



GPO-TRUCK

GPO-TRUCK

tool and die loading trucks with original rigid-chain technology

400

R90

402

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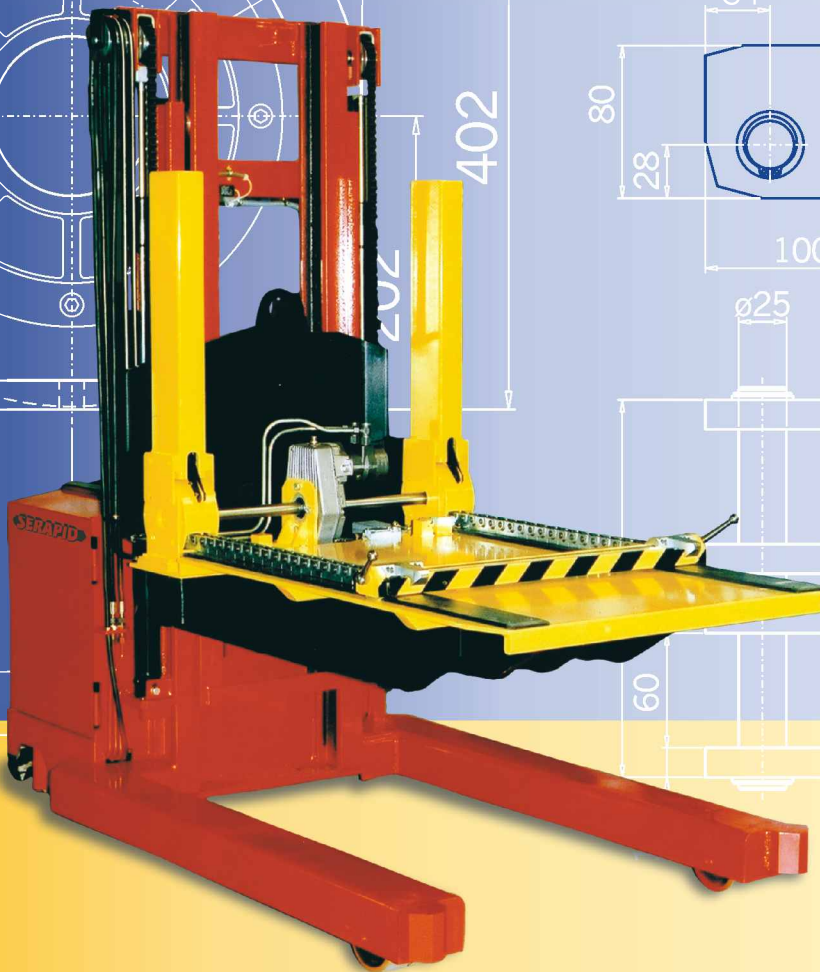
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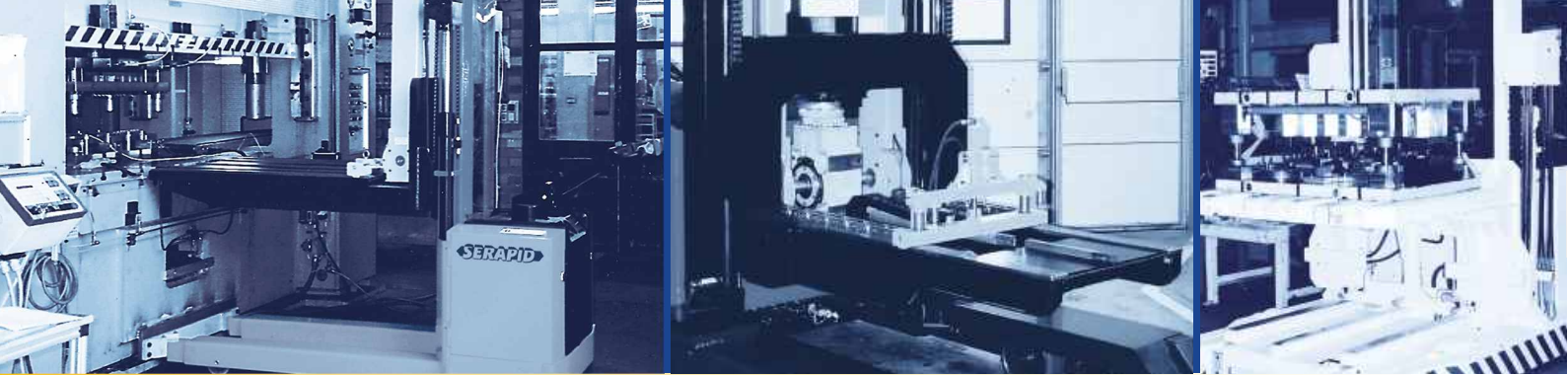
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SERAPID
RIGID CHAIN TECHNOLOGY



