

# Aerosol Valves in Terms of Technologies Used



**KOH-I-NOOR®**  
Mladá Vožice a.s.

Igor Tichý  
General Director

## Aerosol Valves in Terms of Technologies Used

- \* Company history
- \* Production
- \* Aerosol valve description
- \* Plastic products
- \* Pitfalls
- \* Higt Tech aerosol valves production
- \* BOV – the latest technology
- \* BOV - using in different industrial sectors
- \* Sumary

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## COMPANY HISTORY

- ❑ KOH-I-NOOR was established 13.10.1947
- ❑ Since 1967 into the production program included the production of aerosol valves of French licence Reboul-Sofra
- ❑ Joint stock company KOH-I-NOOR Mladá Vožice a.s. was established 1.1.1994 as a legal successor when the decision was made
- ❑ The present manufacturing programme is aimed at the range of the aerosol valves and their accessories.

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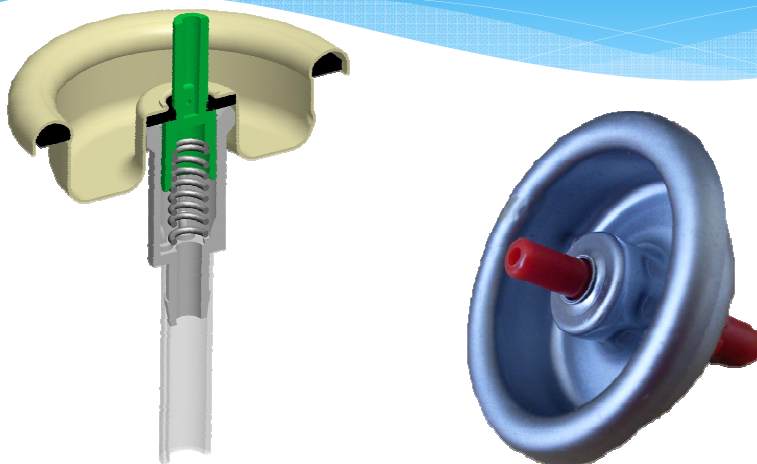
## PRODUCTS MANUFACTURED TODAY

- ❑ AEROSOL VALVES
- ❑ APPLICATORS AND ADAPTERS
- ❑ SPRAYCAPS AND CAPS
- ❑ MECHANICAL PUMPS
- ❑ COSMETIC CLOSURES
- ❑ PLASTIC PRODUCTS



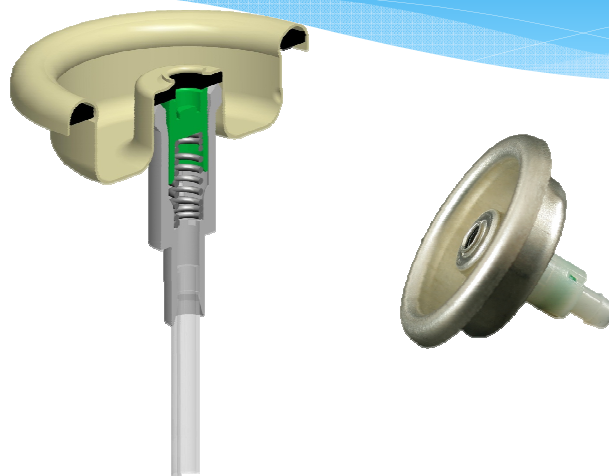
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## MALE AEROSOL VALVE



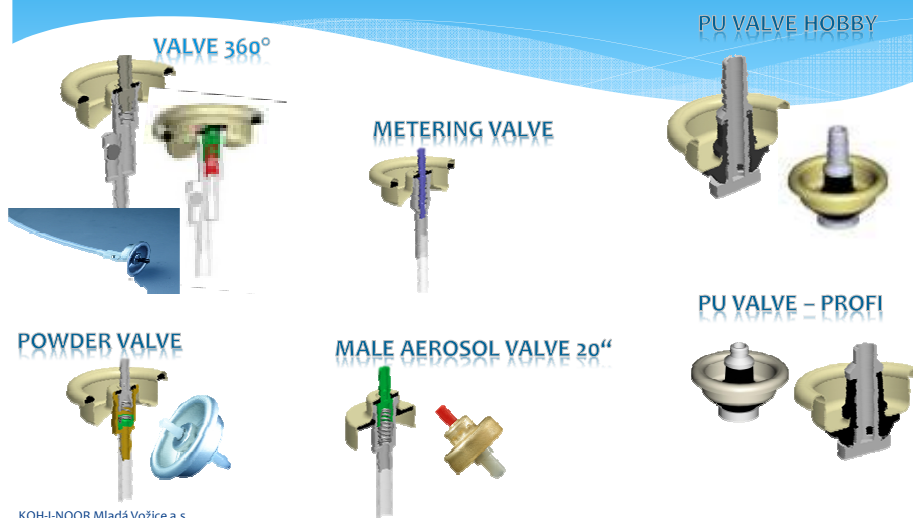
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## FEMALE AEROSOL VALVE



