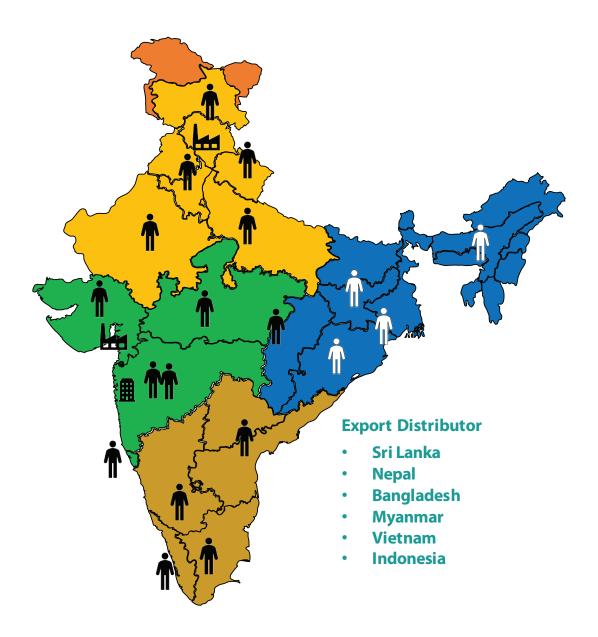


# Solutions for Laundry



#### **OUR PRESENCE & DISTRIBUTION**





We are having Two plants in India, One in Baddi, Himanchal and latest one in Valsad, Gujarat. Our plant are GMP and FDA certified



Corporate office situated at Mumbai. Having the strength of 25 employees to support Customers on time.

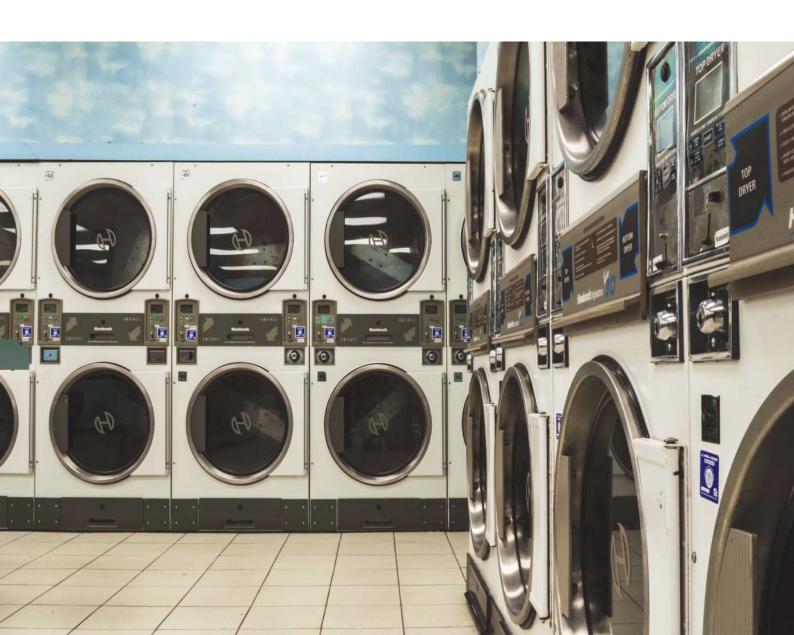


With the total strength of more than 120 Active distributor across India and 55 field force managing them. We can deliver the material at any corner of the country on time.

## **Company Profile**

We introduce ourselves as the manufacturer of specialty chemicals who entered the market of Industrial cleaning in 1999. SATOL offers scientifically proven cleaning solutions and disinfectants aimed at reducing harmful effect on environment. SATOL Chemicals Pvt. Ltd is a Green Building Certified Factory. We are ISO 9000-2015 / GMP & ISO 22000: 2018 certified company, we also have the FDA approval for most of our chemicals with the green building certification for our Factory.

"With immaculate performance imbibed in our products we dedicate ourselves to preserving cleanliness in an ecological way"



## How SATOL works for You

From the spark of an idea, through to the delivery of a solution, SATOL is with you all the way

SATOL supports its customers in every phase of a project, from the inception of an idea or request, through design and testing to launch and installation. Our in-house research, design and development teams work closely with the local teams, drawing on customer and market inputs. Then using

No matter which processes and applications are planned SATOL has a solution in the cleaning and hygiene of kitchens and laundries and surfaces of all types in applications like Offices and Restaurants, Hospitals and Hotels, Retailers and Schools, Car Washes and Swimming Pools, Cooling Towers,

## Partnership philosophy

Being a privately-owned business means that we are here for the long term and can plan projects with and for our Customers, where both parties benefit. It means we can rapidly take decisions to invest our resources to ensure our optimum solutions are delivered.

