



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

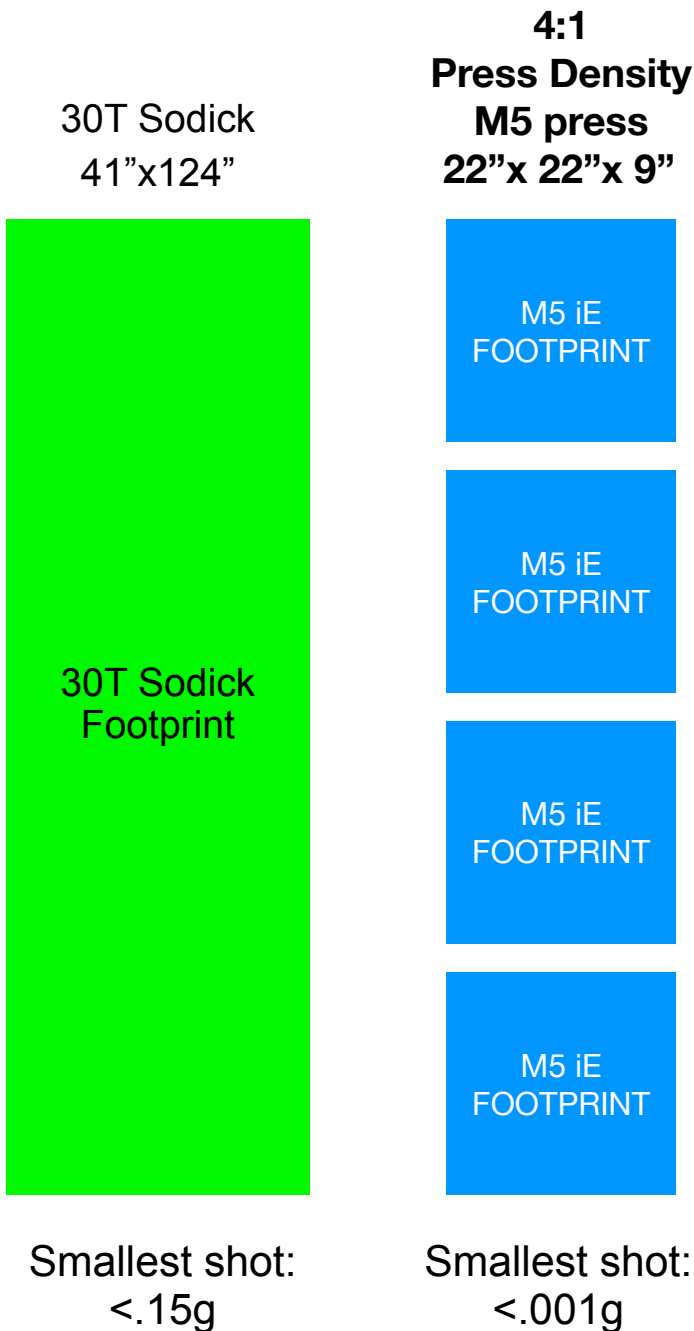
**Customer engages M5 for a process quote.**

M5 Technology:

Operational cost reduction, material savings of \$400K per year at current production levels.

M5 technology can increase customer output by 500K to 1.5 million in the same or less time frame of current operation.

Machine density comparison	# Presses	Sales/Press	Total Sales
30T Sodicks	11	\$700,000	\$7,700,000
M5 Presses	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 100psi
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.