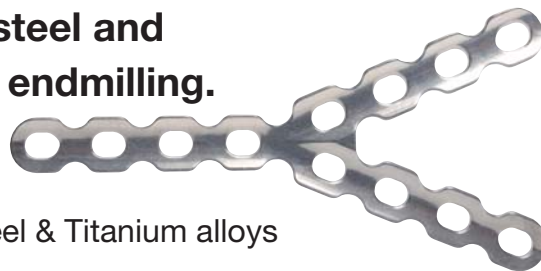
J-SERIES
Back turning



4. Implant plates

**High
Productivity**

Tungaloy's tooling allows high productivity levels and consistently long tool life in stainless steel and titanium alloy drilling and endmilling.



Stainless steel & Titanium alloys



HYBRIDTACMILL

EPH type

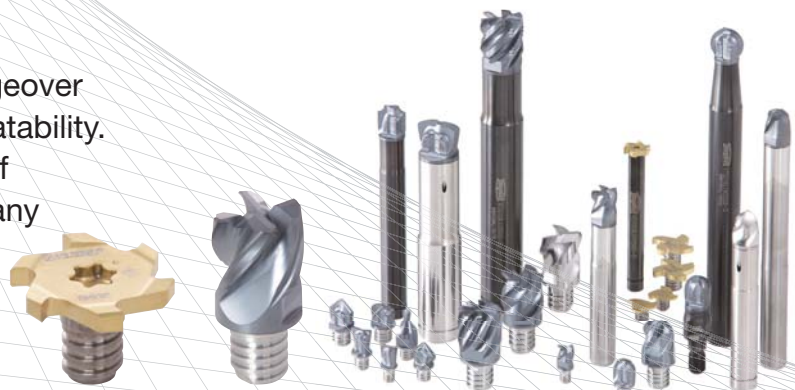
Provides highly productive and accurate machining, offering a viable replacement for solid carbide endmills.



TUNGMEISTER

Indexable endmill

Allows drastic reduction of tool changeover times and offers highly accurate repeatability. The TungMeister also has hundreds of cutting heads that can be applied to any endmilling application.



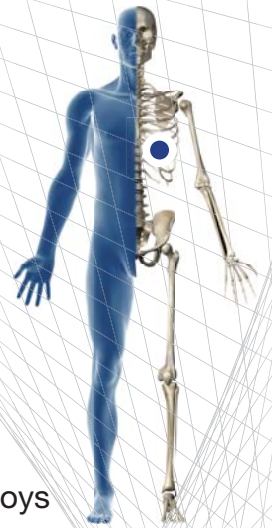
5. Pacemaker components

**Reduced
machining cost**

Tungaloy's drilling range offers high reliability and productivity in small diameter machining.



Stainless steel & Titanium alloys



STREAMJETBARMINI

Suitable for small diameter boring

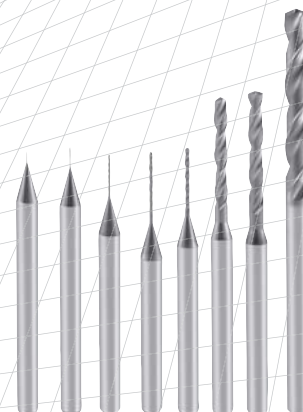
The wide range of items with high rigidity and excellent chip evacuation can be applied to a multitude of boring operations. Minimum boring diameter is $\varnothing 4.5$ mm.



GIGAMINIDRILL

DSM type

The DSM small diameter solid drills reduce cutting times and improve tool life when machining in the $\varnothing 0.1$ mm ~ $\varnothing 3.0$ mm diameter range.



6. Surgical instruments

Improved chip control

Tungaloy's cutting tools provide excellent chip control and increase tool life when machining stainless steel and titanium alloy.