#### Your Business, Our Solutions

Our extensive product range represents a unique combination of design, development and implementation know how. With a wide and ever evolving range of products and ancillaries, we can offer specific and comprehensive solutions for a variety of industrial applications. Our solutions are conceived to fit seamlessly into your operation, optimizing the processes and applications.

#### Your Business, Our Solutions

satol's 3 business units, Cleaning & Hygiene, Water & Industry and Industrial Processes puts us in a unique position to be able to respond to the widest range of business needs, with a broad range that allows you the Customer to deal with just one company, simple.

## The Laundry Market

The global commercial laundry market is forecast to continue to grow steadily in the next 5 years driven by increasing demand for laundry services as the population grows. The market is driven by strong growth in the Asian and Far East markets with rising investments in commercial laundry markets.\*

Steady economic growth and rising disposable incomes are expected to foster demand for laundry services in these regions, consequently driving demand for various types of laundry machinery. The commercial laundry machinery market comprises companies engaged in manufacturing professional or non-residential laundry equipment, such as washers, commercial dryers, presses, and dry-cleaning equipment. Washers or washing machines represent the primary segment of the commercial laundry market, accounting for about 49% share of the global commercial laundry machinery market and are expected to register steady growth in the years ahead owing to the introduction of high-end washing

Advancement in technology has led to the addition of several advanced features, such as water saving technology, energy efficiency, time saving features, and digital operational capability. Manufacturers are concentrating on offering products that not only offer effortless operational capability but also eliminate the need for repair work in the long-term. Over the last couple of years 'SMART' laundries have emerged as technology helps save time, detergent, and energy consumption per laundry cycle



## Laundry Wash Process



#### 5. Finishing

Drying, Ironing, Folding, Storing, Transferring

#### 4. Extraction

Extraction removes at least 80% of the water from the linen used in the rinsing process. It also reduces the drying time.

#### 1. Pre-Washing

The soiled linen is collected and transported to the laundry then sorted by the type or colour of the fabric and the degree of soiling. It is then weighed according to the washing machine capacity and are put into the washing machine for wash cycle.

#### 2. Washing

The washing depends on 4 things which varies as per the fabric:- Fabric Soiled Temperature Water level Time

#### 3. Rinsing

This is done by using hot and cold water, which are usually recovered & recycled from earlier steps during the last rinse in order to save water.



## The Wash Cycle

#### Flush

In this process, the washing machine

fills to a high level of water into which the soiled linen are added to reduce the soil load for the upcoming suds flushes.

#### Break

In this stage, high alkaline product is added, to loosen soil and may be followed by additional flushes. The break cycle is usually carried out at a medium temperature and low water levels.

#### Suds

This is the actual wash cyclein which detergent is added. It takes place in hot water at low water level.

#### Bleach

In this stage, bleach is automatically added in hot water at a low water level. Bleach kills bacteria. whitens fabrics and removes stains.



#### Intermediate Rinse

This rinse cycle removes soils and alkaline to help the bleach work more effectively later. In this process 50-60% water is removed from the linen.





#### Rinse

to remove detergent and soils



High level of water introduced from the linen.



#### Intermediate Extraction

This high speed spin removes left over detergent and soil from the linen, usually after the first rinse step. It removes 70% of water from the linen. The washing machine spins at 200 RPM.



#### **Final Extraction**



A high speed spin removes most of the moisture from the linen. The length of the spin depends on the fabric type, extractor capacity, and extractor speed. Around 95% of water is removed in this stage.



#### Softener/Sizing

Softener and sours are added to condition fabric. This cycle is run at a medium temperature and at low water level. Starches are added to stiffen cotton fabrics. Sizing may also replace the sour/softener step.



