Pascal
Hydraulic Die-Cushion System

Pascal

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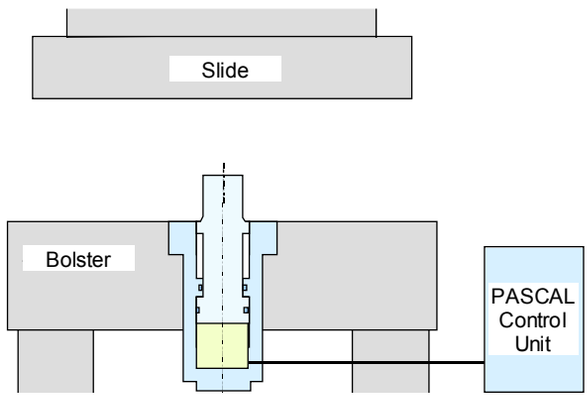
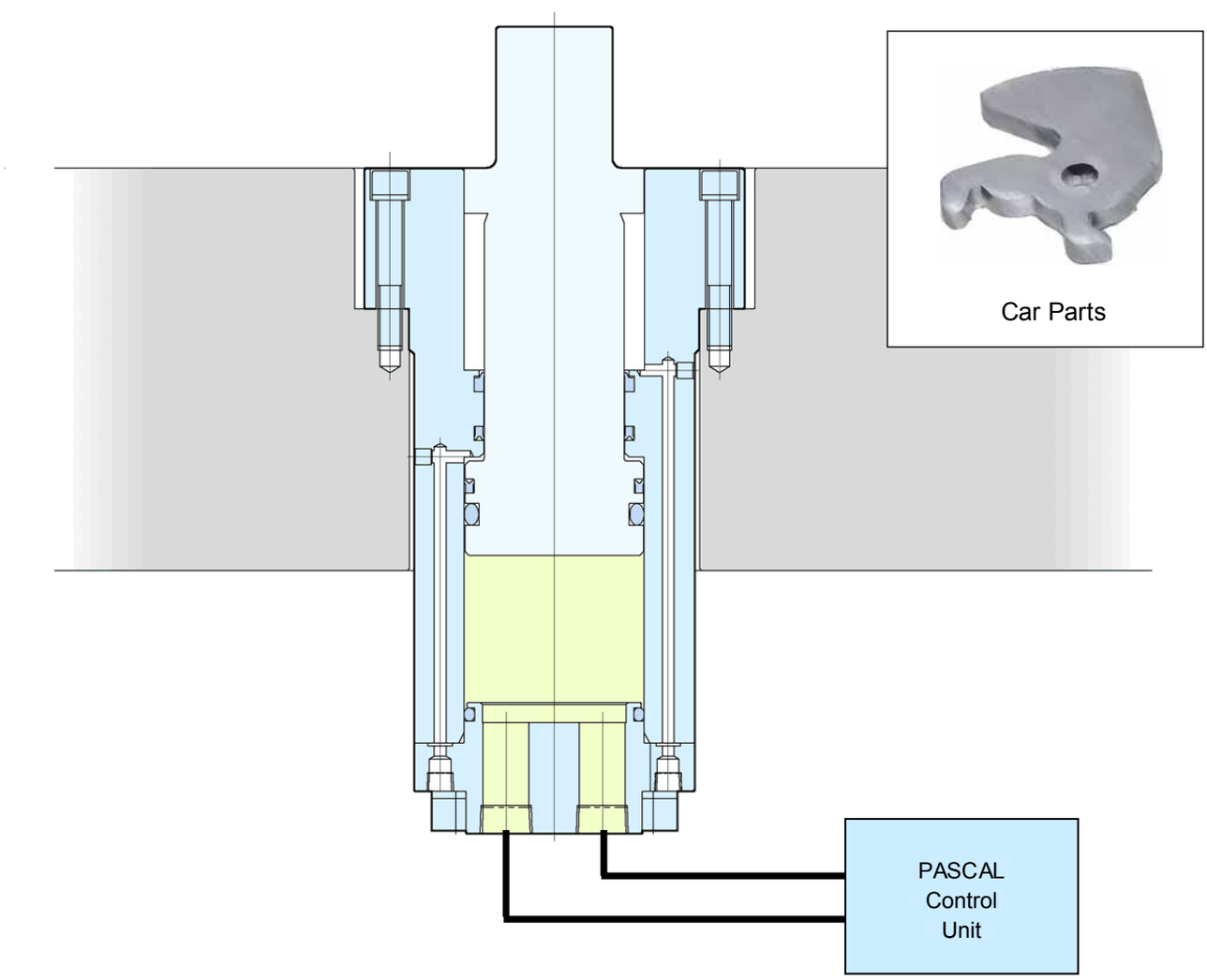
Pascal Hydraulic Die-Cushion System

