



 **INDECO**
YOUR PARTNERS IN DEMOLITION

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 slimwell-proportioned 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.

4 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.

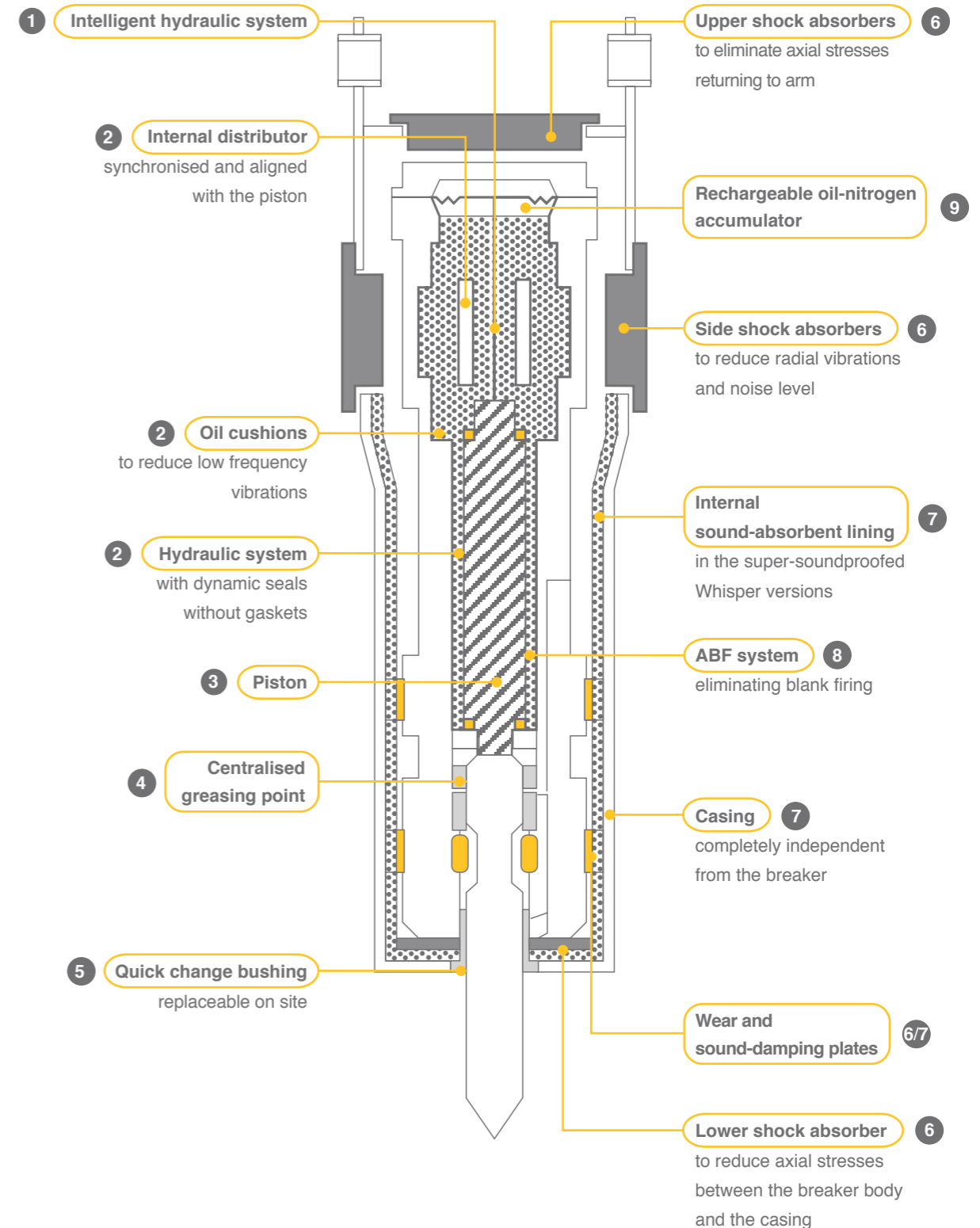
5 The "quickchange" interchangeable bushing is available in different materials according to the different applications, is inserted where the tool moves, reduces maintenance times and costs by cutting out the long downtimes needed to replace the traditional fixed bushing.

