Corrosion Salaries Inch Higher in North America, Continuing the Upward Trend

European Members Report Earnings for the First Time

KATHY RIGGS LARSEN, ASSOCIATE EDITOR

Materials Performance conducted its 13th annual corrosion career survey in April to compile information from NACE International members on their annual compensation, job duties, work experience, education level, company size, and number of years in the profession, as well as challenges they face when working to mitigate corrosion. This year, the survey was expanded to include NACE members in Europe as well as the United States and Canada. The survey questionnaire was e-mailed to NACE members in the 17 European Union countries that use the Euro as their currency—Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, The Netherlands, Portugal, Slovakia, Slovenia, and Spain. Approximately 14% of members contacted in the United States and Canada submitted a completed survey, while close to 19% of members in the selected European countries participated. The *MP* staff extends its thanks to all who shared the information that helped create this report for NACE members and others who work in corrosion control. Next year's corrosion career survey will be e-mailed sometime during April 2012.

Again this past year, corrosion professionals' average annual salaries for the United States and Canada continued their upward climb and set new highs, although the increases were significantly smaller than those reported in 2010. Including salary and bonuses, the average annual U.S. compensation is $95,802, up ~0.08% from $95,036 reported in 2010. The average annual Canadian taxable income this year is $104,917 (equivalent to U.S. $107,613), an increase of ~1.5% over last year's average salary of $103,317. This compares to the previous average annual salary increases (from 2009 to 2010) of ~4.5% for the United States and ~6.8% for Canada. This year, for the first time, salary survey data were collected from European members that are paid in Euros. The average annual European salary is €67,281 (equivalent to U.S. $95,357), which is comparable to the U.S. average annual salary. The currency exchange rate at press time (May 18, 2011) was U.S.$1 to CAN$0.97 and €0.70. See Table 1 for a listing of average annual corrosion salaries for the past 13 years.

"Our challenge is advocating for the corrosion budget, because we don't make any money for the company. We are here to lower expenses for our company by preventing corrosion-related repairs and failures. If we do our job well, management forgets how much they need us."

Corrosion professionals continue to earn good incomes, according to the 2011 survey results. More than half (57%) of U.S. respondents (a 2% increase from 2010) earn an annual salary of $80,000 or more, with 44% (no change since 2009) earning $90,000 or more and 35% (no change since 2009) earning $100,000 or more annually. Canadian respondents reported more gains in annual earnings, with 74% (a 9% increase from last year) earning $80,000 or more, 62% (a 4% increase) earning $90,000 or more, and 51% (a 4% increase) earning $100,000 or more per year. For both the United States and Canada, 10% of respondents report earning $150,000 or more yearly. In Europe, 49% of respondents earn €60,000 or more annually, with 40% earning €70,000 or more, 31% earning €80,000 or more, and 9% earning €100,000 or more. Average annual compensation by salary range is shown in Figures 1, 2, and 3.

"Recognition of the corrosion control profession across many industries is increasing because we are doing a better job of communicating recommendations in a way that's understood by financial decision-makers, and persuading them that these actions are cost effective," says Oliver Moghissi, director of the Det Norske Veritas (DNV) Materials and Corrosion Technology Center in Columbus, Ohio, and current NACE International president. "This increases the value of the corrosion control professional, which is reflected by the continuing increase in salaries, and we should expect that salaries of the corrosion control professional will continue to increase in the future," he adds.

Higher average annual salaries in the United States, Canada, and Europe correspond with years of corrosion experience, with respondents that have 20-plus years showing the highest average annual salaries. Average annual salaries also increase as hours worked per week increase, with the highest average annual salaries reported for those who work 60 or more hours a week. While average annual salaries in the United States steadily increase as education level increases, a correlation between advanced education (beyond high school) and steadily increasing average annual salaries was not apparent for Canada or Europe.

TABLE 1

History of Average Annual Corrosion Salaries

Year	United States (U.S.$)[A]	Canada (CAN$)[B]	Europe[C]
2011	$95,802	$104,917	€67,281
2010	$95,036	$103,317	N/A
2009	$90,902	$96,757	N/A
2008	$88,354	$94,357	N/A
2007	$87,792	$92,594	N/A
2005	$84,421	$76,580	N/A
2004	$73,181	$77,773	N/A
2003	$74,696	$76,245	N/A
2002	$74,440	$76,330	N/A
2001	$72,305	N/A	N/A
2000	$73,776	N/A	N/A
1999	$69,240	N/A	N/A
1998	$66,420	N/A	N/A

Source: NACE International Annual Career Surveys

[A]Salary plus bonus.

[B]Taxable income in Canadian dollars.

[C]Salary plus bonus in Euros.

N/A: Information not available. Canadian salaries were added to the survey in 2002. European salaries were added in 2011.

The exchange rate on May 18, 2011 was 1.00 U.S$ = 0.97 CAN$ and 0.70€.

The Anatomy of Today's Corrosion Professionals

Many educated individuals make up today's corrosion control workforce. About 68% of respondents in the United States and 64% in Canada possess an associate's degree or higher, an increase over last year of 4% and 5% respectively; and 89% of European respondents hold an associate's degree or higher. The percentages of those holding a bachelor's degree are 31% in the United States (same as last year), 28% in Canada (up from 26%), and 21% in Europe; with 10% (United States), 8% (Canada), and 33% (Europe) of respondents having a master's degree; and 5% (United States), 4% (Canada), and 25% (Europe) possessing a doctorate degree or higher. Average annual salaries by highest education level are shown in Figure 4.