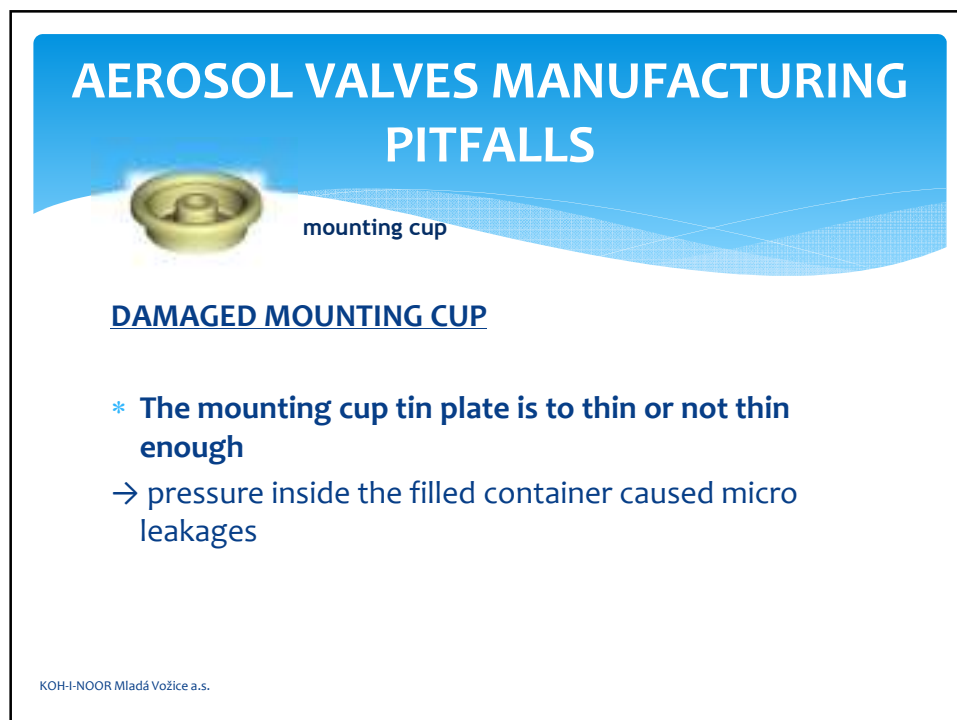
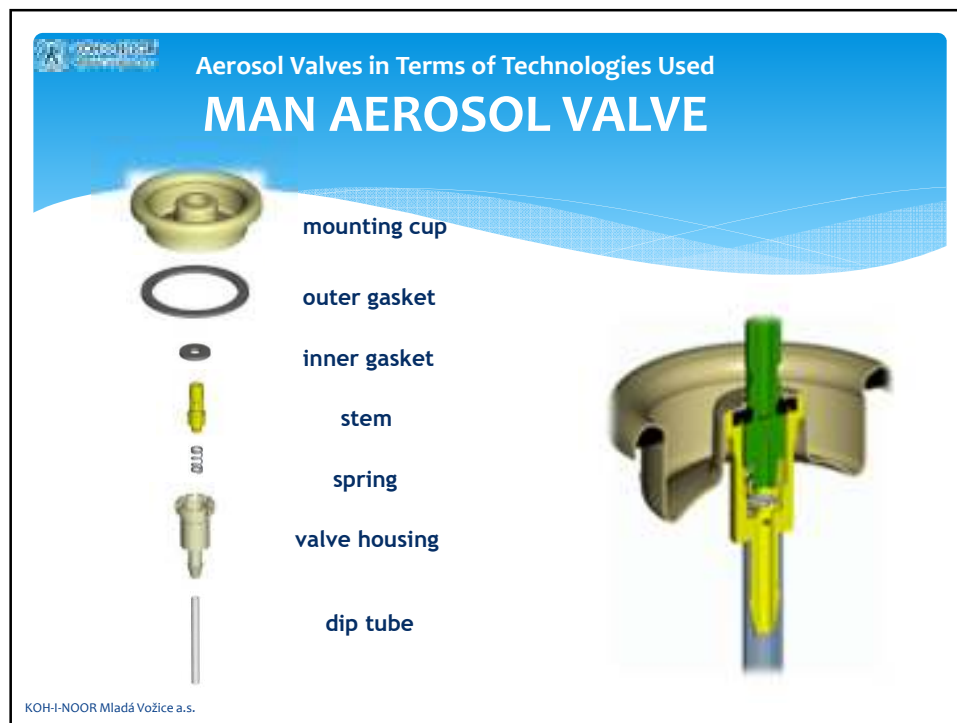
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## SPECIAL AEROSOL VALVES



