



社 是

# 挑戦と調和

ごあいさつ

私たちは1973年創業以来社会の変革に素早く対応し、社会のニーズにお応えして参りました。  
私たちは今後益々発展をする光技術を軸として、真空技術、薄膜技術、塗装技術と今や基幹材料となったプラスチック成形技術の蓄積と融合によって、皆様の企業と社会の発展に少しでもお役に立てればと思っております。  
私たちは社是として「挑戦と調和」を掲げ、お客様と関係会社の協力及び社員一同の努力の下に未来の夢のある、環境に優しい企業に育てる所存でございます。  
今後とも、尚一層のご指導、ご鞭撻をお願い申し上げます。

代表取締役 杉山 久治

## Business ethics CHALLENGE and HARMONY

Greeting

Since the day of establishment in 1973, we have quickly responded to the change of society and have catered to the needs of the society.

Centering on the technology of light which will be increasingly developed hereafter, we will make effort to reach higher level of vacuum metalizing technology, thin film coating technology and molding technology to inject essential materials (plastic). By the accumulation of those technologies, we will create our original products and import/export industrial machineries which are related with those fields.

Through our activity, we would like to be of assistance to your business enterprise and society in even the slightest terms.

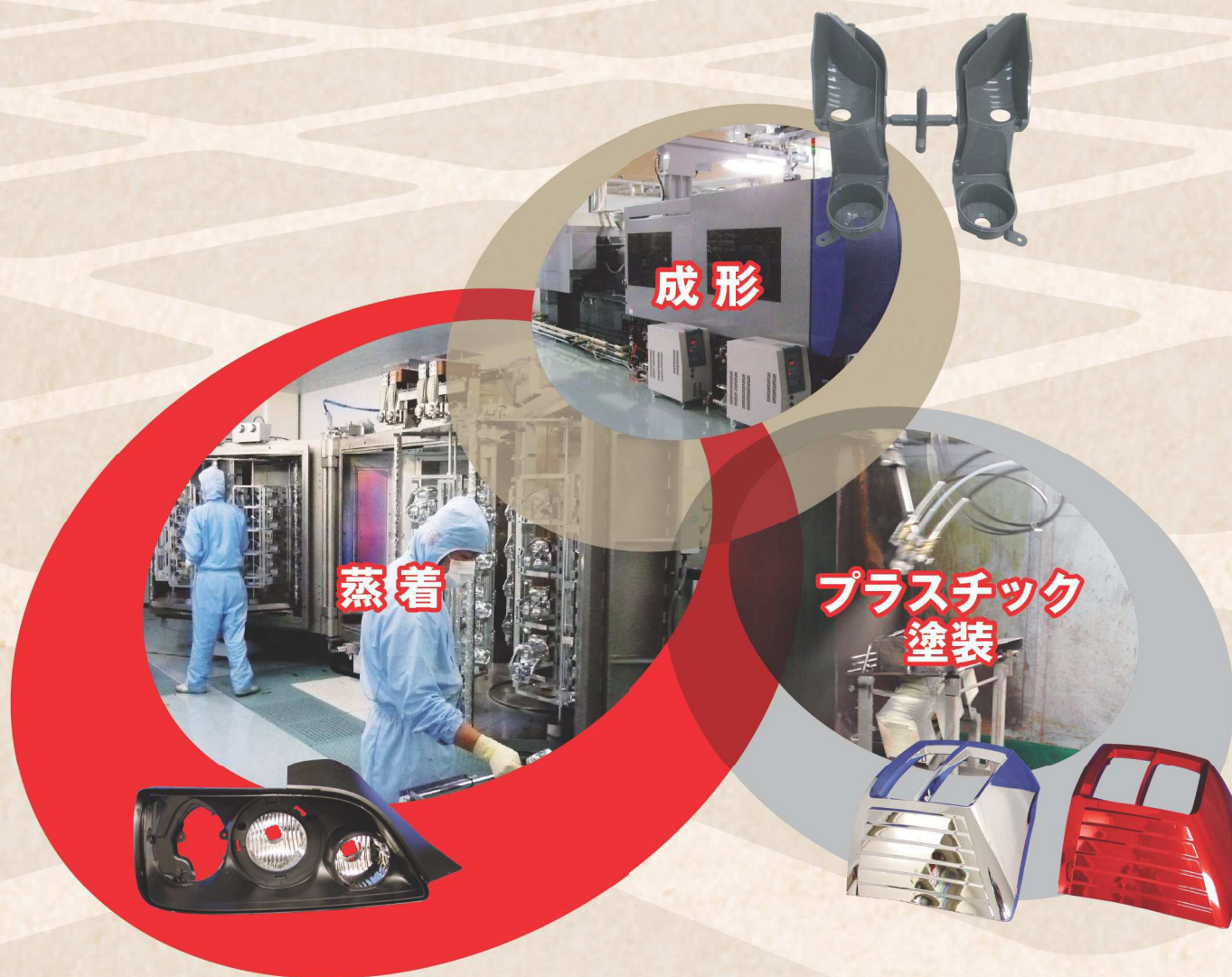
Our company creed is "CHALLENGE and HARMONY". We will develop BIKO toward a dreamy and environment friendly company in future under the cooperation of customer and our associated companies together with the effort of our staffs.

