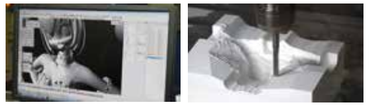
We respond the customer's needs in good faith by manufacturing and fabricating proprietary products in a strictly confidential manner.

Prototype・Small lot production

Manufacturing process using autoclave

Design・Analysis・Mold



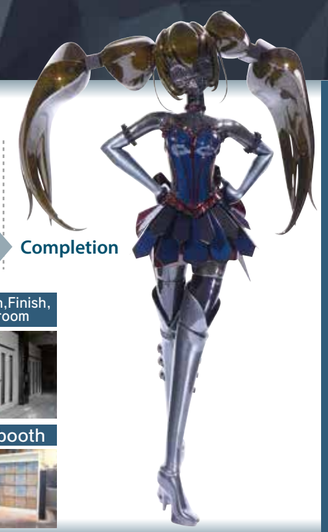
Autoclave

Finish・Adhesion・Assembly

Evaluation・Analysis・Examination

Painting

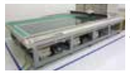
Completion



Operation Room

CAD／CAM
CATIA V5:2
THINK DESIGN:1
MASTER CAM:4
3D／CAD:3
2D／CAD:5

Cutting machine

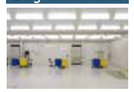


Cutting Plotter
Table work plane:
L3500×W1500
Vacuum suction type

Refrigerator ×1, Freezer ×2

Freezer 1
3350×3350×H2200
Freezer 2
4300×1600×H2400
Refrigerator 1
3400×1600×H2200

Large clean room



Clean room
FED-209D U.S. Federal Standard
(pce/1cf)
Class: 100,000
Size: 16m×16m (256ml)、
Ceiling height 3m
Temperature conditions: 23℃±3℃
Humidity conditions : 65% or less

Autoclave ×2

Autoclave No.3
Size: φ3000mm×L6000mm
Temperature: 200℃
Pressure: 0.99MPa
Within 0.7MPa
Vacuum system: Back suction system
The number of vacuum units: 10

Autoclave No.2
Size: φ1150mm×L1000mm
Temperature: 400℃
Pressure: 2.0MPa
Vacuum system: Back suction system
The number of vacuum units: 5

Machining centers ×5

NEO【5 Axis/MM4223】
M/C(X:4000 Y:2000 Z:1200mm,
C:0°～±270° B:0°～±270°)
Table work plane:4000×2000mm

DMG【5 Axis/DMU 125P】
X:1250 Y:1000 Z:1000
B:Swivel Range 0° -190°
C:Movable Range φ1,250

DMG【5 Axis/DMU 100P】
X:1000 Y:1000 Z:1000
B:Swivel Range 0° -190°
C:Movable Range φ1,100

MORI SEIKI【3 Axis/NV5000】
M/C(X:1020 Y:510 Z:510mm)
Table work plane:1320×600mm

MORI SEIKI【3 Axis/VS10000】
M/C(X:2050 Y:1000 Z:600mm)
Table work plane:2250×1000mm

Oven ×5

Large Oven
Hot wind circle method
Size:7000W×3000H×2000D
Temp:～300℃
The number of vacuum units:10

Oven
Hot wind circle method
Size:3,000W×2,000H×3,000D
Temp:～200℃,
The number of vacuum units:8

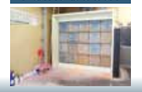
Oven for paint
Hot wind circle method
Size:2000W×2000H×2000D
Temp:～200℃

Medium size oven
Hot wind circle method
Size:1000W×1000H×1000D
Temp:～300℃

Small oven
Size:450W×450H×450D
Temp:～650℃

Adhesion,Finish, Coating room

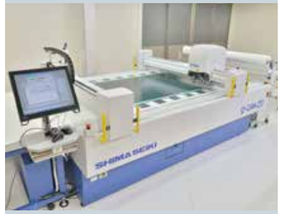
Paint booth



Middle lot production

Advanced CFRTS, CFRTP, HP-RTM Press System Flow, First in Japan

Cutting plotter
Available for Any Kind of Material(wet･dr)



SHIMA SEIKI MFG.,LTD
Max:1300×1700mm
Projector
Inkjet Head
Conveyor Belt +
Picking Table Interlocking System
Cutting Edge

Quick Response Heater
System with the middle wavelength infrared light and the short wavelength infrared light

Asano Laboratories Co.,Ltd.
Quick Response Heater
Heater Size 1164×1164mm×2set
0.6kW×81Heaters×2set (Upper and Lower) (48.6kW/m2)

Material Hand Robot
Available for Any kind of Material

KUKA
Material Hand Robot KR 240 R3330
Loading Capacity: 240kg

Epoxy Resin Injection machine
Resin Injection System for HP-RTM

Krauss Maffei
Epoxy Resin Injection Machine
Resin 60ℓ
Hardener 25ℓ

Remote-monitored 630 ton press machine
-Material handling for stable supply-

Krauss Maffei
630ton Press Machine
W1200×L1500×H1700
Power Unit: Vacuum valve×2
Air valve×5
Hydraulic valve×5

