

KOMATSU



Genuine Joy Service Products
JS30/35 Bitholder System



JS-Series Bit Holder Cutting System



Increase the life of your cutting system. Improve maintenance effectiveness. Minimize downtime.

The new patented JS-Series blocks have set the bar for innovation by decreasing the time you spend changing bits — even when shanked or broken.

The genuine Joy seal stands for quality and performance. Our service products are designed to increase the life of your cutting system through improved maintenance effectiveness and minimized downtime.

Joy service products are engineered to meet our exacting application and design standards, helping to ensure optimal system performance. Genuine Joy parts, for Joy machines. They're a perfect fit.

Benefits at a glance

Increased productivity

- Rear access hole for easy bit removal, saving time and energy
- Optional hardfacing on bit holders and sleeves for high wear applications maximizes life

Lower total cost of ownership

- Induction case-hardened bore extends life of the bit blocks through multiple sleeve change-outs
- Lower profile on blocks helps alleviate potential wear and increases block life

Enhanced safety

- Lighter sleeve extractor tool than previous version (by 1.8 kg /4.0 lbs.) provides ease of handling and maneuvering



Understanding the system

Bit holder

- Patented rear access hole saves time
- Added strength saves on drum repairs
- Increased weld penetration decreases drum repairs
- Lower back profile reduces block damage
- Optional hardfacing for additional life

Sleeve

- Patented undercut provides longer life
- Snap ring groove standard to prevent loss of sleeve
- Induction case-hardened cavities to maximize life
- Optional hardfacing for high wear applications
- Backwards compatible on J35 block series*

*Snap ring is not accessible, no extended tail version of the JS35 sleeve

Sleeve maintenance tool

- Extractor tool can pull and press fit sleeves
- 1.8 kg (4 lbs.) lighter for easier handling
- Rod separates from unit for one person handling
- 2.5 times stronger for increased reliability



A genuine Joy conical cutting system...

...decreases the time you spend changing bits even when shanked or broken. Slightly stuck bits can be removed up to four times faster when compared to other bit holder systems.

...lowers costs through extended life. The induction case-hardened bore provides extended life of the bit blocks through multiple sleeve change-outs. Lower profile helps alleviate potential wear that can shorten the life of the block.

...increases productivity. Cutting productivity relies on more than the bit – extending to the machine's cutter and traction systems. Komatsu has the experience to fully engineer and optimize the complete system.



JS Blocksaver Mark I



The sleeve can be readily extracted by removing the protective cap on top of the block and attaching a hydraulic supply.

The JS Blocksaver Mark I bit holding system incorporates a method of hydraulically extracting press fit sleeves from the block where the stepped sleeve acts as its own hydraulic cylinder. Using a simple hand pump, the Blocksaver system allows for easy and fast removal of sleeves, reducing maintenance delays and increasing productivity. The JS Blocksaver Mark I system is based on the JS35/30 bit holder system, giving users all the advantages of the JS series bit holder in productivity, lower operating costs and safety.

Benefits at a glance

Increased productivity

- Ease of changing sleeves reduces downtime, improves productivity
- Speed of changing sleeves promotes regular sleeve maintenance, extending sleeve life and reduces downtime