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.

7 Alongside the standard version the super-soundproofed 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.

8 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 tasks in the shortest possible time-frame - whether it's the biggest demolition jobs, primary excavations in quarries, or 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.



HP 350

HP 500



HP 150

HP 200



HP 600

HP 700

HP 900

| Technical Data | HP 150 / HP 150 Heavy Duty | HP 200 |
|------------------------------------|----------------------------|----------------------------|
| Excavator weight (possible) | 0,7 ÷ 3 tons | 1,4 ÷ 5 tons |
| Weight of breaker when operated | 80 / 98 kg (Heavy Duty) | *P.B. 130 kg/W.T.P. 160 kg |
| Steel diameter | 45 mm | 48 mm |
| Pressure adjusted to the excavator | 160 bars | 160 bars |
| Back pressure max | 11 bars | 11 bars |
| Energy class per blow | 200 joule | 240 joule |
| Striking rate per minute | 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 |
| *P.B. 210 kg/W.T.P. 230 kg | *P.B. 300 kg/W.T.P. 320 kg | *P.B. 340 kg/W.T.P. 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 |
| joule 450 | 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 |
|------------------------------------|-----------------|------------------|------------------|
| Excavator weight (possible) | 6,5 ÷ 16 tons | 10 ÷ 20 tons | 12 ÷ 22 tons |
| Weight of breaker when operated | 650 kg | 850 kg | 1000 kg |
| Steel diameter | 90 mm | 110 mm | 115 mm |
| Pressure adjusted to the excavator | 170 bars | 180 bars | 180 bars |
| Back pressure max | 8,5 bars | 10 bars | 8 bars |
| Energy class per blow | 1490 joule | 1720 joule | 2000 joule |
| Striking rate per minute | 450 ÷ 980 n/min | 420 ÷ 1000 n/min | 440 ÷ 1060 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 2000 ABF | HP 2500 ABF | HP 3000 ABF |
|-----------------|-----------------|-----------------|
| 15 ÷ 25 tons | 16 ÷ 28 tons | 19 ÷ 32 tons |
| 1200 kg | 1500 kg | 1900 kg |
| 120 mm | 130 mm | 140 mm |
| 180 bars | 180 bars | 200 bars |
| 8 bars | 7 bars | 8 bars |
| 2440 joule | 3320 joule | 4370 joule |
| 460 ÷ 940 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.



