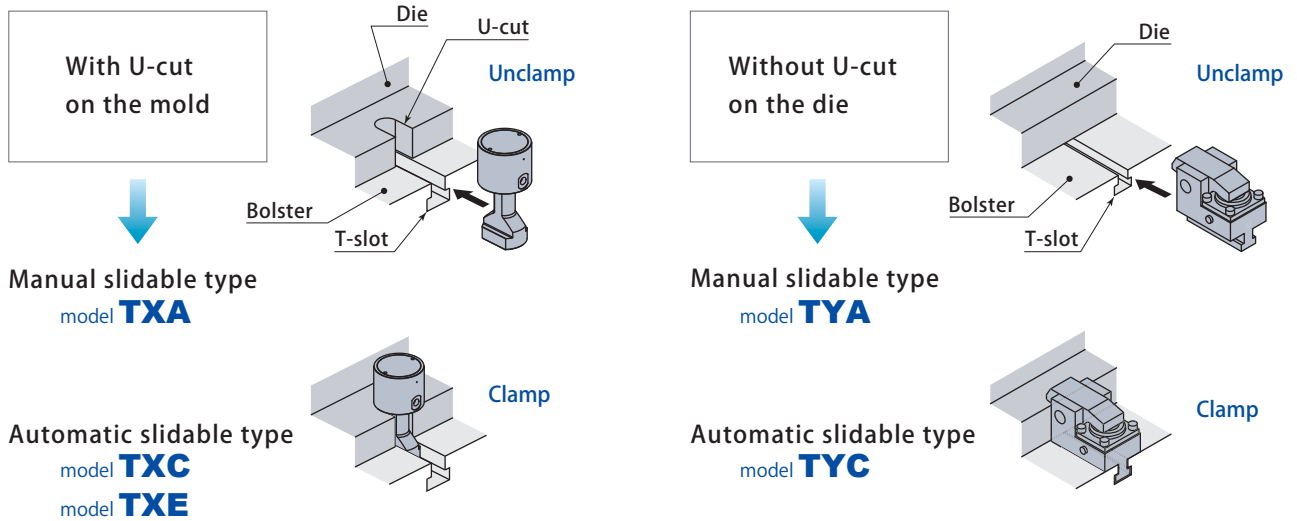


Clamp model



* The unification of die thickness is conditions for the clamp use.
If it is not unified, contact Pascal.

Swing clamp

The clamp rod swings and prevents the interference at time of load/unload of die.

* It is not mentioned in this catalogue, so contact Pascal.

model **TNA** model **THB**

Clamp force and quantity

Determine the size and quantity of the clamp in such a way that the total clamping force, i.e. clamping force by quantity, must be higher than the value stated below.

It should be better for stamping operation to increase the number of the clamp by lowering the force for each clamp, rather than decreasing the number of clamps raising the force for each.

$$\text{The total clamping force, i.e. clamp force by quantity} > \begin{cases} \text{Crank press} & : 10\% \text{ of machine tonnage} \\ \text{High speed press} & : 20\% \text{ of machine tonnage} \\ \text{Hydraulic press} & : \text{die opening force} \end{cases}$$

