

GRANTEE PROFILE

LOCAL METAL INDUSTRY ASSOCIATION MAKES TRACTOR TIRE MANUFACTURING MORE EFFICIENT BY APPLYING NEW TECHNOLOGY



“This new equipment demonstrates that the right machinery appropriately used can improve the efficiency of our production processes many times over.”

– Director Mr. Miftakhul Ulum, PT. Atak Otomotif

Innovative technology is a boon to manufacturing companies that seek to stay ahead of the competition: with specialized equipment that incorporates the latest advances, firms can produce higher quality products more quickly at a lower marginal cost. On the flip side, old-fashioned manufacturing methods may be worse than just inefficient – these methods may be incapable of producing parts with the tight tolerances that modern goods require.

This situation is a real constraint for Indonesian SMEs, who often do not have the capital to upgrade to the new, expensive technology they need to stay competitive. Recognizing the problem, ASPILOW (an association of metal industry firms in Sidoarjo, East Java that is affiliated with the Metal Industries Center of Ngingas–Waru), approached SENADA’s Business Innovation Fund with a proposal to help local tractor tire producers gain access to better technology for making tractor tire frames.

Most SMEs in Ngingas have been using manual tools to produce tractor tire frames, resulting in uneven quality, slow production that consumes a large amount of manpower (it takes four operators to make 80 frames/day manually, compared to a demand base of almost 400 frames/day), and difficulty in achieving the necessary degree of precision for dimensions and smoothness.

ASPILOW members proposed to use BIF resources to construct a roll machine that would allow the frames to be made with greater quality control and economies of scale. The purpose of the roll machine is to roll metal rods into the circular frames used to produce tractor tires. The grant awarded to ASPILOW provided Rp 82,150,000 over a six-month period from February 2007 to August 2008. ▶▶

(continued from other side)

In tests conducted after the machinery was constructed, one operator was able to produce 200 frames per day, a ten-fold increase in productivity.

ASPILOW completed construction of the machinery as planned, testing and adjusting the design during the process to ensure that it functions according to local requirements. In tests conducted after it was constructed, one operator was able to produce 200 frames per day, a ten-fold increase in productivity.

ASPILOW (originally established under the name KOWPLOW) was founded in September 2002 with the goal of advancing the local metal industry and assisting members to conduct business transactions with large customers and develop business-enhancing relationships with other firms and the government. The organization, which has grown to about 10 members, has several business units that provide member services, such as workshops for iron plate cutting and die-making.

These units generate income that ASPILOW uses to advance its goals. The new rolling machine will become one of ASPILOW's business units, and the association will also offer engineering support services to local entrepreneurs who want to replicate the machinery at their own sites.

The Business Innovation Fund (BIF) is an initiative launched in June, 2007 by SENADA. BIF offers short-term, high impact grants for the development of innovative products for the value chains where SENADA focuses. Details can be found at www.senada.or.id/innovation.

SENADA is a four-year, USAID-financed project whose goal is to increase Indonesia's economic growth and employment by improving the competitiveness of major, labor-intensive light manufacturing industries. 🌸

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