We appreciate your further instruction and encouragement.

CEO Kyuji Sugiyama







プラスチック成形・真空蒸着・プラスチック塗装で長年の実績を誇る当社は、最先端の設備とプロ集団による加工技術を駆使し、お客様に高品質な製品を安定的に提供いたします。

お客様のニーズにお応えできるよう企画、設計、製造とトータルサービスを実現できるよう社員一同情熱をもって対応させていただきます。

従来、真空蒸着はアルミニウムによる、光の反射及び意匠的な製品が中心でしたが近年当社に於いては他の金属による蒸着を行いシールド膜の形成など機能部品等他分野への研究、製造を行っております。

We can provide high quality products permanently through the newest facilities and professional process technology professional process technology because we are proud of our several decades business experiences about plastic molding technology, vacuum metalizing and plastic painting technology.

Able to meet the needs of our customers, we will be able to support our employees as of sympathy deliver heat total planning, design, manufacturing and services.

Traditionally, vacuum deposition was mainly a product and reflection of light by aluminum design, recently, we do research and manufacture the film deposition, which is performed by the other metal shield such as the formation and other functional parts.



美光メック製 タングステンフィラメント

アルミ1個用

アルミ2個用

特許取得

美光メック製 真空蒸着アルミ



特許取得

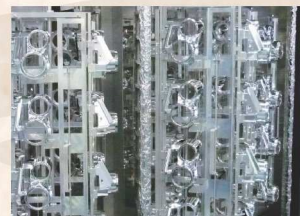


# Technology

技術へのこだわり

## 美光産業の「技術」はここが違う

プラスチック樹脂加工で、長年の実績を誇る美光産業株式会社。  
各種プラスチック製品の成形加工・真空蒸着・塗装までトータルサービス。  
全国的にも数少ないクラス10,000のクリーンルームを完備し、高品質な製品を安定的に製造・提供いたします。



### 美光産業の真空蒸着はここが違う

業界内でも数少ないクラス10,000のクリーンルームを完備。ゴミ・糸くずなどを排除した環境で作られた高品質な製品をご提供いたします。

### 大ロットにも小ロットにも対応

大量生産に適した塗装ロボットと、小ロット・多品種の生産に適した手吹きブースの両方を完備しております。  
臨機応変な対応ができロボットとテーブルとの協調塗装により時間を短縮します。

### 成形後、素材にダイレクト蒸着し工数の削減

最新のプラズマ重合蒸着機を保有。これにより重合蒸着やダイレクト蒸着が可能となり、アンダー・トップ塗装工程を省くことができます。高生産性・高品質・低コストを同時に実現します。

### マイクロスコープによる3D解析を実施

マイクロスコープを使用することで不良の原因を解析し問題を迅速に解決することができます。  
また、塗装時の温度及び湿度等のデータを蓄積しており、これを元に塗料の配合割合を決定し2回目以降も高い再現性があります。

## Here is the difference of our "Technology".

BIKO Industries Corporation proven years of processing plastic resin.  
Total service to the vacuum evaporation, coating molded plastic products from a variety of planning and design.  
Class 10,000 clean room equipped with one of the few nationwide, offers a stable production of high-quality products.

