



Patents:

USA - 11,255,192
Russia - 2788362
India - 202047044367
Australia - 2019237295
South Africa - 2020/05894

Operator on the job training Document

ES7000 Sleeve system

Operator name/surname: _____

Operator I.D. number: _____

Operator signature: _____

Operator contact nr: _____

Supervisor name/surname: _____

Supervisor signature: _____

Training done by: _____

Trainer signature: _____

Training dates: _____

TAKE NOTE !

Only use the ES 7000 Sleeve system for inserting and removing sleeves

Sign

Do not attempt to use the ES7000 Sleeve system unless you have been instructed on the use of it

Sign

Always ensure that the working area and equipment are made safe before work commences

Sign

Lock out, isolate and install mechanical stoppers where applicable before work commences

Sign

Always use PPE when installing and removing sleeves. Gloves, eye protection and safety shoes

Sign








Inspect the ES7000 sleeve system before use, don't use defective equipment and or make any modifications to the system

Sign

Always install the safety cage before applying any pressure to the system

Sign

ES7000 Components

		Signature	
	<u>Hydraulic cylinder</u> Used for controlled press fitting and removing of continues miner cutter drum sleeves	Operator	Instructor
	<u>Extraction cup</u> <ul style="list-style-type: none"> Connects the hydraulic cylinder with the outer ring of the sleeve, as the cylinder retracts the outer ring act as a seat for the extractor All the stored energy and sleeve components are also contained within the cup during extraction 		
	<u>Extraction horse shoe clip</u> This clip locks the cylinder shaft to the rear of the sleeve to be removed Make sure the self centring reses of the clip faces the sleeve		
	<u>Installation cup</u> Locks the hydraulic cylinder in place to the back of the pick box, thus allowing the sleeve to be pulled in <i>Use this cup for a spacer between the sleeve and cylinder if the cylinder stroke is too short</i>		
	<u>Installation horse shoe clip</u> Locks the hydraulic cylinder shaft to the installation cup Make sure the self centring reses of the clip faces the sleeve		
	<u>Hydraulic hand pump</u> The pump is used to supply the hydraulic pressure for inserting and removing sleeves. <i>Never make any unauthorized changes to the pump system!</i>		
	<u>Safety cage</u> The cage covers all moving parts and parts under hydraulic pressure. Should any of these parts fail, the cage will contain the failure <i>Never use Easy Sleeve without Safety cage!</i>		

I, (name & surname) _____, (I.D. nr.) _____ herewith

acknowledge that I have been instructed on the ES7000 sleeve installation and extraction system components and their functions

Signature _____, date _____

ES7000 Pre-use inspection

		Signature	
		Operator	Instructor
1	Inspect the hydraulic cylinder for visible damage and oil leaks		
2	Inspect the hydraulic high pressure pipe and gauge assembly for damage and leaks		
3	Inspect the hydraulic hand pump for damage and oil leaks, also check hydraulic oil level		
4	Inspect the extraction/installation cups and clips for damage		
5	Do not use any component with visible damage and/or oil leaks, replace or repair first		
6	Inspect the safety cage for damage, replace faulty safety cages before using the Easy Sleeve system		

I, (name & surname) _____, (I.D. nr.) _____ herewith

acknowledge that I have been instructed on the correct pre use inspections to be done on the ES7000 sleeve installation and extraction system.

Signature _____, date _____

Installing a sleeve

		Signature	
		Operator	Instructor
Step 1	Clean the inside and back part of the pick box and inspect for any damage, obstructions and wear		
2	Insert the new sleeve as far as possible by hand. Do not wipe the nickel slip of the sleeve, it will prevent rust from forming and binding the sleeve and pick box		
3	Insert the hydraulic cylinder spacer and lock rings behind the sleeve and pick box, pump hydraulics until all components are lined up		
4	Install the safety cage		
5	Start pumping		
6	Continue pumping until the sleeve seats against the pick box		
7	Remove the locking rings and cylinder from the sleeve		
8	Insert the safety c-clip on the back of the sleeve		

Removing a sleeve

		Signature	
		Operator	Instructor
Step 1	Clean the inside and back part of the pick box and sleeve, inspect for any damage, obstructions		
2	Insert the hydraulic cylinder and extraction cup in the front of the sleeve and a locking clip behind the sleeve, start pumping the hydraulics until all components are lined up		
3	Install safety cage		
3	Start pumping		
4	Continue pumping until the sleeve releases from the pick box		
5	Remove the old sleeve and ring from the hydraulic cylinder and discard		

I, (name & surname) _____, (I.D. nr.) _____ herewith

acknowledge that I have been instructed on the correct use and steps to follow when using the ES7000 sleeve installation and extraction system.

Signature _____, date _____