

OUR GROUP

The Castech Plessitech Group was created in order to offer to all types of industries a unique source for all their needs, from the start to the completion of their project. Our organization proudly regroups Castech Metallurgy, Plessitech, M.E.W., Metal Coleraine and Plessitech Express.

The Castech Plessitech Group is a dynamic and experienced team offering turn-key or sub-contracted products in foundry, machining and welded construction. The Castech Plessitech Group is present in many sectors: mining, aluminium smelters, pulp and paper, energy (wind and hydro-electric) and general industrial work.

The Castech Plessitech Group is unique due to its vertical integration: The Group offers design work, including reverse engineering, the pouring of ferrous castings, machining and assembly, delivery and onsite installation. All parts or assemblies produced by the Castech Plessitech Group are manufactured as per ASTM quality standards. All our employees are devoted to produce top quality and to meet all specifications for the conformity of these products. Quality is primordial to reach our customers' satisfaction in order to develop a trusting relationship with them.

OUR MISSION IS TO GIVE A MEANING TO YOUR PROJECT.



OUR VALUES

COMMITMENT

If our customers have had confidence in our Group for close to 100 years, it's due to our ongoing commitment and desire to innovate that reflect our passion for a job well done and our will to be with you all along your project.

RELIABILITY

Our goal is to accompany you by offering custom solutions that are flexible and reliable. It's very important for us to adapt and react positively in order to anticipate to your needs in all your projects.

QUALITY

The proximity with our customers as well as the complete control of our manufacturing processes is the main reason that the quality of our services is related to our comprehension of your needs.

PERFORMANCE

We have a devoted team, loyal and accessible, to accompany each customer on all aspects of their project. In the field or in our fabrication shop, you will find the same passion within the teams of the Group.

IN SUMMARY, THE CASTECH PLESSITECH GROUP IS:

- 5 divisions
- A vertically integrated company
- Present everywhere in the Americas, but also in Asia, Europe, Africa and Oceania
- A dynamic young and experienced team
- Over 220 employees who care about the quality of your products
- An efficient and personalized service
- · Quick production and delivery
- A real development partner



VERTICAL INTEGRATION



DESIGN AND ENGINEERING

Tools with cutting edge technology for a custom design of your ideas and your projects. Castech Plessitech Group has a dynamic team of engineers that can go within your company to take all dimensions necessary for the realization of all your projects. With our 3D scanner, we are able to quickly perform high-precision dimensional readings through the concept of reverse engineering which allows you to optimize and improve the design so that it will adapt perfectly to your needs.

PAINTING

A personalization service that allows you to get products to your company colors.



POURING OF PARTS

The Castech Plessitech Group is the only foundry in Quebec to produce all the ferrous alloys. Therefore, we have a product for each of your requirements. Since the beginning of Castech, our technical team has worked to find innovative solutions to the various applications of our customers. In recent years, Castech has developed specialized irons showing extreme resistance to abrasion applications.

TRANSPORT |

Respect for the "just in time"; we transport the products from our factory to your business and, with an unbeatable price. Our transportation service is a must for the success of your project.



MACHINING AND ASSEMBLY

Our shop has a production capacity for assembled parts up to 100 tons and the quality of our equipments allows us to produce parts of all sizes and up to 40,000 pounds. We are still able to make large projects as well as custom projects to meet all our customers' specifications.

INSTALLATION & TECHNICAL SUPPORT

Whether it is to ensure compliance of the product or to ensure the effectiveness and operation of it, our teams make sure to be present with you to complete installation of your equipment. We also offer an associated technical support available 24/7.





RESEARCH & DEVELOPMENT

RESEARCH & DEVELOPMENT
THE KEY TO THE EXCELLENCE OF OUR PRODUCTS.

ENGINEERING

The Castech Plessitech Group has a dynamic team of engineers that can go within your company to take all dimensions necessary for the realization of all your projects. With our 3D scanner, we are able to quickly perform high-precision dimensional readings through the concept of reverse engineering, which not only allows you to change the initial product but also to optimize and improve it so that it will adapt perfectly to your needs.



KNOW-HOW

Our foundry has always worked to enhance its know-how giving it the possibility to produce complex parts from steel and iron with an even more controlled and efficient process. The users then obtain constantly improved results for their various replacement parts. With more than 100 different alloys, we can offer you superior efficiency when it's a question of offering a better resistance to abrasion or impacts. With our machine shop, we offer machining for small or big parts either on conventional or CNC machines. With our welding shop, we can also offer a general fabrication service as well as a repair/fabrication service for our screws and screw conveyors. We also have the pleasure to offer our customers a 24/7 service.



