

RAISING the DEBAR Group



Written by Robert Hoshowsky

n integral part of the process, reinforcing steel – called rebar – is crucial in building roads, buildings, bridges, wind towers, and more. Hidden behind structural walls, or buried under concrete slabs, rebar remains one of the most important construction materials.

Founded in 1948, and headquartered in Longueuil, Quebec, the AGF Group was the first company in the nation to specialize in rebar, and is a pioneer in the reinforcing steel industry.

Steadily growing its business by merging with related companies and forging dynamic new partnerships, the company is present in five provinces in Canada: Quebec (AGF Steel), Ontario (AGF Rebar), Alberta (AGF Reinforcing Inc.), British Columbia (AGF Reinforcing BC) and New Brunswick (AGF Olympic). Additionally, AGF has a new Vancouver area plant under construction, set to open this year.

To meet client needs, the company is selling to customers – and servicing them – from other plants at its own cost, because of COVID-related slowdowns. "Our goal is to grow slowly, and to provide service. We're not going out there and trying to take over the market. The way we sell ourselves is all about service. Keep our customers satisfied, and they keep coming back," says Joe Golden, Senior Vice President, Ontario and Western Canada.

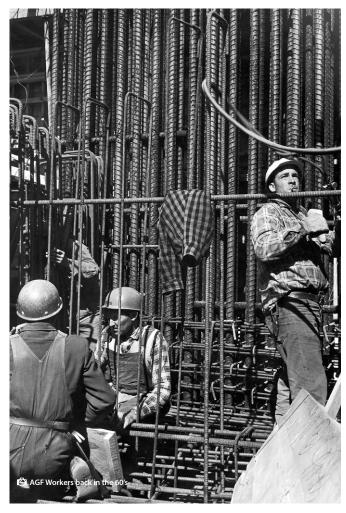
AGF today has over 25 business units. With the majority in Canada, the company also has units in France, Latin and Central America, and India, where AGF has an engineering operation now expanding into fabrication. Privately owned to this day, the AGF Group does not own and nor is held by steel mills, but purchases rebar from mills.

AGF has fabrication and placing, but it starts with the mills, according to Golden. Even with its strong supply capabilities in Canada, demand for rebar remains high.

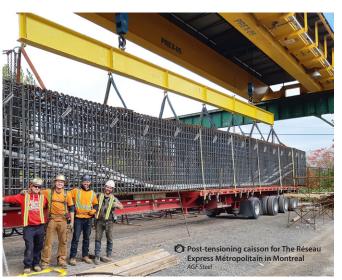
"A certain percentage of rebar is actually brought into Canada, because the Canadian mills cannot service the whole market-place," says Golden. "Depending on the year and how things are going, we can only serve 60 to 70 percent of the market, so we have to bring steel from overseas."

With about 2,150 workers worldwide, the bulk of AGF's crew – some 1,650 staffers – are >>>

Wind turbine base, Whitla Wind







▶ in Canada. Most are iron workers and signatories to a union, usually Iron Workers International (The International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers Union), a trade association going back to the 1890s.

"About 40 percent of our people are field construction workers," comments Golden.

"We love to do the big, complicated stuff," says Golden. Although willing to take on smaller rebar works such as the construction of franchised coffee shops, AGF truly shines with massive, challenging above- and below-ground projects like subways, wind farms, and water treatment-related construction.

One of the company's projects, still under construction at the time of writing, is Toronto's Eglinton Crosstown LRT, a light rapid transit system.

"We are a family-run business, and we think long-term."

Mandated for the large-scale project by Crosslinx Transit Solutions (CTS) — "a design and construction consortium established to deliver and maintain the Eglinton Crosstown LRT," according to Crosslinx — AGF's vital role is to supply, install, and inspect almost 6,500 metric tonnes of reinforcing steel for three stations.

Once completed, the Eglinton Crosstown LRT will see over 19 km (11.8 miles) of new light rail, 10 km (6.2 miles) of them underground, uniting the east and west end of Canada's biggest city.

"Very few people can walk in to Crosslinx and do a \$100 million station," says Golden. "They will say, 'Who do we want to partner with?' and, 'By the way, you can't be late, and it needs to be done right.' This is not for the faint of heart. And our safety is incredible, very professional."

While Crosslinx had some COVID-19 related issues and did a good job addressing them, AGF also used its own health and safety experts on the project.

