Medical
Door Opening Solutions for Ultimate Medical Parts Machining
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

![Joint Implant Image]

2. Bone screws

![Bone Screw Image]
3. Dental implants

4. Implant plates

5. Pacemaker components

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

**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**
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

JT type toolholders
Back clamping system offers easy insert changeovers and excellent repeatability.

Bone screw tooling

External turning
Parting off
Drilling
Face milling
Boring
3. Dental implants

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.

**GIGAMINIDRILL**

**DSM type**

DSM type small diameter solid drills reduce cutting time and improve tool life when machining in the ø0.1 mm ~ ø3.0 mm diameter range.

**J-SERIES**

**JS type chipbreaker**

Provides stable turning performance in difficult-to-cut materials even with a fluctuating depth of cut.
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
(Ti, Al)N PVD “Super-Flash” coating with a well controlled crystal structure and improved adhesion strength.
Fine grain carbide substrate with high toughness.

New PVD coated grade
GH130
Suitable for interrupted or tough cutting
TiCNO PVD coating layer with high wear resistance.
Unique substrate with ultra high toughness and fracture strength.

Dental implant tooling

J-SERIES
External turning

J-SERIES
Back turning

GIGAMINIDRILL
Drilling

TUNGMEISTER
Face milling

TUNGMEISTER
Parting off

Steel
Stainless
Superalloys

Steel
Stainless
Cast Iron
Superalloys
4. Implant plates

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

**HYBRID TAC MILL**

**EPH type**

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

**TUNG MEISTER**

**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

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

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 Ø4.5 mm.

DSM type

The DSM small diameter solid drills reduce cutting times and improve tool life when machining in the Ø0.1 mm ~ Ø3.0 mm diameter range.
6. Surgical instruments

Improved chip control

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

JS type chipbreaker

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

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.

External turning

Overall length: 140 mm