## IPSCO Inc.

PSCO Inc. which is Canada's largest, western-based steel company, manufactures a diverse range of steel products including coil, sheet, plate, hollow structural sections, oil country tubular goods, standard pipe, large diameter pipe and line pipe for markets throughout North America.

Milestones in the company's history have been the development of exceptionally fine-grained steels and a line of special products, such as IPSCO Arctic Grade steel and high frequency welded line pipe for sour gas applications. Also, IPSCO produced North America's first large diameter, spiral welded pipe to American Petroleum Institute specifications. Further product development has been made in the transportation industry and the automobile and farm implement manufacturing sectors. These applications include low carbon hot rolled steel for automotive wheels: high strength low alloy steel for cement mixers and road tankers; and a special grade of hollow structural sections for roll-over protection structures in offroad vehicles.

IPSCO's electric arc furnace steelmaking and its secondary steelmaking processes produce microclean steels having more uniform and reproducible mechanical properties and controlled inclusion morphology. The steelmaking processes coupled with controlled temperatures during rolling produce a steel with optimum toughness, increased ductility, and better shear strength.

Of special note in the finishing department, is the company's new high speed slitting facility, consisting of a slitter and coil build-up line commissioned in 1985 and with an annual capacity of 430 000 tonnes.

The North Vancouver facility has an annual capacity of 100 000 tonnes and can convert half-inch (12 mm) thick coils into 96" (2440 mm) wide cut-to-length sheet and plate.

IPSCO's Oil Country Tubular Goods Centre, is located at Calgary and was completed in 1983. It produces oil and gas well casing in diameters from four and a half inch to ten and three quarter inch (114 to 273 mm) and has an annual capacity of 140 000 tonnes. Their state-of-the-art, gas-fired heat treatment furnace can produce the higher grades of casing used for deeper wells and enhanced oil recovery programs. This heat treatment facility coupled with the high speed ERW welding line and advanced non-destructive testing result in a casing product of extreme cleanliness, minimum wall thickness variation, and high collapse strength.

The recent expansion of IPSCO's steelmaking facilities included the installation of an 84-inch (2133 mm) wide continuous caster and a slab reheat furnace. These became operational in 1987 and improved production yields, quality, and costs.

IPSCO operates a quality assurance system based on three fundamental principles:

- consistency of operation through the use of standardized steelmaking and rolling practices;
- independent verification of compliance with specifications through the Canadian Standards Association's Quality Assurance system (CSA Z299.3); and
- statistical process control from raw material to end product.