Get it all with a GPO-TRUCK from SERAPID

Highly accurate, repeatable positioning

Reliable and efficient operation

Safe and easy handling

SERAPID Tool and Die Loading Trucks are heavy-load lifting carts with the added capabilities of an original rigid-chain system for horizontal transfer and positioning. They allow the handling of heavy tools, such as press dies, from storage to machine and back – all with one, easy to handle piece of equipment.

The tool is pulled out of the storage shelf and onto the truck's load table, and it is

pushed from there into its machine slot and operating position. In both ways, the move is made by the SERAPID chains. All movements are controlled from the operator station.

The SERAPID GPO series of die exchanging trucks improves process efficiency, safety and reliability in press-rooms and, generally, any working environment that requires the handling of cumbersome parts with accuracy

and care. Here, a GPO truck will always save costs and time. And it will help to increase productivity and safety.

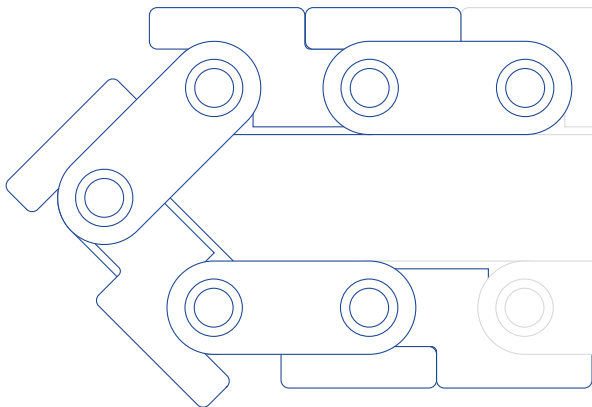
A sensor-controlled safety subsystem monitors the GPO's operating status and checks it against predefined limits and stop positions. This ensures that the transfer and the positioning of tools are only performed if the safety conditions have been met.

GPO-TRUCK

0.5 UP TO 12 TONS

the SERAPID chain

The rigid pushing chain is an original SERAPID product and has proven the superior solution in a wide variety of linear motion tasks. It is basically a chain with special links. This link features a hook-like extension, which we call the shoulder. The shoulder serves as a joint between neighbouring links. When force is applied, the shoulders interlock and make the chain as rigid as a jack. At their cross-axes, the links are connected flexibly, just as in an ordinary chain. Thus, the rigid chain will still bend and can be coiled up and stored very efficiently.



types of GPO Truck

To cater for the broadest possible range of press-room applications, SERAPID offers various types of tool and die loading trucks. The smallest GPO truck lets you handle up to 500 kilos, the biggest up to twelve tons.

Our GPO trucks are standardly based on mast-type lifts, only the largest model, called **GPO.12T**, employs a scissors mechanism, which supports the load right at the centre of gravity. Thus the load may not only be very heavy, but very large as well.

To allow for most efficient die exchange, we have developed a truck with dual load tables. This type of truck, called **GPOD.2000**, allows you to bring the new tool on one of the tables while the other table is free to load the old tool right away. No more double rides or intermediate unloading. – Of course, the press table has to be high enough, and the tool's shut height has to be low enough.