OUR ALLOYS: QUALITY AND SUSTAINABILITY

We never stop developing specific alloys to improve the efficiency of each of our customers. This is why you'll certainly be able to find an alloy within our diversified list that will bring you a demarcated productivity within your daily operations.





« THE MEANING OF MINING »

FOR SEVERAL YEARS, THE **CASTECH PLESSITECH GROUP** HAS WORKED WITH VARIOUS MINING COMPANIES TO IMPROVE THE LIFE OF THE EQUIPMENT USED THEREIN. TRUE HEART OF THE GROUP'S BUSINESS, WE HAVE DEVELOPED A REAL EXPERTISE THAT ALLOWS US TO SUPPORT OUR CUSTOMERS IN ORDER TO HAVE A REAL IMPACT ON THE PERFORMANCE OF THEIR EQUIPMENT.





ORIGINAL EQUIPMENT MANUFACTURERS (OEM) ALSO USE OUR SERVICES AND OUR EXPERTISE TO PROVIDE COMPONENTS: SOW MOULD, PULLEYS, ANODES, TANKS, GEARS, SHREDDER HAMMERS, BEARINGS, BEARING HOUSINGS, TRANSMISSION PARTS. THESE ARE JUST A FEW EXAMPLES OF PARTS MADE BY OUR GROUP.

ALUMINUM SMELTERS







THE STRENGTH OF A TEAM

WITH THE COLLABORATION OF ITS SISTER COMPANY, PLESSITECH, ALL THESE COMPONENTS CAN BE DELIVERED FULLY MACHINED AND READY TO INSTALL. ALSO, WITH THE SURGE IN THE WORLD THIRST FOR GREEN ENERGY THAT IS GENERATED FROM WIND TURBINES, PLESSITECH HAS DEVELOPED THE REQUIRED EXPERTISE FOR THE PRODUCTION OF COMPONENTS FOR WIND TURBINES SUCH AS HUBS AND BASES.



WITH THE HELP OF ITS INDUCTION OVENS, CASTECH HAS MASTERED THE PRODUCTION OF VERY LOW CARBON STAINLESS STEEL (<0.03% C) THAT ARE REQUIRED FOR THE PRODUCTION OF COMPONENTS FOR HYDRO-ELECTRIC POWER GENERATION. THE PRODUCTION OF WICKET GATES, BLADES, RUNNER BANDS AND CROWNS, AND STAY VANES ARE NO SECRET TO CASTECH.

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THE CASTECH PLESSITECH GROUP NOT ONLY HAS EXPERTISE IN CASTING, BUT ALSO THE TECHNICAL KNOWLEDGE TO IMPROVE A PRODUCT IN TERMS OF ITS PERFORMANCE AND ITS LIFE. THIS SYNERGY MAKES CASTECH PLESSITECH GROUP THE MOST INTERESTING SOLUTION FOR ALL MANUFACTURING SECTORS.

WE PRODUCE PARTS DESIGNED AND USED IN PROGRAMS OF TRANSFORMATION AND/OR RENOVATION OF EQUIPMENT. WE THEN WORK FOR STEEL MILLS, FOR THE PULP AND PAPER INDUSTRY, FOR THE AREA OF FORESTRY, FOR SHIPYARDS, FOR RECYCLING COMPANIES, FOR THE TRANSPORTATION INDUSTRY AND FOR MANY OTHERS.

ACTIVITY SECTOR INDUSTRIAL **INDUSTRIAL**



ACTIVITY SECTOR



At Castech Plessitech Group, we continuously develop specific ferrous alloys to continuously improve the performance of cast parts for each of our customers. This is how we have developed our famous CF-140 abrasion resistant alloy. This alloy meets strict criteria related to the chemical composition and heat treatments. These particularities transform the structure and give this material unsurpassed abrasion resistance. Another specific aspect of this alloy modified structure is a big improvement in toughness that gives a much better resistance to impact during service.

No matter what is your need for ferrous cast parts, Castech can produce any types of carbon, alloy or stainless steels and irons, and this from 1 to 40 000 pounds.