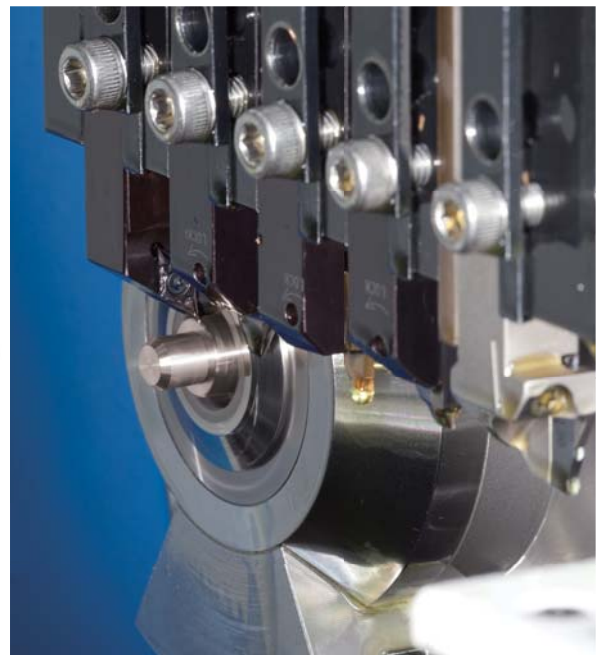


J-SERIES

JS

JS type chipbreaker

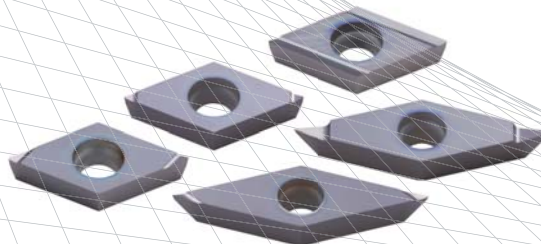
Offers improved chip control when machining difficult-to-cut materials.



JRP/JPP/JSP

Inserts with ultra high accuracy

Provides stable tool life and highly accurate machining. Sharp edge can create excellent surface finish.



Grades

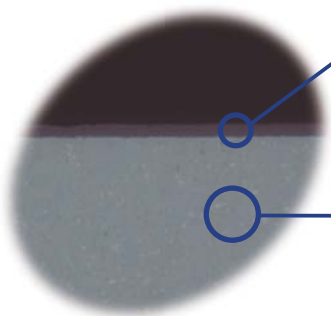
Tungaloy now introduces the latest grades for long and stable tool life when machining stainless steel and titanium alloys that are commonly used in the medical instrument industry.

New PVD coated grade

SH730



Suitable for stainless steel and titanium alloy machining



(Ti, Al)N thin PVD coating offers both sharpness and high chipping resistance.

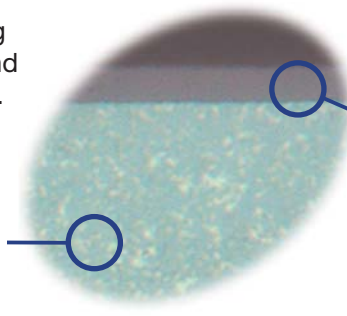
Fine grain carbide substrate with high toughness.

New PVD coated grade

AH725



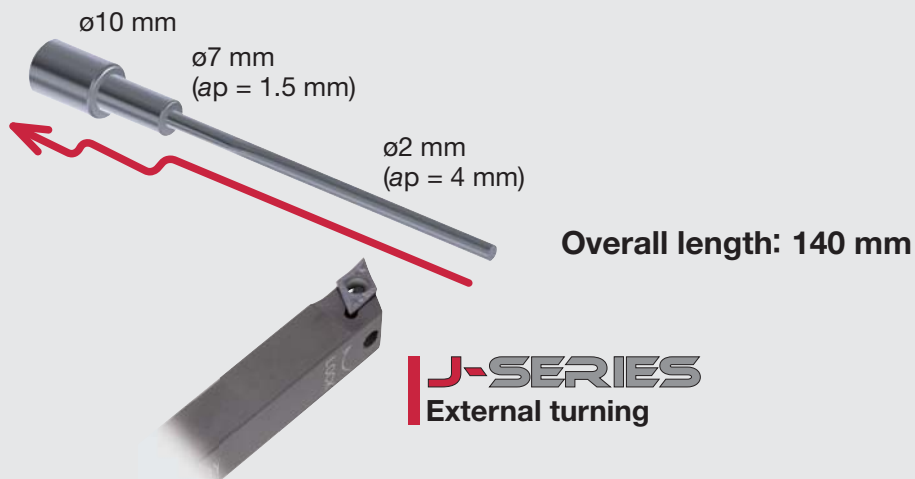
An all-round grade for most materials



(Ti, Al)N PVD "Super-Flash" coating with a well controlled crystal structure and improved adhesion strength.

Surgical instrument tooling

JS type chipbreaker with 3-dimensional design provides stable chip control even when machining with a fluctuating depth of cut.



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Products: Cutting tools

Nagoya plant (Japan)

Products: Cutting tools

Kyusyu plant (Japan)

Products: PCBN and PCD tools

Nirasaki plant (Japan)

Products: Cutting tools
Friction Material (TUNGFRICT)
Wear resistant tools
Civil Engineering tools

Yamato plant (Japan)

Products: Cutting tools

Tungaloy Precision Co.,Ltd. (Japan)

Products: Cutting tools

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18/10/1996

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Japan site and Asian
production site
26/11/1997

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