Customized trucks are available on demand. SERAPID's engineering department is ready to solve any die-handling challenge for you.

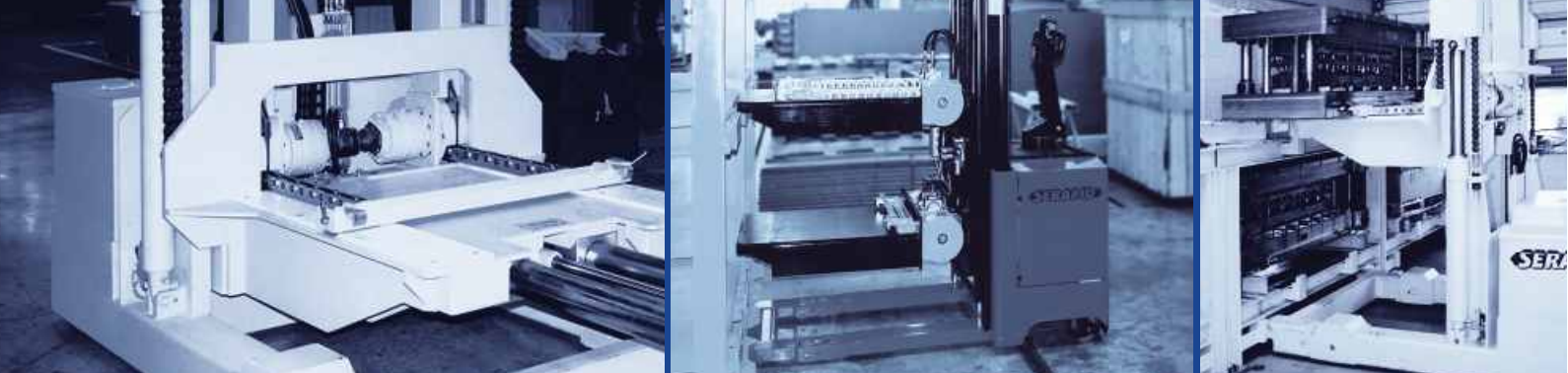
Please note that the technical drawings presented in this brochure can also be downloaded from our website at www.serapid.com, or obtained on CD ROM by calling or e-mailing any SERAPID office worldwide.

complete solutions

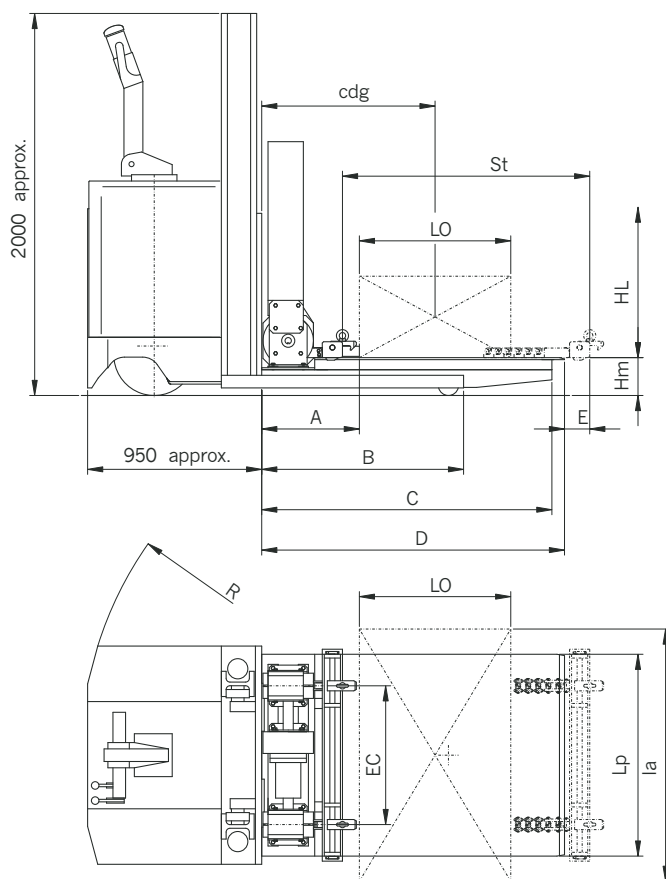
Besides trucks, we also offer a modular system of **die-storage racks** as well as **staging tables**. Dimensions can be made according to your specifications.

