



We are looking for partners who
can work together with us in
pioneering new fields and
technologies!

鉄に、
アルミに、
命を
吹き込む。

Breathing life into
steel and aluminum



CHUO MALLEABLE IRON CO.,LTD

About company

① General profile

② Sales

③ Organization


④ Location

⑤ Capability

⑥ VISION

About company

General Profile

- ◆ Established January, 1944
- ◆ Capital 9.1 million USD
- ◆ All workers 755 person (Group 1056)
- ◆ Sales amount 245 million USD (As of Mar. 31, 2022)
- ◆ Stock market
 -  Nagoya stock exchange
CODE : 5607
(Major shareholder ; TOYOTA 5%)
- ◆ Business contents
 - Cast - Iron (Ductile) and Aluminum
 - Office furniture

HISTORY

- 1944 ; Established**
- 1948 ; Started business with Toyota (Rear hub)**
- 1959 ; Introduction of Japan's first automatic molding line (with SINTO)**
- 1960 ; Listed on stock exchange**
- 1978 ; Introduction of FVB (with TOYOTA&SINTO)**
- 1979 ; Developed automatic pouring machine**
- 1980s ; Started parts of construction machine and robot**
- 1980 ; Started Aluminum gravity casting**
- 1983 ; Awarded TOYOTA quality control prize**
- 1998 ; Started Aluminum die - cast (Laminar flow & squeeze)**
- 2000s ; Advanced to China**
Mar 2001 ISO 14001 / Sep 2004 ISO 9001
- 2019 ; Introduced the world's fastest automatic molding line**
- 2020 ; Capital alliance with Toyota Industries Corporation**
- 2022 ; Organizational reform for new business development**
(established Business Innovation Department)

CORPORATE PHILOSOPHY

**Contributing to society through
challenge and creativity to deliver
dreams for the future**



OUR BUSINESS

MOBILITY



INDUSTRIAL MACHINERY



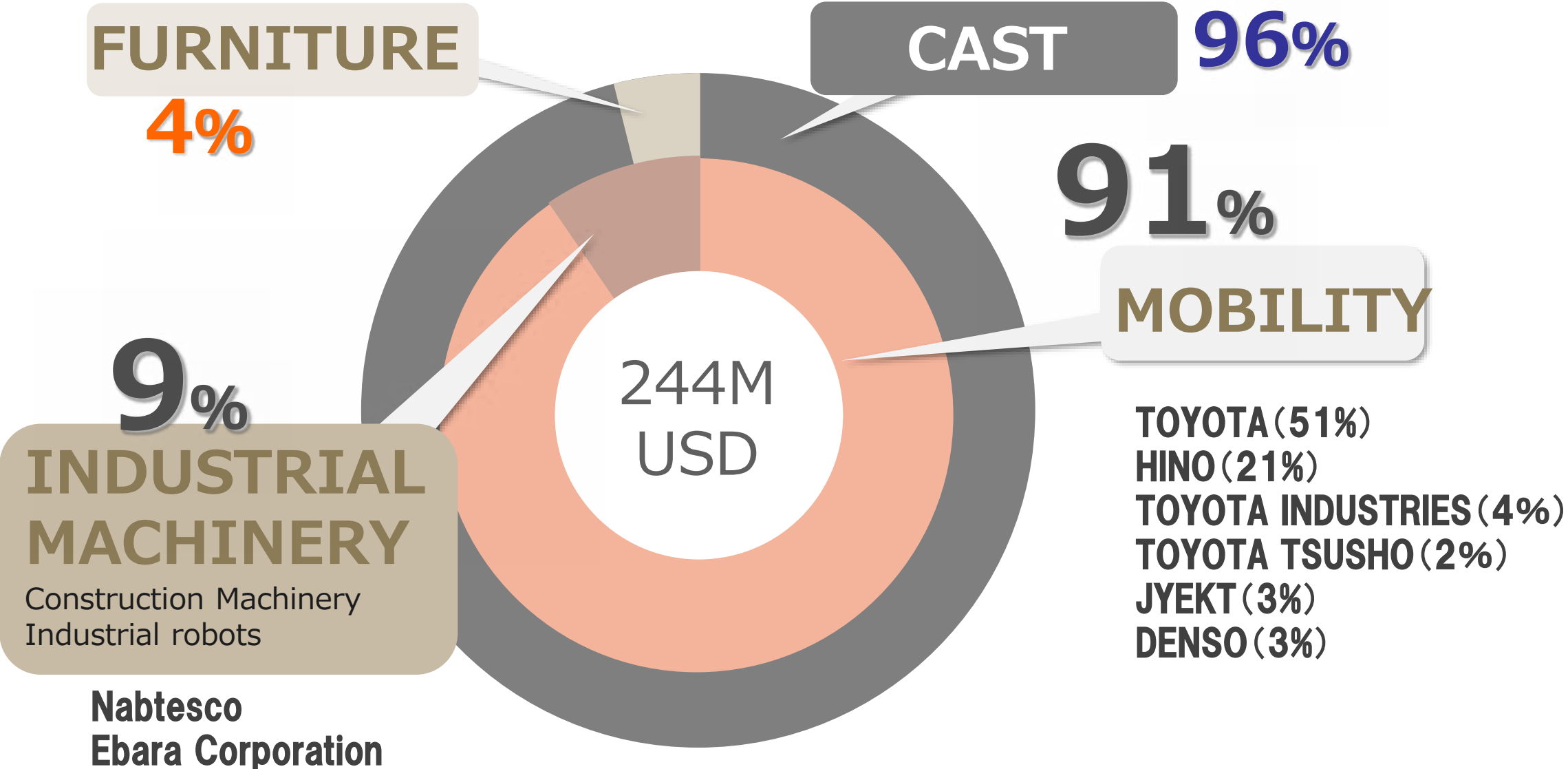
Product business by casting and machining of iron and aluminum

