

ArtUSA takes the grim out of Granulator



"Please -Go ahead" Response "NO-You first of course, and you take all the time you want" Reply "No you go and call me late for dinner I'll find something else to do" Sounds like a conversation between two kids arguing over chores, but in actuality, it was a conversation that took place at a large ice machine maker South of Atlanta GA until they called ArtUSA. Like other manufacturers, this ice machine maker has a certain amount of waste inherent in the making of its plastic tub castings. Fortunately, they are able to recycle waste. Waste is loaded into a granulator which grinds the plastic into tiny pellets. Eventually these pellets are reused in a finished product. The problem was that no employee wanted to use the granulator. It was the loudest machine on the shop floor peaking at 120 dB(A). Finally the noisy granulator became a constant communication barrier. Complaints from shop employees became more frequent, waste piled up meaning that potential raw materials were being squandered and the threat of an insurance claim or an OSHA violation grew every day. Something had to be done quickly. The Production Manager figured that the best way to overcome the problem was with some type of acoustical enclosure. ArtUSA applications engineers offered an enclosure design featuring their BA composite material, a combination sound absorber and noise barrier. The composite is made up of a

1 lb/sq.ft. reinforced loaded vinyl noise barrier and 2" thick quilted fiberglass sound absorber. Typically, a 1" thick absorber is put on the interior of a reinforced barrier. Because of the extreme conditions in this case, Sound Seal engineers utilized the 2" thick material. The BA composite gives excellent overall noise protection.

A critical design feature that ArtUSA incorporated was a feed flap that gave the operator a substantial amount of protection when loading the granulator. Prior to the installation, the operator was subjected to 120 dB(A) of noise at close range. Continuous loading of the granulator without hearing protection would have been disastrous. With the new enclosure featuring the feed flap, an operator no longer needs hearing protection.

ArtUSA engineers also overcame the concern the company had about access to the machine. The double curtain track and hardware design allows access at any point in the enclosure. Another key design feature is the ventilation system. The installation of a roof panel without acoustical hoods means sacrificing ventilation for enhanced acoustical performance.

The idea of "one-stop shopping" at ArtUSA also appealed to the ice machine makers management team. Many noise control companies only sell the materials which comprise the enclosure. These companies leave it to the customer to find someone who can provide the structural framework for the enclosure and handle the installation. ArtUSA has its own line of free-standing or suspended structural support systems, and installation teams. In fact, this enclosure was delivered and installed in one day.

Employee response to the enclosure has been tremendous. Loading and running the granulator is no longer the dreaded task it once was. Consequently, waste no longer piles up and materials are quickly recycled. The granulator is finally the productive machine management always hoped it would be.

ArtUSA has enclosed and or treated granulators, grinders, groovers, jointers, and shapers of every size, shape and description all over the world.

