ENGINEERED MECHANICAL SOLUTIONS

ENGINEERING, MANUFACTURING, ASSEMBLY



Stock Drive Products/Sterling Instrument

Quality Bearings & Components

QTC Metric Gears

Designatronics, Inc.

Est. 1950

Who We Are – Est. 1950

Engineering and Manufacturing - Hicksville, New York USA

Component Choices and Design Solutions

- Develop comprehensive mechanical solutions
- Offer a wide variety of high-quality standard mechanical components
- Precision machining, complex assemblies, modifications and complete custom
- Optimize value in the global markets we serve

Our components and assemblies are found in a wide range of product applications

Surgical Robotics I Satellites I Office Equipment I Aircraft I ATMs I Factory Automation
Therapeutic & Assisted Living Devices I Defense I Security Systems I Military Equipment



SDP/SI
STOCK DRIVE PRODUCTS/STERLING INSTRUMENT

QBC
QUALITY BEARINGS & COMPONENTS

QTC
METRIC GEARS

This presentation document contains information which is proprietary to SDP/SI

Custom & Standard Parts and Assemblies

87,000 Small Mechanical Components

What We Offer

- Timing Belt & Pulley Drive Components
- Precision Gears
- Commercial Gears
- Precision Gearboxes

- Machined Components
- Molded Parts
- Milled Components

- Mechanical Assemblies
- Customized Components & Assemblies
- Contract Manufacturing







This presentation document contains information which is proprietary to SDP/SI

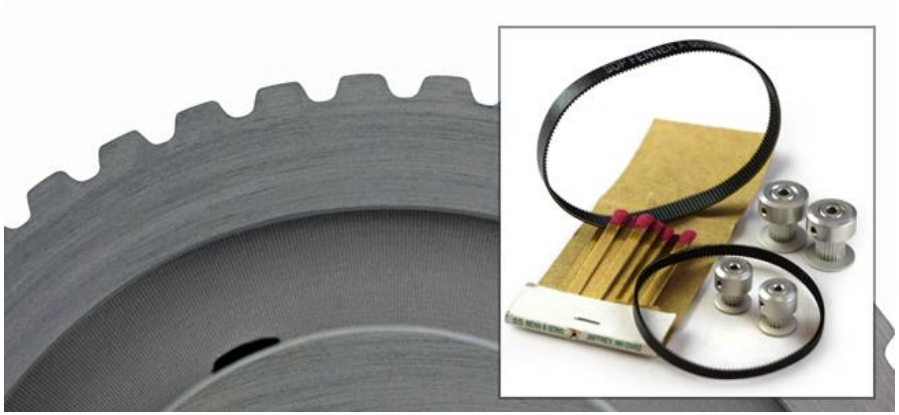
Precision and Commercial Components

Standard Components + Custom Design + Precision Manufacturing

Certifications

- ISO 9001+ AS9100 Certified
- ITAR Compliant – DDTC Registered
- Boeing BQMS Certified
- Lean Manufacturing
- R.E.A.C.H. Compliant
- RoHS Compliant





This presentation document contains information which is proprietary to SDP/SI

High-Volume Manufacturing

New State-of-the-Art Manufacturing Facility, 2017 I 96,000 Sq. Ft. I Over 170 CNC Machines

- Extremely high accuracy and tight tolerance machining
- High efficiency/low-cost volume production
- Low-volume prototype machining
- 24-hr. machining / unattended
- 9-axis Swiss turning
- 5-axis milling

- Producing over 5,000 timing belts per day

- ISO 7 Class 10000 Clean Room



This presentation document contains information which is proprietary to SDP/SI

High-Resolution Plastic 3D Printing

Accelerate Production and Reduce Tooling Costs

Plastic 3D printing capabilities for prototypes and low rate production

Resolution: 800 x 900 x 790 DPI, 32 µ layers
Accuracy: ± .001 inch per inch
of part dimension (on platform)

Prove your Design Concept – 3D printed parts follow the same rules as those made by injection molding.

Be Creative – try different shapes to create lighter, stronger parts.

Pay Attention to the Design Cycle – Transitioning the part from 3D printing to high-volume production. Avoid secondary operations and over tolerancing.



