

**LONG TIME
TRADITION IN
THE FIELD OF
SHOVEL
EXCAVATORS**

The manufacture of shovel excavators at the UNEX a. s. (joint-stock company) dates back to 1952. The innovation programme of the manufacture has contributed in a great measure to the fact that in fifty nine (59) countries of five (5) continents there are customers and buyers of the UNEX shovel excavators.

Steady technical level of the UNEX shovel excavators is guaranteed by a highly qualified team of development and research workers, cooperation with the world's leading producers of building machines including their components and of course by a skilled and highly qualified staff in the workshops.

The UNEX machines distinguish for their high world standard due to incorporation of the latest technical knowledge, designs and top components into their production. Additionally, the level of premanufacturing and manufacturing units makes UNEX excavators possible to be compared with their advanced world competitors both under performance and under particular demands at severe climatic conditions.

UNEX a. s. produces a series of hydraulic excavators comprising four weight categories - 12t, 30t, 42t, and 85t. All the UNEX excavators are multi-purpose, they can operate under different conditions and at different job sites.

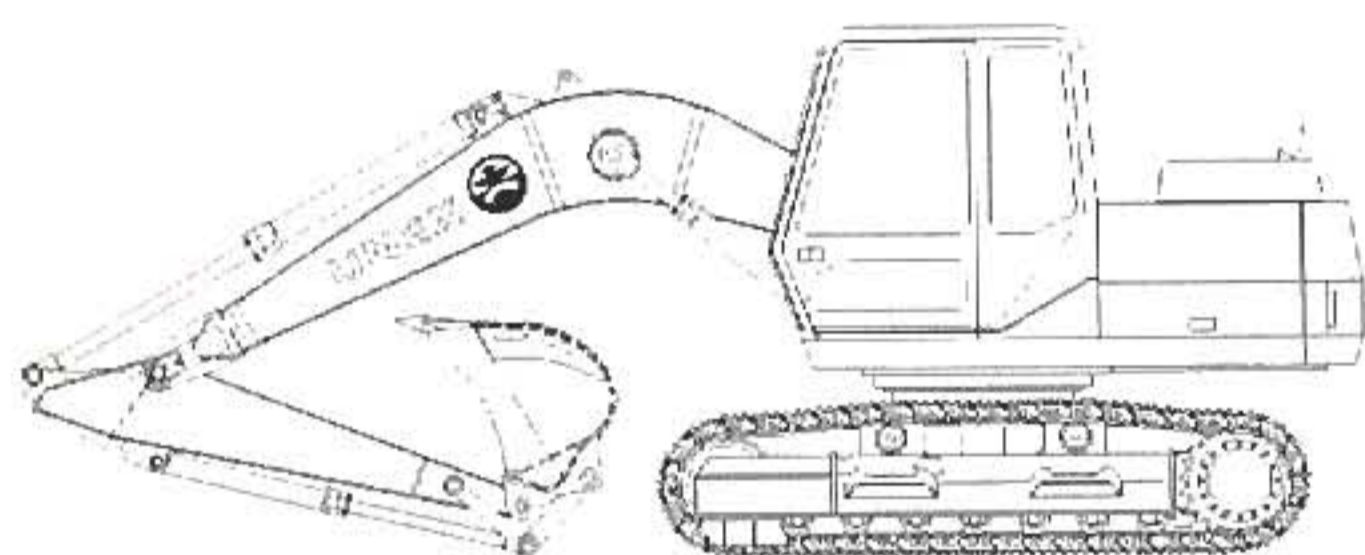
In the Czech Republic, UNEX a. s. is the greatest manufacturer and supplier of shovel excavators within the weight range of 12t to 85t. All the UNEX excavators are multipurpose, they can operate under different conditions and at different job sites.

The excavators of the other categories are built on the crawler undercarriages. For the machines of category 30 t, the LC undercarriage is also supplied as the standard type. All the UNEX excavators distinguish for their robust construction, great digging forces and large operational reach. Thanks to combination of these qualities and the large sort of shovels, the performance of the UNEX excavators has been steadily increased while the optimum consumption of the fuel is maintained.

**SHOVEL
EXCAVATORS**



DH 12.1



The DH 12.1 excavators, with 12 metric tonnes of weight, are the smallest ones in the new production line. The UNEX firm offers them in two versions: **the DH 12.1 M – with wheel undercarriage**, and **DH 12.1 R version – with crawler undercarriage**.

Both types use reliable PERKINS engines, REXROTH hydraulic components and hydraulic system with double hydraulic generator and Cross-sensing power control.

