

RECP Best Practices Catalogue

*Setting up an ultrasonic cleaning machine
for moulding tools*

Developed within the framework of MED TEST II



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



The SwitchMed Programme is
funded by the European Union

Best Practice - Setting up an ultrasonic cleaning machine for moulding tools

SECTOR:	Metal, electrical and motor vehicle parts
SUBSECTOR:	Manufacture of parts and accessories for motor vehicles
PRODUCTS	Friction products for clutches and brakes.
CATEGORY	Technology upgrade/Eco-innovation
APPLICABILITY	Process

COMPANY SIZE	100 full-time employees
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Description of the Problem (Base Scenario):	The cleaning of moulding tools at the company is carried out in a traditional way in a caustic soda bath, a method that is not very efficient, and also generates very heavy liquid discharges.
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Description of the Solution	We recommend the installation of an ultrasonic cleaning tank for moulding tools allowing both efficient and optimum cleaning with improved working conditions, and less liquid discharge.
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Economic Gain

The estimated gain is related to labour. We can expect an annual gain of ½ operator.
Or: € 2,091/year
the gains related to the savings of caustic soda are € 600/year
That is a total gain of € 2,700/year

Environmental Gain

Control of effluent discharges, and stop the consumption of caustic soda (about 400 kg per year).

Health and Safety Impact

Positive impact on employee safety



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Investment & Financial Indicators	An ultrasonic cleaning tank is estimated at € 5,454. (Time for Return on Investment: 31 months)
Suppliers	Manufacturer of ultrasonic cleaning machines
Other aspects	Tool life should be improved. The quality of the moulded parts should be improved (less gluing).
Implementation and New Indicator	Scheduled for the end of 2018



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