### Remark different vacuum deposition is here.

Class 10,000 clean room, one of the few in the industry, equipped. We offer high quality products made in an environment that removes dirt and lint.

### Support both small-lot and large-lot.

Suitable for mass production and painting robots, equipped with both a booth and hand-blown for many types of small-lot production can respond flexibly. We will reduce the coating process time by robot and coating-table cooperation.

### After molding, direct-deposition reduces man hours.

Holding the latest plasma polymerization deposition equipment. Enables direct deposition and deposition polymerization, which can eliminate under and top coating process, high-productivity, quality, cost will be achieved at the same time.

### 3D analysis, performed by a microscope.

You can resolve issues quickly to analyze the cause of the defect by using a microscope. In addition, the accumulated data such as temperature and humidity during the coating has been stored. There is a subsequent high reproducibility to determine the proportion of the original paint.







# Quality

品質へのこだわり

## 美光産業の「品質」はここが違う

美光産業株式会社は2001年に品質マネジメントシステムISO9001  
認証を取得。  
高品質の製品を安定的に生産・提供します。



### ロボットによる安定した塗装

アンダー塗装からトップ塗装・色塗装まで全てロボットで行う為、高精度・高品質な塗装を実現。  
1μ単位の膜厚制御も可能です。

### 当社独自の洗浄・液切り・乾燥技術で高品質

成形品は全自動素材洗浄機にて、超音波浸漬洗浄を行い、当社独自の洗浄・液切り・乾燥方法にて付着した埃・油分等を完全に除去し塗装・蒸着を行い、高品質を実現します。

### 治具を社内で設計

自社で使用する治具は自社で設計する為、高生産性、高品質を実現できます。

### 品質保証体制の確立

耐熱試験器・温水試験器・環境試験器・反射率測定器・膜厚測定器等の各種試験・測定器・分析装置を用いた品質・性能評価を社内にて実施。製品の品質・性能の維持や保証ができます。

## Here is the difference of our "Quality".

Remark BIKO Industries Corporation acquired ISO9001 quality management system certification in 2001. Provide stable production of high quality products.

### Stable robotic coating

Top, under, and color coating, everything to do with robots, provides high precision and high-quality coating. Capable to control film pressure by 1micro-unit.

### Our own cleaning, fluid cutting, and drying technology in high quality

Molded material in fully automatic cleaning machines. ultrasonic immersion cleaning is performed, to completely remove the paint adhering dust and other oil in our own cleaning, fluid cutting and drying technology. Coating and deposition are performed to achieve high quality.

### In-house fixture design

We can design the fixture by our own company, so we can realize high productivity and quality.

### Establishing a quality assurance system

Heat tester, water tester, environmental test equipment, measuring reflectance, measuring instruments and various other film pressure test, measurement, quality evaluation using in-house analysis unit implementation. You can be guaranteed the good performance and product quality.





