

# **Shears**

**ISS Series** 





# **Application areas**

			F		
	Light Demolition	Demolition of masonry structures			
44	Light Demontion	Brickwork			+
EH.		Natural stone			+
		Renovation of interiors	-		+
C(* )5		Autoclaved aerated concrete			+
Demolition	Demolition of	Primary demolition of lightweight and			+
& renovation	non-reinforced concrete	standard concrete			
a removation	structures	Primary demolition of heavyweight concrete			+
		Wall Elements			+
		Secondary demolition			+
		·			+
	Composite steel & concrete structure demolition	Primary Demolition of Lightweight and Standard			
	structure demonition	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		0	0
		Cutting of Metal and steel structures		0	0
		Cutting steel girders/beams	0	0	0
		Cutting reinforcements		0	0
	Sorting and Loading	Sorting			
		Loading			
		Waste handling			
		Site clean-up			
	Pavement demolition	Asphalt			
		Concrete			1
		Composite surfaces			1
	Drogossing	- Seran material processing	0	0	0
<b>S A</b> /	Processing	Scrap material processing     Cutting tyres			
87.55		Cutting tyres     Processing rail cars	0	0	0
		Processing rail cars     Processing cars, trucks and general	1		0
			0	0	0
Recycling		automotive	$\perp$		+
		Cutting tanks	0	0	0
	Handling and sorting	Scrap material handling		0	0
		Scrap material sorting		0	0
		Urban waste			
		Industrial waste			
		Wood and tyres			
	Downsizing and sorting	<ul> <li>Material downsizing and sorting in</li> </ul>			
		recycling quarries	1		

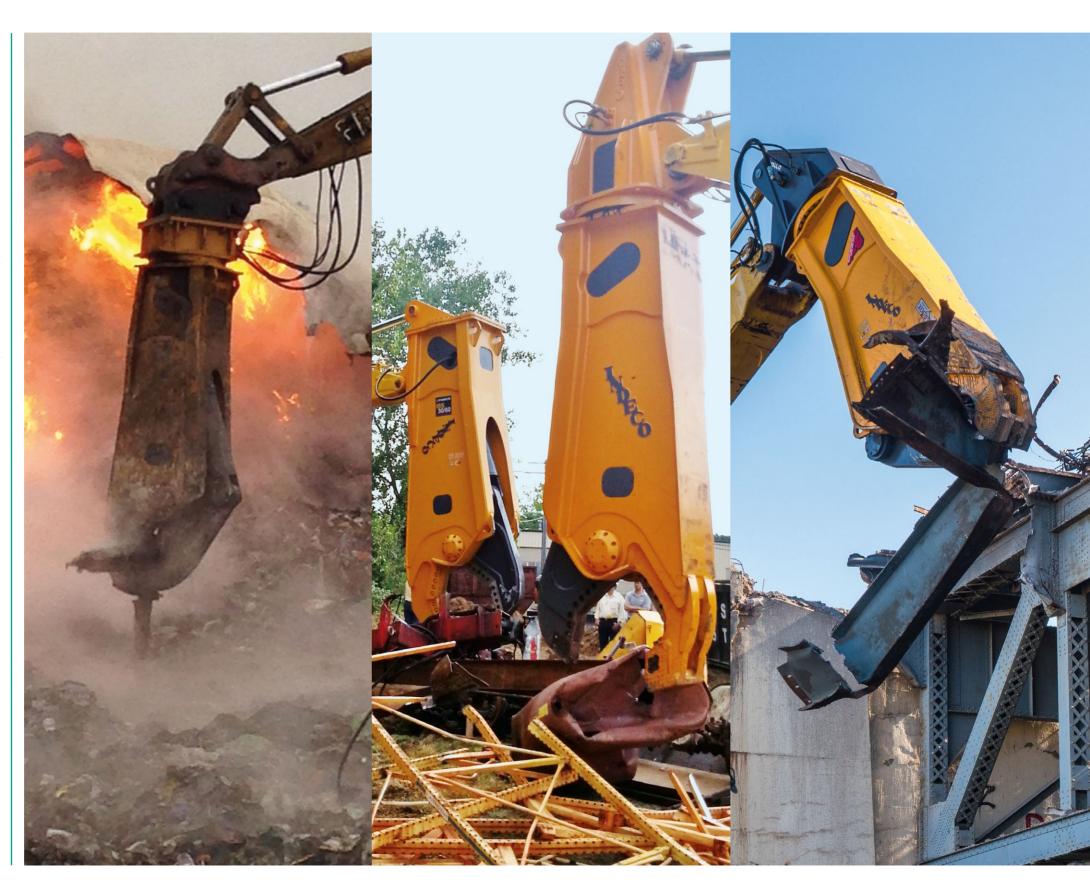
## **ISS** shears

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® alloy steel 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® alloy steel, 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 antifriction 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.

