## Electroless nickel plating

6.**Electroless nickel plating** is performed without electricity and the layer is applied chemically This enables smooth layer on all surfaces even those with complex geometry.

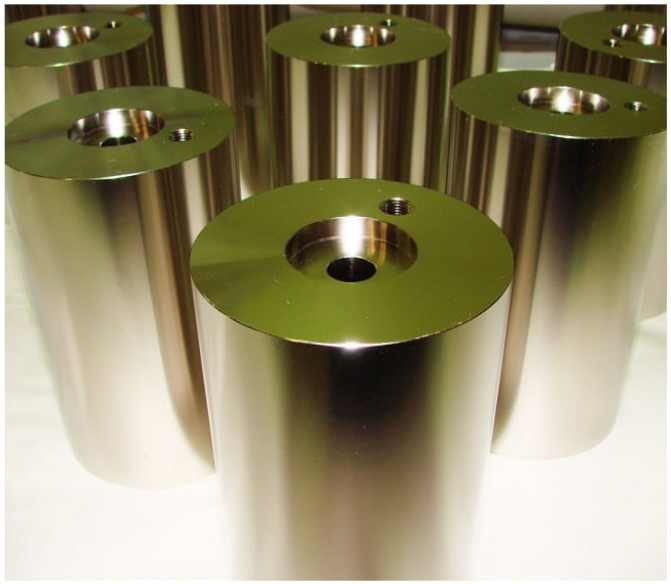
Besides smoothing other properties of the layer are: high corrosion consistency, large surface fort and wear resistance.

Fortress after application is 500 -550 HV, a heat treatment after the close of hard chrome.

The thickness of the layer may range from 6-60 microns.

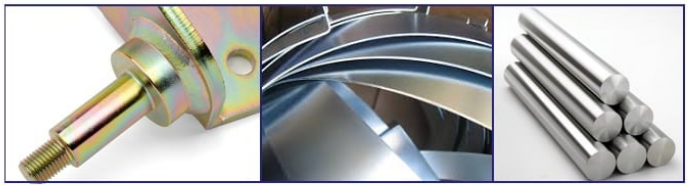
Because of its characteristics is widely used in hydraulics, pneumatics, transport machinery, chemical and food industry and others.

The maximum dimension of the parts:
400 x 800 x 1000 mm.



**The plant is equipped with modern laboratories to control the quality of solutions and inflicted coatings.**

**Also, in our sales program we offer deionized water by filling in packaging client.**



BRATSTVO GROUP

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BRATSTVO GROUP

# SURFACE PROTECTION

**Services offered in our plant are:**

- Zinc coating
- Anodic oxidation
- Phosphating
- Electroless nickel plating
- Bluing
- Hard chrome plating

**Planned services in the near future:**

- Decorative Plating Nickel -Chrome
- Plating of Zinc - Nickel alloy

## Zinc coat

1.**Zinc coat** is applied to protect against corrosion of parts made of steel and cast iron. The coating is further passivated with a shade wanted by the customers. Possible shades: blue, yellow and black passivation, which apart from the aesthetic effect increases the resistance against corrosion.

With further processing "liquid lacquer" the coat becomes more resistant.

Zinc coating is most suitable for the protection of bolts, nuts and so on.

The thickness of the layer may range from 6 to 30 microns.

The maximum dimensions of parts:
800 x 1000 x 300 mm.

## Anodic oxidation

2.**Anodic oxidation** of aluminum is used for the continuous coating of aluminum oxide. This procedure protects the underlying metal from corrosion and increases surface thickness. Extra layer can be colored according to the requirements of customers and thus increasing performance protective layer.

In line anodic oxidation is carried passivation of parts with tight tolerances.

The film is applied with this procedure provides high anti-corrosion protection and is suitable as a base for coloring.

The maximum dimension of the parts:
800 x 1100 x 200 mm.

## Phosphating

3.**Phosphating** is conversion plating and it is applied for: intermediate care, preparation for painting, intermediate layer for extraction or additional treatment (oil immersion) as a final protection. Phosphatized parts are made of steel and cast iron .

The maximum dimension of the parts:
600 x 600 x 600 mm.

## Bluing

4. **Bluing is** apply to parts made of steel with fine tolerance. With bluing you get surface with black paint and than with oil immersion the resistance to corrosion is improved .

The maximum dimension of the parts:
600 x 600 x 600 mm.

## Hard Chrome plating

5. **Hard Chrome plating** is performed on parts made of steel and brass. The layer of chromium has a high thickness (800-1000 HV) and it's suitable for parts that are exposed to friction and wear. It is used for hydraulic and pneumatic devices , tools and the like.

The thickness of the layer is defined by the technical documentation. For parts of the hydraulic and pneumatic portions ranges from 20-30 microns, and repair the parts can be applied to 600 microns.

The maximum dimensions of parts :
F200 x 1000 mm.