The smart connected washing machine market was valued at over \$1.55 Billion in 2015. The growing preference for convenience and the rapidly changing consumer lifestyle is contributing to the segment growth while the need for managing and controlling machines through smartphones and remotely in more complex professional environments is gaining traction across all sectors.\* \*Source Global **Industry Analysts** 



## Laundry Applications





#### **OPL Machines**

Most OPL's are typically very small in terms of available space. Not only do they contain the washers, but also dryers, varying assortments of flatwork ironers, folders, steam cabinets, and so on, for processing laundry. The typical laundry utilizes a washer technology called washer extractors. This type of machine ranges in size from about 7kg up to 60kg in the largest laundries. The name washer-extractor is used because after each portion of the wash cycle (soak, suds, prewash, wash, rinse or finish) an extraction imparting centrifugal force removes the liquid contents from the wash wheel to the drain. Some may be simply timed machines, other maybe semi or fully programmable



#### **Commercial Machines**

Small to medium size laundries mostly rely on equipment referred to as washer-extractors. These look and operate somewhat similar to a residential front-loading clothes washer, except washer-extractors are 3 to 30 times larger. The largest models are huge; allowing workers to easily stand up inside the wash drum for service and maintenance. The fabrics are washed in batches.

Washer-extractor efficiency is usually measured in liters per kg of fabric. The typical washer extractors require 11 - 15 liters of water per kg of fabric cleaned. The most efficient machines have built-in water recycling capabilities; storing the rinse water from the previous load to supply wash water in the subsequent load, using less than 9 liters per kg of fabric.

For washer-extractors without built in recycling features, there are auxiliary recycling systems available that can be attached to washer-extractors to filter and sanitize the rinse water to be reused in the wash water supply. These systems vary in quality, size and efficiency. Recycling the water requires adjustment in chemicals and detergents used in the wash and rinse water to maintain the quality of the washing process.



## Laundry Applications





#### **Industrial Machines**

Unlike OPLs, industrial laundries contract with, receive and launder stock from a wide variety of customers. Industrial laundries include uniform companies and those companies that launder materials from industrial firms, schools, and other institutions.

Although some of the largest laundries can process tens of millions of kilos of laundry each year, these operations are usually more process-related and are tailored to specific operations, unlike commercial laundries. Tunnel washers (sometimes called "continuous batch washers") are very different than washer extractors; long chambers 2.4m x 2.4m x 9.1m and larger are constructed with a series of compartments, called "pockets", through which a large internal auger (similar in shape of a large corkscrew) slowly turns to pull the laundry through the different pockets. The first few pockets mix detergent and chemicals (bleach, sanitizers, degreasers, etc) in the water and fabric to soak and wash. Augers move the fabric to subsequent pockets, dedicated to rinse functions. Water moves in a counter flow direction to the laundry and is therefore used several times before being sent to the drain.

#### **Surface Cleaning**



Surface cleaning can be carried out as a wet or dry process depending on factors including: the potential soils present, the product, the process and the type of equipment. As with manual cleaning, the accurate dilution of any cleaning agent or disinfectant is crucial to effective cleaning. To achieve the required hygiene result it is vital that the surface to be disinfected is free of soils or chemical residues as when these are present, it could prevent the disinfectant working as it should. SATOL spray and foam systems, as well as our dilution and dosing systems, help ensure the most effective cleaning process.



# Laundry Chemicals



### SATFAB 200S Emulsifier Concentrate



SATFAB 200 S is a concentrated liquid surfactant booster based on a blend of surfactants.

SATFAB 200 S is an effective booster based on a blend of nonionic surfactants. This product shows excellent performance on fatty/oily soil. Fats and oils, once removed from the fabric, are further dispersed by SATFAB 200 S, thereby preventing redeposition.

#### **USAGE INSTRUCTION**

SATFAB 200 S is mainly used in conjunction with alkalinity boosters and/or main wash detergents. In combination with the latter its main function is to improve dispersion of fatty and oily soil, thus enhancing wash performance on heavily soiled goods such as cotton and polyester/cotton workwear and table linen.

#### **FORMULATION**

Fatty Alcohol Ethoxylate 50%-60% Iso Propyl Alcohol 10%

#### **BENEFITS**

- Excellent performance on fatty and oily soil
- Good foam control properties optimal use of mechanical action in the washer extractor Machine.
- Suitable for use on pastel-colored fabrics.

