



新製品、新市場、新顧客へと展開する、 世界トップレベルの豊富なコア技術。

New product, new market and new customer made possible by a rich assortment of some of the world's leading core technologies

高精度駆動技術 High-Precision Drive Technology

ロボット等で培った精密駆動制御技術。最新のコンピュータシミュレーション技術を活用し、省エネ、軽小化をキーワードに精密流体制御デバイスへの取り組みも強化。高性能ファンやポンプへの製品展開を実現。

Cultivated through the development of robots and similar devices, NIDEC SANKYO's high-precision drive technology is utilized in the latest computer simulation technology, and has also proved to be an important component in improving the functionality of precision fluid control devices where low energy use and microminiaturization are keywords. Use of our technology has also expanded to products such as high-performance fans and pumps.



流体解析を利用したポンプ設計
Hydraulic analysis utilized for pump design



小型自動組立システム
Compact automated assembly system

生産技術開発 Production Technology Development

小型・軽量・高精度化する製品、多様化・短命化する市場。モノづくり革新が強く求められる中、「DESKTOP FACTORY[®]」(机の上に載る小さな工場)の思想に基づき、省エネ、省スペース、高い生産能力を発揮したモノづくりを実現。サーボモータなどの主要パーツは一貫して自社製品を使用し、生産技術の差別化を推進。
*「DTF」、「DESKTOP FACTORY」及びこれらのロゴは、日本電産サンキョー株式会社の登録商標及び商標です。
NIDEC SANKYO is helping to create products that are compact, lightweight and high precision, as well as contributing to diversified and ephemeral markets. In response to the growing demands for increasingly innovative production techniques, we are busily pursuing the actualization of production forms, based on the "DESKTOP FACTORY[®]" concept, that features reduced energy and space use combined with high productivity. Our production technology leads the way in differentiation through the use of our own production facilities for main components such as servo motors.

*「DTF」、「DESKTOP FACTORY」 and their corresponding logos are trademarks or registered trademarks of NIDEC SANKYO CORPORATION.

C O R E
T E C H N O L O G I E S

コア技術



電着クロードシステム
Electrodeposition closed system



元素分析装置EPMA
Electron Probe Microanalyzer

表面・材料・分析技術 Surfacing / Materials / Analysis Technology

高速かつ正確な動きと長寿命を可能にするSankyoの表面技術。滑动材料の開発に加え、多様な分析装置・技術を有し、表面技術に加え、環境汚染物質・コンタミネーション分析等へも対応。
NIDEC SANKYO's surfacing technology enables high-speed and accurate movement together while also ensuring long service life. Our surface technology is used in the development of sliding materials, as well as a wide range of analysis equipment and technology. Additionally, this technology is finding application in the analysis of environmental pollutants and contamination.

長年にわたり蓄積され、洗練されたSankyoの豊富なコア技術。研究開発の核となる磁気と光学の技術をベースに、メカ・回路・ソフト設計、工法開発、超精密加工などのモノづくりが融合することにより、世界水準の高性能な製品を実現してまいりました。

営業と連携した研究開発により顧客ニーズを的確にキャッチし、多彩なコア技術を活かした先行開発に取り組み、いち早い製品化への対応を推進しております。先進テクノロジーが生み出すさまざまな成果を、より早く、より多くのソリューションへ結び付けてまいります。

NIDEC SANKYO's diverse range of core technologies has been accumulated and refined over many years. From an R & D base in magnetism and optics, we have created high-quality standards that set global benchmarks due to the fusion of production technologies in areas such as mechatronics, circuitry, software design, process development and ultra-precision machining.

We are able to accurately gauge our customers' needs through R & D linked to sales and marketing, and this ability is combined with the pursuit of cutting-edge development utilizing NIDEC SANKYO's wide variety of core technologies to allow us to rapidly move from development to the introduction of new products to the market.

NIDEC SANKYO is committed to rapidly converting our numerous and widespread accomplishments resulting from our cutting-edge technologies into a wide range of solutions for all variety of high-tech manufacturing.

微小光学技術 Micro-Optical Systems

複数波長のレーザー光学システムを集積した光ピックアップ。小型デバイスにシステムを集積し、顕像・センサ系へと展開製品を開発。回折・屈折複合素子等の最先端光学デバイスから複合化されたオプト・メカトロ・システムまで小型・高性能・高集積化する進化に対応。

Optical pickups feature the integration of multi-spectral laser-optic systems. NIDEC SANKYO is developing products that feature system integration in compact devices and whose application is spreading to imaging and sensor systems. Our products find various applications in the current evolution of technology that requires compactness, high efficiency and high integration for everything from leading edge optical devices such as diffraction/refraction elements to complex opto-mechatronic systems.



微小光学系開発と事例：パーティクルモニタ
Example of micro-optical system development: Particle monitor

超精密加工 Ultra-Precision Machining

ナノメートルオーダーの精度を有する超精密部品。光学部品の直接加工、金型加工、超精密成形の各段階における技術開発を推進。光学部品のみならず、最適な加工方法により超精密部品の試作から量産までを実現。

Ultra-precision parts require accuracy on the order of nanometers. NIDEC SANKYO is pursuing development of technology for all production stages including direct machining of optical products, machining of dies and ultra-precise shaping of optical products. In addition to optical products, our optimal machining methods can be applied to produce everything from prototypes to mass production of ultra-precise products.



超精密ナノ加工機
Ultra-precision nano processor



高性能多層膜製造装置
High efficiency multilayer thin-film production equipment

薄膜技術 Thin-Film Technology

リニア・ロータリーエンコーダとしてロボットの関節制御に使用される磁性薄膜。光ディスク装置に使用される高性能フィルタ・ミラーに展開する光学薄膜。これらの薄膜技術を幅広く活用し、高性能磁気センサや特殊機能コートなどの高性能素子を開発。

NIDEC SANKYO's magnetic thin films are used linear rotary encoders that provide joint control in robots, and our optical thin films are being adopted for high-efficiency filters/mirrors used in optical disc devices. With the widespread application of thin-film technology, we are also pursuing development of high-performance elements such as high-efficiency magnetic sensors and coatings with specialized functions.