DCB-PDKA2650



Built in the bolster of 9800 kN (1000 ton) forging press machine. Maximum cushion force is 147 kN (15 ton). With 49 kN (5 ton) hydraulic force, knock-out can be done at desired timing. For severe work environments, constant air blow protects the cylinder.

Max. Cushion Force	Stroke	Oil Volume	Mass
147 kN {15 ton} (at hyd. pressure 23.1 MPa)	73 mm	464 cc	40 kg



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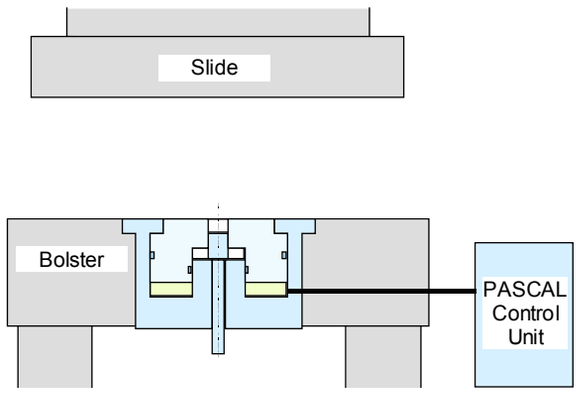
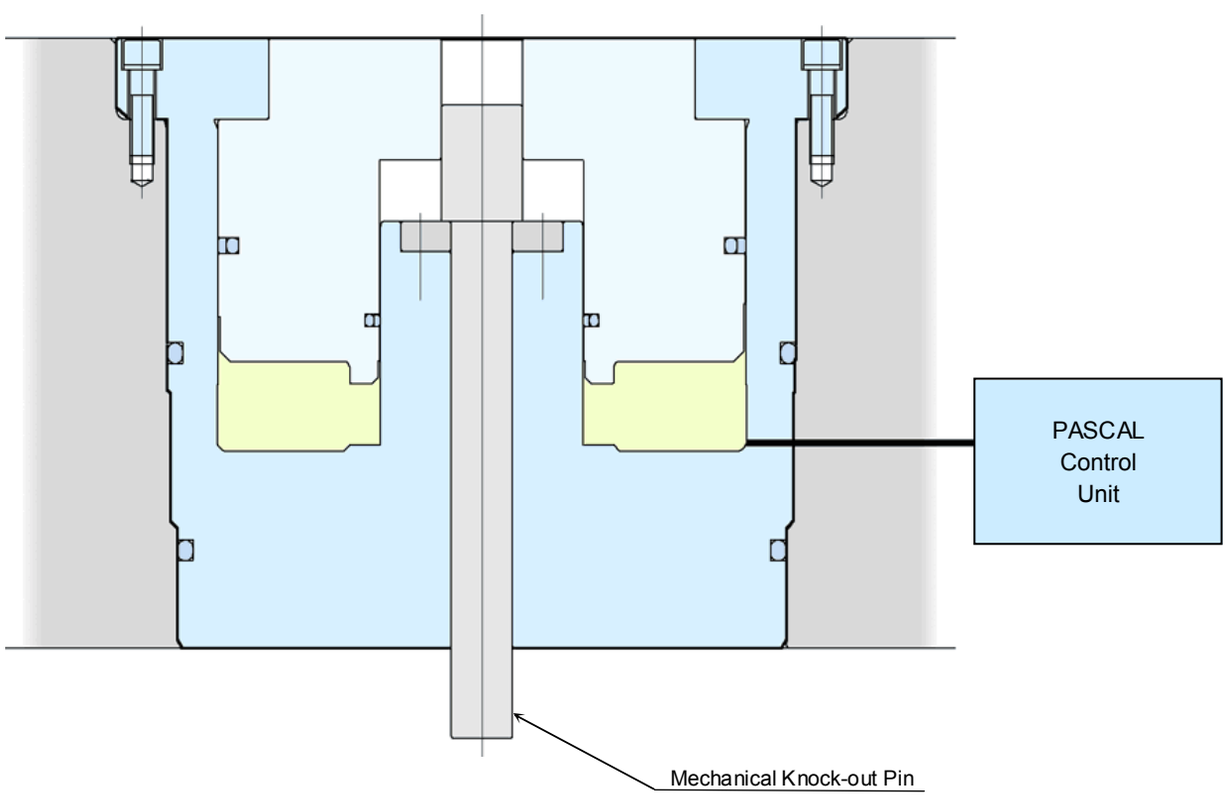
DCB-PDKA2501



