

# EXACTA

Precision Products Ltd.

Punches and Dies for the World's Metal Working Industries  
Custom Precision Machining and Grinding for All Industries



### A Brief History:

Exacta Precision Products Ltd., established in 1967, has grown through the years to be recognized as one of the world's leading punch and die manufacturers.

### Manufacturing Capability:

Exacta Precision manufactures both standard and special punches and dies that are used in a great variety of different machines and systems. We supply tooling to virtually any industry, worldwide. Exacta invests continuously in a diversified range of modern CNC machining and grinding equipment.

Our expertise in the manufacture of punches and dies also allows us to provide precision machining and grinding to all industries.

### The Best Material Used:

Exacta routinely works with a broad range of tool steels. In-house heat treating and surface enhancements allow us to provide total control of a project from start to finish.

### Tool Design:

The design of special tooling or the redesign of customer submitted concepts may be the key to a more cost effective project. Exacta Precision has 40 years of experience designing such tools and stands ready to help you with your future requirements.

### One Source - One Responsibility:

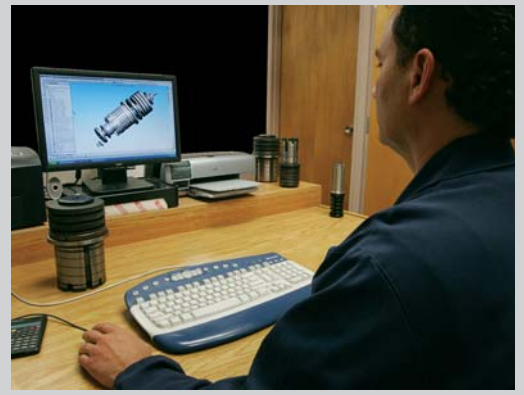
Exacta's complete manufacturing facility, detailing every aspect of machining, grinding, EDM, heat treating and coatings makes us your single source supplier for all types of precision components.

### Committed to Total Service:

Exacta Precision is committed to the highest standards of customer service. We strive for perfection in both manufacturing and personal customer service. Exacta is a member of NAPMA (North American Punch Manufacturers Association) and is ISO 9001:2000 registered.

## Engineering

Exacta's state-of-the-art CAD/CAM systems are linked directly to our CNC machining centres via the latest fibre optic technology available. Component drawings can be produced from supplied parts, CAD files or concept sketches. Our engineers will work with you to establish a technically superior and cost effective design.



## Craftsmanship

Exacta Precision is fortunate to employ some of the top craftsmen in the trade, all with many years of experience. In some instances where NC machines may not be the answer, good old fashioned craftsmanship comes into play. Our highly skilled technical staff is the true key to our success.



# Machining

To meet the tooling demands for all metal working industries, Exacta has heavily invested in modern equipment such as CNC mills, lathes and machining centres. The manufacture of this tooling demands equipment that is designed to handle production runs but must also be versatile enough for small job shop quantities. Whatever your needs, Exacta has the equipment to handle the simplest to the most complex tooling or parts.



Miyano automatic self loading CNC lathe performs multiple operations for large or small quantity runs.



We utilize several high performance turning centres.



Hardinge super precision CNC lathe incorporates the latest technology for machining hardened steel.



Kitamura high speed 3-axis milling centre.



## Grinding/Finishing

Exacta has a wide variety of precision contour grinders allowing us to finish everything from the smallest round to large multi-shaped components holding tolerances of plus or minus .0001. We have invested in the best equipment available on the international market in order to meet or exceed the most rigorous standards set by any industry.



Studer universal grinder for high precision, O.D. and I.D. grinding.



Studer precision contour and form grinder.



Cincinnati centerless grinder with 12" wide wheel.



Tru Tech CNC grinder for small part production.



Custom built contour grinder for production runs of non round components.



Jones and Shipman CNC profile form grinder.



## EDM Machining

Exacta has the most complete line of EDM machines including wire, sink type, EDM drilling and EDM thread cutting. Manufacturing our own electrodes from copper or graphite provides the opportunity to combine processes for results not attainable by other tool shops. Great capacity combined with the latest technology gives us a true edge in EDM machining.



Five Mitsubishi wire EDM machines run production quantities.



Charmilles precision wire cut EDM machines.



Charmilles sink type EDM with automatic electrode changer.



EDM drill capable of drilling .020 diameter holes through hardened steel.



