

RECP Best Practices Catalogue

*Replacement of current rollers with rollers with
carbide inserts*

Developed within the framework of MED TEST II



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



The SwitchMed Programme is
funded by the European Union

Best Practice - Replacement of current rollers with rollers with carbide inserts

SECTOR:	Metal, electrical and motor vehicle parts
SUBSECTOR:	Manufacture of tubes, pipes, hollow profiles and related fittings, of steel
PRODUCTS	Manufacture of pipes and profiles, metal and mechanical construction, stamping, cutting, forming, threading, sleeving, hot-dip galvanising
CATEGORY	Good Housekeeping
APPLICABILITY	Process

COMPANY SIZE	80
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Description of the problem (Base Scenario)

The company currently uses steel rollers on the pipe profiling lines. These rollers no longer resist wear which generates losses in raw material and production, as well as the generation of scrap metal (worn rollers).

Description of the Solution

We propose to standardise the rollers with carbide inserts at frequent points; the wear resistance of the rollers with carbide inserts is greater compared to the steel rollers. **Wear of rollers without carbide insert**



The reduction in the wear incurred will allow:

- The elimination of lost materials
- A reduction in the number of production stoppages
- A product of good quality

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Economic Gain	€ 13,650 This gain occurs from a reduction of 50% of roller cost (the cost of rollers is estimated at € 27,300/year)
Environmental Gain	Reduction of roller recycling frequency; A roller with carbide inserts at a higher resistance and therefore longer life Reduction of discarded rollers generated and therefore metal waste reduction of about 4 tons per year.
Health and Safety Impact	None



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Investment and Financial Indicators	In fact, the investment is low since these parts are replaced less frequently (maintenance budget) (Time for Return on Investment: Immediate)
Suppliers	Imported
Other Aspects	the unworn rollers enable the on line production of shapes and pipes according to the targeted dimensions and standards
Implementation and New Indicator	Under implementation - amortised over a few years



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