Electrodry “The Cleaning Process”

THE SCIENCE OF CLEANING

Electrodry Carpet Cleaning Technician Training
Module 1

Carpet Soiling

- **Real Soil** is defined as any matter that is foreign to the construction of the carpet and which can actually be removed from the carpet, such as sand, grit, hair, food, ashes etc. This accounts for approx. 79% of all soils
- Most soil that accumulates on carpet consists of sand and dry particulate matter. It is often gritty and abrasive.
- The remaining soils are generally composed of oil, greases, starches etc.
- Most soils are acidic in nature.

Soil Composition

Type	Composition	Source	Percentage
Insoluble or particule fibres (Dry Soils)	Clay, sand, quartz, gypsum, carbon etc	Tracked from exterior	55%
	Protein Fibre	People, pets, fabrics	12%
	Cellulosic matter and fibre	Tracked from exterior (grass etc), shedding from newspapers, clothes, interior plants	12%
Subtotal			79%
Water soluble	Sugar, starch, salts, fluid residues	Food stuffs, body fluids	6%
Dry solvent soluble	Tar, Asphalt, animal and vegetable oils, vehicle exhaust residue etc	Tracking, cooking vapours, misc. spills of foreign items	10%
Moisture	Humidity	Outside air, inside activities	3%
Unknown			2%
Total			**100%**

Soil Removal

- Particulate and fibrous soils (dirt and fluff) are insoluble and are best removed using a chemical process – Vacuuming.
- Particulate soils can be hard to remove because:
  - They get trapped in the carpet fibers
  - Soils stick to oily residues from cooking, Vehicle pollution, food spills etc.

The Cleaning process - Vacuum

- **The first step in the cleaning process**
- Use a vacuum with a beater brush and a HEPA filter

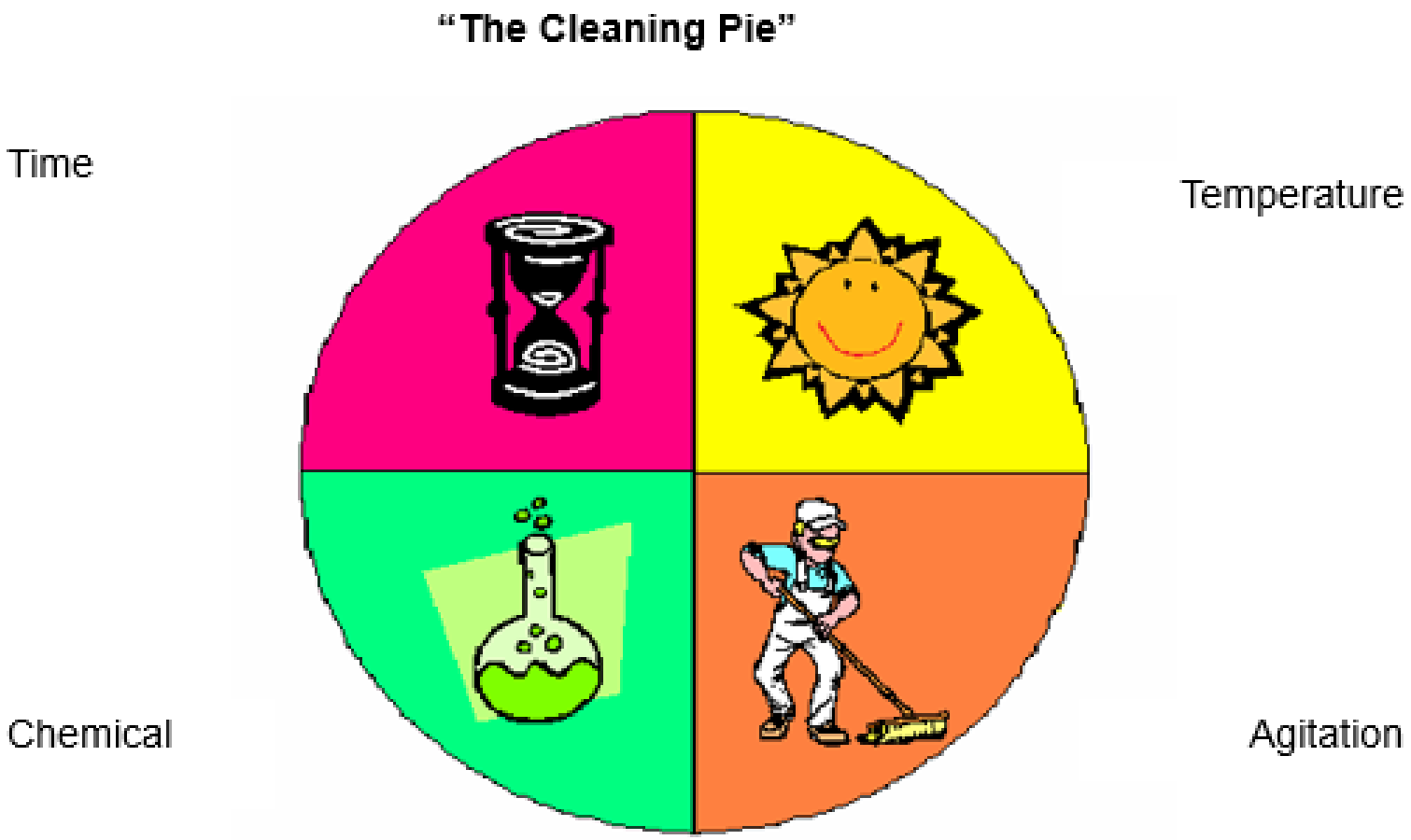
  - A HEPA filter must remove 99.97% of all particles greater than 0.3 micrometer from the air that passes through