The DH 12.1 M wheel excavator with two-piece hydraulic adjustable boom and CLARK-HURTH wheel axles is intended for full performance even in limited space conditions. The DH 12.1 R excavator is the newest type with crawler undercarriage developed by UNEX a.s. The undercarriage is equipped with INTERTRACTOR components and BONFIGLIOLI gearboxes. UNEX offers crawler plates 500 mm to 900 mm wide. Both DH 12.1 excavators are produced with a cab, which provides good view in all directions without interruptions, comfort and ergonomic arrangement of the interior, which enable to increase driver's performance, safety and at the same time reduce his fatigue.

	DH 12.1 M	DH 12.1 R
undercarriage	wheel	crawler
working attachment	back-hoe (two-piece boom)	back-hoe
engine power	56.5 kW	56.5 kW
max. digging depth	4.77 m	4.39 m
max. cutting height	9.79 m	7.2 m
max. horizontal reach	8.28 m	7.66 m
back-hoe bucket volume	0.22 – 0.54 m ³	0.22 – 0.54 m ³
operation weight	12 t	13.5 t

DH 28.1



DH 28,1 hydraulic excavator is a representant of a new machines generation from production of the UNEX joint-stock company. It is characterised by top design, comfortable working place, easy control and maintenance. **High engine power, high crossing ability, optimum use of energy** in the ESU hydraulic system and low fuel consumption are its main advantages.

ESU system (Economy system of UNEX) is two-circuit system getting the advantage of three-circuit one without raising of its first costs. It takes from the engine only such an output which is required in the given moment.

The new cabin and slewing structure design together with **Perkins 1006-6TW** diesel engine bring very low internal and external noise level. For the excavator with backhoe working attachment you can use besides shovels large range of equipments which enable to make work of various character using either big digging force or extreme reach parametres.

DH 28.1

working attachment	back-hoe	loading
undercarriage	crawler	crawler
engine power	130 kW	130 kW
max. digging depth	7.27 m	-
max. cutting height	10.24 m	-
max. horizontal reach	11.09 m	-
back-hoe shovel volume	1.0 - 1.6 m ³	-
loading shovel volume	-	1.15 - 1.4 m ³
horizontal cut bottom length	-	2.74 m
min. radius of horizontal bottom	-	4.82 m
max. loading height	-	7.24 m
operation weight	28 t	28 t



DH 40.1

DH 40.1

working attachment	back-hoe	loading
undercarriage	crawler ST	crawler HD
engine power	223.5 kW	223.5 kW
max. digging depth	7.94 m	-
max. cutting height	9.57 m	-
max. horizontal reach	11.87 m	-
back-hoe shovel volume	1.6; 2.0; 2.5 m ³	-
loading shovel volume	-	2.0; 2.4 m ³
horizontal cut bottom length	-	3.52 m
min. radius of horizontal bottom	-	4.61 m
max. loading height	-	7.24 m
operation weight	42 t	48 t

For the present, excavator type of DH 40.1 is **the greatest model from development class of the new generation** of UNEX a.s. hydraulic excavators, with typical features: top design, comfortable operator's position, easy service and maintenance, optimum power utilization at hydraulic system ESU, and low consumption of fuel. Application of new technology covering e.g. reliable engines type of PERKINS or DEUTZ, and quality hydraulic appliances of the firm REXROTH it is response to the requirements of high output and reliability. Possibility to arrange excavator with backhoe and/or loading working equipment makes DH 40.1 universal at application. Additionally, it can be multiply by large sort of attachable working equipment and working vessels that may be hanged on the both working equipments. New design of undercarriage allows easy manoeuvreability, excellent passing - ability and stability even at the most rugged terrain. Changing of track gauge may increase stability, option of crawler carriers performance allows easy adjustment of undercarriage to standard performance (ST - specified for excavator with backhoe equipment) and/or hard performance (HD - suitable for operation of excavator with loading equipment).

DH 921



With their well-proven rigid construction, using the top quality imported parts, the excavators **DH 921** and bear any comparison with the highly sophisticated products of the world competitors in this working weight category.

A wide range of booms, sticks and dippers enables a very efficient and universal use of DH 921 wherever extraction, excavation or overburden work occurs.

DH 921 in its loading equipment version are designed first of all for quarry site work. The safety of the operators at work is insured by a safety frame FOPS which protects the cabine from down falling stones or, as the case may be, also by a front protective guard.

