



HP series hydraulic breakers

## Indeco breakers

Indeco provides the greatest high-tech solutions for your demolition needs, wherever you are in the world. In-depth research into hydraulic systems, materials, heat treatment and complementary accessories have enabled our company to establish a reputation for product excellence on world markets.

#### Features of Indeco breakers

With its many different models, divided into large, medium and small and in various versions, Indeco has the widest range of breakers available anywhere in the world.

This provides end-users with a huge choice, ensuring that they can find the ideal breaker/ excavator match.

Indeco breakers have a characteristically slimwellproportioned structure which makes it possible to work in comparative comfort even under the most difficult of conditions.

The use of special low-alloy steels, exclusively manufactured according to Indeco's own formula, greatly lengthens the average working life of the most important breaker components.

1 Indeco breakers, with their special intelligent hydraulic system can automatically vary the energy and frequency of the blows according to the hardness of the material being demolished. This optimises the hydraulic pressure delivered by the machine, thus improving productivity and enhancing the overall performance.

2 Exclusive features such as the synchronised internal distributor in line with the main shaft, the oil cushions for damping vibrations and the hydraulic system with dynamic seals which totally eliminate the need for bushings. A decisive factor for lengthening breaker life span

and substantially reducing breakdowns, even where there are moving parts

**3** Piston divided into two parts for a higher energy impact and lower running costs.

In particular the centralised greasing system enables the sliding parts to remain lubricated even when the breaker is working horizontally, thus considerably reducing wear and extending product life time.

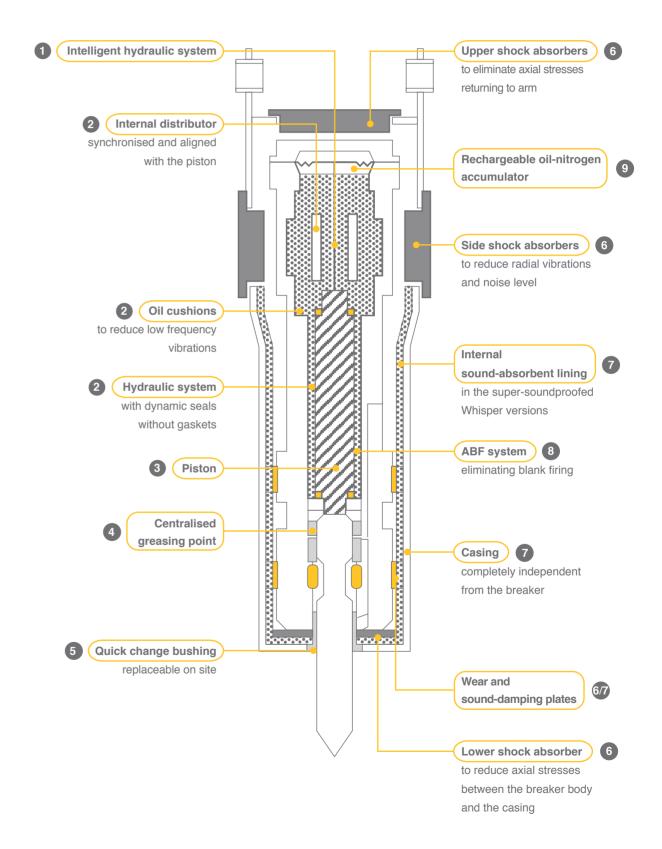
**5** The "quickchange" interchangeable bushing is available in different materials according to the different applications, is inserted where the tool moves, reduces maintenance times and costs by cutting out the long downtimes needed to replace the traditional fixed bushing.

6 All the working machines that use the Indeco breaker benefit from its dual shock absorption System: one internal hydraulic system and one mechanical system outside the breaker body which significantly reduce the vibrations transmitted to the excavator. The excavator boom is exposed to a lower stress because of the lower weight of the Indeco breaker, in working conditions, compared with a breaker in the same class.