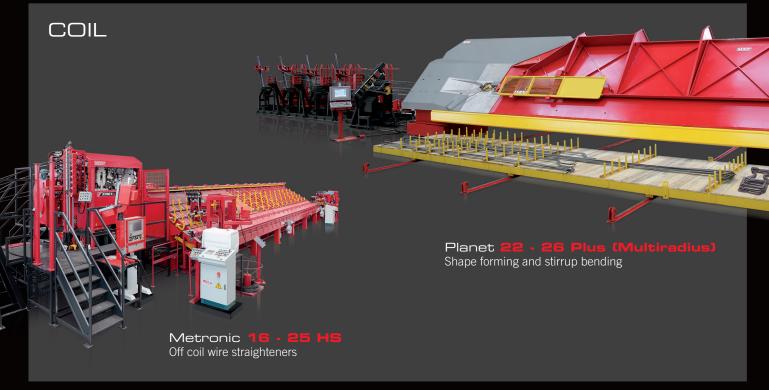
Other major works underway in Toronto include the Coxwell Bypass Tunnel. Part of Toronto's Wet Weather Flow Master Plan (WWFMP), the project represents "the largest and most significant storm water management program in the city's history," according to an online media statement.

Begun in early 2020, the WWFMP is a 25-year project, with the Coxwell Bypass Tunnel the first of three phases of the 22 km (13.6 miles) Don River and Central Wet Weather Flow System.

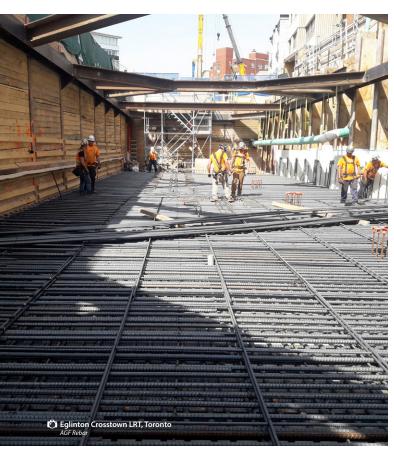


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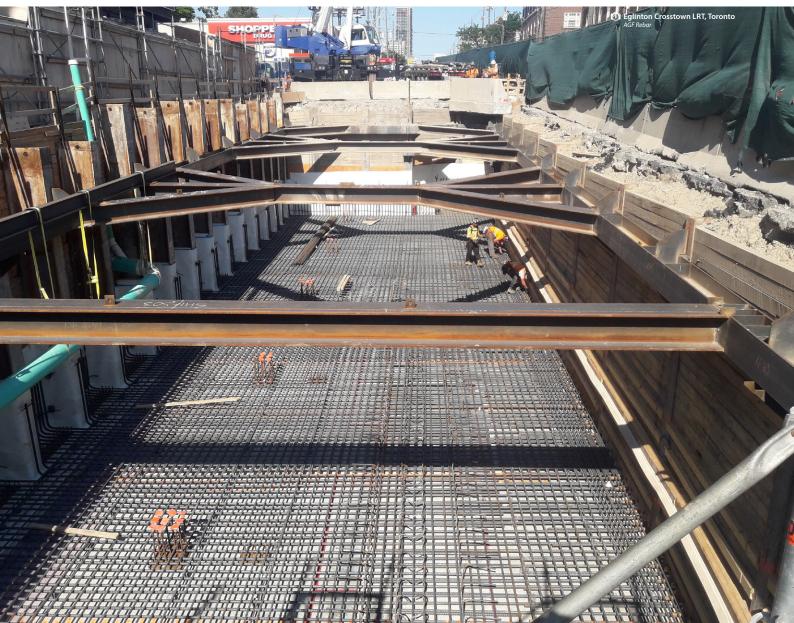


▶ Phase One — a 10.5 km long (6.5 miles), 6.3 meter (20.6 feet) diameter tunnel — is part of the system designed to keep combined sewer overflows (CSOs) out of waterways.

"Toronto has major flooding issues, and it dumps into Lake Ontario," says Golden. "The city is trying to get rid of that, so we are doing several projects, including the Coxwell Bypass and Ashbridges Bay – that's another shaft we are doing – and a lot of tunnelling work is going on."

Serving as Toronto's key water sewage facility, the Ashbridges Bay Wastewater Treatment Plant is on the shore of Lake Ontario. It is an enormous project. Austrian construction services company Strabag was awarded the contract to build large underground concrete shafts, feeder tunnels, and chambers for wastewater to flow to the treatment plant.

AGF is responsible for rebar for the project's shafts and tunnels, which will take several years to complete. As of early February 2021, AGF Rebar had supplied and installed a total of 1,525 MT steel out of a total tonnage of 4,940 MT. The end of the work for AGF is scheduled for April 2023.



Since no project is too big or too complicated for the experts at AGF, the company has tackled other massive works, from the Hibernia Oil Field to the Gordie Howe International Bridge and the new Samuel De Champlain Bridge in Montreal.

"It's a beautiful bridge that opened in 2019. These things are as complex as construction can get, working over a river, with tight schedules for 12 months of the year. It's incredible, and very cool. The express light rail that will go across it and will spread from the South to the North Shore of Montreal is still being built by our team as well. We first fabricated the caissons anchored in the ground, as well as the columns and the cross-sections of the pillars of a segment on the South Shore. We were then awarded the contract for the production and installation of reinforcing steel for 18 metro stations, two bus stations and two service buildings as well as the launching pad of the tunnel boring machine," says Golden.