# BIKO Industries Corporation

## Company overview

Company Name	BIKO Industries Corporation
Foundation	July 02, 1973
Capital	Yen 30 million(Group Total:Yen 130 million)
Chief Executive Officer	Kyuji Sugiyama
Annual turnover	Yen 3.6 billion in 2011(38terms) Yen 4.2 billion in 2012(39terms) (estimate)
Employees	114 persons(As of July 2011)
Business content	Plastic Molding Surface decoration(Vacuum metalizing, Surface Coating) Aluminum/Tungsten Production & Sales(BIKO Mec Kogyo Corp.) (Our own products for Vacuum metalizing)
Main customer	Koito Manufacturing Co., Ltd(automobile parts) Stanley Electric Co., Ltd(automobile parts)
Location	
Headquarter(Factory)	2209-18, Okabe, Okabe, Fujieda-city, Shizuoka, Japan 421-1121 Phone:054-667-3052/Fax:054-667-3059
Okabe Factory	2014, Miwa, Okabe, Fujieda-city, Shizuoka, Japan 426-0002 Phone:054-647-7779/Fax:054-647-7789
Logistics Center	1412-2, Kariyado, Fujieda-city, Shizuoka, Japan 426-0001
Group companies	
BIKO Kyushu Corp.	
Headquarter(Factory)	1848-1, Kamiizumi, Kuboizumi, Saga-city, Saga, Japan 849-0902 Phone:0952-98-0850/Fax:0952-98-0840
Second Factory	3242-2, Kamiizumi, Kuboizumi, Saga-city, Saga, Japan 849-0902 Phone:0952-96-0892/Fax:0952-98-0893
BIKO Mec Kogyo Corp.	2209-18, Okabe, Okabe, Fujieda-city, Shizuoka, Japan 421-1121 Phone:054-667-3052/Fax:054-667-3059

## Company archive

July 1973	Founded BIKO Industries Corp. in Shizuoka city(Capital 6million yen). Set up a factory(Shizuoka factory) for vacuum metalizing, coating, and surface treatment.
December 1988	Newly constructed Fujieda factory in Fujieda city and installed an advanced vacuum metalizing and UV dryers, started to realize domestic-top-level quality and productivity as a consistent surface treatment factory.
August 1992	Increased the capital to 10 million yen. At the same time, increased the capitals of the affiliated companies, BIKO Jyushi Kogyo Corp.(injection molding) and BIKO Mec Kogyo Corp. (Manufacturing medical equipments) to 10 million yen, export and import plastic molding, medical equipments, industrial machines.
September 1997	Constructed Okabe factory in Okabe town, which is fully equipped clean rooms and robotized to respond the demand of higher quality products.
January 1998	Installed several new machines in Okabe factory, combined Shizuoka factory with Okabe and appointed as headquarter(HQ) factory.
June 2000	Installed an automatic cleaning equipment to upgrade the demanded quality.
July 2000	Newly installed a paint coating line equipped with friendly environmental biochemical booth.
April 2001	Build more equipments at Headquarter factory and set-up advanced automatic manufacture line in order to realize higher quality and shorter delivery request.
November 2001	Combined Fujieda factory with HQ factory to get more efficient management.
December 2001	Acquired ISO 9001 Quality Management System.
August 2003	Increased the capital to 30 million yen.
March 2006	Constructed a new Okabe factory.
June 2007	Started to construct a new group company, BIKO Kyushu Corp., at Kuboizumi factory base in Saga-city.
March 2008	Established BIKO Kyushu Corp. in Saga-city(Capital 90 million yen), started to operate as a consistent factory of the process between plastic molding and surface treatment by attached plastic molding factory.
February 2009	Build color coating manufacturing line at BIKO Kyushu Corp.
February 2010	Second factory of BIKO Kyushu Corp. started to operate at Kuboizumi factory base in Saga-city.
February 2011	Acquired ISO 9001 Quality Management System at BIKO Kyushu Corp.
December 2011	Under constructing the second Okabe factory(Molding ,Direct vacuum metalizing system)

## Main facility

Headquarter(Factory)	Site area	4,619 sqm	
	Floor space	2,037 sqm	
Clean room	class 10,000		3 rooms
Vacuum metalizer	1600 mm dia with plasma polymerizing unit		2 sets
	1400 mm dia with plasma polymerizing unit		1 set
Painting robot	teaching play back type		10 sets
Dryer	UV dryer		2 lines
Automatic mask cleaning equipment			3 sets
Automatic Jig remover			1 set
Painting booth			10 sets
Smoke painting equipment (clean room, painting robot, heat set dryer)			1 line
Okabe factory	Site area	7,032 sqm	
	Floor space	1,819 sqm	
Clean room	class 10,000		1 room
Vacuum metalizer	1800 mm dia with plasma polymerizing unit		1 set
Painting robot	teaching play back type	2 sets	1 set
Dryer	UV dryer		1 line
Automatic mask cleaning equipment			1 set
Automatic Jig remover			1 set
Painting booth			1 set
Injection molding machine (220t, 280t)			2 sets

