



**MP-1065**

**MODEL PLANK®**

USES **GREEN** CHEMISTRY

**PRODUCT BULLETIN**



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**DESCRIPTION**

MODEL PLANK® MP-1065 is a medium density urethane based Tooling Plank specifically developed as an accurate, dimensionally stable material for master models/patterns and for proofing CNC programs. MODEL PLANK® MP-1065 does not show any grain and is formulated to produce chips instead of dust when machining. This tooling plank is non-abrasive, machines easily at fast cutting speeds, finishes to a good surface with excellent edge definition and produces very little tool wear. MP-1065 MODEL PLANK® applications include using as master models, styling models, visual models, NC tape proofing and other applications requiring fast machining and good model surfaces.

When manufactured the MODEL PLANK MP-1065 uses a renewable raw material as a substantial portion of its chemistry, which reduces our reliance on petroleum based raw materials. We consider this a significant benefit to our customers who are environmentally conscious.

**HANDLING CHARACTERISTICS**

Color.....	Salmon
Hardness @ 75°F.....	55 Shore D
Density .....	40 lbs/ft <sup>3</sup>
Flexural Strength.....	3,753 psi
Flexural Modulus.....	202,600 psi
Tensile Strength .....	3,104 psi
Elongation .....	1%
Compressive Strength.....	3,798 psi
Impact Strength.....	7.19 ft lbs/in
Heat Deflection Temperature @ 264 psi.....	136°F
Machinability.....	Excellent

**Ambient Use Adhesive System ..... TCC-205 with 102 or 104**

**Standard Size Available: 2", 3", 4" T x 16"W x 60"L**

**STORAGE: Store all Tooling Planks on a flat surface at 60°F-100°F.**

**RECOMMENDED CNC MACHINING INFORMATION**

(Carbide Cutters are highly recommended)

	<b>Inches per minute (Feed IPM)</b>	<b>Plunge (mm)</b>	<b>Spindle Speed (rpm)</b>
2" E-Mill for Roughing	100	25	6000
3/4" Ball	75	20	3000+
1/2" Ball	60-75	10-20	3000+
1/2" x 1/32" R	40	20	4000
1/4" Ball	60	10-20	5000

These are possible recommendations. There may be some variance depending on cutters and CNC mill capabilities.

**CUTTING SUGGESTIONS FOR TOOLING PLANKS**

**CUTTING HORIZONTALLY ON A PLANNER MILL:** Head is a 10 insert, 8" in diameter. For best results use 5 inserts. Inserts are SFE-42E-10J-C5. We have found a C2 Carbide insert does not chip as easily. RPM 2200-2400 – table feed 50-55 inches per minute. Some modifications may be needed.

**SAW BLADES:** A carbide-tipped, positive rake saw blade with air slots should be used, if possible. We suggest alternate top bevel ATB or triple chip grind TCG rpm, depending on the saw. We suggest 3,500 max rpm. Check with manufacturer on saw and blade size.

- 12" blade, 48 teeth
- 16" blade, 48 teeth
- 18" blade, 60 teeth

When sawing, you may need to back part away from blade to relieve heat and binding, then proceed with cut. It may be necessary to take more than one cut to achieve best finish.

MP1065 Tech/Revised 8/2/10  
Supercedes 1/7/10