#### **SPECIFICATION:**

Appearance : Light Yellow Liquid

Specific Gravity : 0.97

pH Value :6.7 (in1%solution)

: 7.71 (in100% solution)

(in100%solution)

#### **DOSAGE:**

1 – 3 (ml/kg Dry Goods)



## SATFAB Universal Liquid Detergent With OB



SATFAB UNIVERSAL is intended for washing UNIVERSAL types of textiles, for water-based wash. The product is especially suited for gentle and hygienic safe washing of cleaning fabrics, such as mops, and cleaning cloths of cotton and / or synthetic beers. The product is intended primarily for automatic dosing.

#### **USAGE INSTRUCTION**

SATFAB UNIVERSAL is compatible with other metering system that automatic universally provides exact and accurate dosage. Recommended dilution 2-5%

#### **BENEFITS**

- SATFAB UNIVERSAL contains non-lonic surfactants, with good fat emulsifying ability.
   Alkali enhances fat solubilisation and removes protein dirt.
- Phosphate aid water softening.

#### **FORMULATION**

Linear Alkyl Benzene Sodium Sulphonate (LABSA) 10% Iso Propyl Alcohol (IPA) 10% Fatty Alcohol Ethoxylate 5%

#### **SPECIFICATION:**

Appearance : Light Yellow Liquid

Specific Grav. : 1±0.2g/cm3

pH Value : 3.0±5(in1%solution) : 1.5±0.5(in100%solution)

SOILING	Soft Water	Medium Water	Hard Water
	0-6°	7 - 13°	14 - 20°
Light	7	10	15
Medium	10	12	20
Heavy	12	15	25

#### SATFAB BUILD

### Fabric Detergent Booster Concentrate



SATFAB BUILD is a liquid alkali builder/ booster, based on a mixture Of alkalis and NTA (water hardness binder), for use in Medium to hard water (125 - 250 ppm).

- SATFAB BUILD is a powerful alkali builder/ booster, which is based on a balanced blend of alkali, water hardness sequestering agent and anti-greying agents.
- SATFAB BUILD is most commonly applied in conjunction with a surfactant booster. These products combined with bleach or a powerful system, which may be used for cleaning

#### **FORMULATION**

Sodium Hydroxide 20%Non Anionic Surfactants 5%Phosphates 5%

#### **SPECIFICATION**

Appearance : Clear Liquid Specific Gravity : 1.23 g/cm3

pH Value :11.59 (in1%solution)

: 11.93 (Concentrate)

#### **USAGE INSTRUCTION**

Dosing level is dependent on water hardness levels, nature and level of soil and type of fabric.

#### **BENEFITS:**

- Improves soil removal, especially of food (protein) And fat stains e.g. restaurant and kitchen linen.
- Prevents greying of linen by stabilisation of soil particles in wash liquor.
- Improves wash performance by affecting the soil fibre interaction (swelling).



## SATFAB HYPO Chlorine Bleach



SATFAB HYPO is a sodium hypochlorite based bleach suitable for use in all types of industrial laundry machines. SATFAB HYPO effectively removes staining on WHITE linen.

- SATFAB HYPO is designed for use through the Satol Chemicals automatic dispensing equipment and should never be manually dosed.
- Heavy concentrations should be used, it is recommended that an Anti Chlor such as SATFAB CID / SATFAB RUSTNIL be used to

#### **SPECIFICATION:**

Appearance : Clear Liquid

Specific Grav :  $1.09 \pm 0.05$  g/cm<sup>3</sup>

pH Value :11.71  $\pm$  0.02 (in1%solu-

: 12.31  $\pm$  0.02 (Concentrate)

#### **USAGE INSTRUCTION**

- Dosage:3–15 ml per kilogram wash load depending on light to heavy stains. Maximum temperature 60°C. Dosage may vary according to degree of soiling.
- Caution: DO NOT use on colours or on hospital linen that has been contaminated with chlorhexidine-based disinfectants.

#### **BENEFITS**

- Effective in all water conditions.
- Longer shelf life and stability
- •Restricts corrosion risk.
- Economical dosage control, long drum life
- Easy identification—assists staff training



## SATFAB OXY Bleach Liquid Oxygen Bleach



SATFAB OXYBLEACH is high quality peroxide-based bleach for maintaining and enhancing whiteness and for removing stains coming from food stuffs and beverages.

#### **USAGE INSTRUCTION**

- 3-10 ml per kg of wash load depending upon intensity of stains.
- Wear protective gloves/ protective clothing / eye protection/ face protection.
- Do not breathe mist, vapors or spray.
- Keep/Store away from clothing/

#### **BENEFITS**

- Safe on coloured linen.
- Can be used simultaneously in the main wash
- with detergent and booster.
- Economical dosage control.
- Long drum life for concentrated formulation.