A comprehensive range of **optional accessories** is available, to adapt our trucks to the individual application. See the last page in this brochure for details.





capacity up to 2.7 tons



cdg = position of load centre relative to lift mast

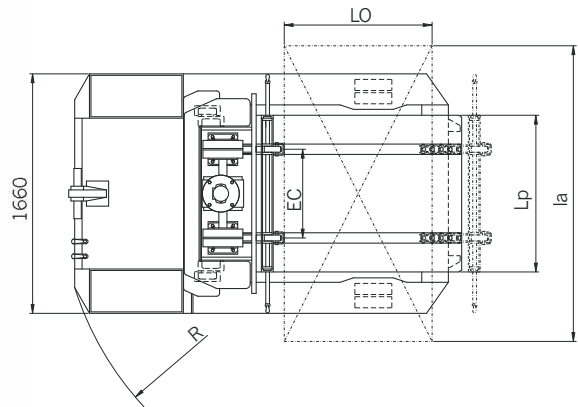
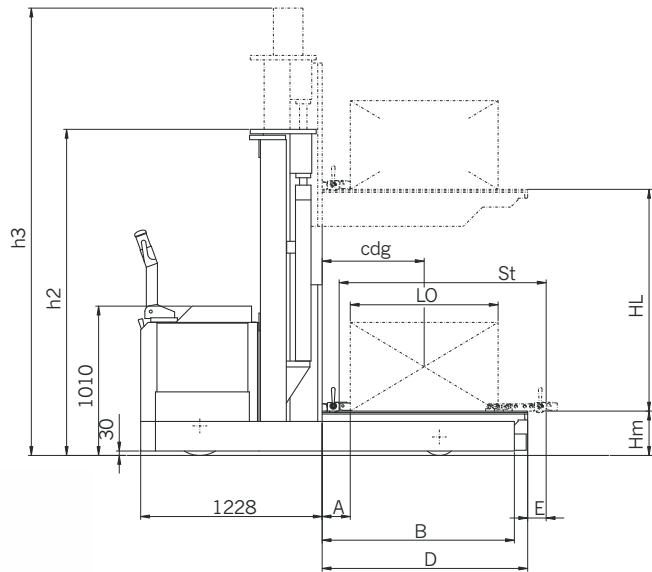
Specifications

| GPO Type | max. Load (kg) | Cdg max. | LO max x la | A/B | C/D | St/E | Lp/EC | Hm/HL/R |
|------------|----------------|----------|--------------|----------|-----------|----------|------------|-----------------|
| GPO.500 | 500 | 780 | 740 x 1000 | 410/930 | 1150/1200 | 960/95 | 890/550±50 | 150/2800/1500 |
| GPO.1000.1 | 1000 | 710 | 600 x 1000 | 410/900 | 1150/1200 | 960/95 | 890/550±50 | 150/2800/1500 |
| GPO.1000.2 | 1000 | 910 | 1000 x 1500 | 410/1100 | 1410/1460 | 1240/115 | 890/550±50 | 230/2800/1700 |
| GPO.1500 | 1500 | 910 | 1000 x 1500 | 410/1100 | 1410/1460 | 1240/115 | 980/550±50 | 230/2800/1700 |
| GPO.2000 | 2000 | 810 | 800 x 1500 | 410/1100 | 1410/1460 | 1240/115 | 980/550± | 50260/2630/1800 |
| GPO.2700 | 2700 | 910 | 1000 x 1500 | 410/1100 | 1410/1460 | 1240/115 | 980/550±50 | 330/1780/1800 |
| GPOD.2000 | 2 x 1000 | 810 | 800 x 1500 * | * | * | * | * | * |

All dimensions in mm.
* Consult SERAPID Engineering.