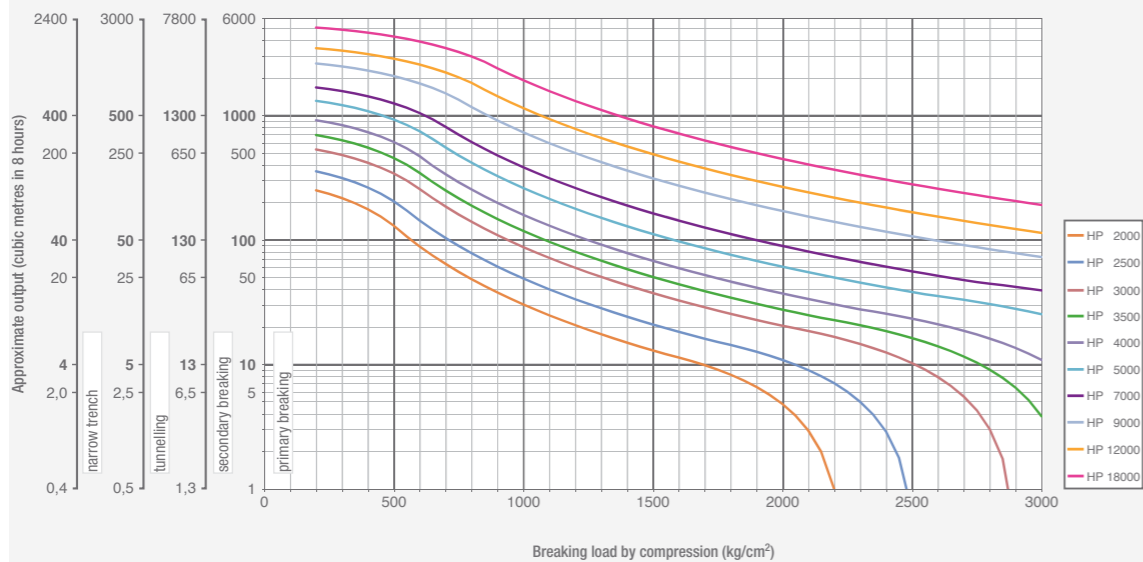
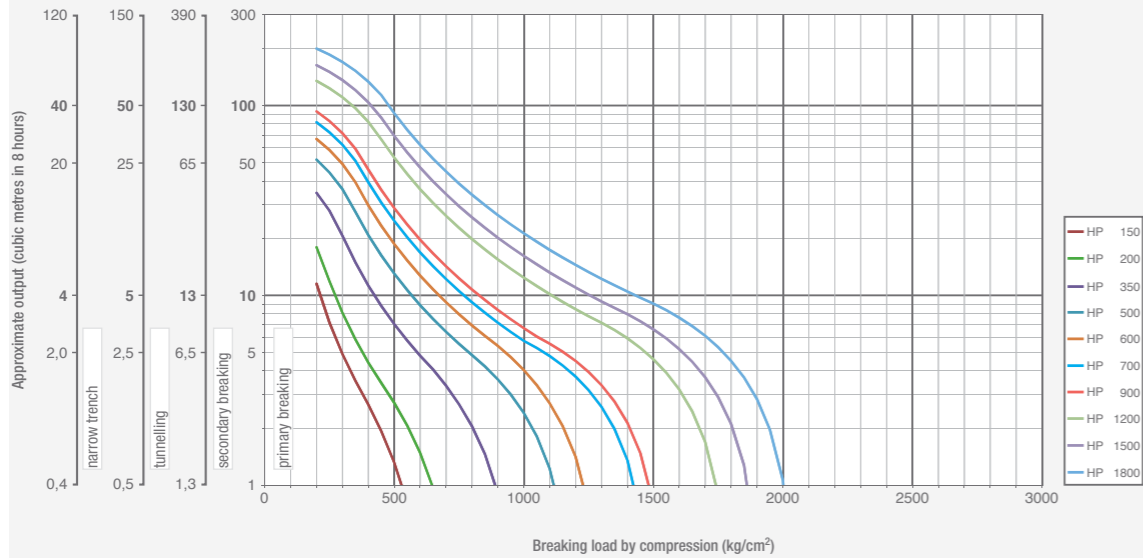
| Technical Data | HP 3500 ABF | HP 4000 ABF | HP 5000 ABF | HP 7000 ABF |
|------------------------------------|-----------------|-----------------|-----------------|-----------------|
| Excavator weight (possible) | 21 ÷ 38 tons | 23 ÷ 42 tons | 27 ÷ 50 tons | 32 ÷ 63 tons |
| Weight of breaker when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

| 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 |

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

productivity

parameters for selecting and adjusting the breaker



noise levels

Noise levels measured* at various distances

| Distance | 10 m | 15 m | 20 m | 25 m | 30 m |
|-------------------|------|------|------|------|------|
| HP models | 96 | 92,5 | 90 | 88,1 | 86,5 |
| HP Whisper models | 93 | 89,5 | 87 | 85,1 | 83,5 |

Noise level guaranteed* by the 2006/42/CE directive

| | |
|-------------------|-----|
| HP models | 126 |
| HP Whisper models | 123 |

