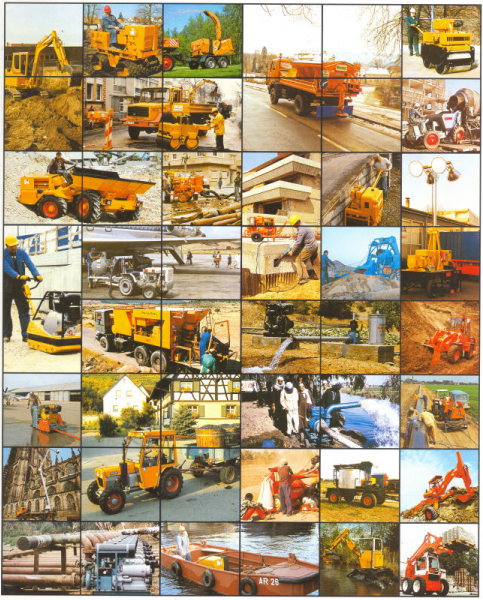
ENGINE PROGRAMME
UP TO 60 kW – 80 HP

HATZ
DIESEL



The objective for design and development at HATZ is the achievement of the following characteristics, which are distinguishing features of each and every HATZ engine.

Economical

Two essential characteristics illustrate the economy of HATZ engines.

The minimum fuel consumption and the incomparable long engine life.

Reliable

HATZ engines are produced to give the highest standards of operational safety under the most severe climatic conditions. The aircooling contributes to this considerably. Air is everywhere – contrary to water, air does not freeze or evaporate.

HATZ engines are famous for their safe starting even at extremely low temperatures.

Robust and indestructible

HATZ engines are designed for durability and robustness. This is guaranteed by excellent quality control during production. HATZ engines are designed in a way that operation and maintenance are problem-free, for experts and non-experts alike.

Universally applicable

The variety of applications of HATZ engines proves the successful achievement of this aim. The compact and easy-to-install design, the manifold power-take-off possibilities and a field-proven variety of additional equipment offer a solution for each and every application.

Ecological

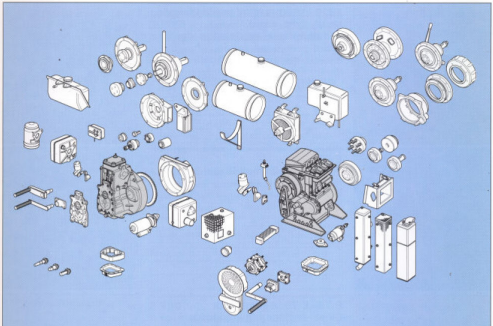
For years HATZ has pioneered the development of Diesel engines which are friendly to the environment. With regard to reduction of noise and exhaust gas emissions the HATZ Research Department has achieved significant success.

HATZ DIESEL

HATZ-DIESEL

IN EVERY CASE – THE BETTER CHOICE

THE ADDITIONAL EQUIPMENT



More than 1000 additional equipment groups are available, depending on your choice.

Output selection

Do not always select the highest permissible speed because at lower speed the maintenance intervals and the engine life increase and the noise decreases. In cases of long-term operation or more than 1500 operating hours per year an engine speed of 2600 r.p.m. should not be exceeded.

Calculation of necessary engine output (P_z)

The output requirement of the driven machine is often not determinable, thus reserves must be taken into consideration. Also the altitude and the ambient temperature require additions where they deviate from the standard (100 m ALT, + 25°C).

Example:

P_E power requirement of driven machine
f_S = safety reserve factor
f_H = factor altitude
f_T = factor temperature
$P_M = P_E \cdot f_S \cdot f_H \cdot f_T$
= necessary engine output

$P_E = 16.5$ kW
at 30°C hight above sea level 1300 m
safety reserve 5%
$f_S = 1.05$
$f_H = 1.14$
$f_T = 1.01$

$P_M = 16.5 \cdot 1.05 \cdot 1.14 \cdot 1.01 \approx 20$ kW

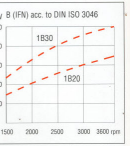
Safety reserve	% / f_S	0 / 1.00	5 / 1.05	10 / 1.10	15 / 1.15	20 / 1.20	25 / 1.25	30 / 1.30
Height above ALT	m / feet / f_H	100 / 330 / 1.00	300 / 1000 / 1.02	500 / 1600 / 1.06	1000 / 3300 / 1.10	1300 / 4300 / 1.14	1500 / 5000 / 1.16	1800 / 6000 / 1.21
Ambient temperature	°C / °F / f_T	25 / 80 / 1.00	28 / 85 / 1.01	31 / 90 / 1.02	33 / 95 / 1.03	35 / 100 / 1.04	38 / 105 / 1.06	43 / 115 / 1.08

HATZ DIESEL

1B20–1B30–1B20V the Challengers, small, light, silent, and universally applicable

Aircooled with integral flywheel fan.
Pressure lubricated. Single Cam System (SCS).

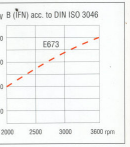
Engine type	Swept volume cm³	Weight kg	Dimensions (mm) Length	Width	Height
1B20	232	28	268	360	400
1B30	347	33	295	370	430
1B20V	232	28	442	360	300



E 673
The approved small Diesel

«World champion at cold starting.»
Aircooling with flywheel fan.
Centrifugal pressure lubrication.