  - The beater brush is required to separate soils from the carpet fibers
- An effective vacuum requires airflow. If a bag is full airflow will be blocked, and the bag will be ineffective.

  - Always empty the bag when it is two thirds full.

The Cleaning Pie

The Cleaning Pie



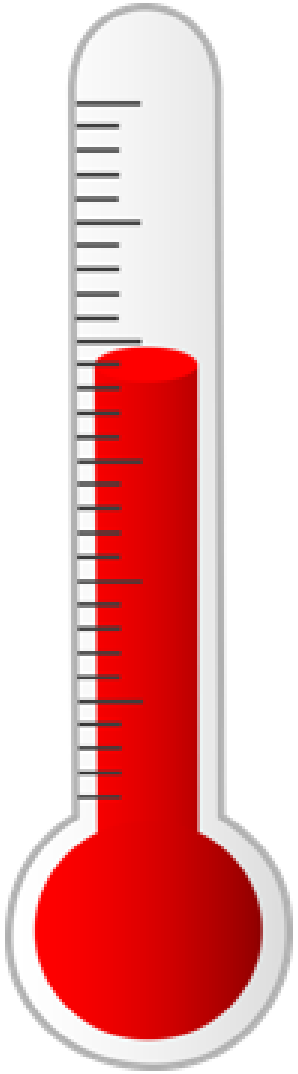
TACT – The Cleaning Pie

- Four fundamentals of the **soil suspension process** together they form the so called "CLEANING PIE"
    - Temperature
    - Agitation
    - Chemical
    - Time

If we understand the cleaning pie we get better cleaning results with less effort.

Temperature

- The more heat you have the greater the cleaning power.
- The molecules in water and chemicals become “excited” as they get hotter.
    - The hotter they are, the more energy they release and the more effective their cleaning power.
- Try applying E1 or Pre-spray hot and see the difference



Agitation

- Agitation aids in:
    - Distribution of chemicals
    - Penetration of chemicals into soils we are trying to remove
    - Assist soil suspension or dislodgement

- This is partly achieved through the rotation of the pad from the rotary machine

- For better results, agitate in the cleaning chemical with a hot pad or carpet rake before starting the dry cleaning process.

Chemical

- Chemicals are used to break down types of soils or contamination
- The use of the right chemicals with the right quantity will give the best results
- Dwell times are critical
    - E1 – short dwell time> Electro pre-spray long dwell time
    - Electro pre-spray has a high PH and should be used as a traffic lane cleaner
    - What happens if E1 is over used or under used?