Alongside the standard version the SUPErsoundproofed Whisper version has been produced whose body is lined internally with sound-absorbent material and an anti-rumble paint, which - combined with a few modifications to the bushing - enable noise emission levels to be considerably reduced.

The brand-new ABF (Anti Blank Firing) system installed on all the med-and maxi-range Indeco breakers, cuts out blank fire by eliminating any down pressure from the breaker whenever the tool is not resting firmly on the surface to be demolished. This increases the service life of all components subject to wear and tear as well as reducing stress to the breaker body and excavator arm.

**9** The reloadable oil-nitrogen accumulator, reducing pressure peaks, also diminishes the stress in the hydraulic circuit of the excavator; it also keeps the gas load constant and with it the force per blow; it requires less maintenance which reduces running costs.



# applications

### small breakers

Despite their compact size, Indeco's range of small breakers are exceptionally reliable, quiet and efficient, and best suited for such jobs as excavations work, highway maintenance, demolitions

and recycling in city areas and building refurbishment. Their versatility makes them extremely efficient in specialist jobs such as maintenance in iron foundries.



## mid-range breakers

Their excellent weight/power ratio and their slimline structure make the mid-range Indeco breakers the ideal choice for classical applications, such as demolishing buildings, earthworks in inhabited areas and secondary demolitions in quarries, as well as for more specific tasks. In fact, midi breakers are used for underwater work using a special kit - as well as for digging narrow deep trenches and removing casting slag from blast furnaces.



large breakers

No job is too tough for an Indeco breaker. Combining maximum power with the effectiveness of intelligent technology, Indeco's larger breakers are unbeatable when it comes to completing the toughest jobs in the shortest possible time-frame - whether it's the biggest demolition jobs, primary breaking in quarries, digging foundations, or excavating huge rail and road tunnels.



# the small breaker range the HP series

Excellent working companions, mini breakers form the largest class of breakers within the Indeco range.





Technical Data	HP 150 / HP 150 Heavy Duty	HP 200
Excavator weight (possible)	0,7 ÷ 3 tons	1,4 ÷ 5 tons
Weight of breaker	80 / 98 kg (Heavy Duty)	*р.в. <b>130 kg</b> /w.т.р. <b>160 kg</b>
Steel diameter	45 mm	48 mm
Pressure adjusted to the excavator	160 bars	160 bars
Back pressure max	11 bars	11 bars
Energy class	200 joule	240 joule
Striking rate	540 ÷ 2040 n/min	700 ÷ 1800 n/min

For data on the pressure adjusted to the breaker and on oil flow, please consult the "Parameters for selecting and adjusting the breaker" page.



HP 350	HP 500	HP 600	HP 700	HP 900
1,7 ÷ 6,5 tons	3 ÷ 8 tons	3,5 ÷ 10,5 tons	4 ÷ 12 tons	5 ÷ 14 tons
* <sub>Р.В.</sub> 210 kg/w.т.р. 230 kg	* <sub>Р.В.</sub> 300 kg/w.т.р. 320 kg	* <sub>Р.В.</sub> 340 kg/w.т.р. 390 kg	440 kg	550 kg
56 mm	65 mm	75 mm	80 mm	90 mm
160 bars	160 bars	170 bars	170 bars	170 bars
12 bars	12 bars	11 bars	12 bars	11 bars
450 joule	610 joule	720 joule	830 joule	1060 joule
540 ÷ 1540 n/min	780 ÷ 1620 n/min	600 ÷1340 n/min	620 ÷ 1500 n/min	570 ÷ 1180 n/min

\* P.B. pins and bushings version - W.T.P. soundproofed Whisper top plate version.

# the mid-range breakers the HP series

A perfect blend of power and agility characterises the mid range Indeco breakers, tireless partners even on the toughest of jobs.