GPO-TRUCK

capacity up to
10 tons



cdg = position of load centre
relative to lift mast

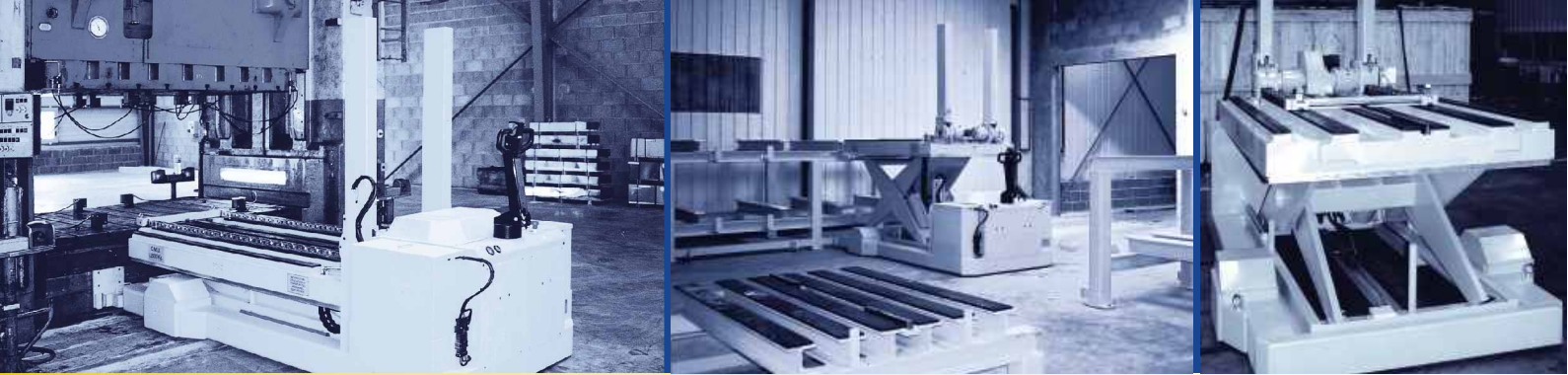


Specifications

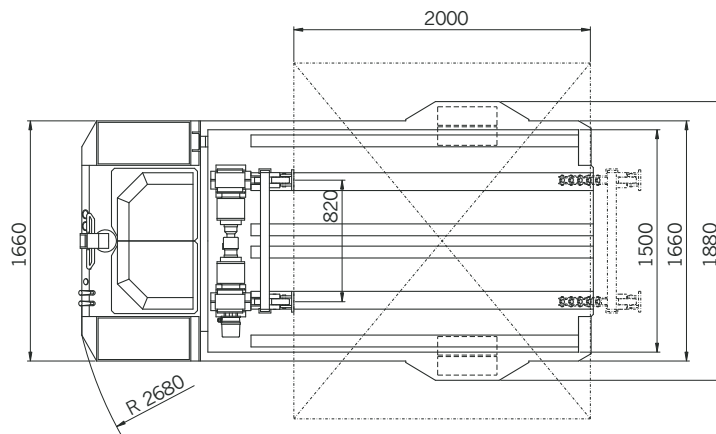
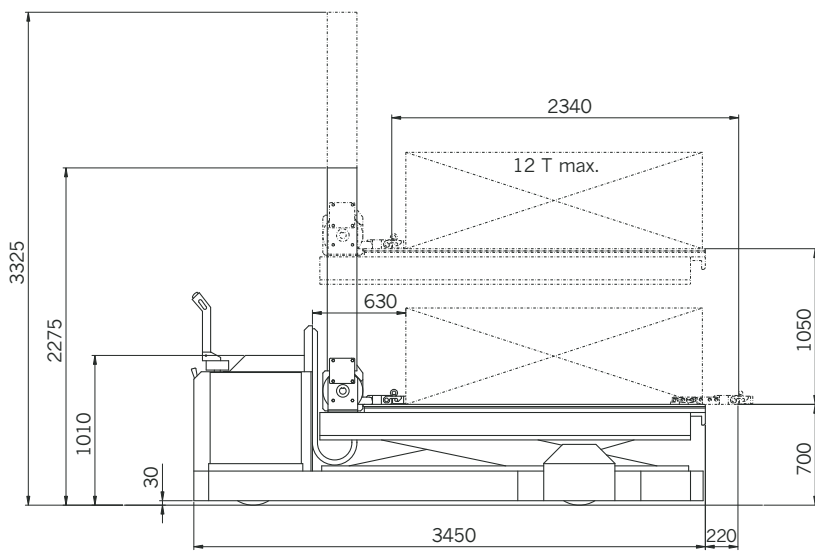
| GPO Type | max. Load (kg) | Cdg max. | LO max x la | A/B/D | St/E | Lp/EC | Hm/HL/R | h2/h3 |
|----------|----------------|----------|-------------|---------------|----------|----------|---------------|-----------|
| GPO.6T | 6000 | 750 | 1100 x 2000 | 165/1300/1400 | 1680/480 | 1060/600 | 300/2000/2120 | 2206/3526 |
| GPO.8T | 8000 | 910 | 1500 x 2800 | 165/1675/1765 | 2100/425 | 1060/600 | 350/2000/2320 | 2106/3825 |
| GPO.10T | 10000 | 910 | 1500 x 2800 | 165/1675/1765 | 2100/425 | 1060/600 | 400/2000/2320 | 2206/3526 |

All dimensions in mm.

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capacity up to 12 tons



GPO.12T

Our biggest GPO truck can push and pull loads up to twelve tons. Its load table is supported by a scissors mechanism that accomplishes the vertical movements.



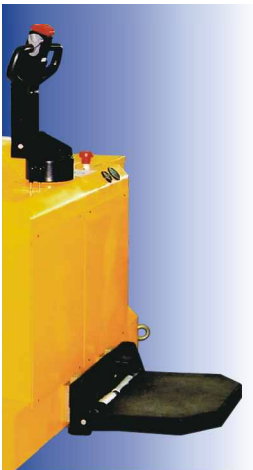
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GPO-TRUCK OPTIONS

Several options are available for our GPO trucks, to enhance use and operation and adapt to specific application situations.

swinging-out platform for driver