Built in the bolster of 29400 kN (3000 ton) forging press machine. Maximum cushion force is 1470 kN (150 ton).
In order to have a knock-out function mechanically with press machine, hollow cylinder structure is applied.

Max. Cushion Force	Stroke	Oil Volume	Mass
1470 kN {150 ton} (at hyd. pressure 32.1 MPa)	30 mm	1357 cc	170 kg



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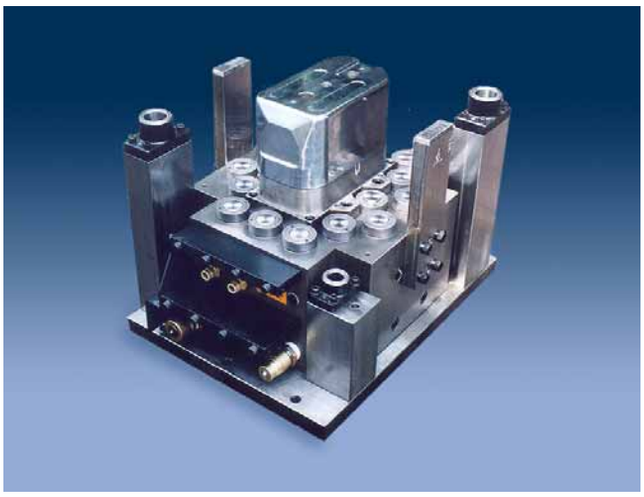
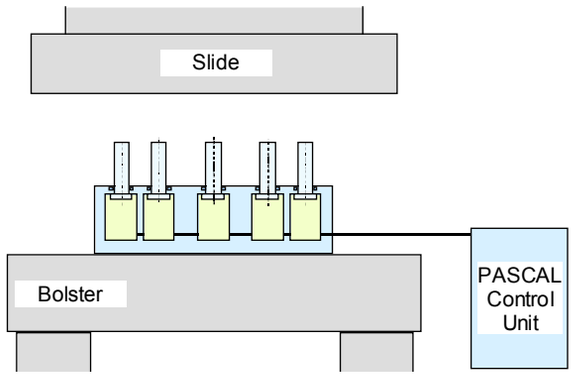
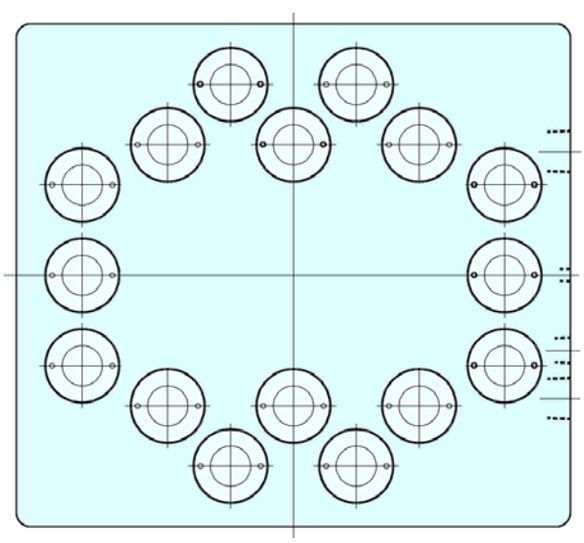