Lower total cost of ownership

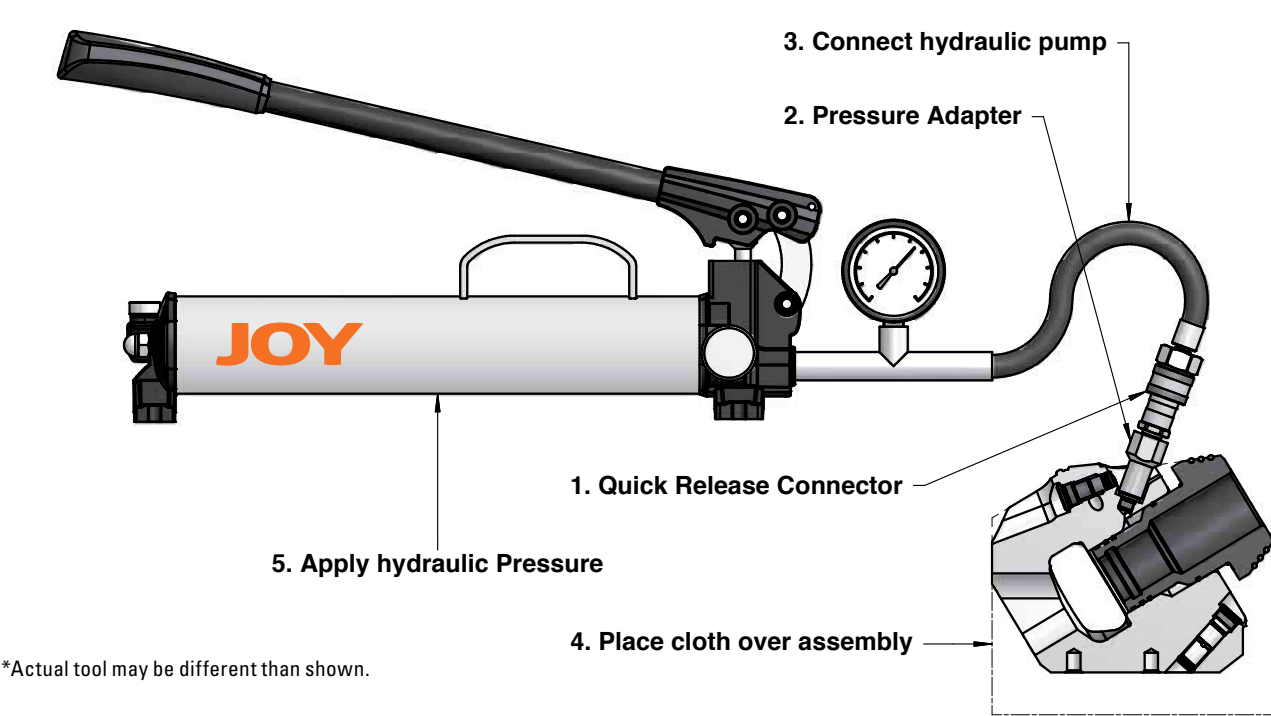
- Optional hard-facing extends sleeve life in high wear applications, lowering cost of ownership

Enhanced safety

- Only a hand pump is required to remove the sleeve. The hand pump is smaller and lighter than the hydraulically-powered sleeve extractor, reducing handling of larger removal tools



Understanding the sleeve removal process



1. Clean away all dirt from around the pressure release hole and remove the protective cap
2. Screw in the pressure adapter and tighten to seal on nose of adapter
3. Connect the hydraulic hand pump
4. Cover the assembly with a cloth to catch any oil that may be expelled on sleeve's release
5. Steadily apply pressure with the pump until the sleeve is released

As a guide to "tightness", a new sleeve fitted into a new block should release by hydraulic pressure at between 4000 and 9000 lbf/in² (275 - 620 bar)

Genuine Joy provides you with...

...decreased time it takes to maintain your sleeves.

Easy extraction can save you time in removing and rotating the sleeves.

...lowers costs through extended life. Carrying out routine sleeve maintenance will increase sleeve life and can extend drum life.

...increased productivity. Cutting productivity comes from increased utilization due to less down time spent on unplanned drum maintenance.



IE JS30 mm blocks for 30 mm bits

Sleeves

Blocks

			30 mm Sleeve					
			Non-hardfaced Sleeve		Hardfaced Sleeve		Laser Clad Sleeve	
			Step Press Fit	Blocksaver	Step Press Fit	Blocksaver	Step Press Fit	Blocksaver
JS30 30 mm Bit Block	Dry	Non-hardfaced Block	100880312 XX	100937003 XX	100888055 X// 100935446 X8	100935459 X// 100935458 X8	100935485 XZ	100935484 XZ
		Hardfaced Block			100923366 //// 100935448 #8	100935461 //// 100935460 #8	100935452 //Z 100935451 #Z	100935491 //Z 100935490 #Z
		Laser Clad Block					100935563 ZL 100935564 ZR 100935565 ZLR	100935560 ZL 100935561 ZR 100935562 ZLR
	Wet	Non-hardfaced Block						
		Hardfaced Block			100735995 //// 100935447 #8	100917425 //// 100935471 #8	100935450 //Z 100935449 #Z	100935489 //Z 100935488 #Z
		Laser Clad Block					100935500 ZL 100935501 ZR 100935502 ZLR	100935557 ZL 100935558 ZR 100935559 ZLR

Not Recommended

Protection Code

Code	Block	Sleeve
XX	None	None
X//	None	CCO Circular
XZ	None	Laser Clad
X8	None	8 pointed Star
//Z	CCO Circular	Laser Clad
///	CCO Circular	CCO Circular
#Z	CCO Crosshatched	Laser Clad
ZL	Left & Top Laser Clad	Laser Clad
ZR	Right & Top Laser Clad	Laser Clad
ZLR	Left, Right & Top Laser Clad	Laser Clad
#8	CCO Crosshatched	CCO 8 pointed star