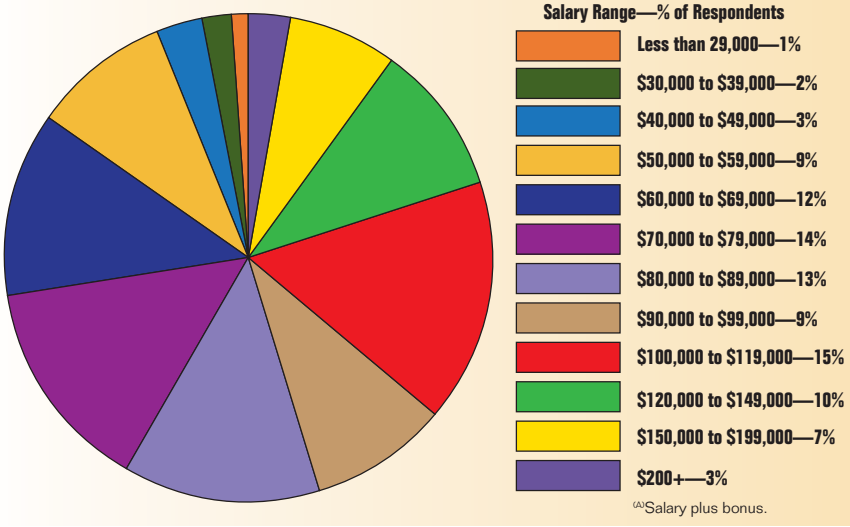
A significant number of survey participants (83% in the United States, 83% in Canada, and 79% in Europe) have attended educational, course-based training in the past 10 years. The percentages of respondents holding at least one NACE certification are 77% (United States), 68% (Canada), and 46% (Europe). In the United States, NACE certifications held most include Coating Inspector Program (CIP) Level 1 (24% with an average annual salary of $87,218), followed by Corrosion Technician (15% with an average annual salary of $82,639), Cathodic Protection (CP) Tester (15% with an average annual salary of $77,624), and CIP Level 3—Peer Review (13% with an average annual salary of $99,962). In Canada, the most-held certifications are CIP Level 1 (25% with an average annual salary of $103,433), Corrosion Technologist (11% with an average annual salary of $106,724), CP Tester (11% with an average annual salary of $99,483), and CIP Level 3—Peer Review (10% with an average annual salary of $94,571). The top NACE certifications held in Europe are CIP Level 2 (15% with an average annual salary of €68,667), CIP Level 1 (14% with an average annual salary of €59,857), and CIP Level 3—Peer Review (13% with an average annual salary of €67,308). Table 2 lists average annual salaries by NACE certification.

"I am pleased to see that the industry continues to recognize the high value of a NACE certification and that our members are able to earn high salaries in a relatively stable industry. In these tough economic times, it is good to be part of an organization that is finding success and whose members are rewarded for their work," says NACE Executive Director Bob Chalker.

NACE members also hold professional certifications issued by other recognized authorities—such as the American Petroleum Institute (API), American Welding Society (AWS), Frosio, the

FIGURE 1

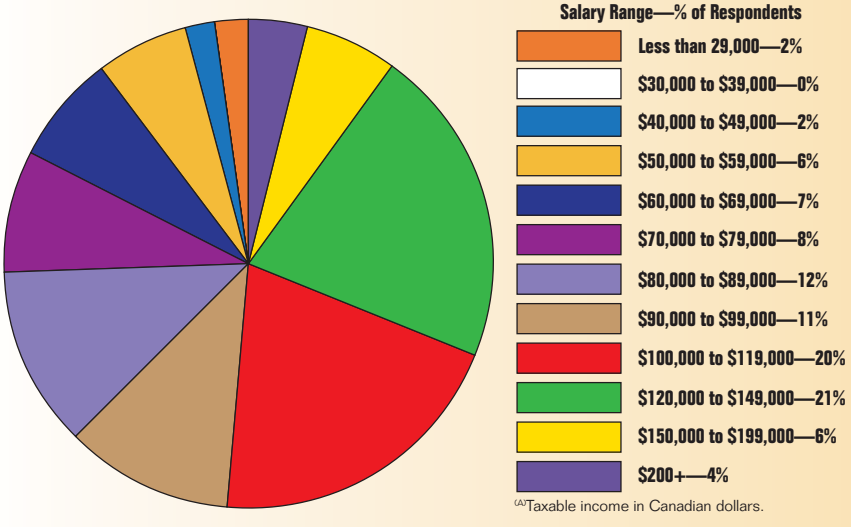
Average Annual Compensation for U.S. Corrosion Professionals[A]



[A]Salary plus bonus.

FIGURE 2

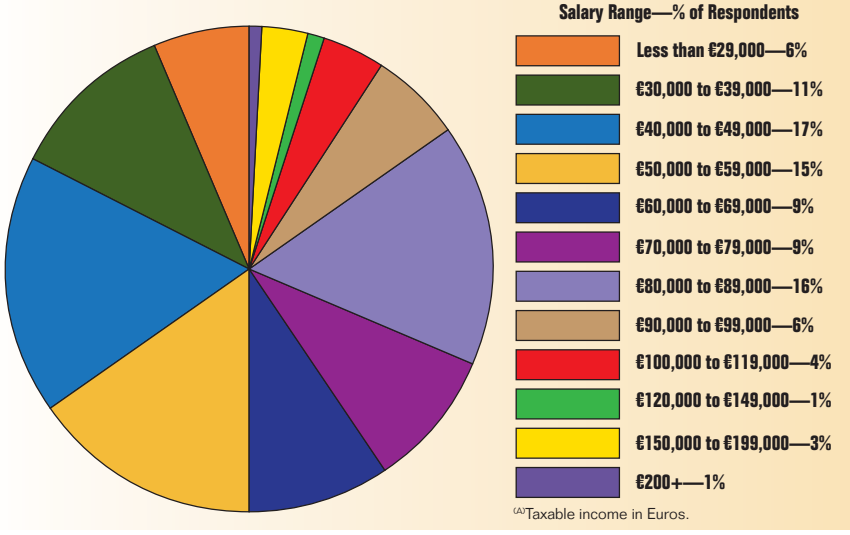
Average Annual Compensation for Canadian Corrosion Professionals[A]



[A]Taxable income in Canadian dollars.

FIGURE 3

Average Annual Compensation for European Corrosion Professionals[A]



[A]Taxable income in Euros.