#### **SPECIFICATION**

Appearance : Clear Liquid – Colourless
Odour : Characteristic Odour

Specific Gravity :  $1.15 \pm 0.05$  g/cm<sup>3</sup> Solubility : 100% water soluble pH Value :  $7.0 \pm 0.5$  (in1%soltion)

#### **FORMULATION**

•Hydrogen Peroxide 25 - 35%

•Phosphonate 0.5 - 1%



## SATFAB RUSTNIL Rust Stain Remover & Neutralizer



SATFAB RUSTNIL effectively removes staining in coloured garments and is suitable for the removal of chlorhexidine stains.

SATFAB RUSTNIL is designed for use through Satol Chemicals automatic dispensing equipment and should never be manually dosed.

#### **USAGE INSTRUCTION**

- For best results maintain alkalinity At pH11-12@75 to 85°C for 12 15 minutes.
- For light distaining, use from 3 mls/kg fabric weight 3–10m/kg of wash load depending on light to heavy stains.
- Dosage may vary according to degree of

#### **BENEFITS**

- Safe on coloured linen.
- Extended shelf life and stability.
- Will not allow chlorhexidine stains to set.
- Can be used simultaneously in the main wash with detergent and booster.
- Economical dosage control, long drum life.
- Easy identification assists staff training.

#### **SPECIFICATION**

Appearance : Clear Liquid – Colourless

Odour : Characteristic Odour

Specific Gravity :  $1.10 \pm 0.05$  g/cm3

Solubility : 100% water soluble

pH Value : 4.19 (in1%solution)

: 3.53 (Concentrate)

#### **FORMULATION**

- Phosphoric Acid 20%
- Oxalic Acid 20%



## SATFAB CID - Neutralizer



SATFAB CID is a laundry sour specially formulated for use in commercial and on-premise laundries. This product should be applied in the last rinse to neutralise residual alkali and to reduce of active chlorine.

- SATFAB CID is an alkali and chlorine 'neutralizer', based on bisulphites. These substances are mildly acidic and are applied to neutralize alkali present in rinse water and on fabric. Accidental overdosing of SATFAB CID will not lead to a too low pH, and consequently the risk off a fabric damage is minimal. An organic acids-based neutralizer should only be used in those cases where no chlorine bleach has been applied.
- SATFAB CID can be used for all types off fabric, except for clean room garments.

#### **FORMULATION**

•Sodium Metabisulphite 35%

#### **USAGE INSTRUCTION**

 Dose into the final rinse (sour bath step) of the wash process to Neutralise residual alkali and ensure that correct pH of washed Goods (6.06.5) is achieved. For some other classic actions, other pH guidelines should be followed. In addition check if the drain water is free of residual chlorine.

#### **BENEFITS:**

- Effective neutralization of residual alkalinity in rinse water and on fabric.
- Neutralization of traces of chlorine bleach.
- Prevents yellowing off fabric.
- Prevents fabric damage.

#### **SPECIFICATION:**

Appearance : Light Yellow Liquid

Specific Gravity : 0.97

pH Value : 6.7 (in1%solution)

: 7.71 (in100%soltion)



### SATFAB SOFT

## Fabric Softener Concentrate



SATFAB SOFTENER is a concentrated fabric softening liquid specially Formulated for use in commercial and on premise laundries. The product is suitable for application on most types of fabric and can be manually or auto dosed.

- SATFAB SOFTENER conc. is a concentrated fabric conditioner Based on biodegradable cationic, quaternary ammonium salts. In the wash solution, these positively charged cationic, adsorb to the negatively charged surface of fabrics.
- Once adsorbed on to fabric the cationic have a lubricating effect.
- During the drying process, this prevents interlocking of individual fibers and build up of static electricity (especially on synthetic fibres). In addition lubrication facilitates ironing/ calendaring.

The product has also been formulated with

#### **USAGE INSTRUCTION**

Dosing level is dependent on wash classification. The softener Should be applied in the last rinse of a washer extractor or in the last section of a continuous batch washer.

#### **BENEFITS:**

- Good softening of many types of fabric (towels, sheets, wool, delicate articles. etc).
- Prevents build-up of static electricity on synthetic fabrics.
- Delivers a pleasant residual smell.
- Is based on biodegradable raw materials.