The position of the operators is such that it insures an easy and sensitive control and a good working condition for the driver. The double circuit hydraulic system is regulated according to the loading and displacement of the controls.

And extraordinarily high tractive force and ground clearance enable a very good manoeuvring and passage even in very difficult grounds.

DH 921

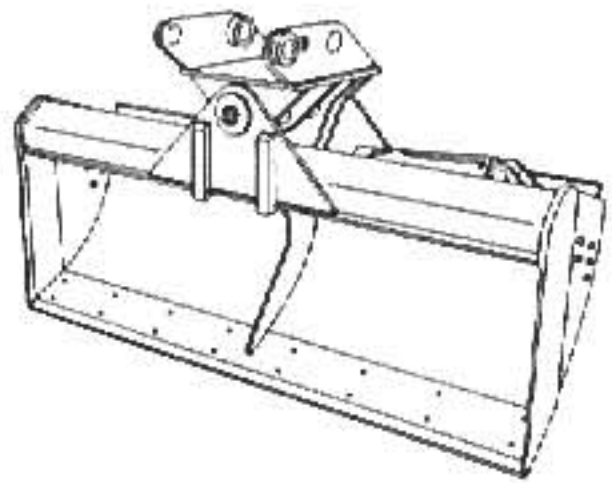
working attachment	back-hoe	loading
undercarriage	crawler	crawler
engine power	388 kW	388 kW
max. digging depth	15 m	-
max. cutting height	11.5 m	-
max. horizontal reach	19.85 m	-
back-hoe shovel volume	1.5-5.0 m ³	-
max. loading height	-	9.2 m
loading shovel volume	-	4.0-7.1 m ³
operation weight	81.3 t	87.8 t