Mold Rapid Warning and Cooling System
REIKEN Mold rapid warning and cooling system(oil)
Maximum operating temperature: 300℃, Medium: Oil, Heater capacity: 78kW

New Technology・Innovative Technique

Metal insert
Minimum 3 minutes
<Reference> Molding time by new system
Image: Airplane Engine Bracket

Inspection test

Analysis for providing a high quality

NDI inspection equipment

NDI inspection equipment
(nondestructive test machine)
Matrix-eye™ EX
[Matrix-eye EX(Portable type)]
3D Ultrasound test system
Display: 10.4-inch liquid crystal panel SVGA
Arrangement size: 342×265×146mm
Picture compositing process:
SAFT(aperture synthesis)processing
AD frequency: 100MHz (12 bits)
CH number: A maximum of 64 ch
A variable setup of transmitted voltage: 20-200V variable
Frequency band: 2 MHz-15 MHz

Inverted Light Microscopes

OLYMPUS
Inverted Metallurgical Microscopes
Overall magnification:
50～1000 diameters
Digital image record system
Observation for brightfield
and darkfield

Laser tracker

Laser tracker(3D Measuring Instrument)
Laser tracker Non-contact 3D measuring instrument (portable type)
Measuring method:Laser interferometer + absolute range finder
Reflector range: Radius 1.5～
T-probe/T-scan range:angle / horizontal / vertical: 360° / ±45
[T-Scan]measurement depth:75mm/scanning width:50mm/focal length:83mm

Inspecting room surface plate (embedded type)
Size:6000×3000
Layout machine
Moving range: 5000×2500×1600

Performance Evaluation

Static Universal
Testing Machine 5985

INSTRON
5985 type with long column
and thermostatic chamber
250 kN
Thermostatic chamber:
-60～+300℃
W400×D400×H900mm

History

1968
・Founded Uchida Kougei as a self-employed small business in Ohi-machi, Saitama, Japan.
・Started manufacturing prototypes by carbon fiber.

1974
・Moved to new plant due to the need for mass production and manufacturing large-sized parts.

1984
・Concluded a contract for prototype of two-wheel parts for racing.

1987
・Started mass production of large-sized vehicles parts.

1991
・Started aero parts development and manufacturing.

1998
・The plant relocation, moved to current address.

1999
・Introduction of medium-sized autoclave (started to development for two-wheel related ACM mold).

2002
・Concluded of a contract for prototype of four-wheel parts, and started manufacturing prototypes of Formura1.
・Extended Plant-2 for introduction of measuring instruments and NC machining with related equipment.

2003
・Introduction of large-sized and small-sized autoclave equipment, and established 2nd clean room.
・Started development of SUPER GT and racing parts for both domestic and overseas rac.

2004
・Started development of the motor show models with each model and each molding.

2005
・Started development for aircraft related parts.
・Changed management system into business-unit based divisional system. Each devision stands for what they make.
・Participated in the next-generation vehicles and defense aircrafts by each national project.

2006
・Changed the company name to UCHIDA Co., Ltd. and switched primary focus to composit manufacturing.
・Newly established Uchida Kougei Ltd. for successing the existing business.

2007
・Established 2nd plant in Miyoshi-machi.
・〈Aerospace Sector〉 Certification of JIS Q 9100 : 2004/ JIS Q 9001 : 2008 (ISO 9001 : 2008)

2008
・Awarded "300 vibrant manufacturing SME's" from Ministry of Economy, Trade and Industry.

2009
・Welcomed the Governer of Saitama Prefecture, Mr.Ueda.
・Started to mold the largest aerospace parts in Japan.

2010
・Welcomed the local government committie of Saitama Prefecture.

2011
・Approved as an official partner of HRC.
・Delivered the 1st prototype to foreign helicopter manufacturer.

2012
・Uchida Kougei was merged into Uchida Corporation.

2013
・The 45th anniversary of Uchida Corporation.
・Passed the Audit by VOLKSWAGEN-AUDI.
・Announced the Agusta Westland's Rotor Blade to the world.
・Received an award of excellence from IHI Aerospace Co.,ltd.
The CEO enrolled in Graduate School for getting a PhD.

2014
・Begins joint development with Lamborghini.
・The GROVER E. BELL Award is given to Agusta Westland Project Zero Team, which UCHIDA joined as one of 16 suppliers.
・Establishes a branch office, UCHIDA Composite USA, in Washington state.

2015
・Exhibits in International Paris Air Show which is held in Le Bourget Airport, a northern suburb of Paris, France.
・Exhibits in MEDICA/COMPAMED 2015 at the world' s largest medical trade fair in Dusseldorf, Germany.
・Introduction of the press molding system with advanced composite material.

2016
・President Toshikazu Uchida graduated from Kyoto Institute of Technology, and received his Ph.D degree in Science.
・UCHIDA's "Lightweight composite bipedal walker" rewarded for JEC World 2016 Innovation Award.
・Received an award of excellence in the section of development cooperation from HRC.

2017
・Received an award for "challenge to the world" category in the Saitama Global award from Saitama prefecture.