JS30	
Snap ring	00913824-0175
Wedge bit removal tool	100862609
Blocksaver adapter (1/8 NPTF)	100929838
Sleeve mainatenance tool	100709537
Hydraulic hand pump w/ hose & gauge (includes Blocksaver adapter)	100931024
Full maintenance kit for 30mm	100881615 (1)*
Sleeve bore wear measuring tool	100088590
Hairpin installer/extractor tool	100088590
Snap ring tool	01452026-0000
Hydraulic hand pump w/ hose	03069842-0006
Hydraulic hand pump w/ hose & gauge	100920837
Spray maintenance tool (Allen wrench)	100820720
Shanked bit removal tool	100836615

*Includes snap ring pliers, pump & hose w/o gauge, go-no-go gauge, sleeve maintenance tool, bit removal tool, hairpin tool, shanked bit removal tool



IE JS35 mm blocks for 30 mm, 35 mm, 43/45 mm bits

Sleeves

			30 mm Sleeve						35 mm Sleeve						43/35 mm Sleeve						
			Non-hardfaced Sleeve		Hardfaced Sleeve		Laser Clad Sleeve		Non-hardfaced Sleeve		Hardfaced Sleeve		Laser Clad Sleeve		Non-hardfaced Sleeve		Hardfaced Sleeve		Laser Clad Sleeve		
			Step Press Fit	Blocksaver	Step Press Fit	Blocksaver	Step Press Fit	Blocksaver	Step Press Fit	Blocksaver	Step Press Fit	Blocksaver	Step Press Fit	Blocksaver	Step Press Fit	Blocksaver	Step Press Fit	Blocksaver	Step Press Fit	Blocksaver	
Blocks	JS35 35 mm Bit Block	Dry	Non-hardfaced Block	100808398 XX	100937004 XX	100766165 X// 100935455 X8	100935470 X// 100935469 X8	100935487 XZ	100935486 XZ	100808399 XX	100937005 XX	100766163 X// 100935466 X8	100935477 X// 100935476 X8	100935516 XZ	100935515 XZ	100808400 XX	100937006 XX	100808397 X// 100935453 X8	100935483 X// 100935482 X8	100935538 XZ	100935537 XZ
			Hardfaced Block			100811525 //// 100935457 #8	100935475 //// 100935474 #8	100935499 //Z 100935498 #Z	100935495 //Z 100935494 #Z			100811526 //// 100935468 #8	100935481 //// 100935480 #8	100935524 //Z 100935523 #Z	100935520 //Z 100935519 #Z			100811527 //// 100935454 #8	100935465 //// 100935464 #8	100935546 //Z 100935545 #Z	100935542 //Z 100935541 #Z
			Laser Clad Block					100935512 ZL 100935513 ZR 100935514 ZLR	100935506 ZL 100935507 ZR 100935508 ZLR					100935534 ZL 100935535 ZR 100935536 ZLR	100935528 ZL 100935529 ZR 100935530 ZLR					100935554 ZL 100935555 ZR 100935556 ZLR	100935550 ZL 100935551 ZR 100935552 ZLR
		Wet	Non-hardfaced Block																		
			Hardfaced Block			100796355 //// 100935456 #8	100935473 //// 100935472 #8	100935497 //Z 100935496 #Z	100935493 //Z 100935492 #Z			100781368 //// 100935467 #8	100935479 //// 100935478 #8	100935522 //Z 100935521 #Z	100935518 //Z 100935517 #Z			100766164 //// 100880040 #// 100931954 #8	100935463 //// 100935462 #8	100935544 //Z 100935543 #Z	100935540 //Z 100935539 #Z
			Laser Clad Block					100935509 ZL 100935510 ZR 100935511 ZLR	100935503 ZL 100935504 ZR 100935505 ZLR					100935531 ZL 100935532 ZR 100935533 ZLR	100935525 ZL 100935526 ZR 100935527 ZLR					100933991 ZL 100933990 ZR 100935553 ZLR	100935547 ZL 100935548 ZR 100935549 ZLR

Not Recommended

Protection Code

Code	Block	Sleeve
XX	None	None
X//	None	CCO Circular
XZ	None	Laser Clad
X8	None	8 pointed Star
//Z	CCO Circular	Laser Clad
////	CCO Circular	CCO Circular
#Z	CCO Crosshatched	Laser Clad
ZL	Left & Top Laser Clad	Laser Clad
ZR	Right & Top Laser Clad	Laser Clad
ZLR	Left, Right & Top Laser Clad	Laser Clad
#8	CCO Crosshatched	CCO 8 pointed star

