

# Mixing solutions for Plastics Processing

## Pay back due to reduced color cost (I)

### Case Study 1

Application:	Garden chair
Machine size:	10500 kN
Screw diameter:	95 mm
Material:	PP
Mixer:	SMK-R 30/4
Shot weight:	3000 g
Cycle time:	68 sec.
Weekly machine utilization:	120 h
Masterbatch level without mixer:	2 %
Masterbatch level with mixer:	1.6 %
Masterbatch savings per cycle:	20 %
Weekly cost savings in Euro:	173

**Pay back time: 3 months**

Annual savings: 9000, EUR

### Case Study 2

Application:	Brush
Machine size:	1900 kN
Screw diameter:	45 mm
Material:	PP
Mixer:	SMK-R 17/4
Shot weight:	200 g
Cycle time:	60 sec.
Weekly machine utilization:	80 h
Masterbatch level without mixer:	3 %
Masterbatch level with mixer:	1.5 %
Masterbatch savings per cycle:	50 %
Weekly cost savings in Euro:	111

**Pay back time: 3 months**

Annual savings: 5770, EUR

# Mixing solutions for Plastics Processing

## Pay back due to shorter cycle time

Case Study 3		Case Study 4	
Application:	Container	Application:	Dog bed
Machine size:	12000 kN	Machine size:	5000 kN
Screw diameter:	120 mm	Screw diameter:	80 mm
Material:	PPC	Material:	PP
Mixer:	SMK-R 30/4	Mixer:	SMK-R
Shot weight:	2500 g	Shot weight:	1100 g
Cycle time without mixer:	120 sec.	Cycle time without mixer:	39 sec.
Cycle time with mixer:	110 sec.	Cycle time with mixer:	36.5 sec.
Cycle time reduction:	8.3 %	Cycle time reduction:	6 %
Weekly machine utilization:	108 h	Weekly machine utilization:	120 h
Masterbatch level without mixer:	2 %	Masterbatch level without mixer:	1.5 %
Masterbatch level with mixer:	2 %	Masterbatch level with mixer:	1.5 %
Weekly cost savings in Euro:	1200	Weekly cost savings in Euro:	318
<b>Pay back time:</b>	<b>1.5 months</b>	<b>Pay back time:</b>	<b>1 month</b>