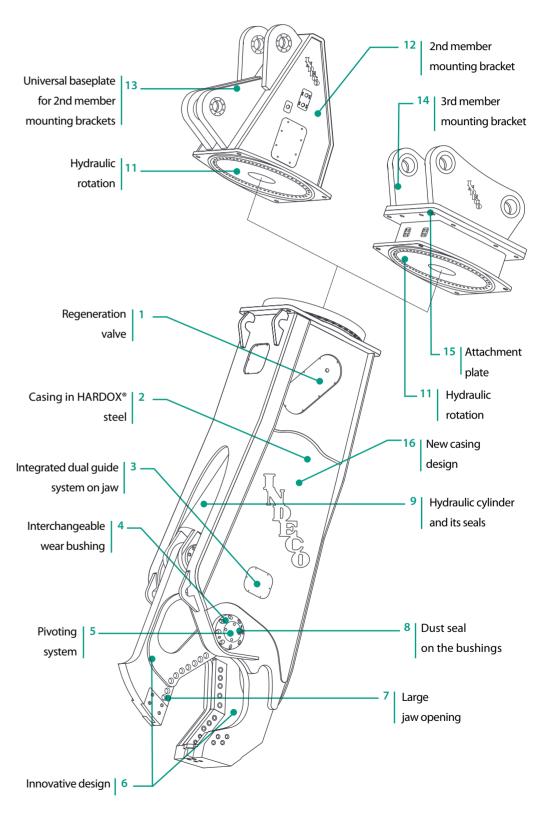
The universal baseplate for 2nd member mounting brackets |13| is compatible with all carriers.

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.

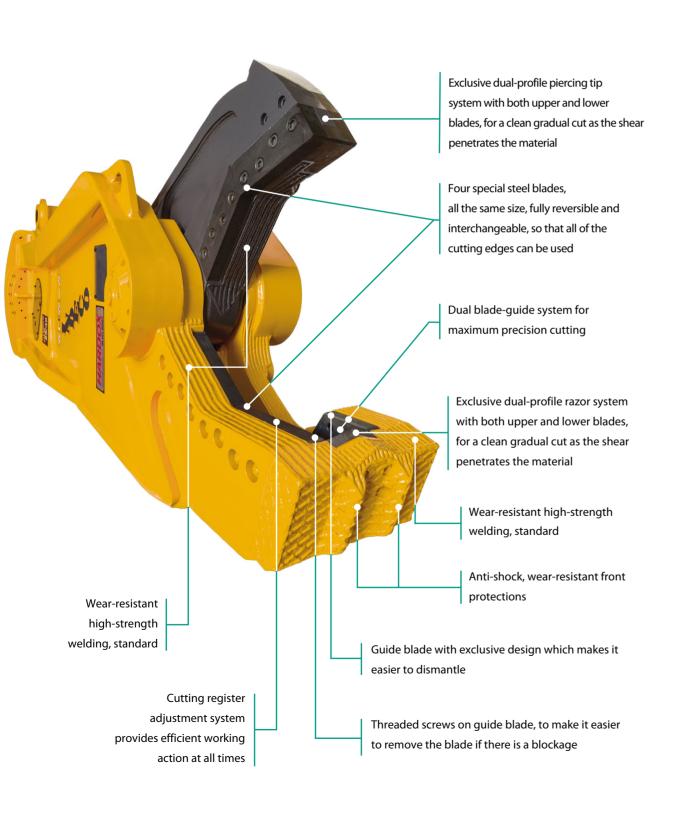
In the latest design [16], the shear is more compact with a thicker casing, thus improving its manoeuvrability and balance, as well as increasing its overall robustness.