Technical Data	HP 1200	HP 1500	HP 1800 ABF	HP 2000 ABF
Excavator weight (possible)	6,5 ÷ 16 tons	10 ÷ 20 tons	12 ÷ 22 tons	15 ÷ 25 tons
Weight of breaker	650 kg	850 kg	1000 kg	1200 kg
Steel diameter	90 mm	110 mm	115 mm	120 mm
Pressure adjusted to the excavator	170 bars	180 bars	180 bars	180 bars
Back pressure max	8,5 bars	10 bars	8 bars	8 bars
Energy class	1490 joule	1720 joule	2000 joule	2440 joule
Striking rate	450 ÷ 980 n/min	420 ÷1000 n/min	440 ÷ 1060 n/min	460 ÷ 940 n/min

For data on the pressure adjusted to the breaker and on oil flow, please consult the "Parameters for selecting and adjusting the breaker" page.



HP 2500 ABF	HP 2750 ABF	HP 3000 ABF
16 ÷ 28 tons	16 ÷ 28 tons	19 ÷ 32 tons
1500 kg	1690 kg	1900 kg
130 mm	135 mm	140 mm
180 bars	190 bars	200 bars
7 bars	7 bars	8 bars
3320 joule	3650 joule	4370 joule
400 ÷ 870 n/min	400 ÷ 870 n/min	360 ÷ 870 n/min

# the large breaker range the HP series

This is the most prestigious class, containing the top range of Indeco breakers. They are top breakers not only in terms of size, but also in their outstanding performance.



Technical Data	HP 3500 ABF	HP 4000 ABF	HP 5000 ABF	HP 7000 ABF
Excavator weight (possible)	21 ÷ 38 tons	23 ÷ 42 tons	27 ÷ 50 tons	32 ÷ 63 tons
Weight of breaker	2200 kg	2500 kg	3000 kg	4000 kg
Steel diameter	145 mm	150 mm	160 mm	180 mm
Pressure adjusted	210 bars	210 bars	210 bars	210 bars
Back pressure max	7 bars	8 bars	7 bars	8,5 bars
Energy class	5160 joule	6080 joule	7990 joule	10350 joule
Striking rate	370 ÷ 760 n/min	340 ÷ 820 n/min	300 ÷ 670 n/min	310 ÷ 580 n/min

For data on the pressure adjusted to the breaker and on oil flow, please consult the "Parameters for selecting and adjusting the breaker" page.

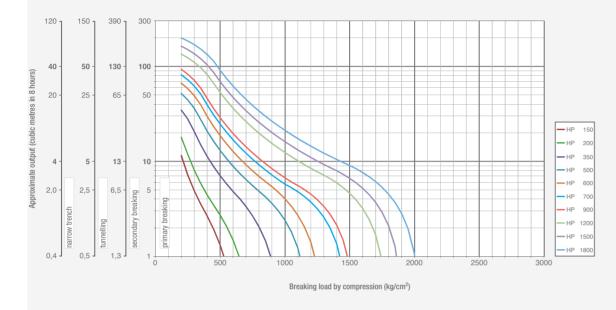


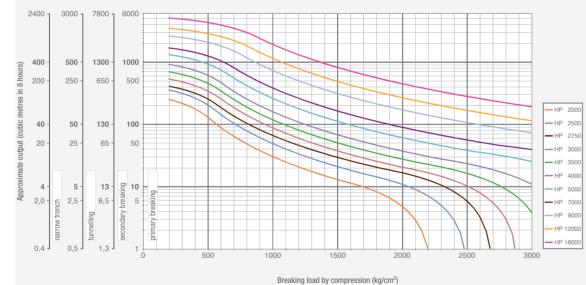
HP 9000 ABF	HP 12000 ABF	HP 18000 ABF
39 ÷ 80 tons	45 ÷ 120 tons	60 ÷ 140 tons
5000 kg	7800 kg	11050 kg
195 mm	215 mm	250 mm
210 bars	230 bars	230 bars
8 bars	9 bars	11 bars
14120 joule	18930 joule	25000 joule
270 ÷ 540 n/min	240 ÷ 550 n/min	240 ÷ 460 n/min

