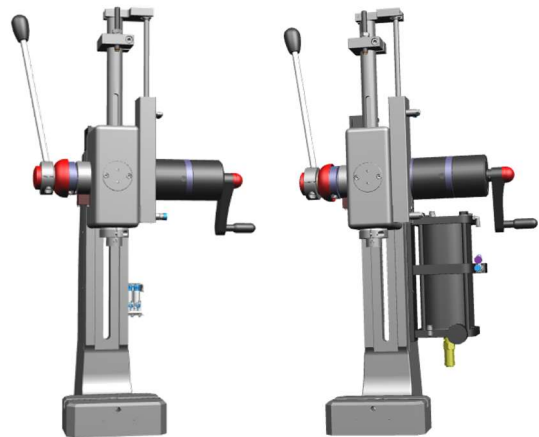


Hot Off the Press

Product Information

NEW ! HandDuplexPress No. 8

High force, long stroke, super ergonomic !



SCHMIDT Technology is breaking new ground for hand presses with a completely new operating principle. The challenge of generating high forces with a long stroke at the same time is not possible with either the conventional rack and pinion or the toggle press. This newly developed No. 8 HandDuplexPress is therefore a very universal solution for pressing tasks, is extremely ergonomic and requires very little pull force on the handles.

➤ **How does the press work?**

In principle, the high force is achieved at the ram via the right hand lever, which requires a low handle pull force due to the transmission ratio of the planetary gear. Optionally, the low force left hand lever can also be used to move the ram downward in a "rapid stroke". This is useful, for example, when a large clearance stroke is required prior to contacting the part and the high forces of the press is needed. The operator would bring the left hand handle down until the ram contacts the part, then they would use the right hand handle to provide the high force.





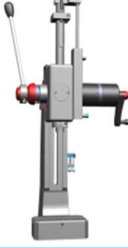





➤ **Why does the press have a compressed air connection or accumulator?**

Due to the higher forces required to overcome the planetary gear during ram retraction, a standard spring cannot be used without impacting the handle pull force of the system. To solve this challenge, an air spring is integrated into the system, using compressed air to push the ram back to the starting position. This air spring system is provided in one of two configurations, with the basic version, called Air Net, using a direct connection to a main compressed air supply line. The second version, called Air Tank, incorporates a 2-chamber pressure cylinder for self-sufficient operation and maximum energy-efficient operation. This latter design ensures that the weight of the upper die can be compensated by the adjustable differential pressure and only requires tank refilling about 1 time per week.

➤ **What options are available?**

In addition to the basic decision for the air tank solution or the connection to the compressed air network, the left hand lever (rapid stroke) and the return stroke lock are offered as options.

All variations are equipped with an integrated positive stop with integrated fine adjustment and mechanical counter. When purchased with one of our columns, the press will have a fully adjustable working height adjustment operated by a handle/gear crank system.

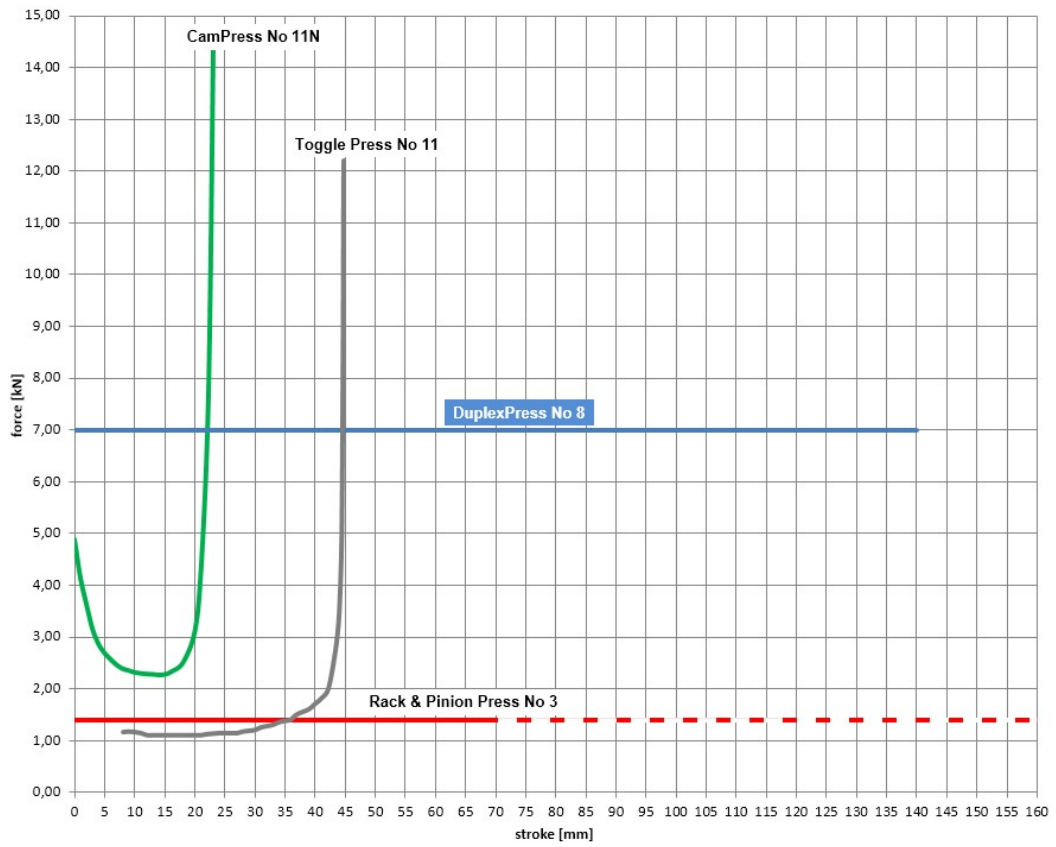
<u>Air Net</u>	HDP No 8	HDP No 8R Return stroke lock	HDP No 8D Duplex (+ approach stroke)	HDP No 8RD Return stroke lock Duplex (+ approach stroke)
				
<u>Air Tank</u>	HDP No 8S	HDP No 8RS Return stroke lock	HDP No 8DS Duplex (+ approach stroke)	HDP No 8RDS Return stroke lock Duplex (+ approach stroke)
				

➤ **Features:**

- Stroke: 140mm
- Force: 7 kN @ 120N hand force on right hand lever
- 2 stage planetary gearbox with efficiency of 98%
- Frame No 5, counter, fine adjustment
- Crank operated height adjustment
- 2 basic Versions: Air Net OR Air Tank
- Air Tank Version
 - estimated 1 week operation w/o refill, new sealing technology
 - Delta pressure between upper and lower tank for return force tuning => compensation of upper tooling weight.
 - 2 Air nozzles for optimization of air speed / reduction of slip stick effect.
- Optional extended return stroke lock for safe and easy operation

Comparison PressDesigns @

Hand Lever Force **120N**



Handle Pull Force [N] on the right hand Lever	Press Force [kN]	Stroke [mm] Up To
20	1,2	140
40	2,3	140
60	3,5	140
80	4,6	140
100	5,8	140
120	7	140