## 2nd and 3rd member configuration



### **Cutting capacity**

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





Technical Data	ISS 5/7	ISS 8/13	ISS10/20	ISS 20/30
Type of carrier	1 2 3	1 2 3	4 5	5
Min. excavator weight in fixed version (boom-mounted) configuration	4 tons	6 tons	8 tons	18 tons
Min. excavator weight in 2nd member (boom-mounted) configuration	5 tons	8 tons	10 tons	20 tons
Min. excavator weight in 3rd member (bucket-mounted) configuration	7 tons	13 tons	20 tons	30 tons
Attachment operating weight fixed version	480 Kg	1050 Kg	2000 Kg	3250 Kg
Attachment operating weight 2nd member	570 Kg	1300 Kg	2400 Kg	3600 Kg
Attachment operating weight 3rd member	570 Kg	1250 Kg	2400 Kg	3650 Kg
Maximum working pressure	300 bars / 220 bars*	350 bars	350 bars	350 bars
Oil delivery	50 ÷ 120 l/min	90 ÷ 180 l/min	100 ÷ 200 l/min	200 ÷ 300 l/min
Maximum rotation oil flow	10 l/min	15 l/min	20 l/min	30 l/min
Maximum rotation pressure	110 bars	110 bars	110 bars	110 bars
Maximum clamping force at tip	45 tons	80 tons	120 tons	140 tons
Clamping force class	150 tons	300 tons	600 tons	800 tons
Length	1700 mm	2100 mm	2724 mm	3400 mm
Jaw width	340 mm	400 mm	450 mm	560 mm
Jaw opening	350 mm	470 mm	550 mm	660 mm
Max jaw depth	320 mm	450 mm	570 mm	680 mm
Closure time	2 ÷ 3 s	2,9 ÷ 5 s	2,4 ÷ 4,6 s	2,8 ÷ 4 s
Opening time	1 ÷ 1,6 s	1,5 ÷ 3 s	2,2 ÷ 4,2 s	2,6 ÷ 3,8 s
Compatibility of attachment plate with breaker	HP 900	HP 2000 - HP 2500	HP 3000 ÷ HP 4000	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











Tracked excavator





**ISS Fixed** 



ISS 2nd member



ISS 3rd member

Common configurations on the following models: ISS 5/7 - ISS 8/13 - ISS 10/20 - ISS 20/30 - ISS 25/40 - ISS 30/50 - ISS 35/60 - ISS 45/90

<sup>\*</sup>low pressure version

Technical Data	ISS 25/40	ISS 30/50	ISS 35/60	ISS 45/90
Type of carrier	5	5	5	5
Min. excavator weight in fixed version (boom-mounted) configuration	23 tons	27 tons	33 tons	42 tons
Min. excavator weight in 2nd member (boom-mounted) configuration	25 tons	30 tons	35 tons	45 tons
Min. excavator weight in 3rd member (bucket-mounted) configuration	40 tons	50 tons	60 tons	90 tons
Attachment operating weight fixed version	4500 Kg	5600 Kg	6800 Kg	9700 Kg
Attachment operating weight 2nd member	5000 Kg	6300 Kg	7500 Kg	11000 Kg
Attachment operating weight 3rd member	4800 Kg	6100 Kg	7600 Kg	10400 Kg
Maximum working pressure	350 bars	350 bars	350 bars	350 bars
Oil delivery	220 ÷ 360 l/min	240 ÷ 400 l/min	300 ÷ 550 l/min	360 ÷ 700 l/min
Maximum rotation oil flow	40 l/min	50 l/min	50 l/min	60 l/min
Maximum rotation pressure	110 bars	130 bars	130 bars	130 bars
Maximum clamping force at tip	195 tons	210 tons	240 tons	275 tons
Clamping force class	1100 tons	1300 tons	1500 tons	2500 tons
Length	3500 mm	4040 mm	4100 mm	4840 mm
Jaw width	670 mm	680 mm	760 mm	815 mm
Jaw opening	760 mm	850 mm	950 mm	1100 mm
Max jaw depth	770 mm	860 mm	970 mm	1120 mm
Closure time	3,2 ÷ 5 s	3,6 ÷ 5,8 s	3,6 ÷ 6,4 s	3,8 ÷ 7,2 s
Opening time	2,8 ÷ 4,8 s	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 7000 - HP 9000	HP 12000 - HP 18000	HP 12000 - HP 18000