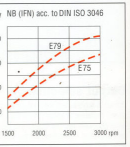
Engine type	Swept volume cm³	Weight kg	Dimensions (mm) Length	Width	Height
E673	280	37	304	340	453



E 75–E 79 a symbol for Diesel-engineering worldwide

Tried and tested 500,000 times.
Aircooling with flywheel fan.
Centrifugal pressure lubrication.

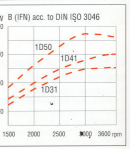
Engine type	Swept volume cm³	Weight kg	Dimensions (mm) Length	Width	Height
E75	353	49	368	476	545
E79	422	53	376	476	545



1D31.–1D41. S/Z/T/U–1D50 S/Z SUPRA – revolutionary technique for single-cylinder Diesel engines

Aircooling with flywheel fan. Pressure lubrication.
With either 50% or 100% mass balancing of the 1st order.

Engine type	Swept volume cm³	Weight kg	Dimensions (mm) Length	Width	Height
1D31.	377	57	341	463	485
1D41.	413	57	341	463	485
1D50.	517	58,5	341	463	485



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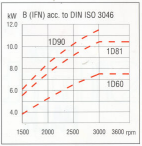
HATZ-DIESEL

IN EVERY CASE – THE BETTER CHOICE

1D60.–1D81 S/Z–1D90 V/W SUPRA – revolutionary technique for single-cylinder Diesel engines

Aircooling with flywheel fan. Pressure lubrication.
With either 50% or 100% mass balancing of the 1st order.

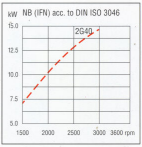
Engine type	Swept volume cm³	Weight kg	Dimensions (mm) Length	Width	Height
1D60.	517	73.4	360	506	554
1D81.	667	77.5	360	506	554
1D90.	722	79.0	570	496	360



2 G 40
A two-cylinder Power Package

sets new standards for compactness and power to weight ratio. Aircooling with flywheel fan.
Pressure lubrication.

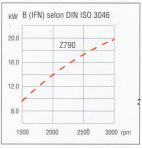
Engine type	Swept volume cm³	Weight kg	Dimensions (mm) Length	Width	Height
2 G 40	997	89	582	461	587



Z 790
A special two-cylinder engine

approved worldwide.
Aircooling with flywheel fan.
Pressure lubrication.

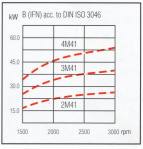
Engine type	Swept volume cm³	Weight kg	Dimensions (mm) Length	Width	Height
Z 790	1272	165	718	509	683



2•3•4 M 41
Sophisticated multi-cylinder engine series inmodular design

The first industrial engine in the world with integrated auto-protection device. Aircooling with axial fan. Pressure lubrication.

Engine type	Swept volume cm³	Weight kg	Dimensions (mm) Length	Width	Height
2M41	1716	223	618	570	733
3M41	2574	255	753	570	733
4M41	3432	291	888	570	733



HATZ DIESEL

Silent PACK

The HATZ – Silent Pack is the quietest engine for equipment installation in its class – and it's ready for immediate application.

1D31C–1D41C

The SUPRA-series is the first single-cylinder Diesel series in the world that can be fitted with a uniquely designed sound-proofing encapsulation. The result is the SUPRA SILENT PACK.

Engine type	Swept volume cm³	Weight kg	Dimensions (mm) Length	Width	Height
1D31C	377	89	467	508	504
1D41C	413	89	467	508	504

1D60C–1D81C

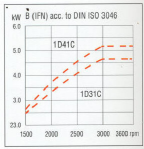
The SUPRA-series is the first single-cylinder Diesel series in the world that can be fitted with a uniquely designed sound-proofing encapsulation. The result is the SUPRA SILENT PACK.

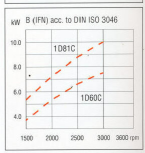
Engine type	Swept volume cm³	Weight kg	Dimensions (mm) Length	Width	Height
1D60C	517	107	512	530	588
1D81C	667	107	512	530	588

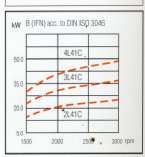
The star of the range: the SILENT PACK 2 • 3 • 4 L41C

Aircooling with axial fan.
Pressure lubrication.

Engine type	Swept volume cm³	Weight kg	Dimensions (mm) Length	Width	Height
2L41C	1716	276	719	596	748
3L41C	2574	331	854	596	748
4L41C	3432	396	989	596	748







THIS IS HATZ-DIESEL

Motorenfabrik HATZ
- has been concentrating on the manufacture of industrial Diesel engines for more than 60 years,
- has gained appreciation worldwide due to progress and achievement,
- ensures by modern production facilities and rigorous quality control engines of the highest standard,
- has been acknowledged throughout the world for outstanding efficiency in research and development work,
- offers their customers through their policy of continuing development, the secure operation of their machines.

HATZ Service means
- the optimum availability of spare parts,
- professionally equipped workshops,
- first-class trained personnel,
- genuine readiness to serve the customer.

HATZ DIESEL

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