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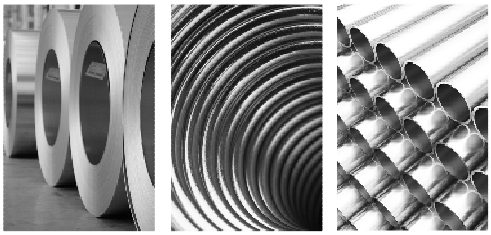

Wire cleaning lines

eclean

Electrolytic cleaning processes for single-wire lines and high metering rates

- for removal of wire rod scale with H_2SO_4
- for removal of drawing agents and stearates

Electrolytic and chemical continuous plickling devices as a part of lead patenting and galvanizing lines

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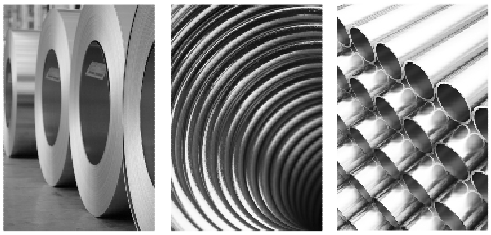

Process description:

Precondition for the further processing or a subsequent coating you need a very clean wire surface. That means that the lubricants and stearates from the previous drawing process have to be removed from the wire surface.
The usual degreasing processes which work with high temperatures and / or with with support of ultrasonic sound often are to slow in their response time to be applied within fast operating processes.

STAKU solved this problem by developing the **e-clean process**. This process enables the surface cleaning within seconds by applying very high current density at changing polarization.
During the electrolytic cleaning continuous current flows to any spot of the metal surface and generates small hydrogen an dioxygen blisters according to polarization.

The pollutant particles are blast away from the surface by the emerging gas pressure and result thereby in a precision cleaning of the surface. Consequently electrolysis is especially suitable in cases you need very clean surfaces.

Benefits:

+ only a fraction of the usual treatment period necessary

+ far better cleaning results

+ lower production costs

Wire surface with and without cleaning

Multi-wire device

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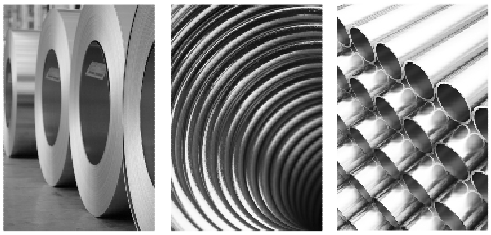
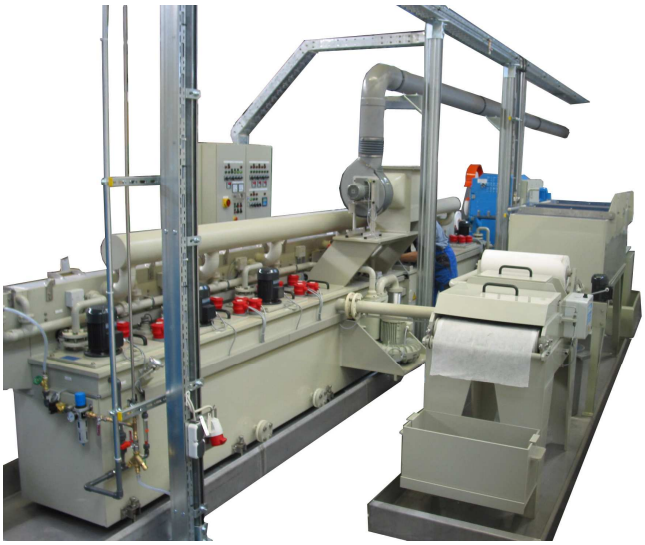


Electrolytic continuous degreasing devices up to 12 m / s

- within reel-2-reel-processes:



- with subsequent drawing process:

Multi-wire degreasing device in front of the annealing furnace, 24 strands

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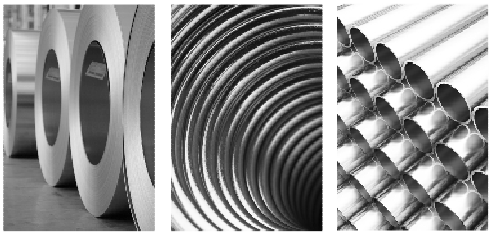

Electrolytic continuous pickling device for annealed non-ferrous wires with polishing drawing

Electrolytic continuous pickling device for wire rod up to 60 m/min with finishing treatment

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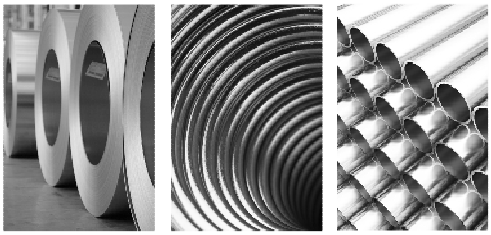
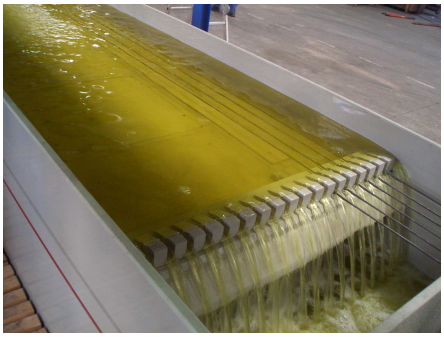


Electrolytic and chemical continuous pickling devices as a part of lead patenting and galvanizing lines



Flood tank with guide bars

Pickling device with flux bath with opened hood

Continuous pickling device „closed type“, 40 strands

Electrolytic pickling device

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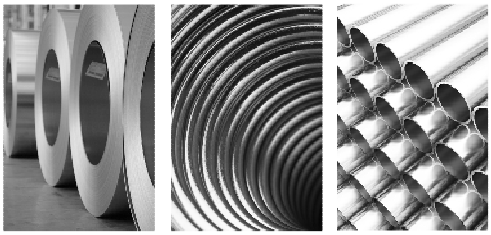

Chemical continuous pickling devices with HCl as a part of lead patenting and galvanizing lines

Continuous pickling device, 10 strands

Hight adjustable wire deflation

Exhaust air scrubber with exhaust fan

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