NBC PROTECTION
**ACHR-90M CHEMICAL VEHICLE**

- complete decontamination of persons, machines, roads and terrain
- establishment of independent workplaces for special water treatment
- fire extinguishing
- physical modifications - filtration, mixing, separation

The chemical vehicle is designed for:

- decontamination of military and civilian vehicles, machines, weapons, roads, terrain and persons,
- preparation, transportation and temporary storage of decontamination mixtures and their application with hand operated lancet equipment with high-pressure or foam-forming nozzles or brushes,
- for water heating up and generation of water steam used for decontamination of oily parts or engines,
- for decontamination of roads, airports or strengthened ground areas,
- decontamination of personnel in protective clothing by spraying with warm water or cleaning mixture,
- re-pumping and transporting of aggressive liquids,
- fire extinguishing using classical methods or high-pressure water stream of 9 MPa
- feeding army and special security units with water, decontamination mixture, water steam and electricity power.

Decontamination of buildings or large-sized objects provided in cooperation with a lifting platform of up to 15 m.

ACHR works very well in combination with the SDO Personnel Decontamination System which can be extra delivered with ACHR.

**EDS MIXER**

Chemical decontamination equipment for production of emulsions and peroxide decontamination mixture in cooperation with decontamination vehicle ACHR-90M.

The EDS Mixer enables to set up new decontamination technologies through the use of emulsions and peroxide decontamination mixture and improves attributes of the ODS-5 foam decontamination mixture amenable by ACHR-90M Chemical Vehicle. The EDS Mixer is drawn as freely embedded accessories of ACHR-90M Chemical Vehicle.

The EDS Mixer is an aggregate working in three regimes of operation:

- **P1 operation** - Continuous preparation and application of decontamination emulsion mixture by mixture of an emulsifier oil EO 04 and 10% aqueous suspension of calcium hypochlorite
- **P2 operation** - Continuous preparation and application of ODS-5 decontamination mixture in the form of foam by mixture of ODS-5 detergent and water
- **P3 operation** - Continuous preparation and application of peroxide decontamination mixture by mixture of 30% hydrogen peroxide and organic components of peroxide mixture

**Basic technical parameters**

- **EDS decontamination emulsion** 10 dm³/min⁻¹ when in use one streamline
- **ODS-5 decontamination mixture** 20 dm³/min⁻¹ when in use two streamlines
- **ODS-5 decontamination mixture** 50 dm³/min⁻¹ into spray frame
- **PDS peroxide decontamination mixture** 100 dm³/min⁻¹ into spray pistol
- **PDS peroxide decontamination mixture** 5 dm³/min⁻¹ into spray pistol
- **External dimensions of EDS Mixer**: Length: 704 mm, Width: 700 mm, Height: 826 mm
- **Weight of EDS Mixer**: 128 kg
Chemical Decontamination Forces special equipment for field conditions works in cooperation with the chemical vehicle ACHR-90M.

Capabilities:
- Deactivation and disinfection of persons
- Hygienic purification of persons
- Decontamination of personal equipment and weapons

The SDO is designed to work in field conditions for the decontamination and hygienic cleaning of army units. The SDO consists of sets of aggregates and materials transported in ISO containers.

The primary components of the SDO are three mutually connected inflatable tents and one tent passageway, which is installed between the second and third tent. The first tent is for undressing, the second for showering and the third for getting dressed.

A water system is built in for supplying water and solutions and carrying away waste water. In order to function under various climatic conditions, the SDO is equipped with a heating system. The workplace is equipped with an electrical system to ensure its operation. The SDO also contains a stand for weapons, pouches for equipment, drinking water containers, a table and tub for decontamination of the protective masks, etc.

**Tactical parameters:**
- Setup time: 45 minutes
- Take down time: 60 minutes
- Hygienic cleansing capacity: 150 persons/hour
- Decontamination capacity: 120 persons/hour
- Uninterrupted daily operation of the SDO: 10 hours

The Small Decontamination Vehicle - MDA is designed for (small-scale) decontamination of secondary level military structures, corresponding to combined arms platoon, battalion and other similar purpose battle groups:
- Decontamination of persons, including selected components, personal armament and equipment,
- Decontamination of military equipment external surfaces, equipment and material.

The MDA is highly mobile, operative and technically autonomous. It can be quickly deploy by air for missions abroad or domestic missions.

**Basic information**
- Chassis: T815-780R59 19 270 4x4.1R
- Cabin designed: 2-seats bullet proof
- Engine: TATRA, output 270 kW
- Max. speed (without speed limiter): 110 km/h
- Max. outer measurements: 7 550 x 2 740 x 2 910 mm
- Weights (total including all attachments and crew): 17 485 kg
LINKA-08 DECONTAMINATION OF MILITARY Equipment

LINKA-08 is the means for decontamination of the Chemical Corps. In cooperation with the chemical spraying vehicle ACHR-90M provides rough cleaning of military equipment surfaces, spraying of decontamination mixtures and the subsequent rinsing on a line-transit way, all this, while meeting the requirements of modern decontamination techniques, including requirements for quick relocation and air transport. The washing equipment and spraying frame can adapt to the profiles that are cleaning in order to keep the recommended distances for decontaminating the equipment.

LINKA-08 is built into an ISO 1C container and includes:

- shelves for placing the parts of the LINKA-08,
- single parts of the LINKA-08, accessories,
- high pressure pump set,
- handling equipment - cart for moving the frame parts, electrical powered gates with brakes,
- water supply including outlets for suction and discharge,
- electric supply for low voltage, including inputs.

Container manipulation can be performed with hook loaders.

Container measurements (L x W x H): 6 058 x 2 438 x 2 438 mm

Container weight:
- Biggest payload: 16 500 kg
- Total weight: 10 716 kg
- Weight for air transport: 10 514 kg

PROTOTYPE OF THE LAV-CBRN LIGHT ARMoured RECONNAISSANCE VEHICLE

The LAV-CBRN light armoured vehicle is designed to perform chemical and radiation reconnaissance while on the move and chemical, biological and radiation observation at the halt.

The crew of the vehicle comprises a commander and driver.

TECHNICAL AND SOFTWARE EQUIPMENT OF THE VEHICLE ENABLES TO PERFORM:

- Computerised gathering, processing and assessment of information from NBC sensors,
- Chemical, radiation, visual and acoustic reconnaissance of hazardous locations using a robot remotely-controlled by the crew from inside the vehicle,
- Laying out of contaminated area borders and alerting of troops deployed in the neighbouring areas of CBRN hazard without the vehicle crew having to disembark the vehicle,
- Computerized elaboration of NBC 4 report optimized as to its scope (manually edited if required) and its remittance to the higher commander.

The LAV-CBRN vehicle represents a purpose-built modification of IVECO LMV M 65E19 WM – LONG. For the CBRN reconnaissance it is equipped with onboard information system and special CBRN mission kit. The protection of the crew against toxic substances, biological warfare agents and radioactive dust is provided by a combined overpressure protection subsystem. The LAV-CBRN light armed reconnaissance vehicle is fitted with an NCWS-type of weapon station.
NBC PROTECTION

- ACHR-90M CHEMICAL VEHICLE
- EDS MIXER
- SDO PERSONNEL DECONTAMINATION SYSTEM
- MDA SMALL DECONTAMINATION VEHICLE
- LINKA-08 DECONTAMINATION OF MILITARY EQUIPMENT
- PROTOTYPE OF THE LAV-CBRN LIGHT ARMoured RECONNAISSANCE VEHICLE

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