



## Alstom's Farrel CNC Vertical Boring Mill Retrofit

### A Project Handled from A-Z

Team Machine managed all logistics for the project, including transportation, packaging etc.; a huge undertaking that involved 3 countries, international trade laws, and tight timelines. Team Machine also managed all the small contracts that came with the project – brokerage, insurance, trucking, logistics and training.

Team Machine successfully met all the project target dates and requirements, even when faced with delays that were beyond their control.

#### PROJECT:

A mechanical and CNC electrical re-fit of a Farrel 12 meter CNC Vertical boring mill.

#### CUSTOMER:

Alstom. A world leader in transport and energy infrastructure

#### OVERVIEW:

Alstom is an international company that provides equipment and services for power generation and rail transport. With plants and offices all over the world, they often buy and move large pieces of equipment, such as the Farrel Vertical boring mill, between countries and sometimes between continents.

This project started with a Vertical boring mill in Alabama that Alstom was interested in purchasing for their plant in India.

Team Machine Tools Inc. was hired to assess the boring mill as to what level of work was needed to refurbish it. After providing their positive evaluation to Alstom, Team was then given the job of moving, refurbishing and installing it in India; a logistically challenging project that involved 3 countries and tight timelines.

#### PROJECT MILESTONES:

The Farrel boring mill is dismantled by Team Machine in Alabama and shipped to Toronto. Over the next six months, Team Machine completes an entire mechanical and CNC electrical re-fit of the machine at their warehouse.

The boring mill is then shipped to Vadodara, India, via Saint John and Mumbai.

Over the next 2 ½ months, Team Machine engineers assemble, install and test the newly retrofitted boring mill at Alstom's Vadodara plant.

#### THE BENEFIT OF RETROFITS:

A new machine of this size would take 2-3 years to build and would cost between 7 and 8 million dollars. In 11 months, Team Machine completely re-fitted it with modern-day capabilities and automation, bringing it up to the standards of new machines – at a fraction of the cost.

Older machines have a level of stability in the major component castings that is often difficult to duplicate. Therefore, in most cases, the larger the machine, the more justification in automation upgrading and refurbishment - not to mention the significant saving of time!

