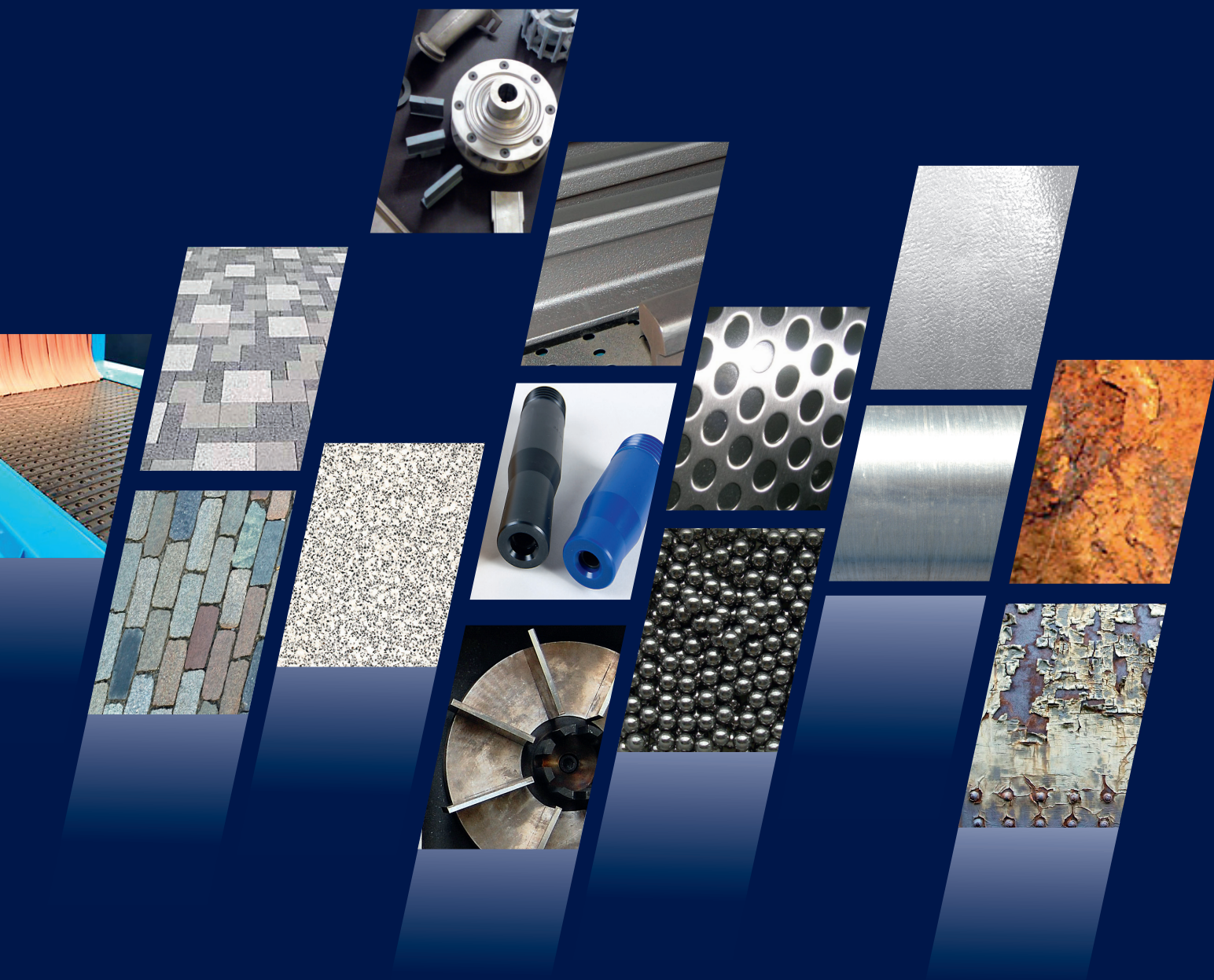


The SciTeX logo, featuring the text "SciTeX" in a stylized serif font. The "Sci" is in a lighter blue and the "TeX" is in a darker blue.