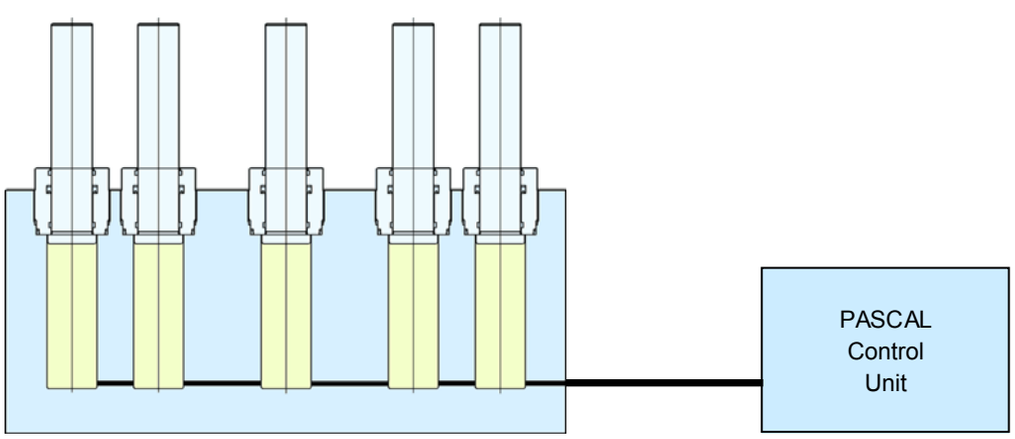
DFA-PDKA1860



Built in the die. Maximum cushion force is 470kN (48 ton). Having 160 mm long stroke for deep drawing application. Cooling jacket is integrated in the cushion plate to avoid heating during continuous operation.

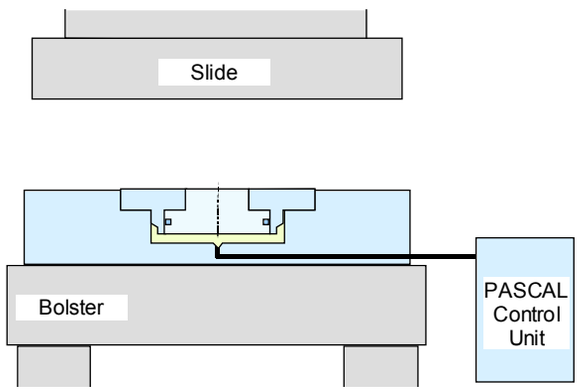
Max. Cushion Force	Stroke
29.4 kN {3.0 ton} x 16 pcs (at hyd. pressure 24.0 MPa)	160 mm





