

Jobs in

DIAMONDS



career opportunities series



Cette publication peut aussi être disponible en français sous le titre:
Emplois dans l'industrie manufacturière du diamant

Cover Photos
Top: Hi-tech Diamond Manufacturing, Fran Hurcomb/GNWT

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JOBS IN DIAMONDS

INTRODUCTION

The diamond is nature's hardest substance. It has been recognized as a precious stone throughout history. Diamonds are thought to be magical, fiery gems, admired with curiosity, awe and envy. There is a world demand for diamonds driven by fast-growing jewellery markets.

The discovery of diamonds in the Northwest Territories has focused attention on the North. With both the Ekati and Diavik mines open for production and Snap Lake (DeBeers) due to open in 2007, the NWT can offer the world a unique, precious export. The NWT is now one of a small number of diamond producing regions in the world.

Once the diamond mines are in full production, it is expected that the NWT could supply 15% by value of the world's diamonds. Some of these diamonds will be sold on the open market in London and Antwerp, but more importantly, a portion of the diamonds will remain in the North. As well as jobs in the mines; sorting, valuation, cutting, polishing and jewellery making will provide new jobs for Northerners and make up what is called the secondary diamond industry or diamond processing industry.

WHAT IS THE DIAMOND PROCESSING INDUSTRY?

The diamond processing industry includes all the steps that happen between the time rough diamonds are separated from kimberlite and leave the mine until the time they are sold. The value of gem quality diamonds increases significantly when they are polished and made into jewellery. Rough diamonds that are not gem quality are also sold for industrial purposes such as drill bits or surgical instruments. The high quality of diamonds found in the NWT makes them well-suited for use in jewellery.

The value of a rough diamond may increase as much as two and a half times from the time it is taken from the ground to the time it is sold as jewellery. Value is added to diamonds when they are sorted, cut and polished, made into jewellery or industrial parts, and sold. Adding value to rough diamonds means that more people and businesses can benefit from diamond mining.

SORTING AND VALUATION

Diamonds are sorted a number of times for different reasons. They are sorted into different categories of size, shape, colour, clarity and morphology. Valuation is the process used to determine how much the diamonds are worth for royalty taxation purposes.

Diamonds are sorted by the mine to determine the value of the mine's production. Sorting for valuation is required by the Canadian government for tax and royalty purposes. The Canada Mining Regulations offer tax advantages for mining companies to establish sorting and valuation facilities in the NWT. There are two diamond sorting and valuation facilities in Yellowknife.

People working in sorting and valuation include rough diamond sorters and rough diamond valuers.

MARKETING ROUGH DIAMONDS

Eighty percent of the world's gem-quality diamonds are sold by diamond mines to the Central Selling Organization (CSO) in London, England. The CSO then sells the diamonds to traders and manufacturers. About 20% of the world's gem-quality diamonds are sold by mines directly to diamond traders and manufacturers, including some businesses in the NWT. Direct sales are a growing trend.

People who work in the marketing of diamonds include diamond traders, manufacturers and marketing experts who work for diamond mines.

CUTTING AND POLISHING

A diamond is cut and polished to make it sparkle as much as possible. First, the rough diamond is examined to identify any imperfections and to determine how the biggest or best shape can be achieved. The diamond is marked with ink to show where the first division will be made. The sawyer cuts the diamond using a special saw or laser. The next step is bruting, where two diamonds are rubbed together, either on a lathe-type machine or an automatic bruting machine, to create a girdle around the circumference. Finally, all of the facets are polished and finished. This process is used to create round diamonds. Fancy diamonds are not bruted. It is a long and exact process requiring patience and precision. Cutters and polishers must continuously check their work.

Cutting and polishing businesses may be small, two or three person businesses or large mechanized factories with many workers. Improved technology has reduced the amount of time and labour it takes for a diamond manufacturer to produce a polished diamond.

People who work in cutting and polishing include: markers, bruters, sawyers, cross workers, diamond polishers, brillianteers, blockers and laser operators. With the development of new technologies, opportunities for computer programmers are increasing.

JEWELLERY MAKING

Diamond jewellery manufacturing in Canada is done by about 20 companies and most of these are located in Toronto, Montreal and Winnipeg. Some cutting and polishing businesses also incorporate jewellery making in their operations. Although diamond jewellery making is not well established in the NWT, some northern jewellers and artisans do set diamonds in jewellery. This may increase as new diamond mines produce more diamonds and more manufacturing and jewellery making takes place in the NWT.

WILL THERE BE JOBS IN DIAMOND PROCESSING?

Diamond processing is a new and growing industry in the Northwest Territories. The world demand for diamonds and the high quality of the stones found in the NWT means exploration and mining will continue. The Government of the Northwest Territories is committed to making sure that some of the diamonds stay in the North for processing. As diamonds are mined there will be more jobs created in the diamond processing industry.

WHAT JOBS WILL THERE BE IN DIAMOND PROCESSING?

