



Textile Care

www.cttn-iren.fr





Status : Centre Technique Industriel

- Law from 1948, creating of the CTI's -

CTTN was created in 1958

- Decree edicted by the Ministry of Industry -

- non profit organisation
- acknowledged as a public utility organism
- neutral and independant



Activities

COLLECTIVE ACTIONS :

- Research and studies ;
- Regulation and technology survey ;
- Standardization : ISO, CEN, NF, focusing mainly on textile care testing, assessments methods & care labels.
- Dissemination to the PTC sector



Activities

COLLECTIVE ACTIONS are focusing on PTC only :

- Drycleaning and small laundry units ;
- Industrial laundry, private sector ;
- Industrial laundry, public (health) sector ;
- Textile rental.



COLLECTIVE ACTIONS :

Financed by :

- annual subsidy from State ;
- public contracts ;

In total, these ressources represent 11-12% of the total annual turnover.



COLLECTIVE ACTIONS :

Research and studies programme :

CTTN proposes annual research and studies programme which is in connection with the specific needs identified by the drycleaning and laundry sector.



Research and studies

2007/2008



1. Best practices for environmental management in the drycleaning sector

Stakes :

- make sensitive the drycleaners to the management they have to do to be friendly with the environment and to have drycleaning shops in conformity with the regulation ;

Objectives :

- diagnostics in 60 drycleaning shops on the french territory (4 years) ;
- balance sheet of positive and negative points for each of them ;
- list of recommandations for every drycleaner ;
- guide for drycleaning shops friendly with environment.

Action supported by Ademe



2. Analysis of alternatives to perchlorethylen

Stakes :

- the drycleaning sector needs to know if it can continue to use perchlorethylen, which is technically a good solvent or if not, which solvent to use in the future.

Objectives :

- to dress a balance of the possible solution proposed on the market today regarding : danger, toxicity, environment impacts, production costs, quality, performances ;
- to constitute a data base in order to make a comparative Life Cycle Analysis ;

Action supported by Ademe



3. How is really used the Wet cleaning process ?

Stakes :

- for some professional or other actors, wet cleaning represents a possible solution regarding environmental pressure. But what is the reality in the workshops using this process ?

Objectives :

- Enquiry in 10 workshops on how is used the wet cleaning process and for what kind of clothes (fiber composition) ?
- Assessment of the quality level proposed to the customers
- Pourcentage of the production treated in the workshop by drycleaning process or subcontracted ?



4. Control of the linen hygien in the industrial laundry

Stakes :

- NAD or ATP methods are proposed on the market and particularly by some suppliers of the laundry industry. It was then necessary to make light on the performances of these methods in comparison with the usual method (countact box).

Objectives :

- Comparison for several levels contamination of the NAD, ATP & Countact-boxes methods with a destructive standardized method (NF 14698 - annexe E) with the collaboration of IRM (Research Institute of Microbiology).

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- 5. Ecotoxicity of the laundry wasted water / impact on the aqueous medium**
measured by submission of a Daphnies to samples of wasted water : % of daphnie inhibited or killed

Stakes :

- Ecotoxicity has a strong impact on the TAXES paid by the launderers for waste water, and probably more with the new water regulation ;
- managing the washing processes in order to reduce the amount of Ecotoxicity (inhibitor substances) ;

Objectives :

- examination of every step impact in the washing pocesses on Ecotoxicity rate ;
- examination of the differences between different bleaching processes on the Ecotoxicity rate ;



6. Washing with Ozone

Stakes :

- Taxes on wasted water, cost of energy and water, product consumptions make the launderers sensitive to other technologies proposed as Ozone. But what is the efficiency of this powerfull oxydizable molecule which does not offer a good solubility in water in the laundry conditions ?

Objectives :

- Test of several ozone injection technologies to check the amount in the water of Ozone molecules ;
- Test of washing efficiency, bleaching effect and wearing of several ozone treatment processes proposed to the laundry by Ozone generator producers



Other studies :

- **Development of a perc. detector**
- **Adsorption/desorption of perc. by activ carbon and photocatalysis (TiO₂)**
- **Optimization of the electricity demand in the laundry sector (ademe)**
- **Performances of finishing in the drying tunnel**
- **Affinity of textile composition and with the greying effect – washing process**
- **Analysis of the existing continuous batch washers on the market, their using and fonctionning in production**
- **Reduction of the energy consumption of the drying processes in the laundry (ademe)**
- **Bleaching processes and products : performances, positive & negative points;**



The CTTN assistance to the Textile Cleaning Sector is also brought by **training activities** and **consultancy**