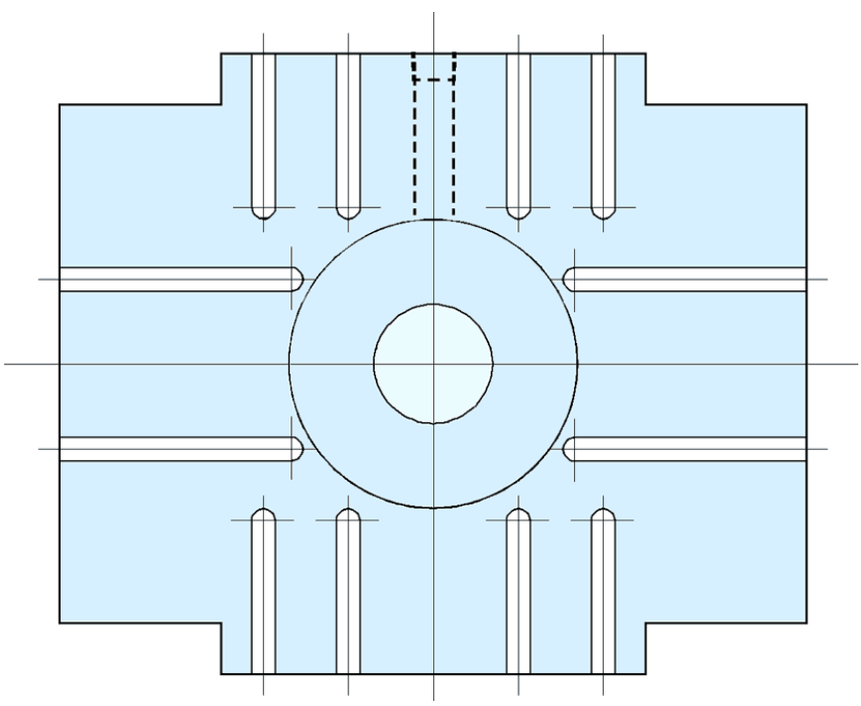
Pascal Hydraulic Die-Cushion System

DKC-PDKA2280

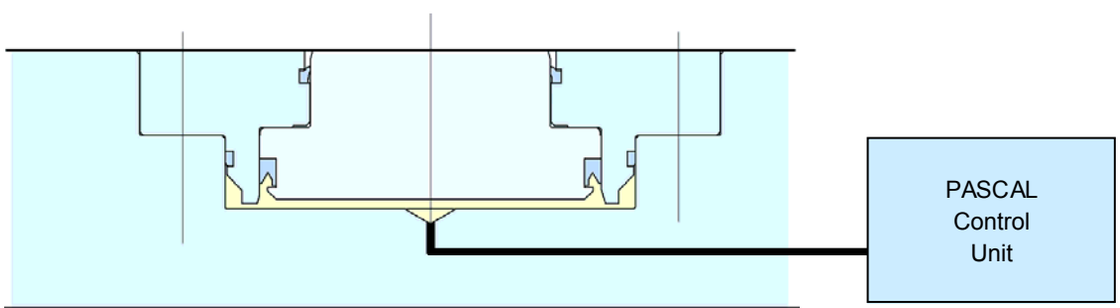


Die cushion for blanking by constant pressure. Locating on the bolster. Max. cushion force of 588 kN (60 ton). Particularly designed locking valve enables a knock-out at desired timing.

Max. Cushion Force	Stroke	Oil Volume	Mass
588 kN {60 ton} (at hyd. pressure 18.7 MPa)	4 mm	125.6 cc	700 kg