## Quality maintenance tools

- \*digital microscope (to analyze defects)
- \*thin film thickness measuring equipment (to confirm manufacturing condition)
- \*black light (to check dust in clean room)
- \*HID light (to check dust in clean room)
- \*CAD (to design Jig)
- \*particle counter (to check cleanness)
- \* UV light intensity measuring instrument (to check the light intensity of UV dryer)
- \*anemometer (to check air flow in clean room)
- \*reflection rate measuring instrument (to measure the reflection rate of products)
- \*heat-resistance tester (to test the heat-resistance of products)
- \*hot water tester
- \*thermal shock tester

# BIKO KYUSHU CORP.

## Company overview

Company name	Biko Kyushu Corp
Location	1848-1 Kamiizumi, kuboizumi-cho, Saga City, Saga 849-0902 Japan (TEL) 0952-98-0850 (FAX) 0952-98-0840
Foundation	August 1st 1975
Capital	90 million yen
CEO	Kyuji Sugiyama
Annual turnover	Yen 500 million in the fiscal term of 2009 Yen1,000 million in the fiscal term of 2010 Yen1,000 million in the fiscal term of 2011 Yen1,000 million in the fiscal term of 2012
Employee	67 persons (at the time of May 2010)
Business content	Producing lighting apparatus for automobile  <ol style="list-style-type: none"><li>1. Injection molding</li><li>2. Dressing the surface of molded parts<ul style="list-style-type: none"><li>• Vacuum metalizing</li><li>• Painting</li></ul></li></ol>
Productivity	500 thousands parts / month
Main customer	Koito Kyushu Co., Ltd
Bank of account	Mizuho bank Saga branch Saga Shinyo Kinko Amadera branch Shoukou Chukin Saga branch Saga bank head office
Group company	Biko Industries Corp ( mother company) Biko Mec Kogyo Corp  ( Location ) 2209-18 Okabe, Okabe-cho, Fujieda city, Shizuoka 421-1121 Japan

## Company archive

August-75	Established Biko Jyushi Kogyo Corp in Shizuoka prefecture
May-07	Altered the company name into Biko Kyushu Corp
June-07	Headquarter(Factory): Concluded the agreement for the embarkation into Saga city
June-08	Headquarter(Factory): Started production
February-10	2nd factory : Concluded the agreement for the embarkation into Saga city
March-10	2nd factory : Stated operation as a distribution center
June-10	Headquarter(Factory): Started the operation of 2nd production line
February-11	Acquired ISO9001

2011/10/23



## *Main facility*

Headquarter(Factory)	Site area	7,617 sqm	
	Floor space	4,434 sqm	
2 <sup>nd</sup> factory	Site area	4,881 sqm	
	Floor space	4,790 sqm	
Clean room	class 10,000		2 rooms
Vacuum metalizer	1800 mm dia with plasma polymerizing unit		2 sets
Painting robot	teaching play back type	2 sets	2 sets
Dryer	UV dryer		2 lines
Automatic mask cleaning equipment			2 sets
Automatic Jig remover			1 set
Painting booth			2 sets
Injection molding machine	(180t, 220t, 350t x 2sets)		4 sets
Smoke painting equipment	(clean room, painting robot, heat set dryer)		1 line

## *Quality maintenance tools*

- \*digital microscope (to analyze defects)
- \*thin film thickness measuring equipment (to confirm manufacturing condition)
- \*black light (to check dust in clean room)
- \*CAD (to design Jig)
- \*particle counter (to check cleanness)
- \* UV light intensity measuring instrument (to check the light intensity of UV dryer)
- \*anemometer (to check air flow in clean room)
- \*reflection rate measuring instrument (to measure the reflection rate of products)
- \*heat-resistance tester (to test the heat-resistance of products)
- \*hot water tester
- \*thermal shock tester

ISO9001: Acquired in February 2011