FURNITURE



Office / Home seating
comfort-friendly chair business

SALES COMPOSITION RATIO



PRODUCTS [CAST IRON/ALUMINUM]

Engine system parts

- タービンハウジング
HOUSING TURBINE
材質: HISI-FCD
- コンプレッサーカバー
COVER COMPRESSOR
材質: AC4C-76
- コンプレッサーブラケット
BRACKET COMPRESSOR
材質: AC2B-F
- オルタネータブラケット
BRACKET ALTERNATOR
材質: FCD500
- エンジンブラケット
BRACKET ENGINE
材質: FCD500
- エンジンブラケット
BRACKET ENGINE
材質: ADC12
- バランスシャフト
SHAFT BALANCE
材質: FCD500

Chassis system parts

- キャブマウントブラケット
BRACKET CAB MOUNTING
材質: FCD450
- ベアリングブラケット
BRACKET BEARING
材質: FCD450
- スプリングブラケット
BRACKET SPRING
材質: FCD500
- サスペンションアーム
ARM SUSPENSION
材質: FCD450

Moving parts

- デフケース
CASE DIFFERENTIAL
材質: FCD450
- デフキャリア
CARRIER DIFFERENTIAL
材質: FCD450
- デフサポート
SUPPORT DIFFERENTIAL
材質: ADC12
- アクスルハブ
HUB AXLE
材質: FCD400A
- デフキャリア
CARRIER DIFFERENTIAL
材質: FCD450

Industrial robot parts

高精度が求められる旋回部の部品。
It is part of the turning part that requires high precision.

- シャフトアッシー
SHAFT ASSY
材質: FCD450S

construction equipment parts

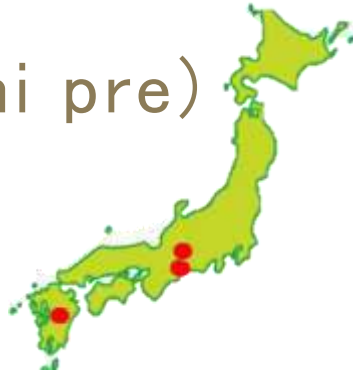
強度を必要とする旋回部、駆動部の部品。
Pivoting portion that requires strength, components of the driving unit.

- リヤフランジ
REAR FLANGE
材質: FCD450S

PRODUCTION BASE

JAPAN 3locations (Gr3 locations)

- NISSIN (Aichi pre)
- GIFU
- KUMAMOTO



CHINA 2locations

- SUZHOU



[岐阜久尻工程紹介.mp4](#)

CAPABILITY

- **Product design, proposal, VEVA** (ease of manufacture and weight reduction)
- **Casting + Machining (One-stop)**
- **Process design (Casting plant, process planning, lay-out)**

- **Production Know-How**
 - mass-production ⇔ High mix & small volum、 ~100kg
- **Cast simulation, CAD, CAM**
- **Metal mold produced by in-house**
- **Toyota production System method**
- **Own developed automatic pouring machine**

- **Measuring / Material Analysis**
 - High-pressure tester/Spheroidizing Inspection**



