

Super High Precision Metal Tubes and Pipes

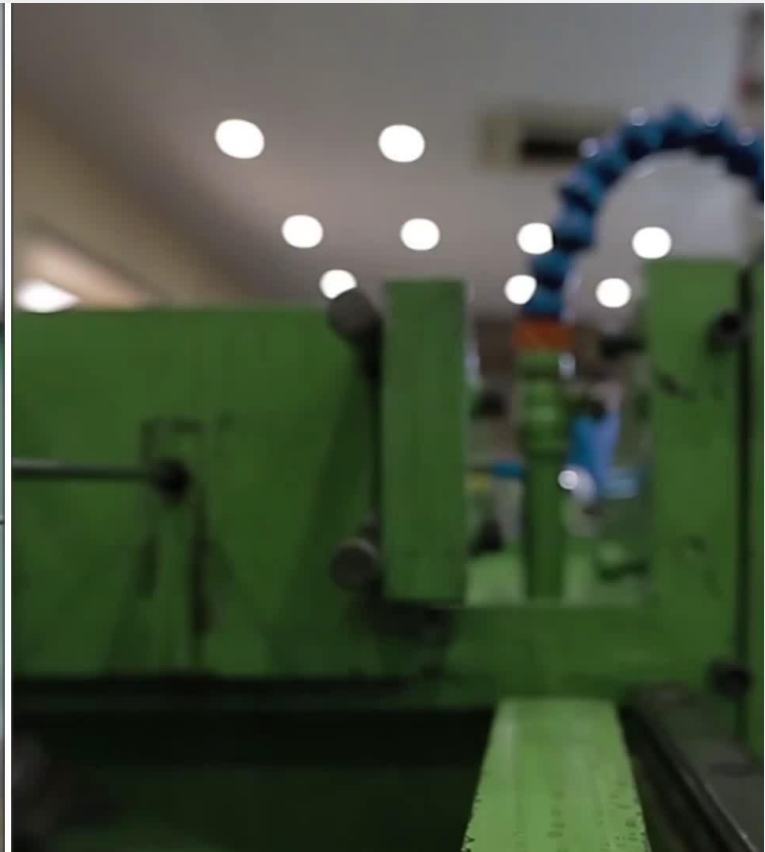


KAKOH Co., Ltd.



How to make KAKOH's pipes?

Deformation processing: to make thick material thinner
Ecological processing: to use up materials without loss



What fields are the products of KAKOH applied?

Precision Pipes for medical field



SUS(stainless steel) material → Used in many fields

Titanium Alloy → Lightweight, Toughness

Magnesium Alloy → Lightweight · High adaptability to human



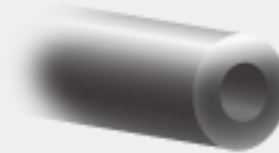
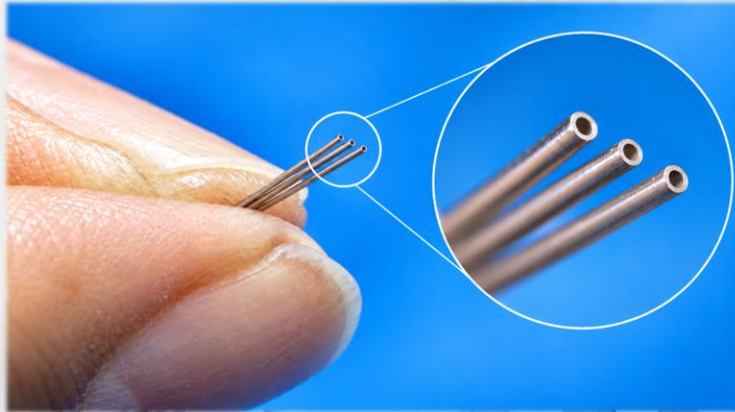
Possible pipe production range I

		Production range	Special production range	Standard specification																		
		W a l l t h i c k n e s s (m m)																				
		0.02t	0.03t	0.04t	0.05t	0.06t	0.07t	0.08t	0.09t	0.1t	0.2t	0.3t	0.4t	0.5t	0.6t	0.7t	0.8t	0.9t	1.0t	1.5t	2.0t	3.0t
Outer Diameter (mm)	0.06																					
	0.08																					
	0.1																					
	0.2																					
	0.3																					
	0.4																					
	0.5																					
	0.6																					
	1.0																					
	1.5																					
	2.0																					
Outer Diameter (mm)	3.0																					
	4.0																					
	5.0																					
	6.0																					
	7.0																					
	8.0																					
	9.0																					
	10.0																					
	1.0																					
	1.5																					