Norwegian Professional Council for Education and Certification of Inspectors for Surface Treatment, National Center for Construction Education and Research (NCCER), and SSPC: The Society for Protective Coatings. Percentages of respondents holding additional certifications are 22% (United States), 36% (Canada), and 27% (Europe). Those with a Professional Engineer (P.E.) license comprise 9% of U.S., 19% of Canadian, and 24% of European respondents.

Today's corrosion professionals are experienced as well, and NACE members who have served in the industry for at least 10 years outnumber those with less corrosion experience. In the United States, 68% of survey participants have been professionally involved in corrosion prevention and mitigation for 10 years or more, while 44% have worked in the industry for 20 years or more. Results indicate that 17% of U.S. respondents have worked in corrosion control for four years or less. These percentages are similar to last year's results. Canadian members who have worked in the corrosion field for 10 years or more include 65% of survey participants, with 39% (a 5% increase from 2010) possessing a minimum of 20 years of corrosion experience. Respondents joining the corrosion profession in Canada within the last four years comprise 23%. In Europe, 58% of respondents have worked in corrosion control for at least 10 years, with 34% having 20 or more years of experience; and 22% have worked in the corrosion field for four years or less. Figure 5 illustrates average annual salary according to years of corrosion experience for U.S., Canadian, and European respondents.

This year, the number of respondents with less than 10 years of NACE membership has slightly increased in the United States, up from 53% to 55%, with 18% of them being fairly new members (less than two years). The percentage of respondents maintaining their NACE membership for 20 years or more is the same as last year's figure, which is 22%. In Canada, 59% of respondents have been NACE members for less than 10 years, down from 60% last year. Of those, 21% joined NACE within the past two years. Canadian respondents who are

long-time members (20 years or more) increased slightly to 18%, up from last year's figure of 17%. In Europe, a very large percentage of survey participants (79%) have been a NACE member for less than 10 years, with 28% joining within the past two years. Only 5% have been NACE members for 20 years or more. For the most part, average annual salaries for U.S., Canadian, and European respondents climbed upward as the number of years of NACE membership increased. As of May 15, 2011, total NACE membership was 26,494, an increase of 13% over this time last year. In Figure 6, average annual salaries are listed by years of NACE membership.

In addition to continuing in the corrosion vocation for many years, a number of respondents have stayed with their employers on a long-term basis, although those figures have changed over the past year. In the United States, 51% of respondents (vs. 49% in 2010) report working for the same employer for the past 10 years, with 24% of respondents (vs. 25% last year) changing employers once, and 11% (vs. 10%) changing twice during the 10-year time frame. About 29% of U.S. participants have worked for their current employer for 20 years or more. The percentage of Canadian respondents remaining with the same employer for 10 years is 45% (vs. 40% last year), while 25% have changed employers once (vs. 24% in 2010), and 11% have changed companies twice (vs. 17% last year). Approximately 19% have stayed with their current employer for 20 or more years. In Europe, 48% of participants have stayed with their current employer for the past 10 years, with 31% changing employers once and 13% changing twice. The percentage who have worked for their current employer for 20 years or more is 13%. Those who are self employed include 8% of U.S. respondents (down from 10% in 2010), 14% of Canadian respondents (vs. 12% previously), and 21% of European participants.

TABLE 2

Average Salary by NACE Certification

NACE Certification	United States (U.S.$)	Canada (CAN$)	Europe
NACE Certified Coating Inspector Level 1	$87,218	$103,433	€59,857
NACE Certified Coating Inspector Level 1—Nuclear Facilities Certification Supplement (NFCS)	$123,750[A]	N/A	N/A
NACE Certified Coating Inspector Level 1 with NACE CIP Bridge Endorsement	$89,900	$110,000[A]	N/A
NACE Certified Coating Inspector Level 1 with successful completion of the Marine Coating Inspection Course and NACE CIP Bridge Endorsement	$82,500[A]	N/A	N/A
NACE Certified Coating Inspector Level 1 with successful completion of the Marine Coating Inspection Course	$122,500[A]	N/A	N/A
NACE Certified Coating Inspector Level 2	$88,208	$102,778	€68,667
NACE Certified Coating Inspector Level 2—Marine Certified	$87,500	N/A	N/A
NACE Certified Coating Inspector Level 2—NFCS	$115,000[A]	N/A	N/A
NACE Certified Coating Inspector Level 2 with NACE CIP Bridge Endorsement	$89,857	$75,000[A]	N/A
NACE Certified Coating Inspector Level 2 —Marine Certified with the NACE CIP Bridge Endorsement	$82,500[A]	N/A	N/A
NACE Certified Coating Inspector Level 3	$99,962	$94,571	€67,308
NACE Certified Coating Inspector Level 3 with NACE CIP Bridge Endorsement	$99,929	$131,429	€65,000[A]
NACE Certified Coating Inspector Level 3—Marine Certified	$114,091	$55,000[A]	N/A
NACE Certified Coating Inspector Level 3—Marine Certified with the NACE CIP Bridge Endorsement	$105,000	$137,500[A]	€85,000[A]
NACE Certified Coating Inspector Level 3—NFCS	$148,000	N/A	€45,000[A]
Chemical Treatment Specialist	$147,500[A]	$135,000[A]	N/A
Corrosion Specialist	$126,113	$120,714	€85,000[A]
Corrosion Technician	$82,639	$88,200	€76,000[A]
Corrosion Technologist	$93,510	$106,724	€61,667[A]
CP Specialist	$119,667	$133,000	€60,000[A]
CP Technician	$82,159	$104,750	€65,000[A]
CP Technologist	$93,667	$110,625	€61,000
CP Tester	$77,624	$99,483	€60,000[A]
Internal Corrosion Technologist	$97,423	$107,941	N/A
Material Selection/Design Specialist	$119,500	$126,667[A]	€85,000[A]
OCAT Technician	$105,000[A]	N/A	N/A
PCIM Level 1	$85,000[A]	$135,000[A]	€75,000[A]
PCIM Level 2	$75,000[A]	$135,000[A]	N/A
Protective Coating Specialist	$110,000	$140,000[A]	N/A
Protective Coating Technologist	$ 95,000[A]	N/A	N/A
SCAT Technician	$76,125	$65,000[A]	N/A
Senior Corrosion Technologist	$104,890	$115,357	N/A
Senior Internal Corrosion Technologist	$107,000	$135,000[A]	N/A
Virtual Reality Coatings Applicator Certificate of Completion	$110,000[A]	N/A	€85,000[A]

N/A: No respondents selected this category.