STEELS

- Carbon steels to the norms ASTM A-27, A-216 ET A-352.
- Alloy steel ASTM A-148 as well as chrome-moly and nickel-chrome-moly steel.
- Manganese austenitic steels to the norms ASTM A-128 of all grades
- Other specialty alloys

STAINLESS STEELS

- All the grade of stainless steels: CF8 (304), CF8M (316), CA6NM, CF3 (304-L), etc.
- Heat resistant stainless steels such as grades HH (309), HK (310), etc. as per the norms of ASTM A297
- Duplex stainless steel 2205

GREY AND DUCTILE IRONS

- All the grade of grey irons as per the norms of ASTM A-48
- All the grades of ductile irons as per the norms of ASTM A-536

SPECIALTY IRONS

- All the grades of high chromium irons as per the norms of ASTM A532, class II and III
- All the grades of high nickel irons (Ni-Hard) as per the norms of ASTM A532, class I, Type A
- Specialty irons resistant to abrasion and corrosion (Ni-resist) as per the norms of ASTM A436, Type 1 to 6
- Heat resistant irons as per the norms of ASTM A319

ABRASION RESISTANT IRONS

Since the beginning of Castech, our technical team has worked to find innovative solutions to the many different applications of our customers. In the last few years, Castech has developed specialty irons, CF-140, CF-142 and CF-144, with extreme wear resistant characteristics in very abrasive applications.

CF-140

Increased resistance to abrasion and erosion and an increased toughness for parts such as teeth, anvils, hammers, concaves and liner plates.

CF-142

Special alloy for pumps, pulverizers and pipes for abrasive and corrosive slurries.

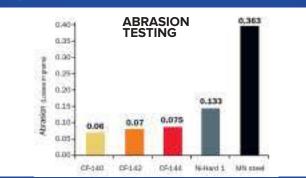
CF-144

Increased resistance to abrasion, cavitations and erosion with an increase toughness for parts such as refining disks and feed chute liners.

ABRASION TESTING

In many types of abrasive applications, our alloys can increase the life of certain components from 2 to 3 times, minimum, as compared to conventional Ni-Hard. The graphic hereunder shows abrasion test results on different types of alloys.

The tests presented in the attached graphic have been done by an independent external laboratory. However, many of the physical tests done at our customer's site have totally proven their PERFORMANCES. The abrasion testing was done as per the norms of ASTM G65 and the impact testing as per the norms of ASTM E23.





FUMP CASING

SOW MOULD

PASTE MIXER FLIGHT



LOWER DVEN DOOR



MARCH TENTH

PAGOT MOULD



OVEN DOOR FRAME



CASTECH





BUSINA

ELOSZEI PUMP



OPENPLINE IMPELLER



INDUSTRIAL PARTS



DISCHARGE GRATE. FOR BALL MILLS





PLESSITECH

Whatever your needs, Plessitech can meet them all. All our welding procedures are certified by the norms of the Canadian Welding Bureau (CWB) and/or ASME. Also, with our complete machining facilities, all your assemblies can be machined and assembled. We also offer sand or glass beads blast for cleaning and our paint shop can paint the parts to your choice of colours. This way, your products are ready to be used upon reception.

Our equipments allow us to do machining work and welding on medium and large sizes parts and to realize projects tailored to your needs.

With our 27,000 square feet of shop floor equipped with high capacity cranes and our complete large of machine tools, Plessitech is able to meet all our customer's requirements.

VERTICAL BORING MILL

Maximum diameter: 17' - 5" Maximum height: 10' - 4"

HORIZONTAL LATHE

Maximum diameter: 4' - 2" Maximum length: 46' - 0"

HORIZONTAL BORING MILL WITH INDEXING TABLE

Maximum travels:

X = 9' - 10" Z = 5' - 3"Y = 7' - 6.5" W = 2' - 3.5"

VERTICAL MACHINING CENTER

Maximum depth:10' - 5" Maximum width:4' - 4" Maximum height: 2' - 2"

PLANO MILL

Maximum depth: 42' - 0" Maximum width: 15' - 0" Maximum height: 9' - 0"

MAX DIPPERTM

DIPPERS FOR CABLE SHOVELS AND HYDRAULIC SHOVELS

Whatever you need, we can quickly design and assemble a custom dipper from 12 to 80 cubic yards.

Since 1994, the Castech-Plessitech Group has delivered dippers on many continents: North America, Central America, Africa, China, Russia, etc. Our dippers have demonstrated superior performances in terms of availability and fill factors, and unequaled durability in all types of mining operations and climates.

