## ABSTRACT:

Authors' Note	3
1. LONGWALL SHEARERS	4
1.1 Main parts of a longwall shearers	4
1.1.1 Longwall shearer frame	5
1.1.2 Longwall shearer travel	6
1.1.3 Chainless travel of a shearer	7
1.1.4 Arm position control	8
1.1.5 Combined cutter-loader loading equipment	12
2. COAL PLOUGHS	14
2.1 Main parts of new ploughing system constructions	15
2.1.1 Scraper conveyor	15
2.1.2 Plough chain guide and plough body	17
2.1.3 Plough body	17
2.1.4 Plough system tilting device	18
2.1.5 Plough system anchoring	18
2.1.6 New plough drive constructions for ploughing in difficult conditions	19
2.1.7 Electrohydraulic drive system with a PS 16 transmission	20
2.1.8 Powered supports	21
3. SUPPORT EQUIPMENT IN THE UNDERGROUND MINE COALFACES	22
3.1 Individual support	23
3.2 Coalface powered support	25
3.2.1 Main functions of a powered support	26
3.2.2 Standing-enclosing supports	27
3.2.3 Resistance of the powered supports	30
3.2.4 Main powered support power hydraulics	32
3.2.5 Powered support hydraulic circuit	34
4. BIBLIOGRAPHY	36