# parameters for selecting and adjusting the breaker

Model		Breaker/carrier compatibility (tons)*	Valori di regolazione pressione (bar)/portata olio (l/min)**	Model	Breaker/carrier compatibility (tons)*	Valori di regolazione pressione (bar)/portata olio (l/min)**
HP	150	0,7 3 0,8 2,5	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	HP 2500	16 28 19 24	<sup>115</sup> 125 130 140 160 <sup>140</sup> 130 125
HP	200	1,4 5 2 4	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	HP 2750	16 28 19 24	120 135 145 130 135 145 160 145 135 130
HP	350	1,7 6,5 2,5 5	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	HP 3000	19     32       21     28	<sup>125</sup> <sub>135</sub> <sub>140</sub> <sup>150</sup> 180 <sup>170</sup> <sup>160</sup> 145
HP	500	3 8 3,5 6,5	<sup>105</sup> 115 120 <sup>125</sup> 80 <b>70</b> 60 50	HP 3500	21 38 24 30	<sup>130</sup> <sub>135</sub> 140 <sup>160</sup> 200 <sup>185</sup> <sup>175</sup> 160
HP	600	3,5 10,5 4 8,5	<sup>105</sup> 120125 <sup>130</sup> 80 <sup>70</sup> 60 <sub>50</sub>	HP 4000	23 42 26 33	<sup>130</sup> <sub>140</sub> <sub>145</sub> <sup>160</sup> 230 <sup>215</sup> <sup>205</sup> 180
HP	700	4 12 5,5 10	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	HP 5000	27 50 30 40	130 140 145 160 265 230 220 190
HP	900	5 14 6 12	<sup>105</sup> <sub>120</sub> 125 <sup>130</sup> 100 <sup>90</sup> <sup>80</sup> 70	HP 7000	32 63 36 52	<sup>140</sup> <sub>145</sub> <sub>150</sub> <sup>165</sup> 305 <sup>285</sup> <sup>275</sup> <sub>250</sub>
HP	1200	6,5 16 8 13	<sup>105</sup> 120 125 <sup>130</sup> 105 <sup>95</sup> <sup>85</sup> 70	HP 9000	39         80           46         68	<sup>140</sup> <sub>150</sub> 155 <sup>165</sup> 355 <sup>325</sup> <sup>315</sup> 290
HP	1500	10 20 12 17	<sup>115</sup> <sub>120</sub> 125 <sup>140</sup> 125 <sup>110</sup> 100 80	HP 12000	45 120 58 90	<sup>140</sup> <sub>160</sub> 165 <sup>180</sup> 420 <sup>380</sup> <sup>370</sup> 325
HP	1800	12 22 14 20	<sup>115</sup> <sub>120</sub> 125 <sup>140</sup> 130 <sup>120</sup> <sup>110</sup> 85	HP 18000	60 140 75 120	<sup>140</sup> 160 170 <sup>180</sup> 520 <sup>470</sup> <sup>460</sup> 420
HP	2000	15 25	<sup>115</sup> 125 130 <sup>140</sup>			

# productivity



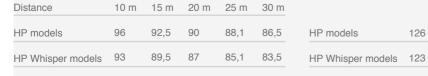


## noise levels

	Noise	levels	measured*	at	various	distances
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Noise level guaranteed\* by the 2006/42/CE directive

126



\*values expressed in dB (A)

#### \*Suggested for use on excavators having total weight (tons):

22



150 135 125 110

Optimum pressure adjusted to the breaker (bars)

18

Optimal oil supply (I/min)

Possible pressure/oil

### Best

\*\*Pressure adjusted to the breaker (bars) relative to oil flow (I/min):

## accessories

#### **IDA System**

(Indeco Dust Abatement)

An innovative and particularly effective system to reduce wear and tear of parts and prolong the life of the breaker. This is made up of an air compressor and a high pressure water pump mounted on the excavator and moved by two hydraulic motors supplied from the excavator itself.

