Shears

ISS Series

INDECO

application areas

			F	II	III
Demolition & renovation	**Light Demolition**	• Demolition of masonry structures			
		• Brickwork			
		• Natural stone			
		• Renovation of interiors			
		• Autoclaved aerated concrete			
	Demolition of non-reinforced concrete structures	• Primary demolition of lightweight and standard concrete			
		• Primary demolition of heavyweight concrete			
		• Wall Elements			
		• Secondary demolition			
	Composite steel & concrete structure demolition	• Primary Demolition of Lightweight and Standard reinforced concrete			
		• Primary demolition of heavyweight steel - reinforced concrete			
		• Secondary Demolition floors, slabs and beams			
		• Separating rebars from pillars and struts			
		• Fiber-reinforced concrete			
		• Cutting rebars and steel reinforcements			
	Demolition of metallic buildings and structures	• Demolition of refineries		○	○
		• Cutting of Metal and steel structures		○	○
		• Cutting steel girders/beams	○	○	○
		• Cutting reinforcements		○	○
	Sorting and Loading	• Sorting			
		• Loading			
		• Waste handling			
		• Site clean-up			
	Pavement demolition	• Asphalt			
		• Concrete			
		• Composite surfaces			
Recycling	**Processing**	• Scrap material processing	○	○	○
		• Cutting tyres	○	○	○
		• Processing rail cars	○	○	○
		• Processing cars, trucks and general automotive	○	○	○
		• Cutting tanks	○	○	○
	Handling and sorting	• Scrap material handling		○	○
		• Scrap material sorting		○	○
		• Urban waste			
		• Industrial waste			
		• Wood and tyres			
	Downsizing and sorting	• Material downsizing and sorting in recycling quarries			

F| fixed configuration II| second-member configuration III| third-member configuration

