# Case Studies



# Topic: Plunger Lubricant for Aluminum Die Casting Process

980ils Products	RANDOCAST PL31 (Water Base Type)
Applications	Plunger in Aluminium Die Casting
Customer /Location	SPT/Phra Nakhon Si Ayutthaya, Thailand
Previous Lube/Fluids	China
Materials	Aluminium, ADC 12
Process/Machines	Aluminium Die Casting
Customer Requirements	Usage Quality Improvement

#### Issue/Problems:

Usage Quality Improvement.

## Solutions:

Machine: DCC-1600 Impress-Plus (1,600 Tons)

Dosage: 0.2 sec./shot

	Experimental	
	Randocast PL31	Current Product
Product		AD
Fire: ■ Lev  Observation Results  Noise: No  Part: At the	Smork: ■ Level	Smork:
	Fire: Level	Fire: ■■■■ Level
	Noise: No	Noise: No
	No problems with friction noise in the pluger	No problems with friction noise in the pluger
	Part: At the head of gate	Part: At the head of gate
	Consumption:	Consumption:

## Summary:

- 1. Smoke and fire generation appear to have decreased from before.
- 2. At the head of gate on workpiece, there are no black stains and no burn marks.