



Developments in the fields of working liquids and lubrication spheres, and working environment conditioning

1. The output of “Universal RZh” emulsion has been started. It differs with higher lubricating, corrosion resistance, foamy resistance and bacteriological resistance characteristics. It does not decay, need not dissolving devices, can be diluted in a water up to 17 mg-equ/litres hardness (all previous emulsions were diluted up to 7,5 mg-equ/litres hardness). The necessary concentration is 1% (previous was 3%). The emulsion’s cost is twice lower at considerably higher characteristics. It is used at “Sverdlovantracite”, “Rovenkiantracite” and “Dobropoljecoal” mines.

2. Fine rectification filters have been developed. They are differed by unlimited dirty cubic content, unlimited efficiency of production, unlimited service life without maintenance, replacement or filterelement cleaning; low cost.



Car oil cleaning hydrodynamic filter



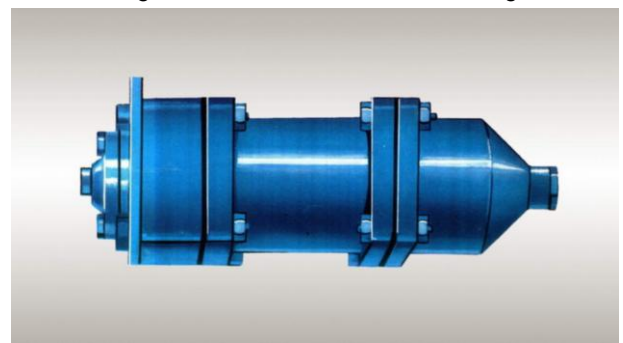
Incomplete productivity line hydrodynamic filter used utilized industrial water rectification

Cleaning fineness0,035 mm
 Capacity 1000 m³/h
 Particle coarseness 60 mm
 Dimensions:
 diameter1620 mm
 height1230 mm
 weight1800 kg



Sewage disposal hydrodynamic filter

Cleaning fineness0,05 mm
 Capacity 4500 m³/h
 Particle coarseness at entry 63 mm
 Dimensions:
 diameter1720 mm
 height2200 mm



Complete productivity line hydrodynamic filter

Cleaning fineness.....0,015 mm
 Capacity60 l/min
 Max. particle coarseness at entry..... 5 mm
 Pressure overfall 0,08 MPa
 Dimensions..... 120x120x310 mm



3. There has been developed an original device used for oil lubricating ability control, operating conditions and materials selection of components or mechanism assemblies. This device is dozen times simpler than devices used nowadays and it is standardized in Russia.

4. A lubricant aptitude controlling method used for crank cases and possibility of mining machine operating continuation have been proposed. The control device is a serial photo calorimeter or nephelometer. This technology is being used for more than 37 years at mines “Stepnaya” PO “Pavlogradcoal”.

5. The installation for oil regeneration directly in the crank case was developed and is manufactured now. Productivity – 60 l/min. Weight – 60 kg. It is designed on the wheels. Compact.

6. The simple filters for irrigation systems has been developed. Weight – max 12 kg. Dimensions: Diameter – (maximum) 100 mm, length – 440 mm.

Filters are being produced in the Poland under our license. In Polish mines according to safety regulations the operation of irrigation systems without hydrodynamic filters developed by our university is forbidden.



Hydrodynamic partial flow filter

Cleaning fineness0,025 mm
Capacity 60 l/min
Dimensions:
diameter110 mm
length440 mm