Designed to your specifications and needs Optimum fill factor Minimum maintenance required Robust design

Cast-fabricated fabrication
Proven reliability in very cold digging conditions
Compatible to shovels from CAT (Bucyrus) and Joy
Global (P&H)

Competitive pricing

Quick deliveries

DIPPER EXCHANGE PROGRAM

For many years now, Plessitech does complete dipper retrofit for different mines. The purpose of this program is to allow each mine to always have operational dippers on all their shovels without having to worry about retrofits and spare parts. The program is designed so that each shovel can receive a retrofitted dipper following an established schedule based on their expected time in operation. Plessitech always deliver dippers to the mine on time to avoid any production losses.

Also, Plessitech offers technical services on the mine site on a regular schedule including regular dipper inspections on site for an optimum maintenance and scheduling.

HYDRAULIC SNUBBERS FOR DIPPER DOORS SNUB-TECH™

- Maintenance free : no adjustment required
- Efficiently reduces door oscillations and impacts at closing
- Interchangeable with other OEM hydraulic snubbers on the market
- Retrofit and/or exchange program available



UNIVERSAL MECHANICAL ATTACH SYSTEM FOR ADAPTORS AND LIP SHROUDS GET-TECH™

- Interchangeable with all C-clamps and wedges for Whisler 8, 10 and 12
- Easy installation and removal with a ratchet or impact
- Keeps GET solidly in place on the lip in a safe and efficient way

RIPPLE LINER PLUS™

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- Cast to match the shape of the dipper floor or the inside corners of the dipper
- Can be welded in place
- Longer life as compare to any other type of liners
- Weight reduction is possible as compared to other materials as it is possible to reduce the thickness and still maintain a life equal or longer

TOOLS (GET)

GROUND ENGAGING TOOLS (GET)

- All Whisler sizes available
- Test proven alloys reducing breakage risks
- Many different teeth profiles available
- · Hammerless locking system



MACHINING

Whatever the size of your machining needs in CNC or conventional, you can confidently count on M.E.W. Our CNC machining centres are well equipped to machine steel, stainless steel, aluminium, plastic materials and components related to the printing industry.

COCA

MÉTAL COLERAINE

INSTALLATIONS

Our facilities include an abrasive blasting chamber and industrial painting. In addition, an area dedicated to machining is occupied by seven lathes with a capacity of up to 40" ø x 52'-0" lg.

Metal Coleraine has industrial handling equipment with a capacity of 100 tons and 20 welding units for performing all processes.

SCREWS

Known for the quality of their

fabrication and their durability, our screws can be offered either casted or fabricated to the specifications of our customers. We have the knowledge required within our Group to produce screws with very precise specifications.

All the screws we produce are used in various sectors.

OUR EQUIPMENTS

- Plasma cutting table 8' x 20'
- Welding with TIG, MIG and
- submerged arc
- 2 milling machines
- Press brake 350 T
- 7 lathe up to 40 inches in diameter by 52 feet
- Shear 1/2" x 10' wide
- Roller 3/4" x 10'

SCREW CONVEYORS OF PREMIUM QUALITY

Compacts, versatile and economical, screw conveyors are ideal for transporting or distributing bulk material from one point to another. Screw conveyor systems also adapts to other uses such as mixing non-uniform granular materials and the extraction of water from wet materials.

A double wall construction can even make a cooling or heating mechanism of solid or semi-solid bulk material. Moreover, this screw conveyor is particularly suitable for applications which require contain-

ment of fumes and dust.

PLESSITECH: EXPRESS

ABOUT

In order to always anticipate our customers needs and to meet their expectations, we've created Plessitech Express in 2014. The company offers a service completely dedicated to the transportation of your products from our shop to your enterprise with prices defying any competition.

Our truck has a capacity of 175 000 pounds, giving you the opportunity to transport you oversize parts. During thaw period, our truck capacity is 121 000 pounds. We implement our expertise to offer you a complete solution.

Plessitech Express is our commitment to respect the Justin-time and to offer a quick, effective and advantageous service.

QUALITY CONTROL

For us, quality is the realization of a commitment to manufacturing products that meet the demands of our customers expressed to precise specifications. Such a product must be free of material defect and also reflect our careful pride. We must be able to offer the product at a reasonable cost and deliver it on time. Finally, it must be accompanied by a proactive and reliable customer service.



OUR WORLDWIDE MARKET

WE ARE PRESENT EVERYWHERE IN THE WORLD.





CASTECH PLESSITECH GROUP

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