

# **Sumitomo Electric Industries and Sinterwerke Company profile**

Sinterwerke Herne GmbH  
Sinterwerke Grenchen AG  
Sumitomo Electric Industries, Ltd.

# Company profile

1\$=110JPY

1€=130JPY

Company  
Name

**Sumitomo Electric Industries, Ltd.**

Established

**April 1897**

Capital Stock

**\$907 million** (767 million€)

President

**Osamu Inoue**

Employees

**283,910**

Subsidiaries&  
Affiliates

**416** (JAPAN 107, Overseas 309)

Consolidated  
Business Results

Net Sales **\$26.5 billion** (22.5billion€)  
Operating Income **\$ 1.1 billion** ( 0.9billion€)

(As of March 31, 2020)

# SEI Business

CONFIDENTIAL

Cemented carbide Tools, Sintered Metal Products, Nano-Polycrystalline diamond, Heatspreader material  
Special steel wires(PC steel, Spring, Tire cords)



Powder metal products



Magnet wire



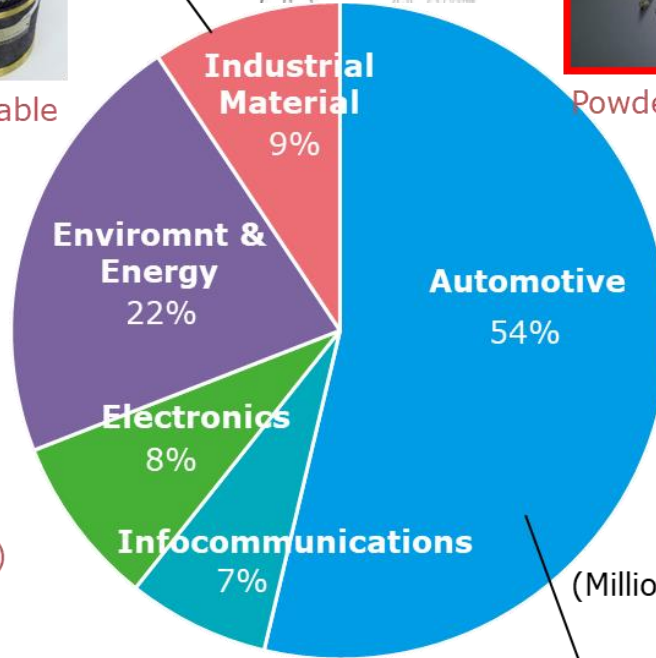
Ecology Cables



Power Cable



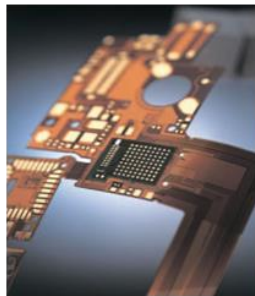
Industrial Material  
9%



(Million yen)



Wiring harness .Wheel Speed Sensor, Connector ,Center cluster integration panel



Flexible Printed Circuits (FPC)



Optical Fiber Cable



# Powder Metal Products Organization

CONFIDENTIAL

## Sumitomo Electric Industries, Ltd.(SEI)

### Sintered Metal Components Division

GM: Nobuhiro Hashimoto  
⇒Mitsuhiro Goto(21/10~)

Administrative Department

Sales Department

Advanced Materials Lab.