Sodick sink EDM complete with tool changer.



Sodick EDM with automatic wire threading for use on multiple cavities.



## Quality Assurance

Quality Assurance is paramount at Exacta. Manufacturing to very tight tolerances on such a large variety of precision components requires sophisticated quality test equipment. Exacta has the equipment and guarantees the results.

Exacta is ISO 9001:2000 registered.



CNC Mitutoyo Co-ordinate Measuring Machine (CMM).



10:1 Mitutoyo comparator.



### Inventory Control:

Our computerized inventory control keeps track of parts and work in progress. We can respond to any customer inquiry in regards to production stage, estimated finishing and completion date.



One of several digital hardness testers.



Amada NC punch press used to test specialty tools for the fabricating industry.

Forming and Blanking operations in modern CNC Turret Machines dictate that Exacta design, manufacture and test tools to perform operations similar to miniature die sets in a stamping press (picture bottom left).



## Value-Added Services

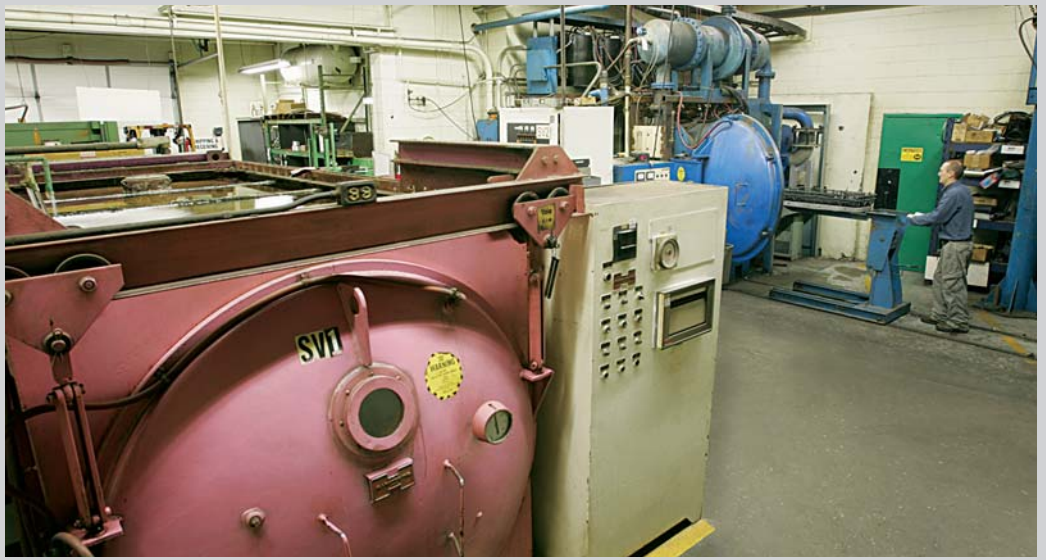
Exacta Precision offers a number of value-added options to its customers to save time and money. Exacta's one-stop services eliminate costly transportation and administrative work.

### Heat Treating:

Exacta is a leader in the advanced methods of Vacuum Heat Treatment of all tool steels. Quality Heat Treat is a must to insure that modern steels perform to their full potential and is the key to surface coating performance. A full range of PVD coatings such as TiN, TiCN, TiAlN, CrN and many custom coatings are routinely applied.

### Ion Nitriding:

Plasma Nitriding or case Hardening of tool steel increases surface hardness to provide increased wear, fatigue and corrosion resistant properties. It is diffusion based, not a coating, and will not chip or peel. It is a distortion-free process with a low coefficient of friction.



Tools ready for Ion Nitriding.



View of ion nitriding in process.



### Cryogenic or Freeze Treating:

This treatment can be applied to all tool steels. Unlike CVD, PVD, or Ion Nitriding, Cryogenic is not a surface treatment, but a process that affects the whole tool. The cooling down of the tool to  $-320^{\circ}\text{F}$  results in a tougher steel, extending the life span of the components.



### Micro Sandblasting:

This specialized blasting process enables us to clean small parts of any debris left from the machining process or scale left over from previous heat treating processes. The result of micro sandblasting is an extremely smooth finish of parts.



### Vibro-Tumbling:

The vibratory effect of the soft pebbles in our vibro-tumbler cleans parts, smoothens sharp edges and removes heat treat scale. It is just another additional service we provide when deemed to be of added value.





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