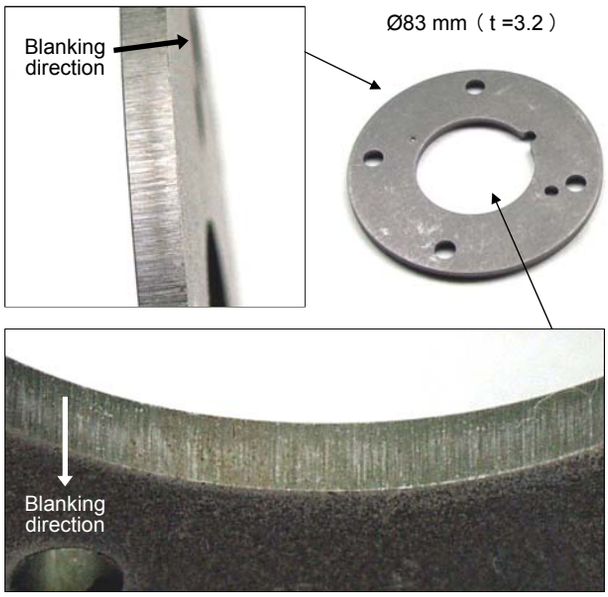


Car Parts

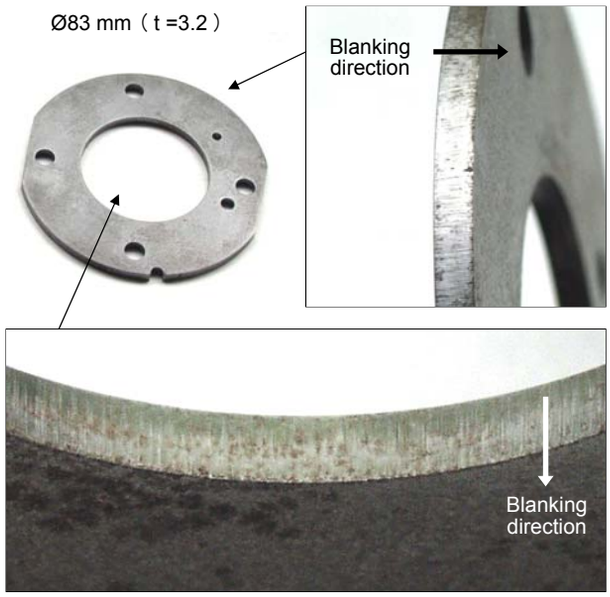


Pascal Hydraulic Die-Cushion System

Hydraulic die cushion system

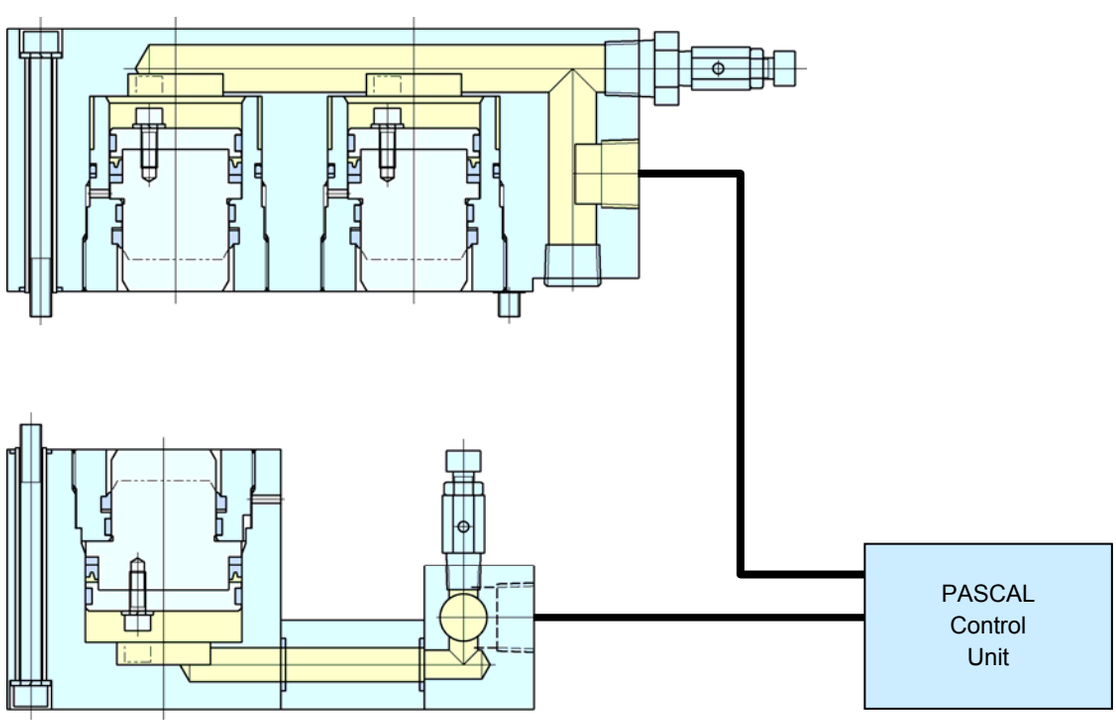


N2 Gas springs



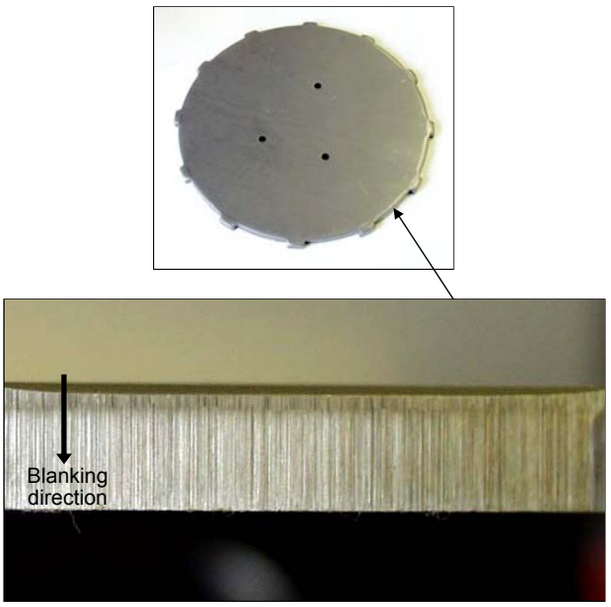
Provided by YAMAMOTO PRESS KOGYO

	Max. Cushion Force	Stroke	Oil Volume
Upper Die cushion model PDKB1440	49.0 kN × 2 (at hyd. pressure 25.0 MPa)	12 mm	23.5 cc × 2
Lower die cushion model PDKB1380	73.5 kN × 2 (at hyd. pressure 26.0 MPa)	12 mm	33.9 cc × 2

