



## 44W Structural Steel Plate: T-A GEN2

The customer is drilling solid steel plates made of 44W structural steel. They are using a Daewoo 4020 D 20HP Vertical Machining Center with 300 PSI (20.684 Bar) through tool coolant.

The customer requested a tool that could break the chip, as they were getting 'bird nests' around the spindle every time.

The **T-A GEN2** eliminated the poor chip formation while significantly reducing the cost per hole.



**Product:** T-A GEN2  
**Objective:** Better chip formation  
**Industry:** Structural steel/ fabricator  
**Part:** Plate  
**Material:** 44W structural steel  
**Hole Ø:** 0.813" (206.502 mm)  
**Hole Depth:** 4.000" (101.600 mm)

Measure	Competitor	T-A GEN2
RPM	525	1230
Feed Rate	0.010 IPR (0.254 mm/rev)	0.007 IPR (0.178 mm/rev)
Penetration Rate	5.25 IPM (133.350 mm/min)	8.8 IPM (223.520 mm/min)
Cycle Time	1 min 12 sec	45 sec
Tool Life	1200 linear inches (30.48M)	1500 linear inches (38.1M)

The T-A GEN2 offered **95%** cost per hole savings over the competitor tooling.



- ▶ T-A GEN2 insert  
Item No. 450H-0022-HE
- ▶ T-A GEN2 holder  
Item No. 26005H-075F



37.5% cycle time decrease

### The T-A GEN2 provided:

- ✓ Decreased cost per hole
- ✓ Decreased cycle time
- ✓ Eliminated poor chip formation

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