FOREWORD

SASADA Mikio

Vice President,
Director, Tubular Products
Business Planning Function,
General Superintendent, Chita Works,
JFE Steel

Steel pipes and tubular products are used in diverse applications, from familiar city gas and water piping to oil country tubular goods (OCTG) and linepipes used in the production and transportation of petroleum and natural gas, high formability tubes used in automobile parts, and piles and columns for civil works and buildings. All of these are indispensable in modern society. JFE Steel has a production system for all main steel pipe products, including welded pipes such as butt-welded pipes, electric resistance welded (ERW) pipes, UOE pipes, and spiral-welded pipes, as well as seamless pipes and tubes. As a result, the company has an extensive product line and can supply customers with the optimum pipe for the application. In particular, with heightened energy demand in recent years, JFE Steel's high performance, high quality steel pipes such as OCTG, linepipe, and boiler tubes are enjoying strong demand.

In the past 10 years, world crude steel production increased from 700 million tons in 1994 to more than 900 2003. On the other hand, both China and Russia posted large gains, with Chinese p

rising from 7.4 million tons to 17 million tons and Russian production increasing from 3.6 million tons to 6 million tons between 1994 and 2003.

As shown by these facts, the environment surrounding the steel pipe business has undergone important changes. In responding to these conditions, JFE Steel, as an blast furnace steel maker, manufactures high performance, high quality steel pipes and tubes by applying integrated control to the entire production process from steelmaking through rolling. In technical development as well, the company has systematically developed technologies in all process from the manufacturing process, including material development, rolling technology, pipemaking technology, inspection technology, and material evaluation technology, to quality assurance and evaluation of performance in use.

These efforts have resulted in the establishment of the following distinctive technologies at JFE Steel:

(1) Rolling technology for high Cr steel by the Mannesmann process
(2) 26” ERW mill, which is capable of manufacturing the world’s largest outer diameter ERW pipe
(3) *Super*-OLAC/HOP process for plates used as material for linepipe
(4) HISTORY tube manufacturing process for high formability steel tubes

Taking advantage of these process technologies, in the area of seamless pipes, JFE Steel has developed 13% Cr steel pipes which respond to the high level of activity in natural gas development, high corrosion-resistance OCTG (HP13CR, UHP15Cr) or high c 5