Over the years, AGF has been involved in the construction of many wind farms across Canada including the Whitla Wind Farm Project in Alberta. Spearheaded by Capital Power, the large-scale project was approved by the Alberta Utilities Commission in August 2018, with Whitla Wind 1 built soon after and commencing commercial operations on December 1, 2019.

"Hidden behind structural walls, or buried under concrete slabs, rebar remains one of the most important construction materials."

The next stage of the work, Whitla Wind Phase 2 & 3, is under construction in the province's County of Forty Mile. For AGF Reinforcing, this will represent the construction of 42 additional bases for approximately 2090 MT of steel.

"This is going to be the biggest wind facility in Alberta," Golden says of the second stage of the work, projected to have a capital cost of approximately \$165 million.

According to Capital Power, this stage of the project will see the construction of 27 wind turbines from Danish manufacturer Vestas Wind Systems, the V-136-3.45 MW (megawatt), optimized in 3.6 MW power mode. This is being done to fulfill Alberta's pledge of adding 5,000 MW of renewable energy capacity in the next 10 years. Once completed, the project is expected to see 99 wind towers.

With a height of about 100 meters (328 feet) and a rotor diameter of 136 meters (446 feet), the towers are made with Large Diameter Steel Tower (LDST) technology, and require significant below-ground support. This is where AGF comes in.













They're huge chunks of concrete," says Golden of the concrete and rebar bases, set 10 feet (3.5 m) into the ground, with a radius of 60 feet (18.2 m) for each tower. One company digs the hole for the base, and AGF installs rebar. "During Phase 1, our crew constructed one base per day which is 49 metric tons (MT) of rebar per base, for a total of 56 wind turbines. Right behind us, there is another guy pouring concrete, and that process is going as fast as it possibly can, six days a week, 10 hours a day."

To ensure timely project delivery, AGF works from client designs during the off-season, performs all the necessary fabricating and bending, and delivers completed rebar to the job site for installation. In total, the project will see three phases. Slated for completion by the end of 2021, Whitla will be Alberta's biggest wind farm, capable of generating 353 MW of power.

Big believers in giving back to the community, management and employees make it a point to help others through the AGF Group Foundation. Donating primarily to registered Canadian charities involved in humanitarian causes, health, education, arts and culture, and sports and leisure, the Foundation also has a signed, longer-term commitment to Polytechnique Montréal, Make-a-Wish Canada, The Centre for Addiction and Mental Health (CAMH), and other groups.

Last year, thanks to the Foundation, AGF Group received an Award in the Community Involvement category at the 40th Mercuriades Awards. "Organized by the Fédération des Chambres de Commerce du Québec (FCCQ), Les Mercuriades is one of Quebec's most prestigious business competitions that



highlights the innovation, ambition and performance demonstrated by the companies in the province," according to the company on its website.

"The AGF Foundation will match whatever funds are raised by AGF's employees, and we also then create relationships – with CAMH, for instance," says Golden. Employees approach the board that manages the Foundation, and raise money for charities that range from providing warm coats in the wintertime, to food and toy drives in their communities.

Unlike many other companies, these initiatives do not come from management, but employees. "I've only been here for 18 months, and it's actually one of the reasons I came to AGF," says Golden, who has a 30-year background in manufacturing and construction.

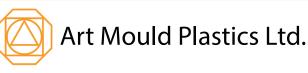
"That's the mentality. You can work for anybody, but this starts at the very top, a whole separate side of the business. It's driven hard, and the employees here are completely into it. The younger generation, they are all about that. They know they can work anywhere — a paycheque is a paycheque — but what are you giving back to your community?"

To better serve its customers and attract new talents, early this year AGF will be launching its new website which will be more streamlined and user-friendly than ever. And, as the construction industry contends with technological challenges, AGF set up a "4.0 committee" in spring 2020. Its mission is to integrate new technologies into the company's value chain by, among other things, the judicious use of massive amounts of data (production output, orders, stocks, etc.) generated every day by the departments of the organization. From the automation of some IT tasks to the use of artificial intelligence, a vast program has been defined until 2024.

"We are a family-run business with the structure, reputation and professionalism of a major international business and we think long-term," says Golden. "There is a reason the company's been here since 1948 and continues to grow: it's because, if you treat your customers' right, they grow and you grow.

"AGF has done 40,000 projects since 1948. Because of that, we have an incredible amount of knowledge, from the technical part of folks in the manufacturing facility to on-site. We know how to do it. If it's big and it's tough, we're definitely someone you want to partner with. We, of course, are about long-lasting relationships, and AGF plans to be here for another 75 years."

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