



Minnesota Micro Molding, Machining & MFG. Inc.

Case study:

Material cost savings

Material: \$2000 per pound - Implantable bioresorbable PLLA/TCP

Current operation: Making 1 million parts on a Traditional Sodick micro-molding press

Customer current Operational Equipment:

1. 2 cavity mold
2. Traditional Sodick micro-molding press

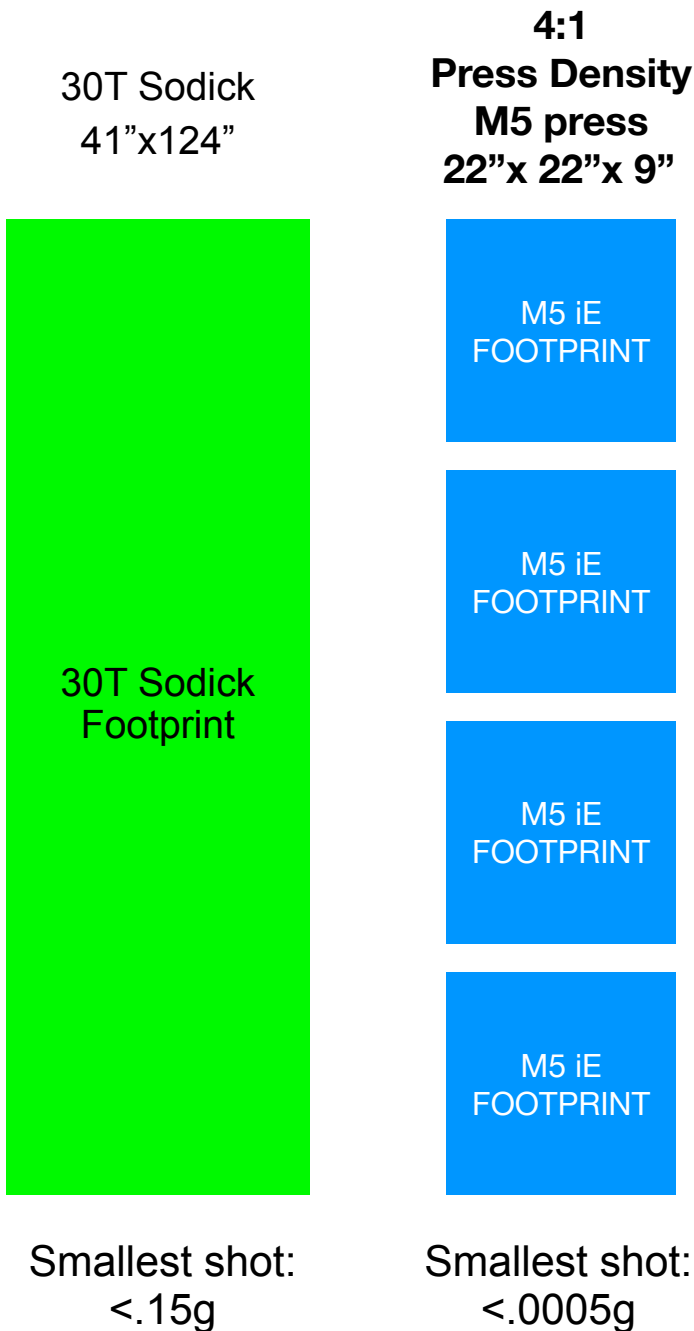
Customer engages M5 for a process quote.

M5 Technology proved out, operational cost reduction, material savings of \$400K per year at current production levels.

M5 technology could increase customer output by 1 to 1.5 million in the same or less time frame of current operation.

Outcome, Happy Customer!

Machine density comparison	# Presses	Sales/Press	Total Sales
30T Sodicks	11	\$700,000	\$7,700,000
M5 iE Platforms	44	\$700,000	\$30,800,000



M5 Technology and Process

1. Standard Sprue size <.0182g per part, no runners.
2. Typical purge for cleaning .060g
3. Material savings 95%+
4. Footprint 22" x 22" x 9"
5. Energy usage - 5amps 115v
6. Shop air - 90psi
7. Minimal radiant heat
8. No hydraulic off gassing
9. Mold head, remote location away from control box (internal to production cell)
10. See website for automation cell animation.