PRODUCTS 【 HOME/BUSINESS FURNITURE】

In charge of planning and design

INTERVIEW

開発者の声

企画・設計・デザイン担当

山田 英伸



To be used for long periods of time and to lean back." People-friendly chairs



ISU1-GP 【RACING ON OFFICE CHAIRS】

いす-1GP 熱いやつ、集まれ。 ISU1-GP

愛知一宮大会
中央可鍛参戦決定！

いすが壊れるか？
おのれが壊れるか？

10.22 SAT

一宮、再び。

2時間耐久事務いすレース

参戦車両
だよー

2022.10.22(土) 10:00~/13:00~
一宮市銀座通 商店街特設コース

おいち新々・銀座ストリートフェスタ

SILHOUETTE

いす-1GPは、いすのグランプリ。いす-1GPは、いすのグランプリ。いす-1GPは、いすのグランプリ。



爆走！“いすー1グランプリ” 2時間耐久の過酷なレース 事務椅子に座って駆け抜けろ！ - YouTube

LIGHTWEIGHT TECHNOLOGY

<CFRP · GFRP>

LIGHTWEIGHT TECHNOLOGY <CFRP · GFRP>



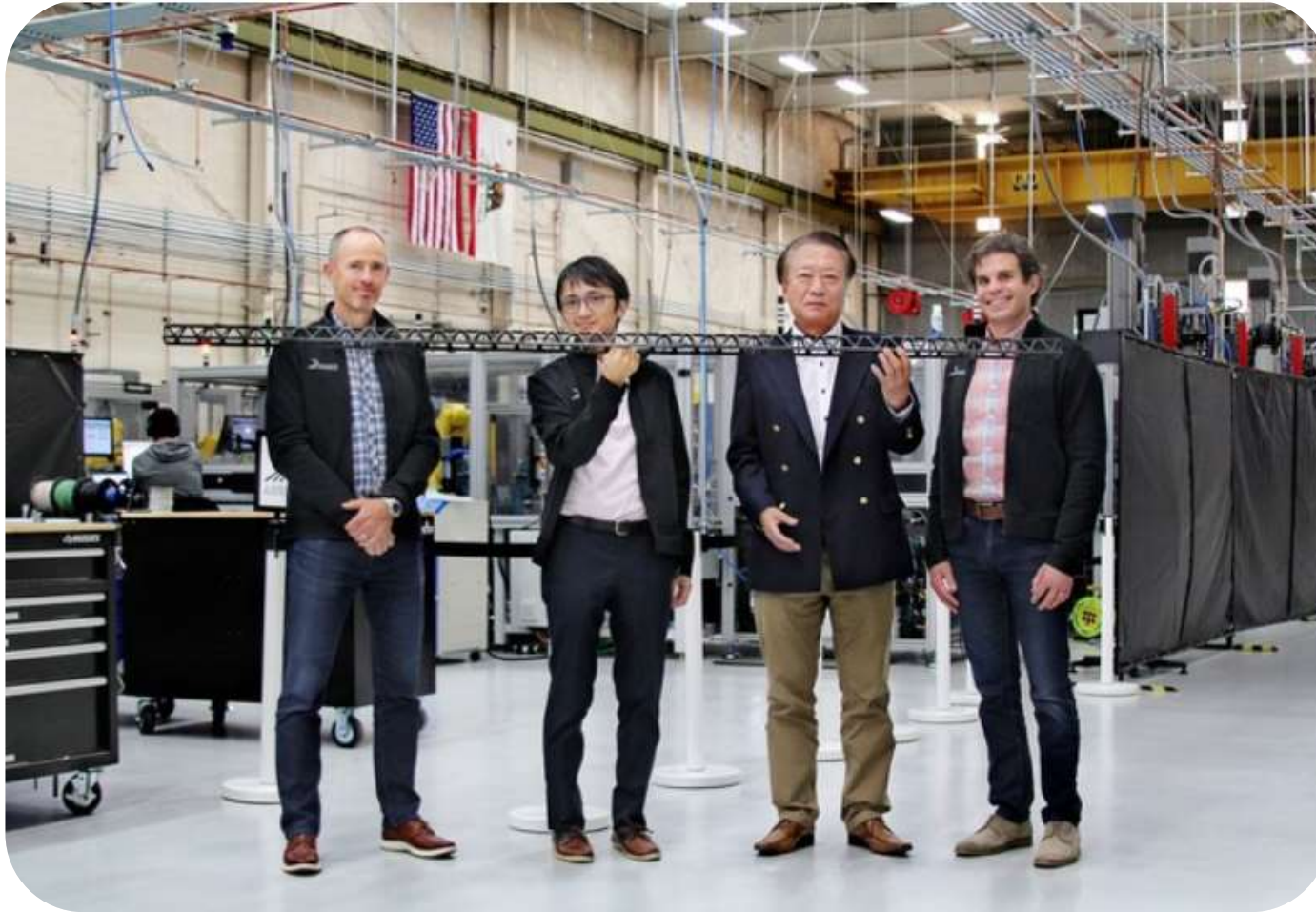
Ex : Industrial drone

- 17 parts to 1 part
- Improved strength, rigidity, and durability
- Weight reduction by 25
- Improved radio reception performance

Multi-material components can be optimally arranged and integrally molded.

