Development of Snowplow Shape Suitable for Heavy Snow Area

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In order to develop a snowplow shape suitable for heavy snow area, model experiments were carried out. In those experiments, we examined snow resistance against snowplow and distribution of snow spattered from the plow. In addition, we carried out numerical calculation to examine snowplow shape parameters. Finally, a snowplow shape suitable for heavy snow area was decided. This plow has side plates for scooping snow and a fin to turn downwards the spattered snow from the wing end. In comparison with the conventional snowplow, the developed snowplow has small snow resistance and good distribution performance of the spattered snow suitable for the track structure in heavy snow area.