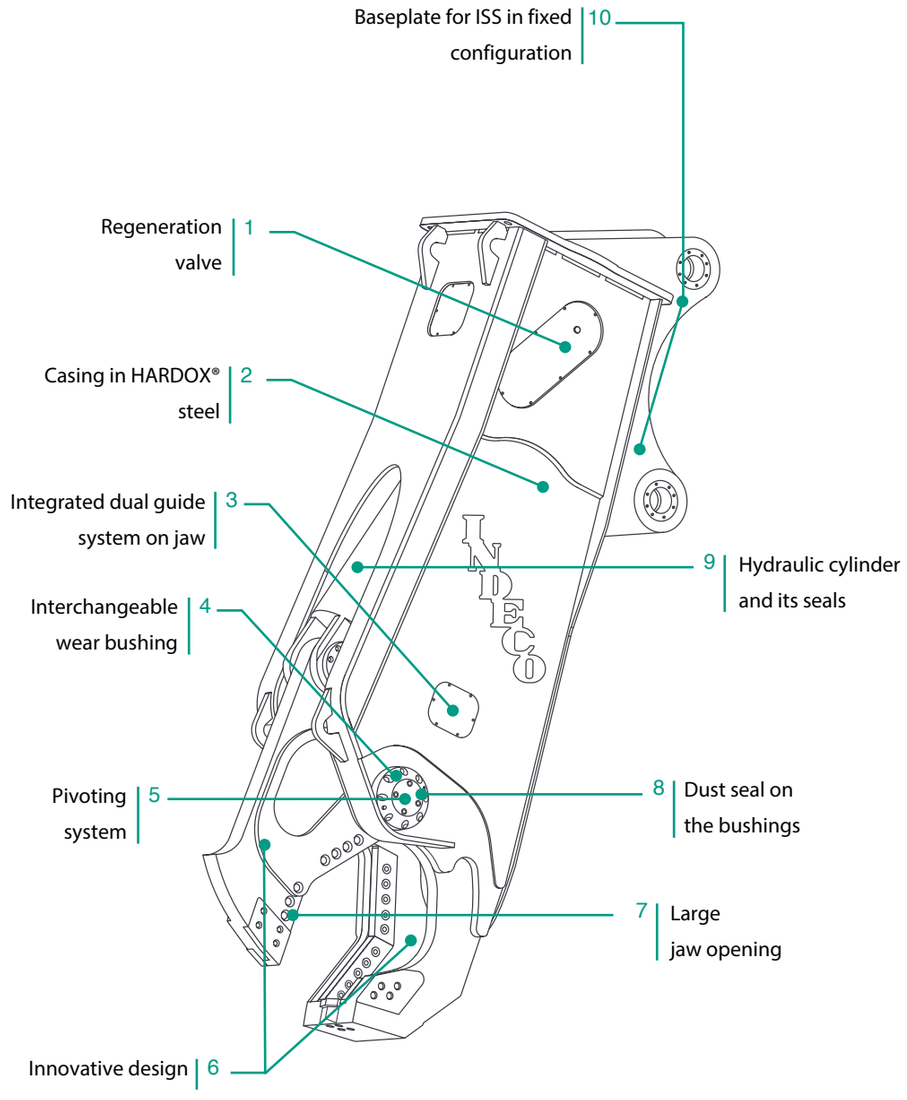
ISS shears

Vital tools for anyone working in the scrap metal or recycling sectors, Indeco ISS Steel Shears stand out for their cutting-edge design, for their extreme robustness and for their technical innovations which substantially increase their efficiency.
Rapid, efficient and surprisingly powerful, Indeco ISS shears are the ideal choice for demolishing any type of metal structure.
Indeco's tried and tested continuous rotation hydraulic system, found on all of our other rotating products, enables the shear to work in the best possible position, while its large jaw opening and fast cycle times and its incredible cutting power, make all demolition operations fast and effective.
Special extra-strength HARDOX® steel alloys make ISS shears outstandingly resistant and reliable.
Each of the main knives and guide-blades was designed with four cutting surfaces and so can be rotated three times before replacement; promising more consistency, uptime, and production in your operation.

features of Indeco hydraulic shears

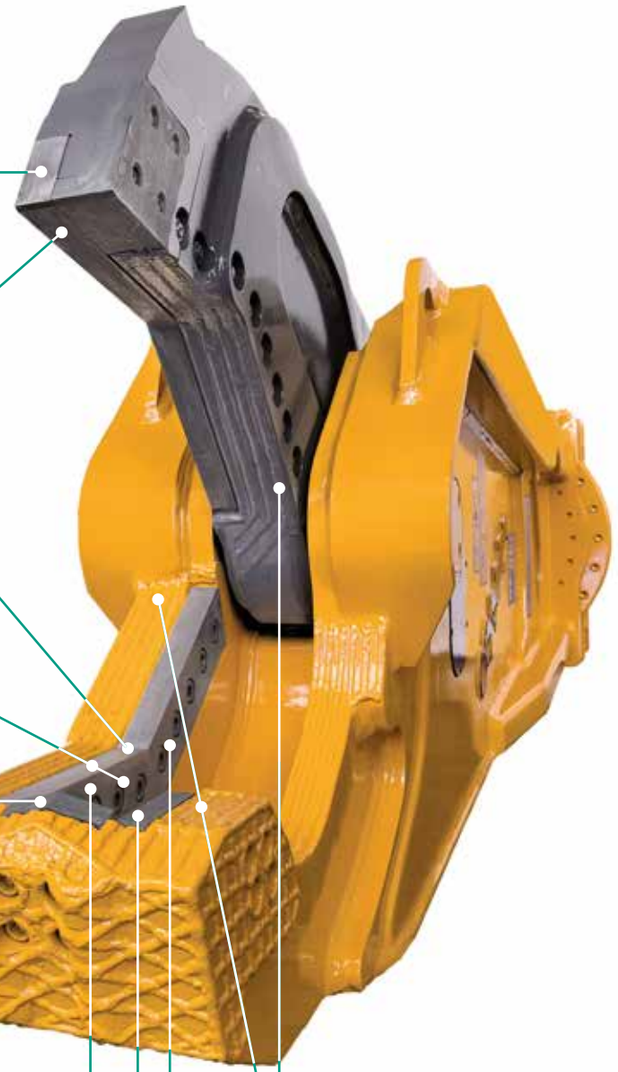
The regeneration valve **|1|** speeds up no-load movement of the jaw, which opens and closes more quickly, thus reducing cycle times and increasing productivity.
The chassis **|2|**, made from extra-strength HARDOX® steel alloys, eliminates any flexing of the shear body.
The unique integrated dual guide system **|3|** can be used to adjust the alignment tolerance of the jaw and prevents it from buckling during the cutting stroke.
The interchangeable "quick change" wear bushings **|4|** ensure that the knives are always optimally aligned.
The heavy-duty pivot group **|5|** provides long-term cutting efficiency, keeps jaws aligned and prevents buckling.
The innovative design **|6|** improves cutting efficiency compared to similar products.
The large jaw opening **|7|** provides greater flexibility for numerous applications.
The special insert bushings **|8|** are made from an anti-friction material with a dust seal.
The large, powerful hydraulic cylinder **|9|** is an exclusive Indeco design, and provides enough force to deal with any type of working conditions. Its long-lasting seals are able to withstand up to 700 bars of pressure.
The baseplate for the ISS in fixed configuration **|10|** makes the attachment much lighter and less bulky, which means that a larger shear can be used on the excavator.
The shears have full high-speed 360° hydraulic rotation **|11|** for better positioning and optimal cutting in any working position.
The mounting bracket for the 2nd-member configuration **|12|** is used to mount the ISS straight onto the excavator boom. In this configuration, ideal for recycling ferrous material, a large attachment can be mounted even on a relatively light carrier.
The universal baseplate for 2nd member mounting brackets **|13|** is compatible with all carriers.
The 3rd member mounting bracket **|14|** is used to mount the ISS on the carrier stick (bucket-mounted), ideal for demolition jobs.
The attachment plate **|15|** is compatible with the plate for Indeco breakers of similar weight.