This presentation document contains information which is proprietary to SDP/SI

SDP/SI Engineering Development & Manufacturing

Innovative and Cost Effective Engineered Solutions

Engineering and Precision Manufacturing for Aviation, Defense, Space, Robotics, Industrial, Commercial and the Medical Device and Healthcare Industries



Partnering with Fortune 500 Companies on Substantial, Multiyear Projects

Assisting Customers During the Development Stage

Let us review your design – submit your drawing or CAD Model for a design consultation.

Proven Performance and Unsurpassed Experience Improving designs and providing solutions through engineering & manufacturing.

- ✓ Lighter
- ✓ Quieter Operation
- ✓ More Compact, smaller in size
- ✓ Improved Efficiency and Ease of Assembly
- ✓ Cost Savings



Design Review – Let us 3D print your part or assembly for review, often times leading to improvements

Recently a customer submitted a design for an assembly with a requirement for 3 components. We suggested manufacturing as one complete piece. The design improvement resulted in lower costs, shorter lead time, less assembly time and a more compact size.

This presentation document contains information which is proprietary to SDP/SI

Engineered Mechanical Solutions

We Specialize in Machining Components and Complex Assemblies for Many Applications

Aerospace

Commercial & Business Aircraft

- Flight Controls
- Structural Components
- Aircraft Instrumentation
- Fuel Systems
- Cargo Handling Components
- Camera Positioning Systems
- Antennas Control



Satellites

- Solar Wing Deployment and Positioning

Medical

- Minimally Invasive and Surgical Gear Drivers
- Diagnostic and Laboratory Equipment
- Medical & Dental Instrumentation
- Pharmaceutical Processing & Packaging
- Robotic Surgery
- Pumps and Drives



Military & Defense

Aircraft, Tanks, & Missile Systems

- Cockpit Instrumentation
- Ground Based Training Systems
- Fin Control Actuation Systems
- Gun Turret Controls
- Actuation and Positioning Systems
- Gimbals



SDP/SI components and assemblies produced for these applications:



Bevel Gears
Differentials
Gearboxes
Gearheads
Precision Gears
Gear Assemblies
Miniature Gears
Synchronous Drive Systems
Planetary Gearheads
Slip Clutches
Magnetic Clutches
Mechanical Components

This presentation document contains information which is proprietary to SDP/SI

Custom & Standard Parts and Assemblies

Bearings and Bearing Services

QBC Specializes in Bearings

Our Quality Bearings & Component division is an authorized distributor for some of the worlds largest bearings and linear motion manufacturers, including:

- Thomson Industries
- INA Bearings Co.
- Pacific Bearing Co.
- THK of America
- Spyraflo, Inc.
- Roller Bearing Co.



USA Distributor of BEGA Special Tools

- Specialized equipment for safe and efficient mounting and removal of bearings.
- Bearing maintenance and testing tools

Bearing Services

- Global Sourcing
- Full Lubrication Capabilities
- Ball Bearing Cleaning and Relubrication
- Class 1000 Clean Room
- Custom Bearings and Shafting made to customer print



Contact : Kathy Lantier
kathyl@designatronics.com
www.qbcbearings.com

QBC QUALITY BEARINGS & COMPONENTS

This presentation document contains information which is proprietary to SDP/SI

Custom & Standard Parts and Assemblies

Metric Gears – Over 18,000 Configurations

Metric Gears for Industrial Automation

- Modules 0.2 thru 10
- 12 mm O.D. to 505 mm O.D.
- Wide variety of materials



Spur gears, miter gears, bevel gears, worm gears, worm wheels, helical gears, internal ring gears, gear racks, splines, gear couplings

Meeting the Increasing Demand for Metric Dimensioned Gears

Specify QTC Metric Gears for your next application:

- Replacement Gears
- Large Quantities
- Custom Gears

QTC Metric Gears – www.qtcgears.com
Contact: Kathy Lantier
kathyl@designatronics.com



QTC METRIC GEARS

This presentation document contains information which is proprietary to SDP/SI

See What We Can Do For You



Contact:
250 Duffy Avenue
Hicksville, New York 11801
www.sdp-si.com
Main: 516 328-3300 l Email: Sdp-sisupport@sdp-si.com

SDP/SI
STOCK DRIVE PRODUCTS/STERLING INSTRUMENT

This presentation document contains information which is proprietary to SDP/SI