### Sumitomo Electric Sintered Alloy, Ltd (OSS)

KPMC/ESC

USA

SEMX

MEX

SWH/SWG

GER/CHE

SESG

GER

SEST

THA

SSI

IDN

SESC

MYS

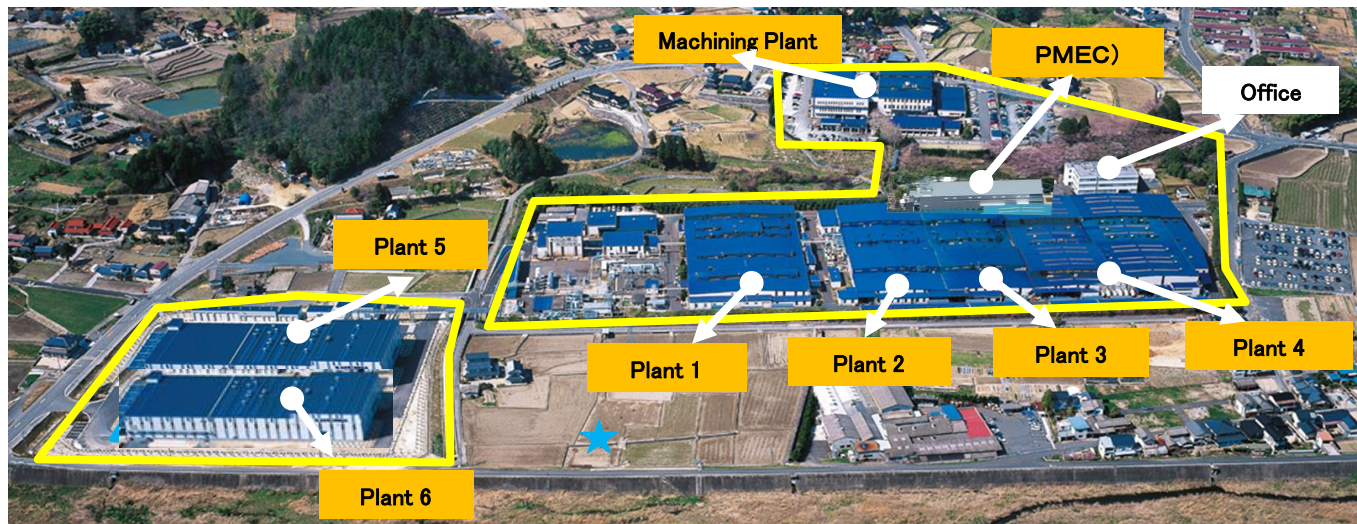
SPW

CHN

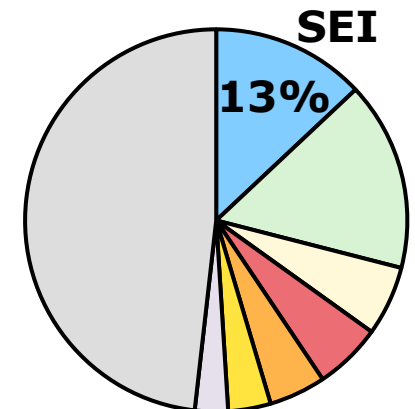
KSM

KOR

## OSS plant (The largest plant in the world)



## Global market share



SUMITOMO ELECTRIC GROUP

# Company History in Europe

**CONFIDENTIAL**

Trading Company  
Siber Hegner Japan  
(DKSH Japan)

\* Group Company of  
Sumitomo Electric

## Japan



Tungsten Rings for Watch were supplied to  
ETA from \*Allied Material (Japan)



## Germany

Herne



Founded as Bosch  
sub division "Sintertechnik"



Joint Venture  
"BTMT" between Bosch  
and TDK



Acquisition by Quantum  
Kapital AG (Switzerland);  
renamed Sinterwerke



**SUMITOMO  
ELECTRIC**

Oil Pump parts for AT, Nabe for MT  
Starter Gears, Magnet cores

## Switzerland

Grenchen



**BTMT**

Produced Tungsten Rings  
for Watch Companies



1971

1990

2012

2015

May 9<sup>th</sup>,  
2019

Acquisition by Dübbers  
Management & Consult



1948

1983

1994

2000

2013



Founded as  
Sinterwerke  
Grenchen

Takeover  
by Pleuco

Acquisition by  
BTMT/Sinterwerke

Vacuum Pump Parts,  
Oil Pump Gears,  
Valvetronic Parts for BMW,  
Sprocket for Engine

**MAHLE**

Driven by performance

Joint Venture MWP between  
Mahle, Wizeman and Pleuco

Transformed to Mahle  
Motorkomponenten Schweiz

2002 2007

VVT Parts for Engine,  
Shift Parts for MT



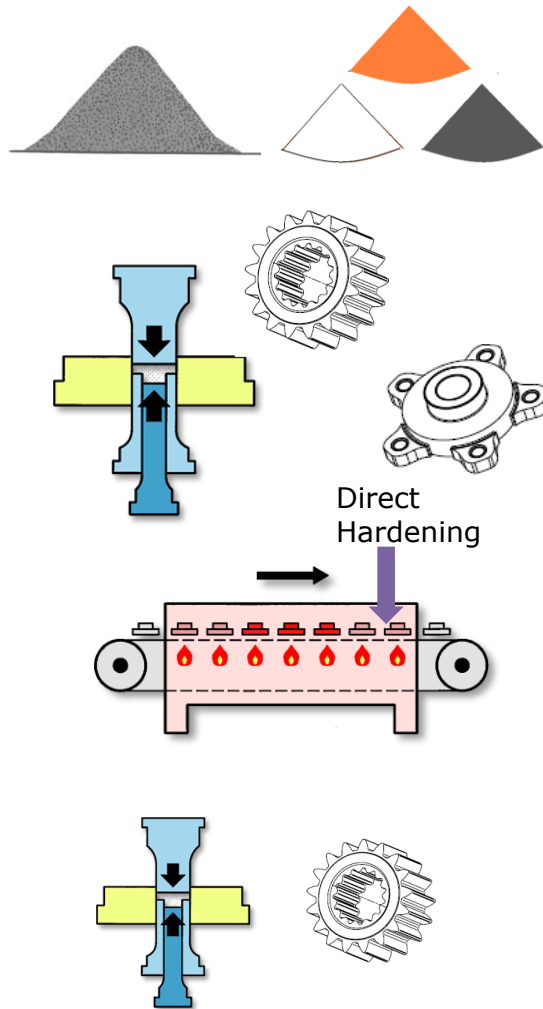
## Germany

Zittau



**SUMITOMO ELECTRIC  
SINTERED COMPONENTS (GERMANY) GMBH**

# Process of Powder Metallurgy



## 1. Powders >> Material Variation

Fe-Cu-C, Fe-Ni-Cu-Mo-C,  
Stainless Steel

## 2. Compacting >> Make Complicated Shape

Gear, Spline Density 87~94%  
Multi-Steps, Vertical holes

## 3. Sintering >> Achieve High Accuracy

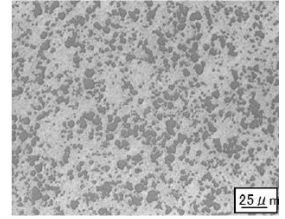
Sintering below melting point  
(1130~1150°C)

