



Benefits of Additive Manufacturing

Introduction to Additive Technologies for Educators

Weight Reduction

*Using additive manufacturing technologies, companies can now reduce the weight of their planes.
What is the resulting financial and environmental impact?*

Annual fuel cost savings due to 1 lb weight reduction per plane	\$62,000
Annual carbon emissions reduction due to 1 lb weight reduction per plane	190,000 lbs
Weight reduction due to use of additive manufacturing per plane	2,000 lbs
Annual fuel cost savings	\$
Annual carbon emissions reduction	lbs

Material Waste Reduction

What is the waste reduction benefit to using additive/hybrid machining versus traditional machining?

	Traditional Machining	Additive/Hybrid
Starting material	1,100 lb ring	200 lb ring
Material added	0 lb	50 lbs
Material removed/ scrap generated	lbs	lbs
Weight of finished part	75 lbs	75 lbs