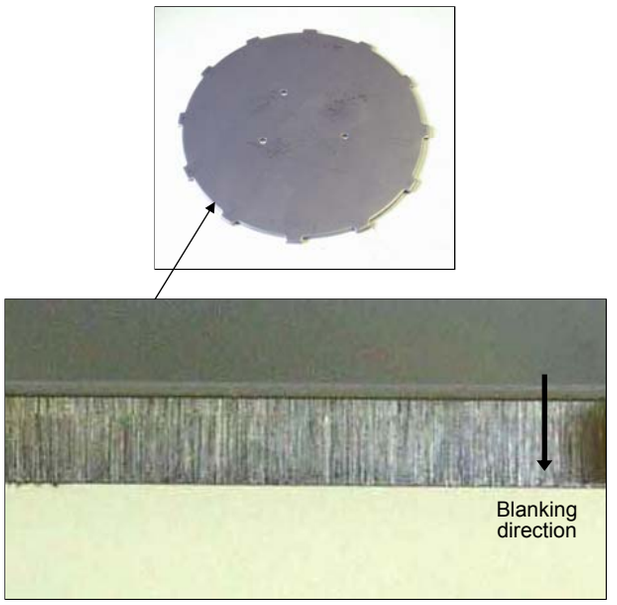


Fine blanking workpiece example by Hydraulic die cushion system

Ø171 mm（t =5.0）



Ø171 mm（t =3.2）



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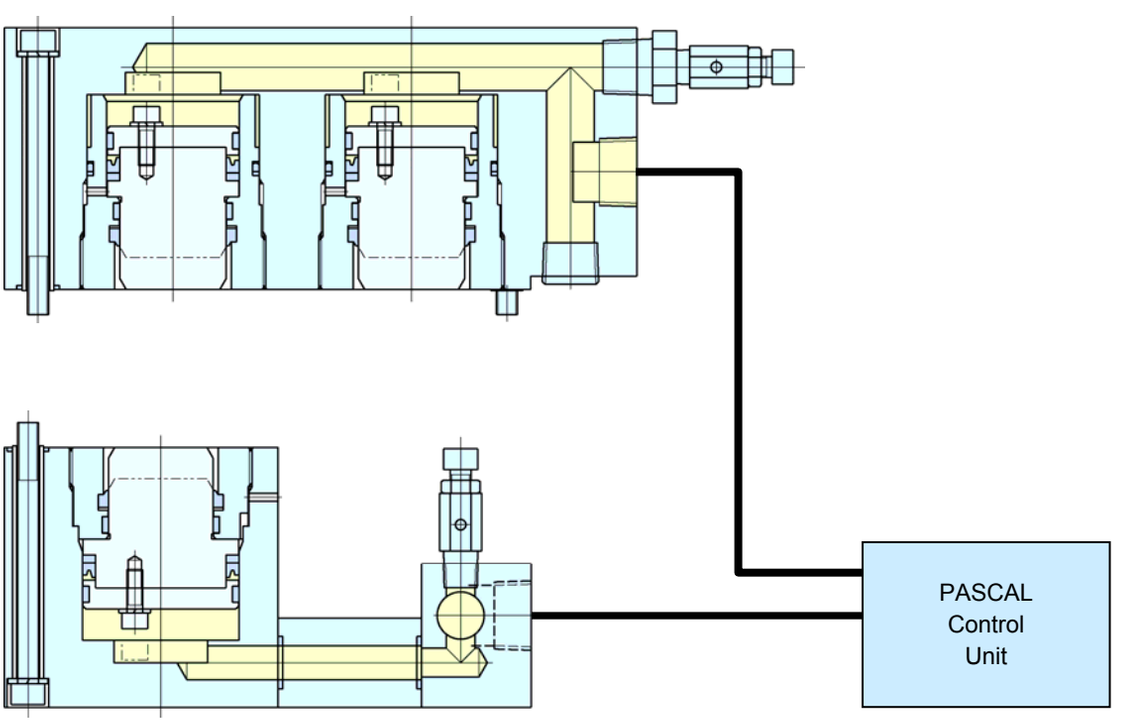

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CERTIFICATE OF APPROVAL ISO9001

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