## BAG ON VALVE (MALE VERSION)





## AEROSOL VALVES MANUFACTURING PITFALLS



outer gasket



inner gasket



spring



stem

- a) **Missing outer/inner gasket, spring or stem** → container contents escapes through the valve outward during the filling process → production interruptions, filling line cleaning (very difficult, especially PU foams or paints)
- b) **Inner gasket bad swelling** → practically impossible actuator fitting (according the swelling rate and time of actuator fitting - female AV, during the filling of the valve), or problems during the application (it is difficult to close)
- c) **Gasket prolapsed** → it can caused inappropriate filling head (similar to - b)

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## PLASTIC PRODUCTION



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## PLASTIC PRODUCTS MANUFACTURING PITFALLS

### Oval or cracked caps, spraycaps or applicators

→ difficult to fit it into the container or valve, the valve can be put in the filling line



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## THE PITFALLS

Cracked applicator



Mounting cups after test  
Incorrect/correct



Wrong type of valve

Mounting cup corrosion  
inside the container



Wrong assembling process



Gasket prolapsed



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## QUALITY CONTROL AND INSPECTION

### Mass production

- \* Aerosol valves assembling process is controled 100% (every aerosol valve production step is controled separatelly)
- \* All plastic production - periodically checked

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## High-Tech Assembly machines – only way for the future

- \* [ValveCaseLoading.wmv](#)

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## Aerosol Valves in Terms of Technologies Used

### MALE AEROSOL VALVE – utilization

#### Cosmetics:

- \* Hairsprays
- \* Hair foams
- \* Shaving foams
- \* Shaving gels
- \* Deodorants
- \* Antiperspirants



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#### Household products

- Insecticides
- Airfresheners
- Shoe care products
- Furniture products
- Antistatic products



### FEMALE AEROSOL VALVE – utilization

#### Technical products

- De-icers
- Gas refills
- Silicones
- Cockpit sprays
- Cavity applicators
- Paints & varnishes
- PU foams



## BAG-ON-VALVE – the latest technology



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## BOV - utilization

### Cosmetics:

- Shaving Gels
- Shower Gels
- Sun Cares
- Creams
- Refreshing Water

### Pharmacy:

- Salt Water
- Disinfecting product

### Others:

- Fire Extinguisher
- Security Fog



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## BAG-ON-VALVE – the newest possibilities – FOOD INDUSTRY

**EASY**

As simple as to lighten up, cook and taste. Make tempura, dumplings, pancakes or cutlets has never been easier

**QUICK**

What once meant hours is now a matter of seconds. Improvise and enjoy some unique products anytime

**CLEAN**

As these products do not require preparation you do not have to stain anything. And if there is nothing to stain, there is nothing to clean, isn't it?

**SURPRISING**

Try them, combine them and create new recipes. Surprise everyone with Magerit's latest creation, the world's sixth best restaurant.

**UNALTERABLE**

This type of innovative packaging ensures that the conditions of the product will remain unalterable forever

**SAVING**

No more wasting food. You just use what it is necessary. Not a drop more, not a drop less.

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## KOH-I-NOOR Mladá Vožice a.s.



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# THANK YOU FOR YOUR ATTENTION !

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