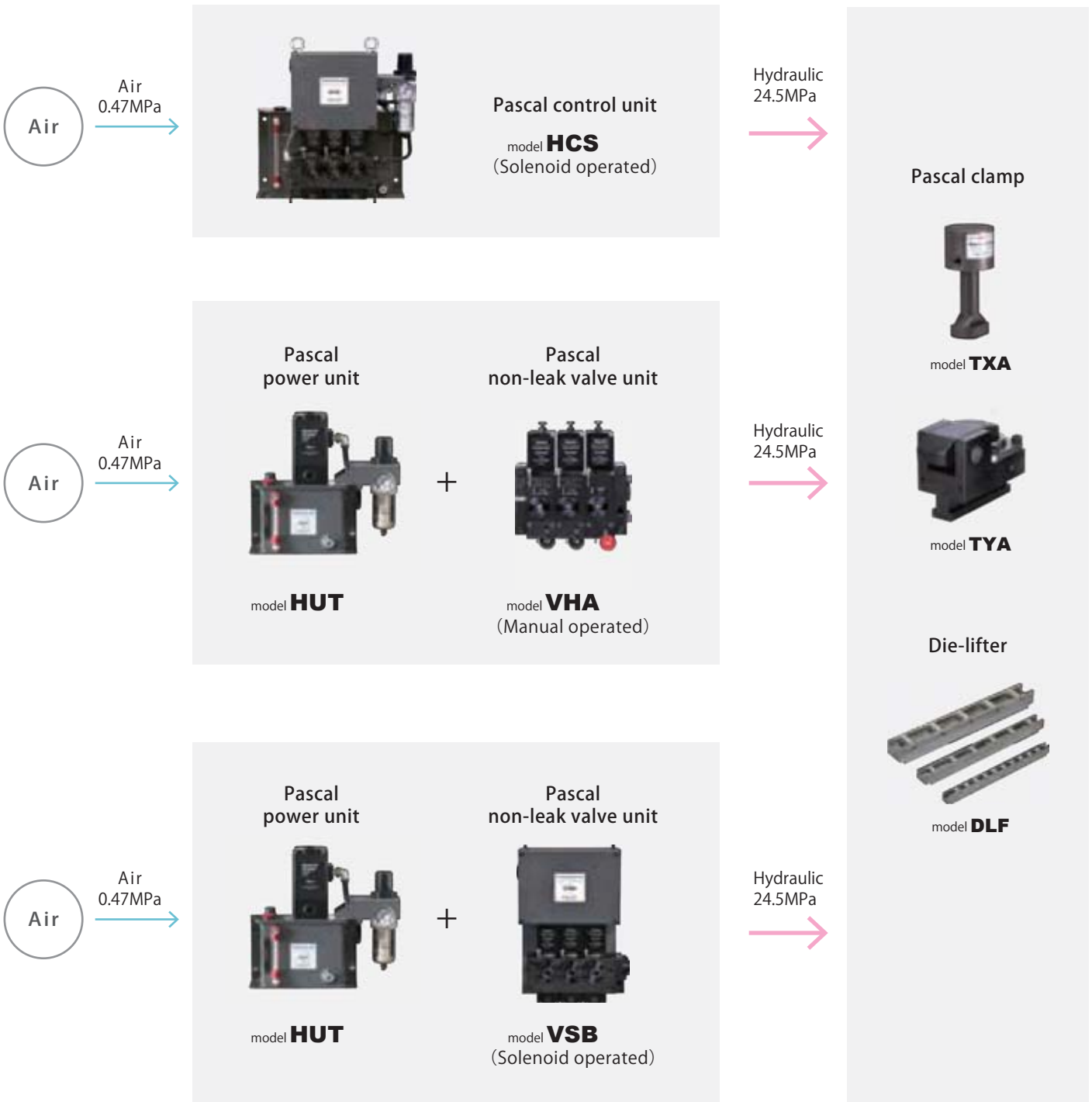
For tonnage 1100kN crank press

If 4 pieces of model TXA040 (clamping force 39.2kN) are installed on both of slide and bolster, total clamping force would be 156.8kN (39.2 x 4), which represents about 14% of machine tonnage.

The proper size and quantity of clamps differs depending on the condition of die and machine. Please contact Pascal sales representative or customer center for the details.