[A]Based on fewer than five responses.

The number of hours spent on the job remains steady, with survey responses indicating that the majority of participants in North America and Europe work a 40- to 49-hour work week. The percentages of survey participants working between 40 to 49 hours per week are 64% (United States), 70% (Canada), and 53% (Europe). Some respondents put in up to 59 hours a week (21% in the United States, 12% in Canada, and 18% in Europe); a few work 60 hours or more (9% in the United States, 6% in Canada, and 8% in Europe); and some work less than 40 hours a week (5% in the United States, 12% in Canada, and 20% in Europe). Across the board, average annual salaries increase as weekly work hours increase. Figure 7 provides a look at average annual salaries based on hours worked per week.

The majority of survey participants

FIGURE 4

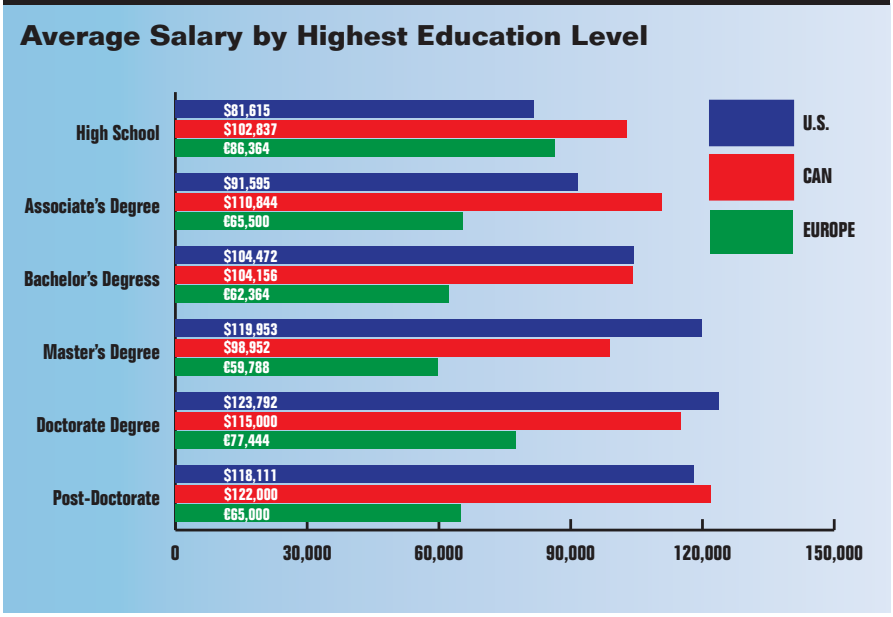


FIGURE 5

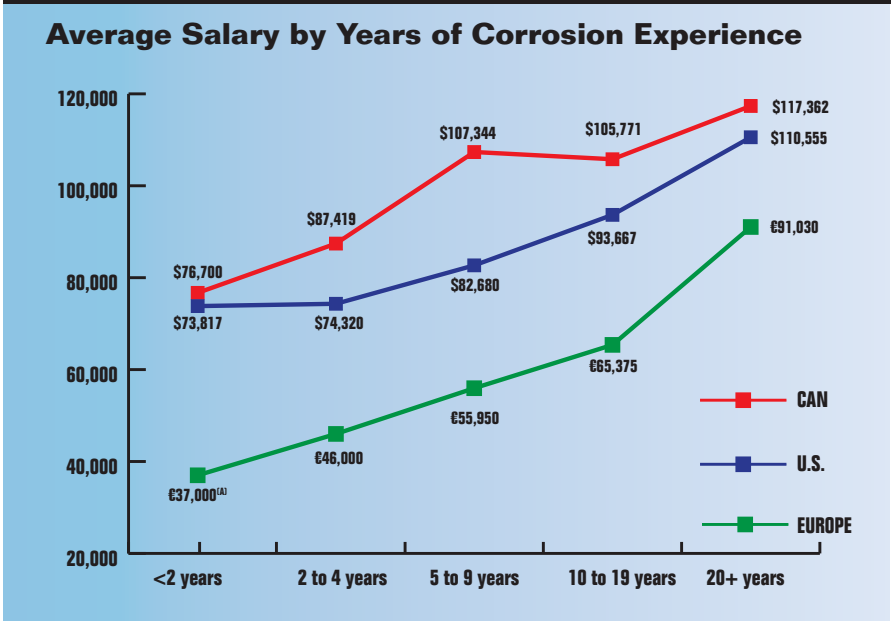


TABLE 3

Average Salary by Company Size

No. of Employees	United States (U.S.$)	Canada (CAN$)	Europe
1-5	$100,486	$105,600	€69,571
6-19	$89,781	$90,625	€47,500(A)
20-49	$89,884	$101,571	€61,286
50-99	$91,456	$87,250	€55,500
100-499	$87,238	$111,087	€66,727
500+	$100,115	$107,407	€70,855

(A)Based on fewer than five responses.

work for companies with 500 or more employees—58% for U.S. members, 54% for Canadian members, and 56% for European members—with 16% (United States), 17% (Canada), and 11% (Europe) working for companies with 100 to 499 employees; and 26% (United States), 29% (Canada), and 33% (Europe) working for companies with less than 100 employees. Table 3 lists average annual salaries by company size. The highest average annual salaries are earned by respondents at the largest companies.