Time

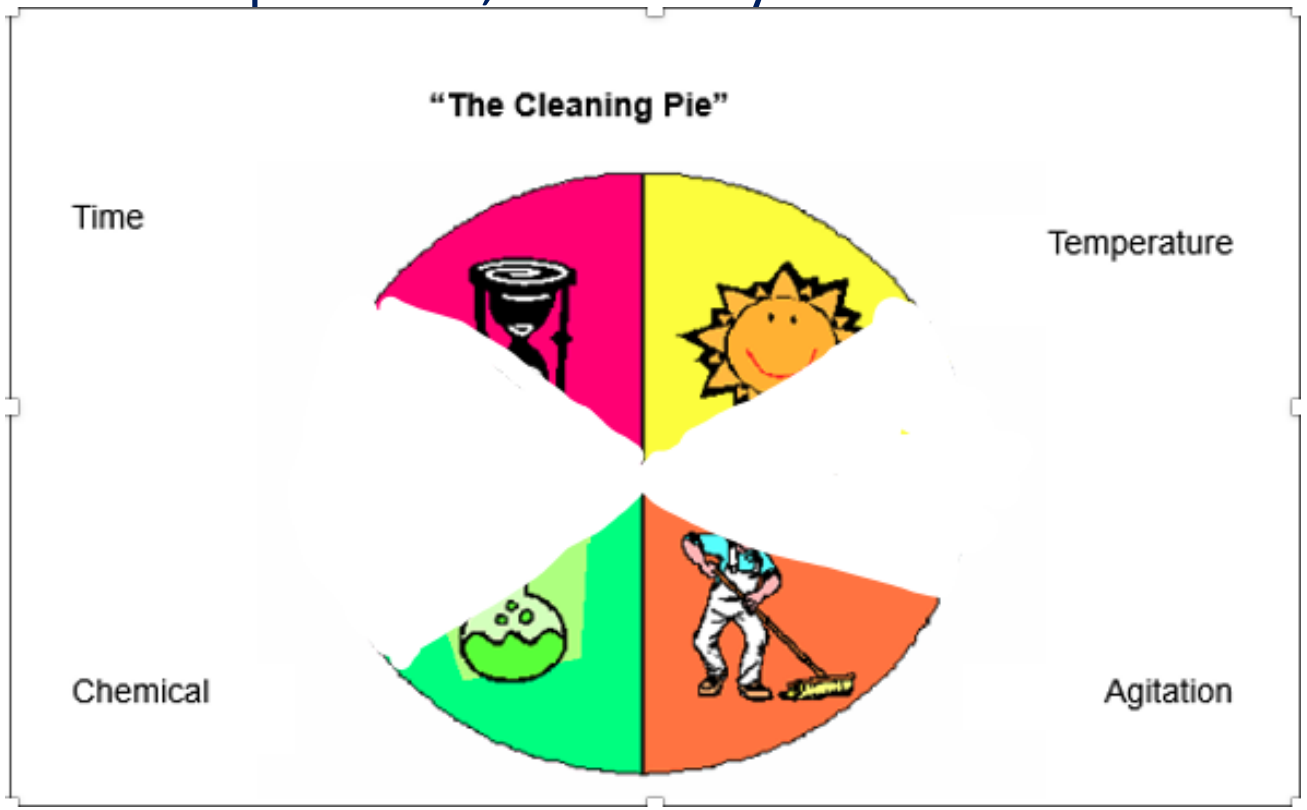
- Time is considered to be an amount of seconds, minutes or hours required for the cleaning agents to provide the optimum effectiveness.

- This will vary depending on the type of chemical

    - E1 has a short dwell time
    - Electro pre-spray and & E8 have a long dwell time

What Happens when you don’t use TACT properly

- When the TACT pie is not used to its full potential, how can you clean properly.
- Consider this TACT pie.
- How effective will the cleaning system be using this Pie