The drivers platform is attached to the rear of the truck.



custom sizes

With the exception of the GPO.12T, all models are available with custom-sized load tables.



automatic hooks

A hydraulically driven hooking device allows coupling and uncoupling of the tool without manual action. This option is particularly useful when the target position of the tool inside the press is inaccessible to operators.



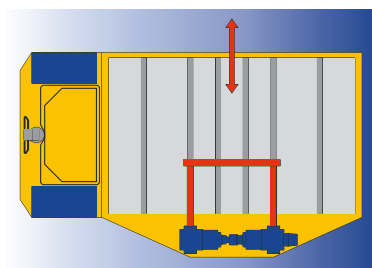
interfacing loops

The loops are attached to the tool, to engage with the GPO Truck's hooks. They are available in pairs.



lateral pushing and pulling

The GPO.12T is available with the chain system mounted in rectangular orientation to the truck carriage. The tool is thus moved sideways from or onto the truck.



coil loader

To pick up metal-band coils, a hydraulically controlled extender can be attached to the truck's load table. (GPO.6T / 8T / 10T only.)



truck positioning and platform docking

To accurately position the truck, a pair of V-block locators are mounted at the base of the press. To securely dock the platform, a fixation bar is mounted on the press at the transfer height level. Die transfer is only permitted when the platform is engaged into the bar.



racks and tables

Storage racks and staging tables can be supplied in application-specific sizes.