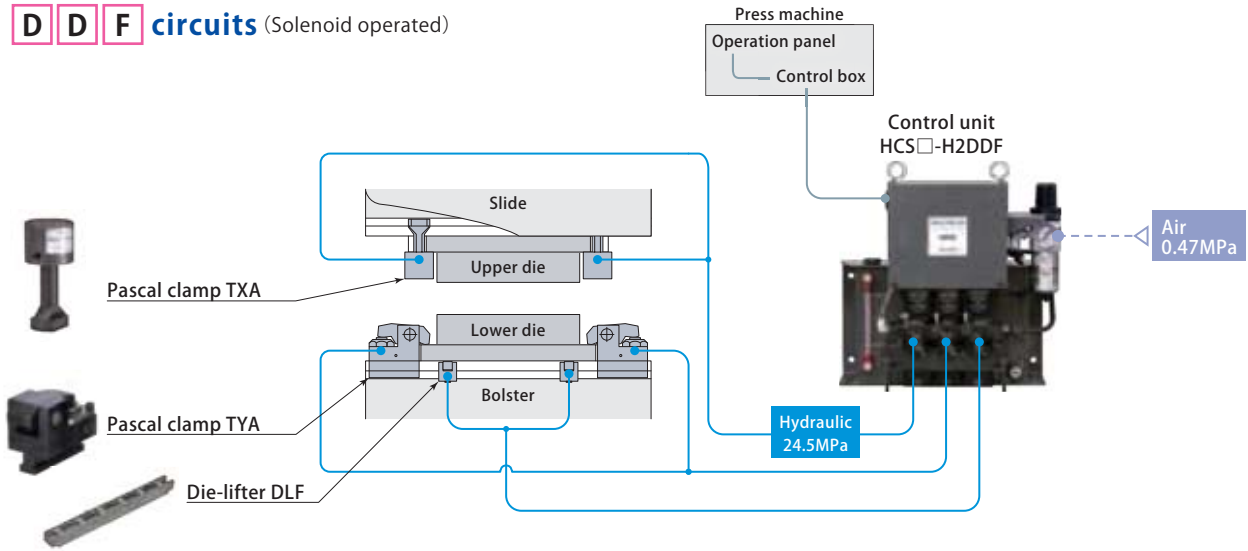
Pascal control system

For the control system supplying the hydraulic pressure to the Clamp and Die-lifter, the compacted Control unit model HCS is recommended. For the manual operation, please select the Non leak valve unit model VHA(operated manually) and Power unit model HUT.

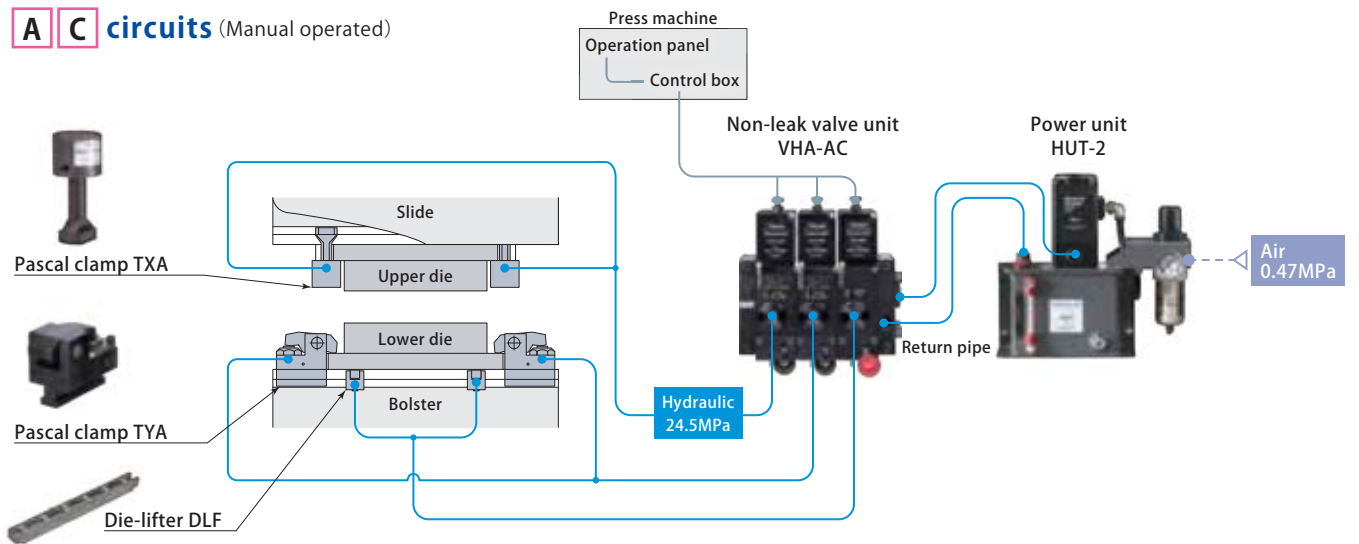


Example of hydraulic circuit

DDF circuits (Solenoid operated)



AC circuits (Manual operated)



DDF circuits (Solenoid operated)