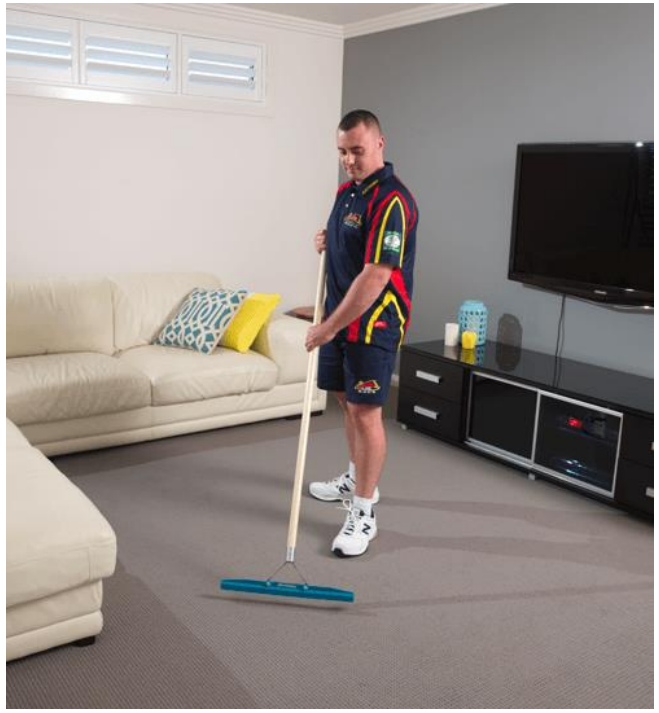
Rinse/Extraction

- Actual removal of soils
- Third major step in the cleaning process – the application of chemicals does not remove soil, it just loosens them and breaks down oily residue.
- Penetration of the cleaning process will depend on a number of factors including:
    - Density of pile
    - Present heat
    - Pre-cleaning chemicals
    - Rinse chemicals (E2)

Rinse/Extraction

- Extraction process should:
    - remove soils
    - Leave the carpet residue free
    - Re-set the chemical balance of the carpet
- In the Electrodry system, oily residue are broken down and captured on the bonnet pads.
    - E2 neutralizes the cleaning products used re-sets the chemical balance of the carpet

Grooming



- Step 4 in the cleaning process
- Apply Electroshield and groom
- Leaves the carpet with a uniform feel
- Promotes drying
- A dry pad after the cleaning process will also promote drying

The Cleaning process

- Step 1
  - Pre-vacuum. Mechanical process of removing dry soils
- Step 2
  - Soil suspension – The Cleaning Pie, TACT
- Step 3
  - Rinse/Extraction. The process of physically removing the soils.
- Step 4
  - Carpet Grooming

The Electrodry System

- Step 1 – thorough pre-vacuum with a Kirby vacuum
- Step 2 – Spray the carpet with E1 (soil suspension) and Electro pre-spray if required
- Step 3 – Rinse/Extraction with the dry cleaning system. 250ml of E2 in the rinse bucket will restore the carpets chemical balance.
- Step 4 – Apply Electrodroshield and Groom the carpet with a carpet rake

Important Notes

- Removing more soil with vacuuming means less soil needs to be removed in the extraction process.

- TACT Tips:
    - Agitate E1 with a rake in traffic areas
    - Use a pad dipped in hot water on the carpet before applying E1 – this will create heat
    - This will create heat, high PH & agitation
    - Consider the Traffic lane clean or the Restorative clean

Important Notes

- Use 2-3 pads per room
- Each pad should be thoroughly rinsed before putting it back into the E2 solution
- 2-3 pads is required in any room to effectively extract soils and rinse the carpet
- Use a dry pad to collect excess moisture and promote drying

Pricing

- Electrodry's prices are based on a maximum room size of 13 square metres (3.3 x 4 metres)

If rooms are larger than this, adjust the price:

- Confirm with the customer that they were told that the price is based on a 13 sqm room.
- Measure room
- Advised the adjusted price
- If the customer chooses not to go ahead, find a median point with the customer – Do not not walk away from the job.

Carpet Condition

- The price is subject to the condition of the carpet.
    - Very dirty carpets charge an additional $10 - $20- per room.
    - Traffic Lane Clean
    - Restorative clean
    - Use additional pads in the cleaning
    - Ensure the customer gets value for money

Pricing – Specialised Stain Removal

- Charge $35 per 15 minutes
- Applies to attains that can’t be removed in the cleaning process and require specialized treatment.
    - Blood
    - Wine
    - Make-up
    - Heavy grease
    - Ink
    - Paint
    - Urine

Ask for more work

- Customers always have more cleaning they want done.

- Look for opportunities
    - Other rooms of carpet
    - Rugs
    - Lounge suites
    - Mattresses
    - Air conditioning units
    - Timber floors
    - Mould

- Advise the customer how much better the items will look with cleaning and give a price.

Electro 3 Bottles

- Professional Carpet stain remover
- Safe, effective and easy to use
- Will generally last 2-3 years with regular use
- Show the customer how effective E1 is and advise it’s the same product
- $25.00 per Bottle

E-GARD

- Protective coating over the carpet fibres
- Repels against stains and oils
- More effective vacuuming – Carpets last longer
- Healthguard built in to repel germs and mould
- Guaranteed for 3 years
- $4 per square metre