## SPECIAL MACHINES SURFACE TREATMENT



## Flexibility

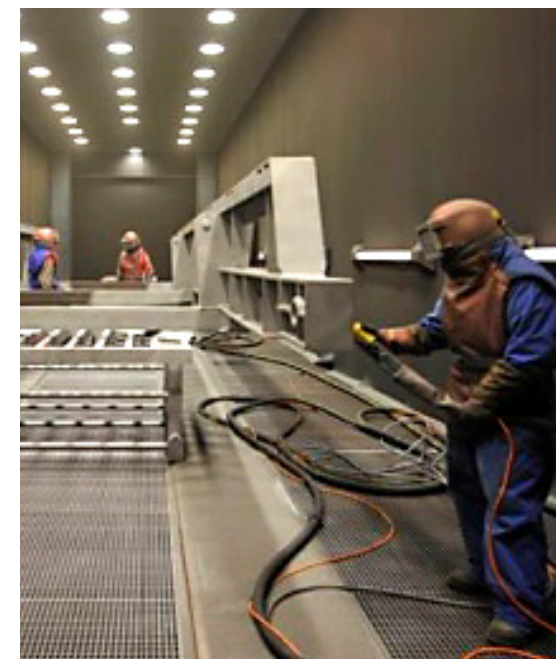
SciTeeX Robot cleans large and complex work pieces as efficiently as small, simple ones. All cavities and blind angles can be cleaned by directing the nozzle into the hidden, difficult areas; the oscillating nozzle further enhances the cleaning procedure. SciTeeX Robot lends itself both to manual cleaning of unique work pieces and to fully automated cleaning of items in serial production.

The abrasive media can freely be chosen according to the needs of the work piece. At its simplest, the robot is 'taught'; or programmed, by operating the nozzle manually with joysticks; the next identical work piece can then be cleaned by the robot following the movements stored in its memory. When serial production demands extreme efficiency, the programming is carried out by means of computer simulation, thus not interfering with the robot's use in production.

## Safety

Manual abrasive blasting is an extremely hard and dangerous task. The blast-operator is exposed to noise, dust and physical strain. When working with large items, ladders and platforms are needed, so the risk of injury is again higher. To be protected from abrasive media moving in excess of 200 meters per second, the operator needs heavy protective clothing. Accidents and work-related injuries are common among manual blasters.

Delays are often experienced. Motivation for such exhausting work can be low. SciTeeX Robot solves all these problems. When operating the robot manually, the operator is housed in an ergonomically designed, air-conditioned and soundproofed cabin and uses joysticks to control the robot's nozzle arm. In automated cleaning, the robot follows a pre-programmed track which can be monitored from a control room outside the blast chamber.



## Quality

Abrasive blasting aims to produce the optimal surface quality for painting or other processes. The main factors in quality are cleanliness and the correct degree of roughness.

Often the desired roughness is achieved using sharp, variable-sized medium that is highly abrasive and can only be delivered with pressurized air. Both roughness and cleanliness are also directly affected by the correct pressure and distance of the nozzle from the work piece, and the "shot" angle at which the medium is projected. SciTeeX Robot uses the

abrasive material and pressure most appropriate to the work piece; the nozzle distance and angle can easily be controlled.

The stored program repeats the cleaning cycle time after time, producing high, consistent quality; there is no room for human errors in the process. In automated cleaning, a log file is created: the log can be used to track the time and duration of the operation as well as coping with possible problems etc. The file can be used to monitor and improve quality and development.

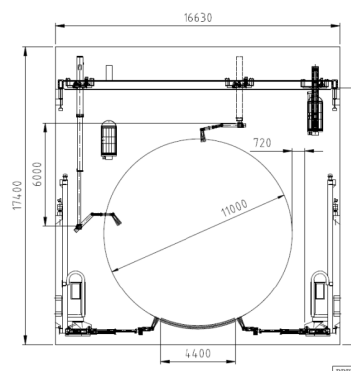
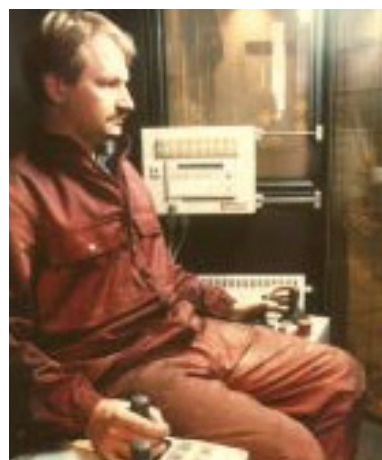
## Efficiency

In abrasive blasting, the surface is blasted with abrasive media that removes impurities and coarsens the surface before painting or coating. The greater quantity and higher speed of the blast medium delivered to the cleaned surface means greatly increased efficiency in the cleaning process.

The amount of abrasive medium is dependent on the

nozzle size: the larger the diameter, the bigger the mass flow.

The efficiency of a SciTeeX robot is due to the high pressure and the controllability of a large diameter nozzle combined with tireless operation in harsh blast chamber conditions.





[www.sciteex.net](http://www.sciteex.net)