#### **SPECIFICATION:**

Appearance : Slightly white Liquid

Specific Gravity : 1.02 g/cm3

pH Value :6.83 (in1%solution)

: 5.79 (in100%solu-

tion)

#### **FORMULATION**

• Di Hydroxy Fatty Acid 10% - 12%

#### **Dosage recommendation:**

1.5 - 5.0ml/kg of fabrics.



### **Powder Laundry Products**

#### SATFAB COMPLETE

A complete, advance, fully built in laundry detergent for light and heavy soils. It is suitable for use on all cotton, polyesters and blends thereof, providing the highest standards of wash performance. The quality water hardness sequestrants ensure prevention of build up of scaly deposits on fabric and equipment.

#### SATFAB ALL IN ONE (White & Brown)

A multi purpose detergent powder with in built stain removing ability for wide range of stains, hard water compatibility and built in alkalinity. Saves Water, steam, expensive boiler fuel, time and electricity through highly efficient wash- process. Enhance productivity.

#### **SATFAB BOOST (Alkalinity Booster)**

SATFAB Boost is an alkaline booster specially formulated to assist in the removal of heavy soils as found in F&B Linen, engineering overalls, etc. When used in conjunction with SATFAB Complete, it gives excellent results. It does nor contain caustic soda, hence, it is safe on fabrics

#### **SATFAB PEROXY (Powder Bleach)**

A high quality peroxide based bleach for maintain and enhancing the whiteness and for removing stains coming from foodstuffs and beverages. Suitable for a wide range coloured fabric too. Had good storage stability.

#### **SATFAB ACTION (Hard Water Conditioner)**

SATFAB Action is a water conditioner which contains sequestrants to neutralise water hardness effectively, producing the best cleaning efficiency.

#### **SATFAB RINSE (Neutralising Agent)**

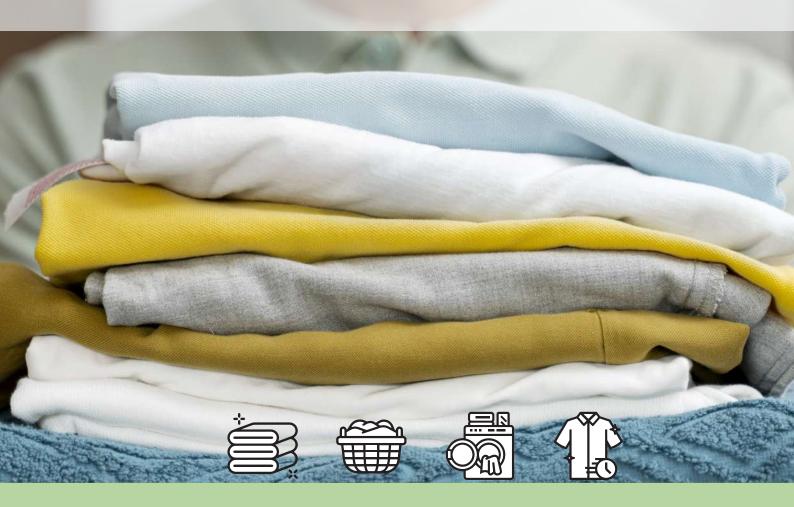
SATFAB Rinse is a mildly acidic powder that has the properties of neutralising both alkalinity and chlorine. Addition of SATFAB rinse in the last rinse completely neutralise any excess alkalinity as well as bleach, thereby preventing yellowing.

#### SATFAB LAUNDRY SPOTTING KIT

SATFAB LAUNDRY SPOTTING KIT offers simple, quick and comprehensive stain removal. It includes four 500 ml bottle that takes care of different kind of stains like, protein, blood, tannin, oil, paint, rust & many other



# Your Choice, Our Commitment



In the modern Globalized world, being a privately owned Company has significant benefits especially for our Customers, our Partners For over 23 years, SATOL has developed a Global organization able to take the longer view, manage the pressure of the now, and to plan for the long term, delivering true Partnership for our Customers, with transparency and mutual respect.

Whether it's for our known flexibility, our attention to detail, the high-quality products, or just the way we do business, we understand that it's Your Choice to do business with us. It is Our Commitment to fulfill your needs wherever you, our Customers are.



For more information about our portfolio, worldwide locations, approvals, certifications, and local representatives, please visit: www.satol.net