According to the survey results, the corrosion field is predominantly male, with men comprising 93% of the U.S. workforce, 89% of the Canadian workforce, and 89% of the European workforce. In the United States and Canada, the percentage of female corrosion professionals has increased slightly since last year—by 1% for both countries.

Many Industries, Numerous Jobs

Corrosion professionals are employed in many industries—such as aerospace, chemical processing, natural gas and electric utilities, maritime, oil and gas, refining, and transportation to name a few—with a variety of job functions that range from engineers and chemists to technicians and inspectors. The largest percentage of U.S. respondents work with oil and gas pipelines/storage tanks (25%) followed by coatings and linings (16%), which is similar to the results from surveys conducted in 2009 and 2010. Those working for a natural gas utility comprise 12% of respondents, and 8% work in oil and gas extraction. In Canada, the top three industries employing respondents are oil and gas pipelines/storage tanks (26%), coatings and linings (19%), and oil and gas extraction (14%)—with coatings and linings representing a larger portion of Canadian participants this year compared to last year (14%). The coatings and linings industry was selected by 21% of European respondents, followed by oil and gas pipelines/storage tanks and engineering/architecture consulting (both 16%), and refining (13%).

Reported average annual salaries in the United States were highest for plastics/nonmetals ($135,000 with <1% of responses), oil and gas extraction ($131,822), and refining ($123,462); and lowest for instrumentation ($64,800) and academia ($69,231). In Canada, the highest average annual salaries were found in oil and gas extraction ($119,211), water distribution/treatment ($119,167), and chemical processing (118,500); and the lowest were in aerospace ($29,000 with <1% of responses) and academia ($64,333 with <1% of responses). Aver-

age annual salaries for European respondents were highest for plastics/nonmetals (€95,000 with <1% of responses), oil and gas extraction (€79,545), and chemical processing (€76,800); with the lowest reported for power plant/electric utility (€35,000 with <1% of responses) and cathodic/anodic protection (€42,333). See Table 4 for average annual salaries by company function.

The type of jobs selected by the largest percentage of U.S. respondents are technician/technologist (25%), engineer (22%), and quality assurance/quality control (QA/QC) inspector (18%), with the highest average annual salaries reported for engineers ($112,281), consultants ($111,316), and management ($108,208). The largest percentage of Canadian professionals (25% of respondents) also classified their job function as technician/technologist, with 22% selecting QA/QC inspector, and 17% specifying engineer. The highest Canadian average annual salaries are $135,000 for professor/teacher (with <1% of responses), $118,750 for management, and $117,188 for contractors. The job mix for Europe differed somewhat from North America, with engineers representing the largest percentage of participants (40%), followed by QA/QC inspectors (24%) and consultants (17%). Technician/technologist was selected by 8% of European respondents. Chemists drew the highest average annual salary in Europe (€78,333), with management earning an average of €75,267 per year and consultants making an average annual salary of €70,882. Principal job types and corresponding average annual salaries for corrosion professionals in the United States, Canada, and Europe are listed in Table 5.

Geographic Comparisons

Responses were received from all 50 U.S. states and Washington, DC, 10 Canadian provinces (no territories), and 13 European countries. However, some had so few replies that the average annual salaries reported may not be typical. Tables 6, 7, and 8 depict average salaries by state, province, and country, respectively. The highest average annual salaries reported are $127,000 in Alaska (United States), $113,559 in Alberta (Canada), and €95,000 in Greece (Europe). Large percentages of respondents in the United States are located in Texas (22%), California (7%), and Louisiana (6%), which parallels the U.S. demographic results reported in 2009 and 2010. Similarly, Canada's geographic percentages mirror survey results from the last two years as well, with the highest number of participants in Alberta (60%), Ontario (15%), and British Columbia (12%). Most European respondents are located in Italy (30%), The Netherlands (19%), and Germany (16%).

FIGURE 6

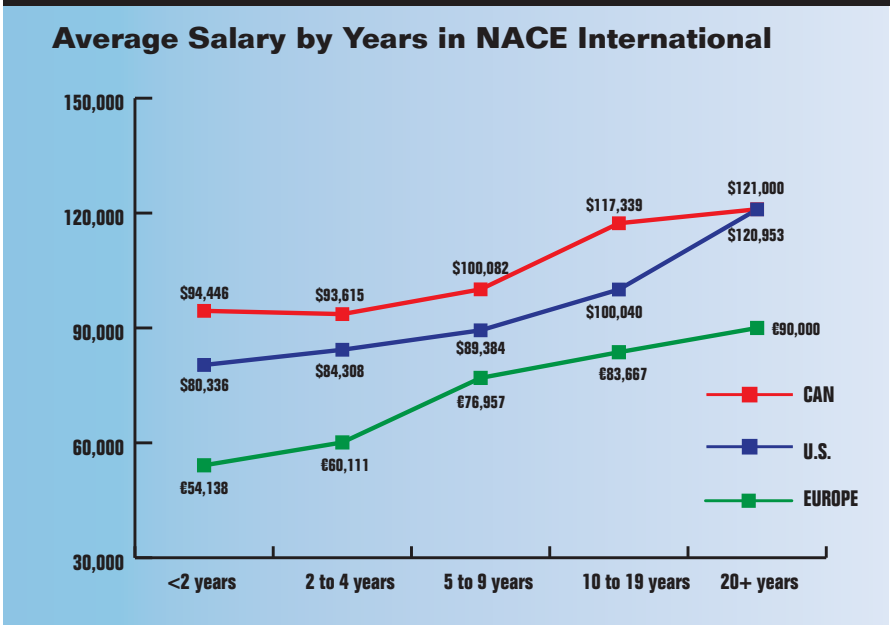
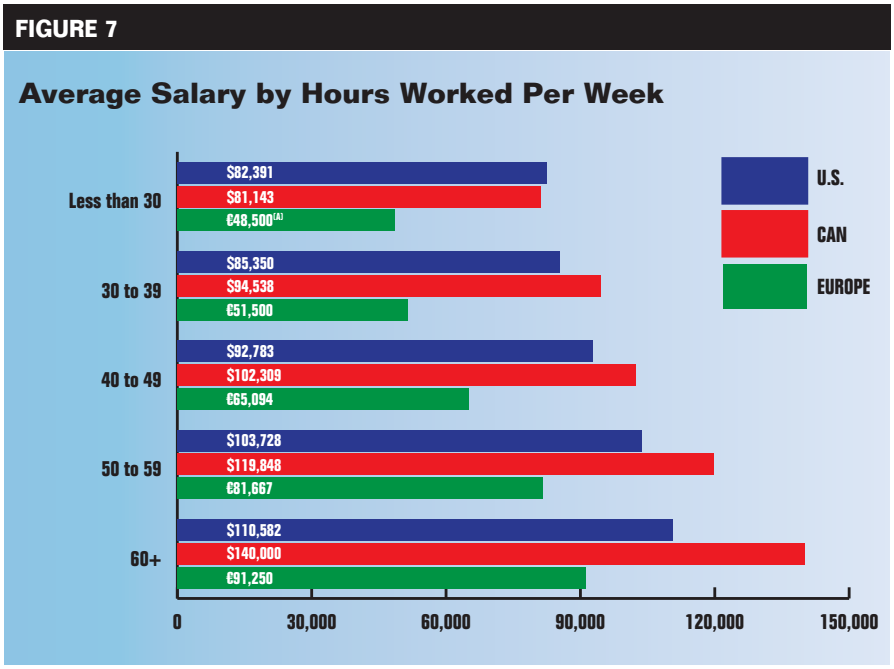


