

## Before and after performance with Posi-Melt Screw

SPECS				BEFORE				AFTER			
Dia. mm	L/D	Machinery OEM	Resin type	Cycle time sec.	Scrap %	Production yield, parts/hr.	Comments	Cycle time sec.	Scrap %	Production yield, parts/hr.	Comments
38	18	Hunter	ABS	29.0	10	893	8-cavity tool, goal was to reduce scrap and cycle time	26.0	1.5	1091	Cycle time was reduced and production yield increased by 22%
105	18	Van Dorn	PP	25.0	3	279	2-cavity tool, goal was to reduce cycle time and increase yield	22.0	1.0	324	Cycle time was reduced and production yield increased by 16%
71	22	Sumitomo	LDPE w/lubricant	22.8	3	972	8-cavity tool, severe problems with lubricant led to frequent purging, screw cleaning and downtime	22.8	1.0	1200	Melt temperature was lowered and screw cleaning eliminated; production yield increased by 23%
80	14	Klockner Windsor	HDPE	19.0	4.5	176	Black specs led to scrap generation, frequent purging and downtime	19.0	<1.0	187	Melt temperature was reduced and black specs eliminated; production yield increased by 6.2%
18	20	Engel	TPU	32.2	13.2	383	Part imperfections were caused by an erratic screw recovery time and excessive shear	32.0	3.0	436	Screw recovery time was reduced by 27% and was very consistent; production yield increased by 12.3%
120	20	UBE	PA W/GF	64.0	7	52	Fiber breakage on an Automotive instrument panel led to rejects due to part failure	58.0	1.0	61	Melt temperature was reduced and production yield increased by 16%

**Actual field trials of the Posi-Melt general purpose screws show basic productivity improvements. (As shown in IMM Magazine May 2006)**