Improved mechanical performance

COOPERATION



**Invests USD 2 million in U.S. company ARRIS Composites, Inc.
(November 2021)**

LIGHTWEIGHT TECHNOLOGY <CFRP · GFRP>

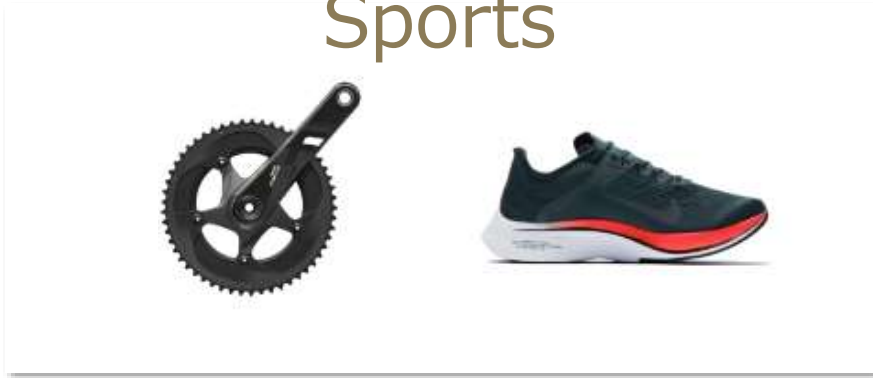
Electronic Components



Mobility



Sports



Medical Equipment

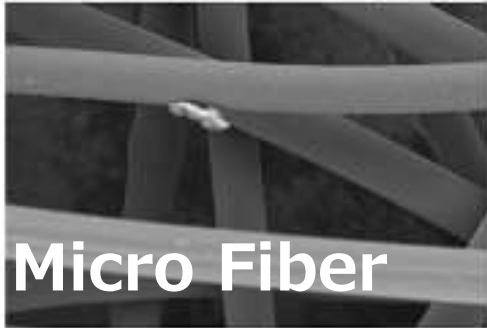


Collaboration with companies to develop products

NANOFIBER TECHNOLOGY

200 μ m

ト 200マイクロメートル ト



Micro Fiber

マイクロファイバー

5 μ m



$\phi 5$ ミクロン

Features

- 1 Moisture retention and heat insulation
- 2 Antibacterial
- 3 Non-absorption of odors
- 4 Water repellency, etc.

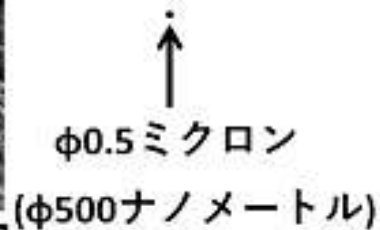
ト 200マイクロメートル ト



Nano Fiber

ナノワン

0.5 μ m



$\phi 0.5$ ミクロン

($\phi 500$ ナノメートル)

NANOFIBER TECHNOLOGY



防寒着



テント・シュラフ



ビニールハウスの保温・断熱



畜舎の保温



家屋の防音・断熱



防音・断熱カーテン



自動車の吸音・断熱

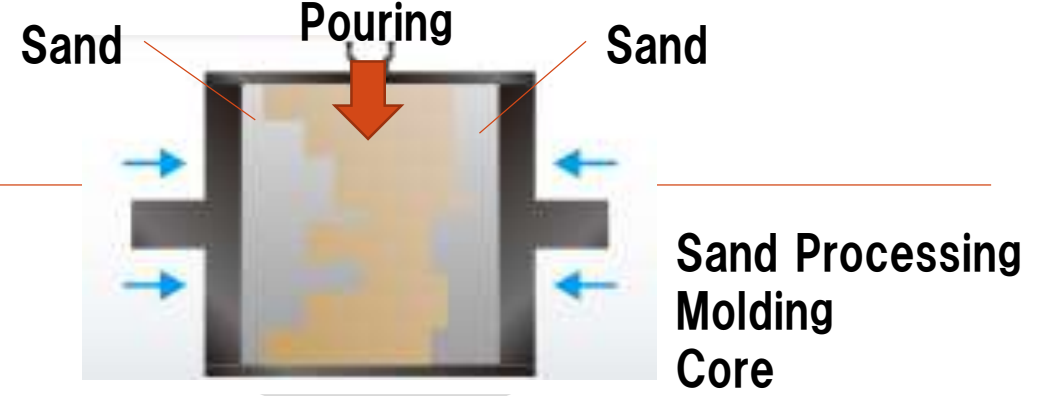


マスク

- Lightweight and insulating camping equipment and plastic greenhouses for agriculture
- Soundproofing material for automobiles etc.

FACTORY AUTOMATION

PRODUCTION LINE



Material Compounding



melting



Pouring



machining



burr removal



gate cutting



FACTORY AUTOMATION

Collaborative Robotics



AGV & IoT



AI Appearance Inspection



The social issues facing the manufacturing industry are piling up...

We want to collaborate on demonstration experiments

COLLABORATION



THANK YOU!