FIGURE 7



Career Priorities and Challenges

A larger corrosion control budget and more opportunities to advance continue to dominate as job aspects corrosion professionals would most like to change. Many U.S. participants (26%) ranked "a larger budget for corrosion control" as the top job aspect to change, while others (23%) would like to see "more advancement opportunities." An equal number

FIGURE 8

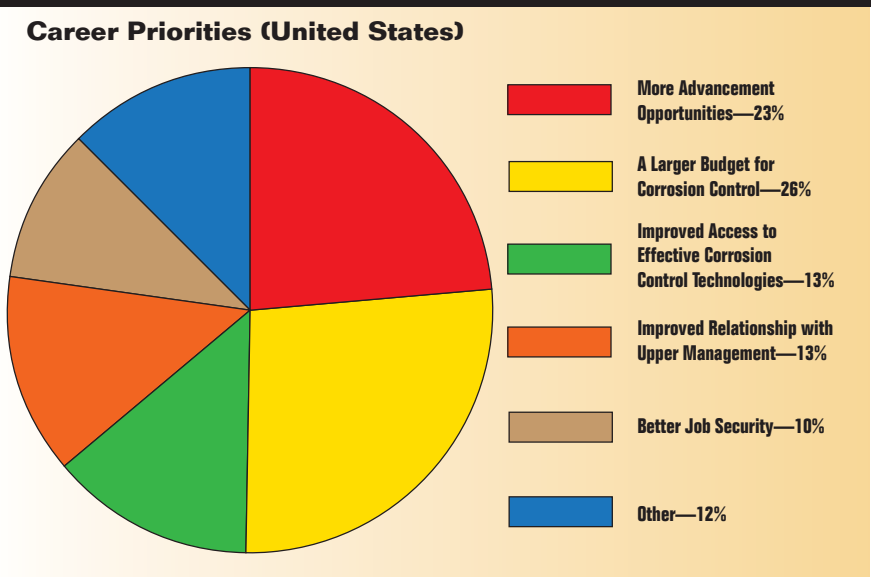


FIGURE 9

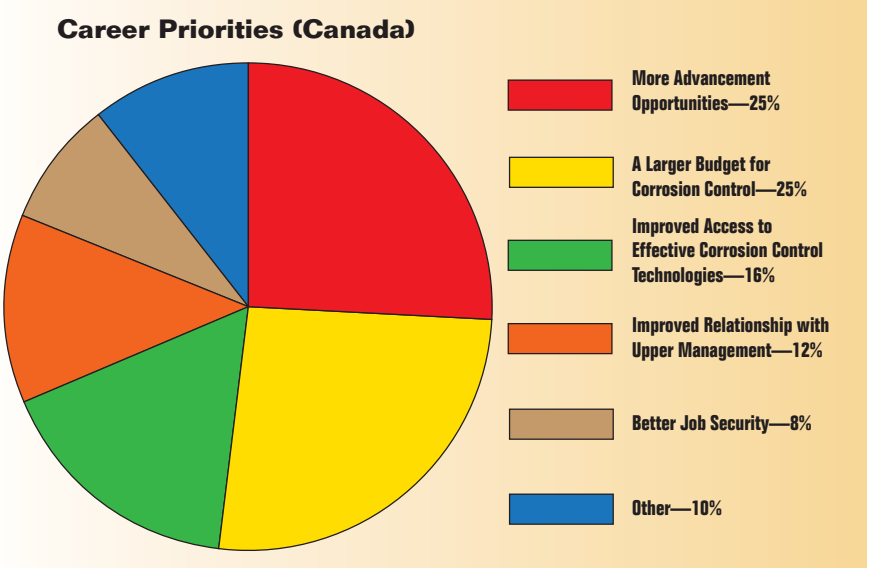
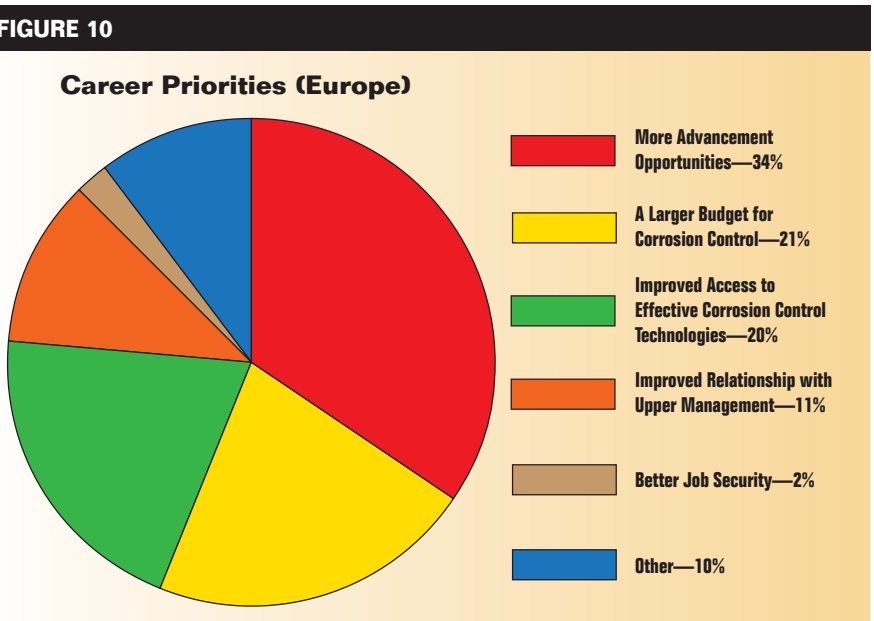