There will be many different kinds of jobs as the diamond processing industry develops. Getting a job in this industry requires training, motivation, dedication and experience. Diamond processing jobs are mainly technical and professional, but there are some entry level, administrative and skilled jobs that are less specialized. You must be “bondable” for most jobs in diamond processing. This means that you are able to pass an RCMP security check. Because diamonds are so valuable, companies must take out insurance against accident, loss or theft by employees or other people.



ENTRY LEVEL AND GENERAL ADMINISTRATIVE JOBS

Most entry level jobs require that you have Grade 10 or high school graduation, basic math, and good reading and writing skills. These jobs may require little or no previous experience. Administrative jobs require you to have some familiarity with computerized systems and previous training or experience in office procedures.

Boiler	Cleans polished diamonds in acid bath at end of processing.
Materials Clerk	Coordinates handling and shipping of inventory.
Office Clerk	Keeps records and time sheets for the business.

TECHNICAL AND SKILLED JOBS

Technical jobs require you to have a Grade 10 or high school education, good communication skills, good hand/eye coordination, and a basic knowledge of math, physics, and computers. Technical expertise is gained through experience in the industry. Occupational certification may be available for some diamond polishing occupations.

Diamond Processing Sawyer*	Cuts rough diamonds into two pieces using a specialized saw.
Diamond Processing Bruter*	Rubs two diamonds together to create diamond girdle (round circumference) using manual or automated bruting methods.
Diamond Polisher* (Blocker, Cross worker, Brillianteer)	Polishes facets on diamonds to create shapes. Uses a grinding wheel and other tools.

<i>Laser Operator</i>	Operates laser machine used in automatic sawing, cleaving, engraving and bruting activities.
<i>Rough Diamond Sorter</i>	Sorts rough diamonds by size, colour, shape, clarity and economic considerations.
<i>Polished Diamond Grader</i>	Grades polished diamonds by cut, clarity, colour, and carat.
<i>Scaife/Polishing Wheel Maintainer</i>	Maintains and prepares polishing wheel used in diamond processing.
<i>Automatic Polishing Machine Operator</i>	Operates automatic polishing machines (robotics).
<i>Automatic Machine Setter</i>	Sets diamonds in containers in preparation for automatic polishing.
<i>Jewellery and Metal Worker</i>	Designs and makes custom jewellery from metals and other materials including diamonds.

** Occupations in the Diamond Processing Sector that have been approved for Occupational Certification.*



SUPERVISORY AND PROFESSIONAL JOBS

Supervisors oversee people working in technical, skilled, administrative and entry level positions. Supervisors are experienced in the technical and management aspects of diamond manufacturing. They likely have worked in various jobs in the industry for 10 or more years. They are guided by industry standards, have technical or professional training, and good supervisory skills. Professional jobs in the diamond industry require many years of experience. Professional training may include a university degree or community college certificate.

- Marker/Planner** Studies and marks rough diamonds to determine how the diamond should be cut to get the best value. Considered the “architect” of the diamond.
- Gemologist** Examines and grades diamonds and is a gem expert.
- Government Valuator** Values rough diamonds for taxation or royalty purposes.
- Supervisor/Foreman** Responsible for production, finished grade and security of diamonds; provides linkages between the various manufacturing stages.

OTHER JOBS IN THE INDUSTRY

The diamond manufacturing industry purchases goods and services from other economic sectors. This creates more jobs for northerners as couriers and expeditors, accountants, office administrators, bookkeepers, janitors, trainers and security workers.

WORKING CONDITIONS

Most jobs in the NWT's diamond processing industry are located in Yellowknife. The work place is usually within a secure facility in a commercial area within the community. A few diamond sorters and valuers may be employed by mines and work at remote sites. Jobs in diamond jewellery-making may be located in your own home, a studio associated with a retail jewellery store or jewellery manufacturing facility.

People who work in the diamond processing industry must have excellent eyesight and sense of colour, high levels of manual dexterity, concentration and motivation. Jobs in the industry may also require completion of a certification training program and regular participation in skills upgrading courses. Diamond polishers must be patient artisans, and must be comfortable sitting for long periods of time.

To be eligible for employment, you will likely be required to complete a security check for bonding purposes. You may also have to agree to security and safety procedures that the company has set down for the work place. Work in the industry is available year round. Employees are likely to work a regular eight hour day, Monday through Friday.

Wages for jobs in this field are competitive. Pay is based on production precision. Proficiency is rewarded by production bonuses. For more information on current wages and demand see NWT Job Futures available at the Career Centre in your community or online at www.jobfutures.stats.gov.nt.ca and talk to people at work in the field.

WHERE TO GET TRAINING

AURORA COLLEGE

Aurora College offers a variety of programs that can help you to get a job in the diamond manufacturing sector. These programs and services include: Office Administration, Management Studies, Fine Arts and Crafts and Diamond Cutting and Polishing. Student Services at Aurora College will explain current course offerings.

Although these programs are a good introduction to many jobs in diamond manufacturing, some jobs will require additional schooling or on-the-job training.

Call your local campus or visit www.auroracollege.nt.ca to find out about current programs and courses being offered.

