



Bearing Housings: T-A GEN2

The customer is manufacturing bearing housings for the renewable energy industry. The housings are made of A516 (grade 70, 23 Rc) using a 40 HP Shibaura BTD-11ER16 with approximately 120 PSI (8 Bar) and utilizing semi-synthetic coolant. The holes need to be 1.375" (34.925 mm) in diameter, drilled into a 20" (508 mm) thick solid bearing housing.

The customer knew Allied Machine was a leading drill manufacturer with the widest breadth of "off the shelf" products and could handle a job of this hole depth. The customer needed good chip control, good finish, and absolutely no catastrophic failures.

Allied Machine was able to produce good chips with no catastrophic failures. The customer was pleased and utilized the **T-A GEN2** with HE geometry for the remainder of the application.



Product: T-A GEN2 Objective: Better chip formation Industry: Renewable energy/wind Part: Bearing housing Material: A516 steel Hole Ø: 1.375" (34.925 mm) Hole Depth: 20" (508 mm)	Measure	Competitor	T-A GEN2
	RPM	-Slow speed and feed	250
	Feed Rate	-Wear on machine -Concern for tool life	0.006 IPR (0.152 mm/rev)
	Penetration Rate		1.5 IPM (38.100 mm/min)



▶ T-A GEN2 insert
Item No. 452H-0112-HE

▶ T-A GEN2 holder
Item No. 250205-004I

40% cycle time decrease

The T-A GEN2 provided:

- ✓ Increased tool life
- ✓ Decreased cycle time
- ✓ Achieved drill depth requirements

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