FIGURE 10



of Canadian respondents chose "a larger budget for corrosion control" and "more advancement opportunities" as the one aspect they would like to change (25% for each). "More advancement opportunities" is the one job aspect the largest percentage of European respondents would like to change (34%), followed by "a larger budget for corrosion control" (21%). Survey results for career priorities of U.S., Canadian, and European participants are illustrated in Figures 8, 9, and 10.

Across the board, respondents expressed a desire for a more balanced workload and/or additional qualified staffing to handle corrosion control responsibilities. Other recurring items on the list of job aspects that members would like to change are better pay that is commensurate with experience and training, additional training, less paperwork, improved communication, and reduced travel. One member says that, "I would like to have more time off to spend with my family."

Better corrosion education for decision makers, such as customers and managers, better understanding and implementation by company managers of corrosion control-driven practices, and increased awareness of the cost-saving benefits of corrosion mitigation were also mentioned by several respondents as something they would like to change about their job. According to one NACE member, "I would like to see more emphasis on corrosion management during the design phase of a project. Corrosion management seems to be somewhat of an afterthought." Another member would like to "improve the knowledge level of all employees, and management in particular, relating to corrosion and corrosion control." Yet another member suggests that "universities should include corrosion training as part of chemical engineering curriculums so that process engineers have an appreciation for how processes cause corrosion and failures." Many respondents, however, commented that they wouldn't change anything about

their job, with one survey participant saying, "I can't image what would be better than being a corrosion engineer."

Costs, budget constraints, lack of funding, and educating upper management on the inherent corrosion risks present and the need for corrosion control were mentioned over and over as survey participants shared their thoughts on the corrosion professional's greatest challenge. One challenge, a member remarks, is "advocating for the corrosion budget, because we don't make any money for the company. We are here to lower expenses for our company by preventing corrosion-related repairs and failures. If we do our job well, management forgets how much they need us."

Many report that their biggest challenge is convincing those in charge of spending that corrosion control is critical to the safety and longevity of structures and that funds spent to mitigate corrosion up-front are a long-term investment that will help realize cost savings and benefits later on, whether in the form of increased service life of components, reductions in repairs and/or replacements due to corrosion damage, etc. One member writes, "There is a science behind corrosion prevention, and I think the lack of education by owners and clients hurts the corrosion professional. However, the greatest challenge is to convince owners and managers that there is good economic sense in monitoring and controlling corrosion on their facilities and to use the expertise that is available to optimize value." Another comments that a "if it isn't broke, don't fix it" management philosophy often conflicts with beneficial corrosion management programs. "In a long-term perspective," says another survey participant, "convincing management that you are doing your job when no corrosion incidents occur [is the biggest challenge]. They want to cut and cut funding until the next big problem occurs. Then the funding is returned."

Many respondents note that keeping up with an ever-changing environment is their biggest challenge. Some members comment that they are faced with constantly changing corrosion conditions and unpredictable environments where the assets to be protected are located. According to one respondent, "The greatest challenge is solving corrosion problems. It's also the reason the job is enriching." Several refer to the regulatory environment, where their challenge is to stay current on new governmental rules, codes, and regulations. Still others find the challenge is keeping up with changes in corrosion control technology, standards, methods, procedures, and products. "There is so much to know, that you never get to the point where you say, 'I know it all,'" observes a survey participant.

TABLE 4

Average Salary by Company Function

Company Function	United States (U.S.$)	Canada (CAN$)	Europe
Academic	$69,231	$64,333[A]	€60,000[A]
Aerospace	$95,000	$29,000[A]	N/A
Anodic/Cathodic Protection	$88,802	$91,115	€42,333
Chemical Processing	$108,722	$118,500	€76,800
Coatings & Linings	$93,223	$99,980	€69,524
Construction	$87,759	$107,692	€56,625
Engineering/Architecture Consulting Firm	$104,024	$80,000	€54,000
Government	$89,032	$98,333[A]	€70,000[A]
Instrumentation	$64,800	N/A	N/A
Metals & Mining	$91,389	$101,000	€57,500[A]
Natural Gas Utility	$73,634	$90,250	N/A
Oil & Gas Extraction	$131,822	$119,211	€79,545
Oil & Gas Pipeline/Storage Tanks	$91,387	$113,662	€62,125
Original Equipment Manufacturer	$112,593	$103,333[A]	€45,000[A]
Plastics/Nonmetals	$135,000[A]	$87,000	€95,000[A]
Power Plant/Electric Utility	$99,082	$104,167	€35,000[A]
Pulp & Paper	$110,000	$95,000[A]	N/A
Refining	$123,462	$115,625	€67,308
Research & Development	$98,912	$96,111	€49,667
Ships/Marine/Offshore Platforms	$86,951	$95,000	€74,833
Testing Services	$79,971	$90,714	€59,286
Transportation	$92,667	$85,000[A]	€55,000[A]
Water Distribution/Treatment	$90,925	$119,167	€61,667[A]

N/A: No respondents selected this category.