OTHER TRAINING OPPORTUNITIES

There are several diamond cutting schools around the world. Courses in gemology, diamond sorting, and grading are offered by the Canadian Gemological Association, the Gemological Institute of America (GIA) and others. Some courses are available by correspondence.

COLLEGES IN SOUTHERN CANADA

Other courses and programs available at colleges in southern Canada that can lead to jobs in diamond manufacturing include the following: Jewellery Design and Production, Fine Arts, gemology, Bookkeeping and Accounting, Business Administration, Marketing and Office Administration. Check with your regional Career Centre for college information or look on the Internet for online calendars.



UNIVERSITY PROGRAMS

For professional jobs in diamond manufacturing you need a university degree. There are many Canadian universities that offer professional programs in the following areas: Commerce, Geology, Economics, and Business Administration. Universities also offer academic programs for professions that are common to most large businesses, such as human resources, industrial and labour relations, management and accounting. Programs such as these could also lead to employment in diamond manufacturing. Check with your regional Career Centre for information on the universities, or look on the Internet for online calendars.

OCCUPATIONAL CERTIFICATION

Certification in any of 24 designated occupations in the NWT is recognition that an employee has the knowledge, skills and attitude required to work in that occupation. Certification is administered through the Department of Education, Culture and Employment and is recognized across the NWT. Certification requires a minimum number of work hours, on-the-job training, an examination and a demonstration of skills.

Your regional Career Centre or Canada/NWT Service Centre can give you more information or help you start an apprenticeship or occupational certification program.

ON-THE-JOB TRAINING

Some diamond processing businesses offer on-the-job training programs that combine hands-on work experience with industry sponsored courses. If you are interested in finding out about on-the-job training opportunities in the diamond processing industry, talk to a Career Development Officer at your nearest Career Centre.

FINANCIAL ASSISTANCE

To find out if you qualify for financial help while you study, contact the following:

NWT Student Financial Assistance

Department of Education, Culture and Employment, GNWT

P.O. Box 1320 Yellowknife, NT X1A 2L9

For further information call: (867) 873-7190

24-Hour Toll-Free Line – Tel.: 1-800-661-0793

www.nwtsfa.gov.nt.ca



HOW TO APPLY FOR A JOB IN DIAMOND PROCESSING

The most common way of applying for a job is to send your resume and a cover letter to the organizations where you would like to work. However, because of the very strong interest in jobs, some employers only accept an electronic application, which can be accessed and completed on the organization's website. Make sure you indicate which job or jobs you are interested in, and why you think you are qualified for those jobs.

If you are interested in a career in diamond processing you should talk to people who are working in the field to see if it is right for you. Look for diamond processing jobs advertised in the newspapers, on websites or on *www.jobsnorth.ca*.

Your local Career Centre can help you to prepare for your job search and to write your resume and cover letter.

WORKPLACE RIGHTS AND RESPONSIBILITIES

Employers and workers have responsibilities to each other. The *Labour Standards Act* sets out the general rules, minimum requirements, and principles of employment standards in the Northwest Territories. The *Act* covers such areas as hours of work, minimum wage, termination of employment, annual vacation and general holidays, and pregnancy and parental leave. It is up to you to know what rights and responsibilities you have as an employee.

For more information, contact Labour Services at 1 (867) 873-7486 or toll free at 1 (888) 700-5707 or visit the Department of Education, Culture and Employment website at: <http://www.ece.gov.nt.ca/Divisions/Labour/index.htm>

CAREER PLANNING

Career planning is an ongoing process that starts in your youth and continues throughout adulthood. When you think about making changes in your working life, try to make decisions based on your personality, passions, aptitudes, skills and commitments. Also consider what training and education you want and what opportunities are available to you. By finding the best fit between your interests, skills, values and available jobs, you'll have more control over your life and you'll find greater satisfaction in your work.

For more information or assistance with career planning and decision-making, contact your local Career Centre, adult educator, or school counsellor.

Put a lot of effort into your career today to make the most of your work. Always continue creating new opportunities for yourself.



NWT CAREER CENTRES, CANADA/NWT SERVICE CENTRE

Your regional Career Centre can help you to do the following:

- Learn about your skills, interests and values
- Find career, training and employment information
- Search for jobs
- Write resumes
- Apply for jobs
- Prepare and practice for a job interview
- Make a personal career or education plan

The regional Career Centres, Canada/NWT Service Centre are located in the following communities:

Fort Simpson	Deh Cho Hall	(867) 695-7333
Fort Smith	Sweetgrass Building	(867) 872-7425
Hay River	Courthouse Building	(867) 874-5050
Inuvik	Mack Travel Building	(867) 777-7365
Norman Wells	Town Square	(867) 587-7120
Yellowknife	Greenstone Building	(867) 766-5100

Other booklets in the Career Opportunities Series include:

- Jobs in Mining
- Jobs in Oil and Gas
- Jobs in Construction
- Jobs in Health Services
- Jobs in Aviation
- Jobs in Community Government
- Jobs in Tourism
- Jobs in Social Sciences
- Jobs in the Service Sector
- Jobs in Information and Communications Technology
- Jobs in Arts, Culture and Heritage

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