The pump and compressor are activated independently through electro-hydraulic valves directly by the machine operator who can thus launch two different protection devices:

#### Dust Abatement Kit

a high pressure nebulised water jet, emitted by three nozzles mounted outside the breaker, stops dust that can be dangerous for the equipment and the operator.

#### Anti-Dust Shield for Tunnel and Underwater. Works

the internal pressurisation of the breakers stops dust water and debris entering the breaker through the bushing, as happens during demolitions in tunnels or underwater excavations.

#### Grease Shield and Anti-Dust System 2

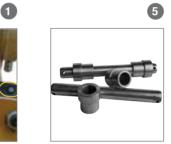
This system, which is crucial when working in dusty environments and when tunnelling, is made up of two clamps which are attached to the tool which prevent dust from getting in and grease from getting out, improving lubrication levels, thus lengthening the working life of the main breaker parts.

#### The Automatic Centralised Greasing Kit 3

This system has a dual function - to optimise grease consumption and make it unnecessary for the operator to stop work to grease the moving parts. The kit includes a pumping unit pack, tubing













and connections to the breaker. The grease point is centralised and feeds all the bushings and the moving parts between the tool, breaker and retaining axle. To satisfy the requirements of those hiring the equipment, the system (which is normally installed on the excavator) can also be mounted on the breaker.

#### Special Indeco Sirio Lubricant

It is vital that a specific lubricant be used, to ensure the durability of the main components of the breaker. Indeco's Sirio HBS grease with solid additives is particularly resistant to oxidation, can withstand extreme pressures and temperatures and shows excellent adhesion and water-resistance.

#### Pins and Bushings **5**

Designed to facilitate installation of all Indeco products on the arm of the machine, with or without attachment mounting bracket.

Mounting brackets 6

Each type of Indeco mounting bracket can be used in conjunction with all Indeco products of the same

#### Foldable Mounting bracket 7

A particular model of mounting bracket for breakers which means that the breaker can be bent back directly under the arm of the operating machine.

#### Connection hoses 8

Use of original Indeco high and low pressure original hoses is advised for connection of different pieces of equipment to the hydraulic equipment of the operating machine.

## the tools

#### Chisel tool

 $\Box$ 

Suitable for all earthworking or narrow-section excavation.

#### Moil point tool



Suitable for breaking up concrete, or mediumhard non-stratified rock. Secondary demolitions: average, hard or extremely hard blocks.

Asphalt cutter



Suitable for cutting asphalt, breaking up flooring, as well as brick or sandstone walls.





Suitable for pilework or press-moulded supports for guardrails, etc.

#### Pyramidal point



Suitable for demolishing hard reinforced concrete flooring, as well as sedimentation material.

#### Cobra chisel tool

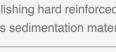


Suitable for all types of excavation work on medium-hard to hard rock, non stratified rock or rock which tends to pulverise when being broken up, "puddingstones".

#### Blunt tool

Suitable for breaking up blocks of any hardness, or to reduce the size of rubble. Secondary breaking, breaking oversize material.











Bre	eaker	Weig	jht	Breaker	Weig	jht
HP	150	80	kg	HP 2000	1200	kg
HP	150 Heavy Duty	98	kg	HP 2500	1500	kg
HP	200	160	kg	HP 2750	1690	kg
HP	350	230	kg	HP 3000	1900	kg
HP	500	320	kg	HP 3500	2200	kg
HP	600	390	kg	HP 4000	2500	kg
HP	700	440	kg	HP 5000	3000	kg
HP	900	550	kg	HP 7000	4000	kg
HP	1200	650	kg	HP 9000	5000	kg
HP	1500	850	kg	HP 12000	7800	kg
HP	1800	1000	kg	HP 18000	11050	kg

All of the hydraulic breakers in the Ir	ndeco range	e
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