Fixed configuration



Cutting capacity

The Indeco ISS shears have exceptional capacity and cutting force, due to the following specific design features:



Exclusive dual-profile piercing tip system in both upper and lower tips, for a clean gradual cut

Four special steel blades, all the same size, fully reversible and interchangeable, so that all of the cutting edges can be used

Dual blade-guide system for maximum precision cutting

Exclusive dual-profile piercing tip system in both upper and lower tips, for a clean gradual cut

Wear-resistant high-strength welding, standard

Deep jaw and long blades for maximum depth of cut

Wear-resistant high-strength welding, standard

Threaded screws on guide blade, to make it easier to remove the blade if there is a blockage

Cutting register adjustment system provides efficient working action at all times

Technical Data	ISS 10/20	ISS 20/30	ISS 25/40
Type of carrier	4 5	5	5
Min. excavator weight in fixed version (boom-mounted) configuration	8 tons	18 tons	23 tons
Min. excavator weight in 2nd member (boom-mounted) configuration	10 tons	20 tons	25 tons
Min. excavator weight in 3rd member (bucket-mounted) configuration	20 tons	30 tons	40 tons
Attachment operating weight fixed version	2000 Kg	3250 Kg	4500 Kg
Attachment operating weight 2nd member	2400 Kg	3600 Kg	5000 Kg
Attachment operating weight 3rd member	2400 Kg	3650 Kg	4800 Kg
Maximum working pressure	400 bars	400 bars	400 bars
Oil delivery	100 ÷ 200 l/min	200 ÷ 300 l/min	220 ÷ 360 l/min
Maximum rotation oil flow	20 l/min	30 l/min	40 l/min
Maximum rotation pressure	110 bars	110 bars	110 bars
Maximum clamping force at tip	120 tons	140 tons	190 tons
Clamping force class	600 tons	800 tons	1000 tons
Length	2724 mm	3400 mm	3800 mm
Jaw width	450 mm	560 mm	640 mm
Jaw opening	550 mm	660 mm	740 mm
Max jaw depth	570 mm	680 mm	760 mm
Closure time	2,4 ÷ 4,6 s	2,8 ÷ 4 s	3,2 ÷ 5 s
Opening time	2,2 ÷ 4,2 s	2,6 ÷ 3,8 s	2,8 ÷ 4,8 s
Compatibility of attachment plate with breaker	HP 3000 - HP 4000	HP 7000 - HP 9000	HP 7000 - HP 9000

N.B. Weights may vary according to the various configurations. The information in this catalog is subject to change without notice and without any obligation or responsibility on our part. The content of this catalog is provided as a courtesy to readers and constitutes non binding information only.