## 4. Additional Process

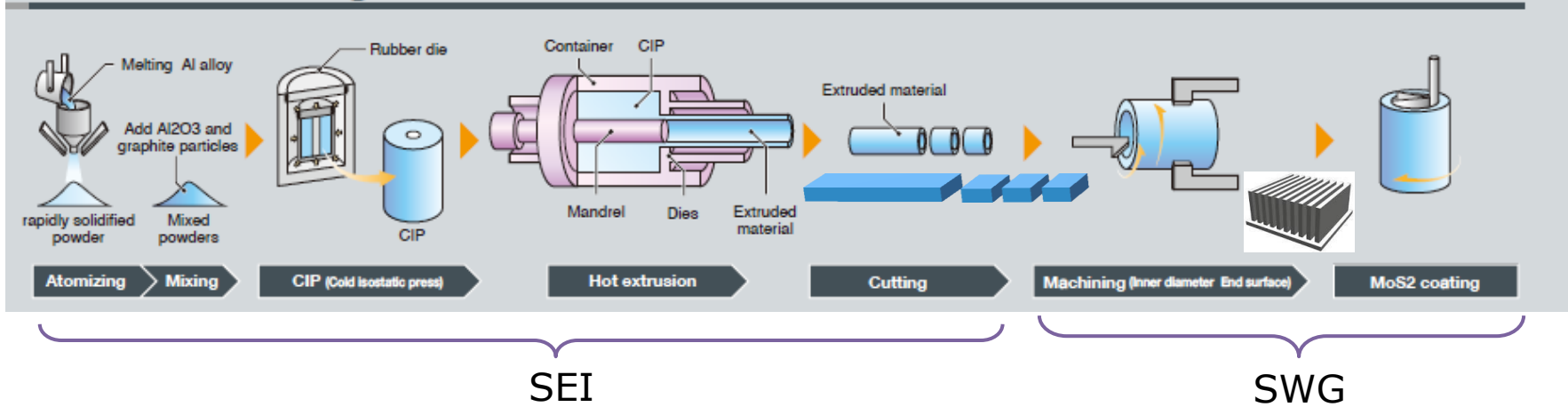
More Accurate → Sizing (Calibration)  
More Strong → Direct Hardening

# Special Aluminum Material (Al-Tough)

- ◆ High Tensile Strength (270~500 MPa)
- ◆ High Wear Resistance (HRB 70~100)
- ◆ Low Thermal Expansion (14~18 10<sup>-6</sup>/K)



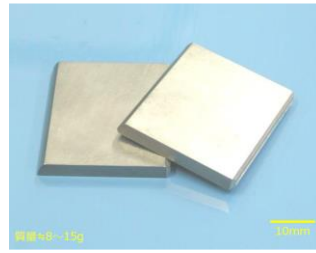
## > Manufacturing Process 高機能アルミニウム合金の製造工程



SEI is producing



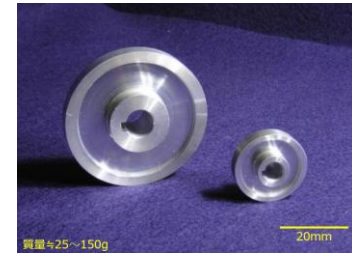
Engine Sleeve (Al-17Si)  
for Motor Cycles



Vane (Al-20Si)  
for Car Air-Con



Heat Sink (Al-40Si)  
for Semi conductors



Cychlo reducer (Al-17Si)  
for Robot Arm

# Vacuum Sintering for Grenchen's Market

- ◆ When we invest a Vacuum furnace in SWG (~1800°C)

We can supply the following materials

## Stainless Steel Material for Watch/Medical

- ◆ SEI is producing S430, S304 parts for ABS Sensor / O2 Sensor.



Vacuum Furnace

## Tungsten Material for Watch

- ◆ Allied Material (Japan) is used be producing.
- ◆ SWG is also used be producing.
- ◆ We have experienced employee in SWG now.

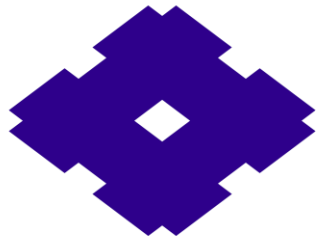


## Ceramic Material for Medical

- ◆ We can utilize a Vacuum furnace



# As Your Partner



**SUMITOMO  
ELECTRIC**

**Connect with Innovation**

<https://sumitomoelectric.com/>

SUMITOMO  
ELECTRIC  
GROUP