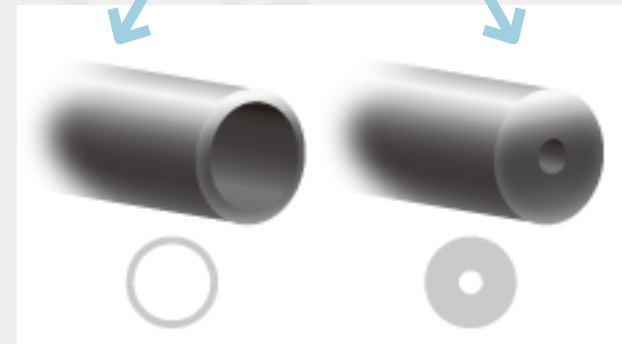
Possible production range

- Thickness : less 0.04mm
- Inner dia : $\phi 0.1$ (thick)
- Outer dia : $\phi 0.1$ (small)
- Surface roughness : Ra0.1. Ra0.1.
- Length : 1.0mm~2000L(mm)~Coil

Possible pipe production range II



Popular Tubes



Ultra thin tubes

Ultra thick tubes



???



Any kind of material and rare metals:

α - β titanium alloy 6-4 Titanium	Ti-15V-3Cr-3Sn-3Al	Ti-15Mo-5Zr-3Al	Elgiloy	Ti-22V-4Al
Pure Titanium	Ti-Nb-WSn Titanium-niobium alloy	Titanium tantalum alloy	Platinum	Nitinol
Cobalt chromium molybdenum alloy	MP35N	SPRON510	Nickel alloys	Monel
Permalloy	μ -Metal	Hastelloy	Molybdenum	Inconel
Stainless steel	SUS303Cu	SUS304 SUS304L	SUS316LVM	SUS316 SUS316L
All kind of Aluminum(alloys)	SUS440C	SUS420J2	Pure Gold	SUS310S
All kind of Copper(alloys)	Copper-tungsten	Brass	Magnesium (alloys)	AZ-31



Application examples of KAKOH's Products

Long tapered pipes



Application examples

As a nozzle of Medical Testing Equipment

require large force



small force

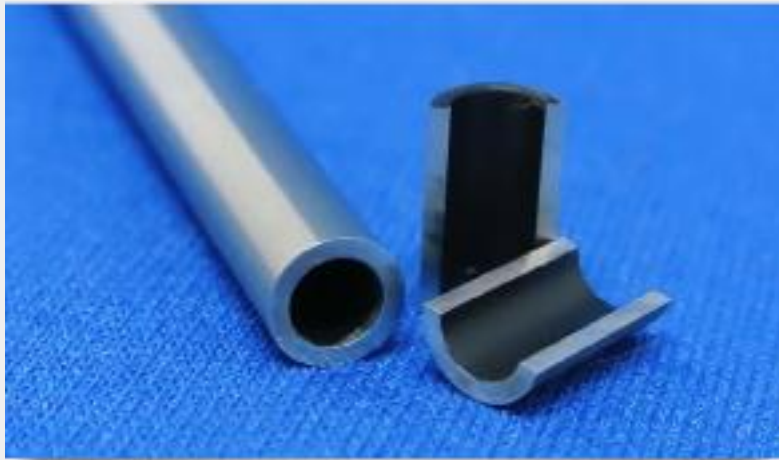


- **Efficient fluid mobilizing**
- **Decrease of residuals**
- **Minimize the loss of pressure**



Application examples of KAKOH's Products

Resin(Teflon) coated pipe on inside surface



Application examples

Medical Analysers

Piping work under harsh chemical environment.

Our products work best because

- High chemical resistance capability
- Improvement of surface roughness
- Stable working performance



Application examples of KAKOH's Products

Super thick Metal Tubes



HPLC: 130Mpa

High Performance Liquid Chromatography



UHPLC: 300Mpa

Ultra High Performance Liquid Chromatography

Application examples

Super High Speed Liquid chromatography

: Super thick Metal tubes are super high pressure resistant.

Resins tubes such as PEEK(current)



Burst!!

By using thicker metal tubes,
It is possible to cope with this Problem!



Introduction of KAKOH Co.,LTD

**“THE RESEARCH AND DEVELOPMENT TYPE COMPANY TO
OVERCOME ANY DIFFICULTIES”**

To serve our customers smoothly our production equipment all made within our company. ”

KAKOH Co., Ltd.

**President and representative director
KIDA KAZUHISA**

Founding: May 23, 1964

Head office: Tokyo, JAPAN

Factory: Saitama, JAPAN

Web site: <https://kakoh.com/en>

Mail: info@kakoh.com





**Thank you very much
for your kind attention.**

We are ready to accept any small quantity orders as well.
Please try and utilize our production footwork for your business.



KAKOH Co., Ltd.