JS35

Snap ring	100704866
Wedge bit removal tool 30mm	100862609
Wedge bit removal tool 35mm	100863844
Wedge bit removal tool 43/35mm	100863845
Blocksaver adapter (M10 x 1.5mm)	100918117
Sleeve maintenance tool	100831188
Hydraulic hand pump w/ hose & gauge (includes Blocksaver adapter)	100931008
Full maintenance kit for 30mm	100832660*
Full maintenance kit for 35mm	100832661*
Full maintenance kit for 43/35mm	100832662*

*Includes snap ring pliers, pump & hose w/o gauge, go-no-go gauge, sleeve maintenance tool, bit removal tool, hairpin tool, shanked bit removal tool

JS35

Sleeve bore wear measuring tool	100088590
Hairpin installer/extractor tool	100088590
Snap ring tool	01452026-0000
Hydraulic hand pump w/ hose	03069842-0006
Hydraulic hand pump w/ hose & gauge	100920837
Spray maintenance tool (Allen wrench)	100820720
Shanked bit removal tool	100836615

JoyCut™ – cutting systems solution program



Competitively-priced quality cutting systems solution, supplied and supported by KMC's global network of sales, service and facilities.

The JoyCut program is a cutting systems solution that takes into account your mine's specific geological conditions and production requirements to optimize cutting efficiency, thereby maximizing the productivity of your mining equipment. Joy's cutting systems solution program not only analyzes your current pick performance, but also analyzes the performance of your continuous miner or shearer as a complete cutting system.

To provide the optimal cutting solution, JoyCut program begins by measuring and analyzing your mine's existing cutting system and cutting practices to establish baseline data. When required, geological samples are taken from the face for testing in our controlled laboratory. Komatsu has 60 years of industry-leading experience and an extensive database of field and experimental data that help us identify the right configuration and components to meet your cutting system requirements.

Through our direct service model, Komatsu works in close collaboration with you to increase the productivity and life of your cutting system through optimized system design and minimized downtime.

Benefits at a glance

Increased productivity

- Increases machine utilization by reducing maintenance and downtime
- Improves product size

Lower total cost of ownership

- Maximizes bit and sleeve life for lower operating costs
- More energy-efficient cutting leads to reduced component wear and less maintenance

Enhanced safety

- Reduces dust for improved machine operator environment
- Decreases unplanned maintenance activities



JoyCut design elements

Application

- Application specific custom fit cutting solution, that delivers optimal cutting and productivity performance
- Support – fully dedicated global team of cutting experts

Advanced design

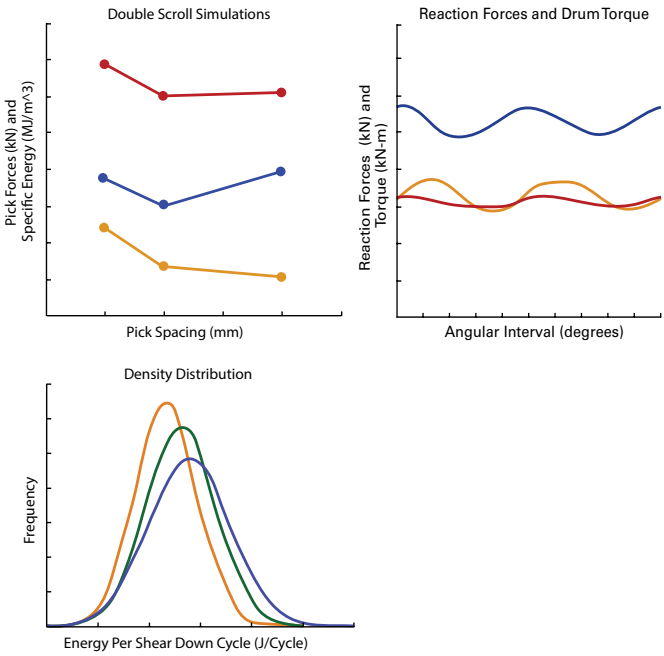
- Lowest cost per ton
- Application engineering practices combined with machine design
- Simulation – purpose-designed test rigs along with propriety drum design software contribute to optimal performance

Smart Solutions

- Comprehensive productivity analysis report
- Optimization – identify potential bottlenecks early to make corrections before they turn into problems
- Cutting system Integrated with machine performance

Environment

- Safety – new tools provide a safer and more efficient way to maintain and repair cutting systems
- Dust – reduce the amount of respirable dust created, creating a safer working environment
- Particle size – increased recovery of the mined material



JoyCut™ is a fully integrated systems cutting solution which...

...increases cutting efficiency, reduces the specific energy required, extends component life and improves product size.

...lowers operating costs, extends component life and reduces downtime and maintenance.

...improves safety, and reduces the amount of fines and dust produced to improve operator environment.

JoyCut - solving mining's toughest cutting challenges.



Komatsu Mining Corp.

Komatsu.com



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