[A]Based on fewer than five responses.

TABLE 5

Average Salary by Job Type

Job Function	United States (U.S.$)	Canada (CAN$)	Europe
Chemist	$93,105	$96,429	€78,333
Consultant	$111,316	$113,542	€70,882
Contractor	$91,000	$117,188	€65,000[A]
Designer/Architect	$74,833	N/A	N/A
Engineer	$112,281	$108,111	€64,000
Inspector/QA/QC	$87,577	$107,169	€65,000
Maintenance	$78,000	$110,833	€51,667[A]
Management	$108,208	$118,750	€75,267
Professor/Teacher	$93,611	$135,000[A]	€60,000[A]
Purchasing	$97,500	$65,000[A]	N/A
Retired	$112,375	N/A	€45,000[A]
Sales/Marketing	$100,043	$93,235	€82,000
Student	$52,000	$29,000[A]	€29,000[A]
Technician/Technologist	$74,723	$95,348	€51,444

N/A: No respondents selected this category.

[A]Based on fewer than five responses.

TABLE 6

Average Salary by U.S. State (U.S.$)

State	Average Salary
Alabama	$82,000
Alaska	$127,000
Arizona	$96,905
Arkansas	$100,000(A)
California	$107,922
Colorado	$91,667
Connecticut	$81,667
Delaware	$77,857
District of Columbia	$80,000(A)
Florida	$85,979
Georgia	$103,368
Hawaii	$77,500
Idaho	$100,000
Illinois	$107,537
Indiana	$78,238
Iowa	$82,500
Kansas	$79,516
Kentucky	$79,333
Louisiana	$91,685
Maine	$75,000(A)
Maryland	$110,313
Massachusetts	$89,375
Michigan	$80,854
Minnesota	$82,560
Mississippi	$96,667
Missouri	$87,667
Montana	$82,692
Nebraska	$90,000
Nevada	$91,500
New Hampshire	$90,000(A)
New Jersey	$102,560
New Mexico	$90,926
New York	$99,432
North Carolina	$80,179
North Dakota	$69,800
Ohio	$92,909
Oklahoma	$107,951
Oregon	$78,462
Pennsylvania	$84,227
Rhode Island	$92,000
South Carolina	$92,222
South Dakota	$73,000
Tennessee	$82,588
Texas	$108,512
Utah	$85,667
Vermont	$110,000(A)
Virginia	$84,780
Washington	$95,676
West Virginia	$94,500
Wisconsin	$90,000
Wyoming	$85,882
U.S. Average	$95,802

N/A: No respondents selected this category.

(A)Based on fewer than five responses.

TABLE 7

Average Salary by Canadian Province and Territory (CAN$)

Province	Average Salary
Alberta	$113,559
British Columbia	$109,812
Manitoba	$85,000(A)
Nunavut	N/A
New Brunswick	$95,000(A)
Newfoundland and Labrador	$96,667(A)
Northwest Territories	N/A
Nova Scotia	$76,167
Ontario	$90,357
Quebec	$72,000
Saskatchewan	$104,000
Yukon	N/A
Canadian Average	$104,917

N/A: No respondents selected this category.

(A)Based on fewer than five responses.

TABLE 8

Average Salary by European Country

Country	Average Salary
Austria	€65,000(A)
Belgium	€71,250(A)
Cyprus	N/A
Estonia	N/A
Finland	€45,000(A)
France	€81,727
Germany	€79,625
Greece	€95,000(A)
Ireland	€75,000(A)
Italy	€51,200
Luxembourg	N/A
Malta	N/A
The Netherlands	€82,368
Portugal	€46,333(A)
Slovakia	€35,000(A)
Slovenia	€35,000(A)
Spain	€61,000
European Average	€67,281

N/A: No respondents selected this category.

(A)Based on fewer than five responses.

Highlights of NACE International Corrosion Career Survey

Average annual salaries for 2011:
- United States—$95,802
- Canada—$104,917 *(equivalent to U.S. $107,613)*
- Europe—€67,281 *(equivalent to U.S. $95,357)*

Participants with 10 years or more corrosion experience:
- United States—68%
- Canada—65%
- Europe—58%

Participants with 20 years or more corrosion experience:
- United States—44%
- Canada—39%
- Europe—34%

Participants with four years or less of corrosion experience:
- United States—17%
- Canada—23%
- Europe—22%

Participants who have been a NACE member less than 10 years:
- United States—55%
- Canada—59%
- Europe—79%

Participants who have been a NACE member for 20 years or more:
- United States—22%
- Canada—18%
- Europe—5%

Participants attending any course-based training in the past 10 years:
- United States—83%
- Canada—83%
- Europe—79%

Participants holding at least one NACE certification:
- United States—77%
- Canada—68%
- Europe—46%

Dominant industries:

United States:
- Oil and gas pipelines/storage tanks—25%
- Coatings and linings—16%
- Natural gas utility—12%
- Oil and gas extraction—8%

Canada:
- Oil and gas pipelines/storage tanks—26%
- Coatings and linings—19%
- Oil and gas extraction—14%

Europe:
- Coatings and linings—21%
- Oil and gas pipelines/storage tanks—16%
- Engineering/architecture consulting—16%
- Refining—13%

Survey Methodology

The 2011 Corrosion Career Survey was conducted in North America and Europe using online survey software. In April 2011, approximately 10,900 members in the United States, 1,900 in Canada, and 525 in Europe received an e-mail with an invitation to participate and a link to their respective survey. At the close of the survey, 1,541 U.S. surveys were submitted, representing a 95% confidence level in the survey results, plus or minus 2% for error; 270 Canadian surveys were returned, resulting in a 95% confidence level with a margin of error of plus or minus 5%; and 98 European members responded, for a confidence level of 95% plus or minus an error margin of 8%.[1]

Reference

1 The Survey System, http://www.surveysystem.com/sscalc.htm.