

---

# Textures of a Few Multi-Phase Advanced high Strength Steels

Basudev Bhattacharya\*<sup>1</sup>, Santigopal Samanta<sup>1</sup>, Ravi Ranjan<sup>1</sup>, Sarbari Ganguly<sup>1</sup>, Akula Durga Vara Prasad<sup>1</sup>, and Bhagyaraj Jayabalan<sup>1</sup>

<sup>1</sup>RD, Tata Steel Limited – India

## Abstract

Advanced high strength steels (AHSS) are the key materials for the manufacturing of present and future generation automobile body components. The present paper is a part of a comprehensive study on a series of multi-phase steels, the microstructures being consisted mainly of ferrite, bainite and martensite. The study concentrates primarily on the texture development in a few hot rolled and cold rolled multi-phase steels, with variations in processing. The paper mainly aims at understanding the nature of texture in this kind of steels, through the analyses of bulk texture using X-ray diffraction, as well as micro-texture using EBSD.

**Keywords:** AHSS, hot rolling, cold rolling, bulk texture: micro, texture

---

\*Speaker