Carrier key

Compact excavator | Miniloader | Backhoe loader | Wheeled excavator | Tracked excavator

ISS Fixed

ISS 2nd member

ISS 3rd member

Common configurations on the following models: ISS 10/20 - ISS 20/30 - ISS 25/40 - ISS 30/50 - ISS 35/60 - ISS 45/90

Technical Data	ISS 30/50	ISS 35/60	ISS 45/90
Type of carrier	5	5	5
Min. excavator weight in fixed version (boom-mounted) configuration	27 tons	33 tons	42 tons
Min. excavator weight in 2nd member (boom-mounted) configuration	30 tons	35 tons	45 tons
Min. excavator weight in 3rd member (bucket-mounted) configuration	50 tons	60 tons	90 tons
Attachment operating weight fixed version	5600 Kg	7200 Kg	9700 Kg
Attachment operating weight 2nd member	6300 Kg	7800 Kg	11000 Kg
Attachment operating weight 3rd member	6100 Kg	7800 Kg	10400 Kg
Maximum working pressure	400 bars	400 bars	400 bars
Oil delivery	240 ÷ 400 l/min	300 ÷ 550 l/min	360 ÷ 700 l/min
Maximum rotation oil flow	50 l/min	50 l/min	60 l/min
Maximum rotation pressure	130 bars	130 bars	130 bars
Maximum clamping force at tip	210 tons	240 tons	275 tons
Clamping force class	1300 tons	1500 tons	2500 tons
Length	4040 mm	4238 mm	4840 mm
Jaw width	680 mm	730 mm	815 mm
Jaw opening	850 mm	950 mm	1100 mm
Max jaw depth	860 mm	970 mm	1120 mm
Closure time	3,6 ÷ 5,8 s	3,6 ÷ 6,4 s	3,8 ÷ 7,2 s
Opening time	3,4 ÷ 5,6 s	3,2 ÷ 5,6 s	3,6 ÷ 7 s
Compatibility of attachment plate with breaker	HP 7000 - HP 9000	HP 12000 - HP 18000	HP 12000 - HP 18000

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accessories

1 | Connecting hoses
We recommend using original Indeco high- and low-pressure hoses to connect various tools to the hydraulic system on the carrier.

2 | Special 2nd member universal mounting bracket
Indeco have designed our second-member mounting system to be flexible, extremely strong and long-lasting, and it can be used on a variety of different carriers. Digital machined-true surfaces ensure perfect alignment of the rotating components, and all service items are easily accessed via the four access panels.

3 | Mounting bracket for 3rd member configuration
Indeco have designed our 3rd member mounting brackets to give the operator the best flexibility in terms of range of reach and positioning. And they're designed identical to OEM bucket dimensions with pre-installed pins; allowing for quick change as needed and the use of quick-coupler systems if desired.

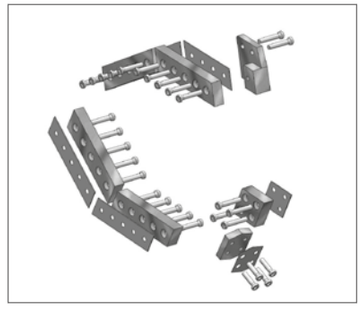
4 | Blades
Made with special heat-treated steels, using an exclusive Indeco technology which optimizes their performance and durability.

1 |

2 |

3 |

4 |



appetite guide

Indeco shears are designed to cut and reduce the size of the most common materials used in demolitions in the mechanical, naval and construction sectors. The figures set out below refer to cutting capacity under normal working conditions. Results may vary according to such factors as how robust the material to be cut is, what condition the shear blades are in, the characteristics of the carrier and the operator's ability. Appropriate maintenance of the shear is crucial for maximum productivity of cutting operations.

	ISS 10/20	ISS 20/30	ISS 25/40	ISS 30/50	ISS 35/60	ISS 45/90
●	50 mm	70 mm	90 mm	105 mm	116 mm	145 mm
I	330 IPE*	400 IPE*	450 IPE*	500 IPE*	550 IPE*	600 IPE*
I	260 HEA	300 HEA	340 HEA	360 HEA	400 HEA	450 HEA
▬	13 mm**	16 mm**	19 mm**	22 mm**	25 mm**	31 mm**
■	55 mm	65 mm	85 mm	96 mm	110 mm	137 mm
◎	265x9 mm***	320x9,5 mm***	440x9,5 mm***	500x9,5 mm***	570x9,5 mm***	713x9,5 mm***

* These figures may vary for beams of different shapes, thicknesses and material
** Blade thickness affect the shear's capacity to pierce sheet metal in various applications
*** Refer to mild steel tubing and not to other materials such as stainless steel, cast steel etc.

N.B. All illustrations and numerical data in this catalog are purely indicative and subject to change at our discretion and without notice.
We therefore reserve the right to modify them with a view to improving and continuously developing our product.