*values expressed in dB (A)

| Model | Breaker/carrier compatibility (tons)* | Pressure regulation values (bar)/oil flow (l/min)** | Model | Breaker/carrier compatibility (tons)* | Pressure regulation values (bar)/oil flow (l/min)** |
|---------|---------------------------------------|---|----------|---------------------------------------|---|
| HP 150 | 0,7 3 0,8 2,5 | 105 115 120 125 40 30 20 15 | HP 2000 | 15 25 18 22 | 115 125 130 140 150 135 125 110 |
| HP 200 | 1,4 5 2 4 | 105 115 120 125 45 35 25 25 | HP 2500 | 16 28 19 24 | 115 125 130 140 160 140 130 125 |
| HP 350 | 1,7 6,5 2,5 5 | 105 115 120 125 60 45 35 30 | HP 3000 | 19 32 21 28 | 125 135 140 150 180 170 160 145 |
| HP 500 | 3 8 3,5 6,5 | 105 120 125 135 90 85 60 55 | HP 3500 | 21 38 24 30 | 130 135 140 160 200 185 175 160 |
| HP 600 | 3,5 10,5 4 8,5 | 105 125 135 140 80 70 60 50 | HP 4000 | 23 42 26 33 | 130 140 145 160 230 215 205 180 |
| HP 700 | 4 12 5,5 10 | 105 120 125 130 90 80 70 60 | HP 5000 | 27 50 30 40 | 130 140 145 160 265 230 220 190 |
| HP 900 | 5 14 6 12 | 105 120 125 130 100 90 80 70 | HP 7000 | 32 63 36 52 | 140 145 150 165 305 285 275 250 |
| HP 1200 | 6,5 16 8 13 | 105 120 125 130 105 95 85 70 | HP 9000 | 39 80 46 68 | 140 150 155 165 355 325 315 290 |
| HP 1500 | 10 20 12 17 | 115 120 125 140 125 110 100 80 | HP 12000 | 45 120 58 90 | 140 160 165 180 420 380 370 325 |
| HP 1800 | 12 22 14 20 | 115 120 125 140 130 120 110 85 | HP 18000 | 60 140 75 120 | 140 160 170 180 520 470 460 420 |

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

Best Possible (match subject to approval by the Indeco dealer)

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

Optimum pressure adjusted to the breaker (bars) Optimal oil supply (l/min) Possible pressure/oil

accessories

IDA System (Indeco Dust Abatement) 1

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

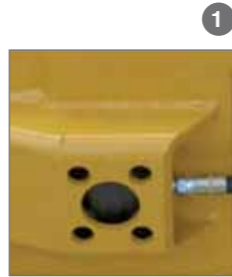
the internal pressurisation of the breakers stops dust water and debris entering the breaker through the bushing, as happens during demolitions in tunnels or underwater excavations.

Grease Shield and Anti-Dust System 2

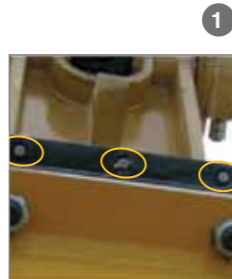
This system, which is crucial when working in dusty environments and when tunnelling, is made up of two clamps which are attached to the tool which prevent dust from getting in and grease from getting out, improving lubrication levels, thus lengthening the working life of the main breaker parts.

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



1



1



2



3



3



4



5



6



7



8

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 4

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 class.

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.

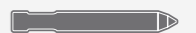
the tools

Chisel tool



Suitable for all earthworking or narrow-section excavation.

Moil point tool



Suitable for breaking up concrete, or medium-hard 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.

Pile driver



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.

All of the hydraulic breakers in the Indeco range

| Breaker | Weight | Breaker | Weight |
|----------------------------------|---------|----------|----------|
| HP 150 | kg 80 | HP 2000 | kg 1200 |
| HP 150 <small>Heavy Duty</small> | kg 98 | HP 2500 | kg 1500 |
| HP 200 | kg 160 | HP 3000 | kg 1900 |
| HP 350 | kg 230 | HP 3500 | kg 2200 |
| HP 500 | kg 320 | HP 4000 | kg 2500 |
| HP 600 | kg 390 | HP 5000 | kg 3000 |
| HP 700 | kg 440 | HP 7000 | kg 4000 |
| HP 900 | kg 550 | HP 9000 | kg 5000 |
| HP 1200 | kg 650 | HP 12000 | kg 7800 |
| HP 1500 | kg 850 | HP 18000 | kg 11050 |
| HP 1800 | kg 1000 | | |

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