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Carrier key











Tracked excavator







ISS 2nd member



Common configurations on the following models: ISS 5/7 - ISS 8/13 - ISS 10/20 - ISS 20/30 - ISS 25/40 - ISS 30/50 - ISS 35/60 - ISS 45/90

## **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.





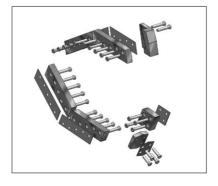
2 |



3 |



4 I



## 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 5/7	ISS 8/13	ISS 10/20	ISS 20/30	ISS 25/40	ISS 30/50	ISS 35/60	ISS 45/90	
•	20 mm	35 mm	50 mm	70 mm	90 mm	105 mm	116 mm	145 mm	
	60x3 mm*	220x6 mm*	265x9 mm*	320x9,5 mm*	440x9,5 mm*	500x9,5 mm*	570x9,5 mm*	713x9,5 mm*	
	20 mm	40 mm	55 mm	65 mm	85 mm	96 mm	110 mm	137 mm	
	6 mm**	10 mm**	13 mm**	16 mm**	20 mm**	22 mm**	25 mm**	31 mm**	
I	120 IPE***	240 IPE***	330 IPE***	400 IPE***	450 IPE***	500 IPE***	550 IPE***	600 IPE***	
I	100 HEA	200 HEA	260 HEA	300 HEA	340 HEA	360 HEA	400 HEA	450 HEA	
I	150 I BEAM (W)	250 I BEAM (W)	330 I BEAM (W)	410 I BEAM (W)	460 I BEAM (W)	560 I BEAM (W)	660 I BEAM (W)	7901BEAM (W)	
JIS G3192	100x100x17	200x200x50	250x250x72	300x300x93	400x300x105	450x300x121	500x300x125	600x300x133	

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.

<sup>\*</sup>Refers to mild steel tubing and not to other materials such as stainless steel, cast steel etc.

<sup>\*\*</sup>The shear tip will take longer to cut into thicker sheet metal

<sup>\*\*\*</sup>These figures may vary for beams of different shapes, thicknesses and material

## The full range of other Indeco products

Products		Weight		Prod	Products		ght	Pro	Products		Weight	
IFP	8 X	750	Kg	IHC	50	200	Kg	ISS***	10/20	2400	K	
IFP	13 X	1300	Kg	IHC	70	445	Kg	ISS***	20/30	3650	K	
IFP	19 X	1800	Kg	IHC	75	485	Kg	ISS***	25/40	4800	K	
IFP	28 X	2800	Kg	IHC	150	970	Kg	ISS***	30/50	6100	K	
IFP	35 X	3450	Kg	IHC	250	1280	Kg	ISS***	35/60	7600	K	
IFP	45 X	4550	Kg	IHC R	50	425	Kg	ISS***	45/90	10400	K	
IRP	5 X	570	Kg	IHC R	70	630	Kg	ĪMH	3	295	K	
IRP	11 X	1150	Kg	IHC R	75	670	Kg	ĪMH	5	535	K	
IRP	18 X	1700	Kg	IHC R	150	1185	Kg	IMH	6	555	K	
IRP	23 X	2300	Kg	IHC R	250	1520	Kg	IMH	8	595	K	
IRP	29 X	2950	Kg	IMG S**	400	380	Kg	IMH	10	735	K	
IRP	36 X	3600	Kg	IMG S**	600	570	Kg	IMH	14	1045	K	
IRP	45 X	4500	Kg	IMG S**	1200	1140	Kg	IMH	20	1495	K	
IMP*	15	1500	Kg	IMG S**	1700	1610	Kg	IMH	28	1540	K	
IMP*	20	2080	Kg	IMG S**	2300	2180	Kg	ĪMH	4.2 SS	1400	K	
IMP*	25	2400	Kg	IMG S**	2800	2650	Kg	IMH	SG16	840	K	
IMP*	35	3500	Kg	ISS***	5/7	570	Kg	IMH	SG20	840	K	
IMP*	45	4500	Kg	ISS***	8/13	1250	Kg					

<sup>\*</sup>Crusher configuration - \*\*Sorter configuration - \*\*\*Third-member configuration

Indeco ind S.p.a. viale Lindemann, 10 z.i. - 70132 Bari - Italy tel. +39 080 531 33 70 - fax +39 080 537 79 76 info@indeco.it - www.indeco.it/en