WORKING EQUIPMENT

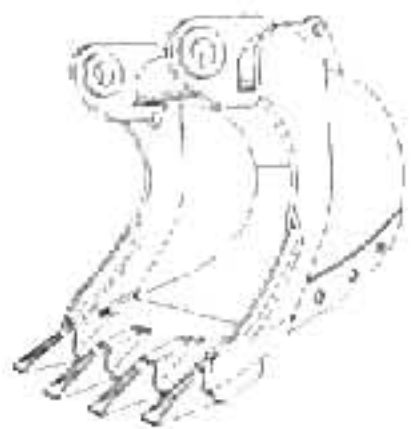
Backhoe Bucket



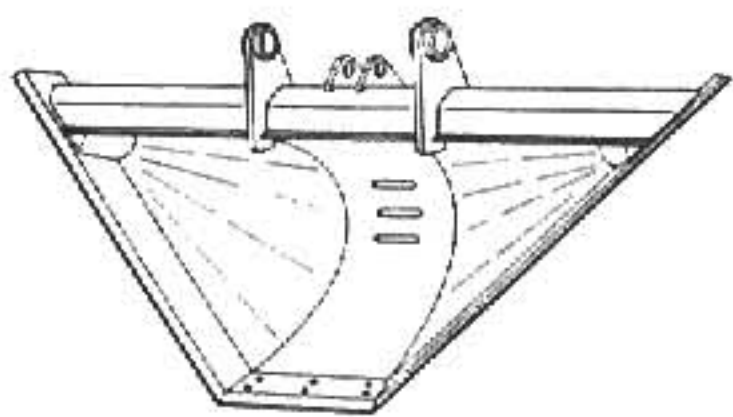
Slope Bucket



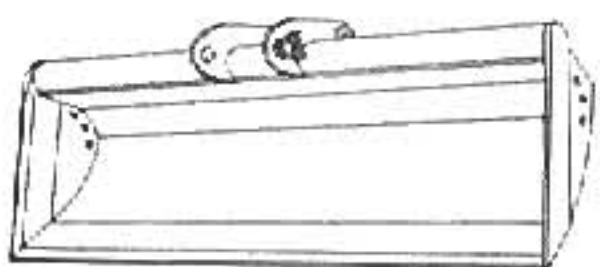
Rock Backhoe Bucket



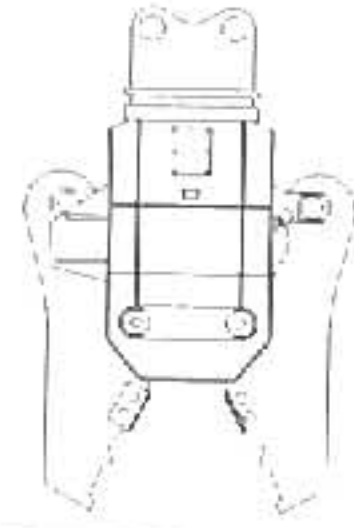
Trench Forming Bucket



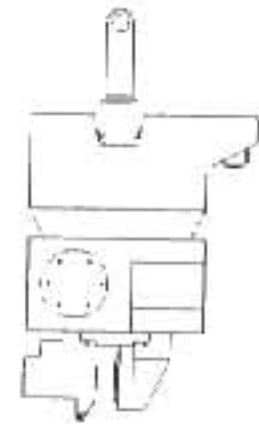
Cleaning Bucket



Demolition Crusher



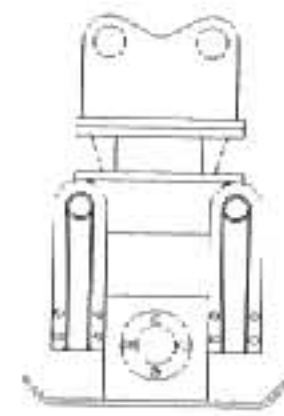
Pile-Driver



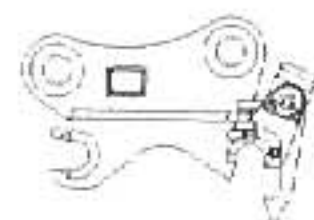
Ripper Tooth



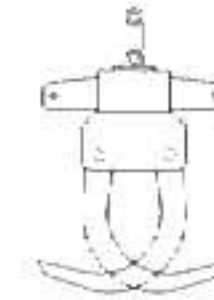
Compactor Attachment



Fast Chuck Device



Timber Grapple



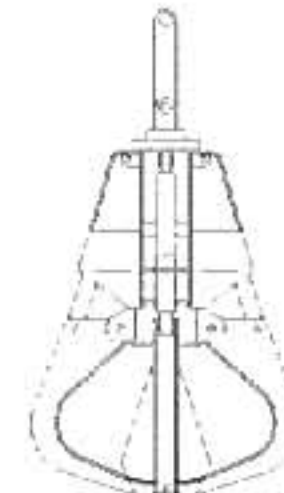
Hydraulic Hammer



Magnet



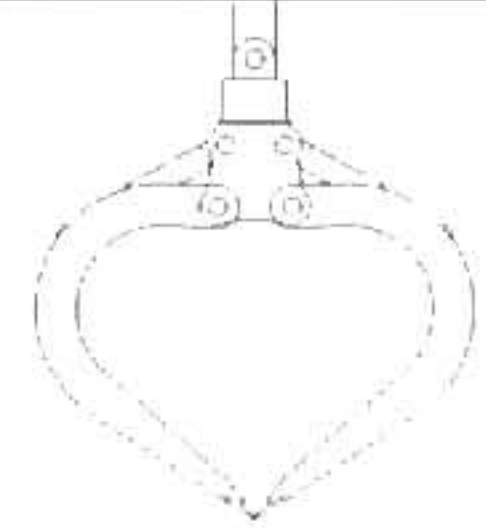
More Jaws Grab



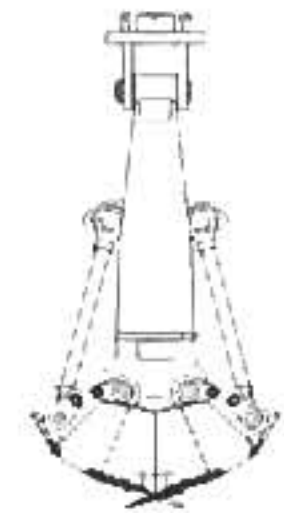
Scrap Shears



Timber Grapple



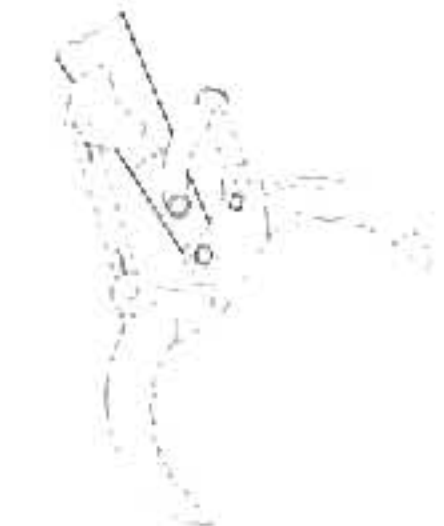
Grab with Circular Jaws



Double Jaw Grab



Handling Grab



Grab

