Project # 206-293

TG Tools United Co.

Performance and Endurance Testing
Cutting Tools

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Prepared for: TG Tools United Co.
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Conclusions:

KIK Spade Bit.

1. Able to drill plastic including Acrylic
2. Able to drill none ferrous sheet metal, clean entry and no burr
3. able to bore 90 deg. curved path

SAMPLE INFORMATION:

Spade Bits:
TG Spade – 7/8” (KIK Point)
Irwin Speedbor – 7/8” (3 Points)
Test Methods and Procedures:

2. Sheet brass – Ability of KIK Spade drill none-ferrous sheet metal
   Hand Power Tools – Drill straight down with back material wood
   Check the hole’s entry and exit

Mechanical TEST DATA AND RESULTS: “Continued”

Spade Bits: Cutting Ability Test – Brass:

Test material: Brass sheet 0.016” thickness.

The TG spade bit was able to cut a round section from the brass test plate.
Test Methods and Procedures: “continued”

10. Wood Block – Ability to produce curve path

Hand power tool

Mechanical TEST DATA AND RESULTS: “Continued”

Forstner and Spade Bits: Curved Cut Ability:

Both TG Forstner and Spade bits were able to bore a 90 deg. curved through hole in a 4” X 4” wooden post.
Test Methods and Procedures: “continued”

3. Acrylic - Cracking
   Hand Power Tools – Drill straight down
   Scale under wood – 25Lbs pressure, full power

Mechanical TEST DATA AND RESULTS: “Continued”

Forstner Bits: Cutting Ability Test – Acrylic:

   Test material: Acrylic plate 0.70” thickness.

   Both the TG Forstner and TG spade bits were able to satisfactorily bore into the acrylic test plate.