

A safe help to die coupling?



Compes has conceived for you **DCM DIE COUPLING MACHINE®**, the machine designed and produced in order to help aluminium extruders in the delicate task of coupling die plate and mandrel, by eliminating the annoying noise pollution caused by hammer work. Many types of presses were already existing, but Compes wished to meet the operator's demands and help him in portholes assembly. This is why a new system has come out which is composed of three main components:

- 1) a special table with balls, making the die movement and centring easier.
- 2) a die supporting table, movable on springs
- 3) a swinging disc, installed in the upper part of the machine.

Thanks to the co-ordinated and effective movement of such elements, the automatic closing of die plate and mandrel takes place in a parallel way and therefore effectively. The manual intervention on the contrary does not allow to apply a symmetrical strength at the same time.

This means that also limited angle variations between the components to be coupled may cause the seizure of coupling diameters and compromise the coupling itself. In presence of dies with high diameter **DCM DIE COUPLING MACHINE®** makes possible the intervention of one operator.

Besides the die life increases considerably, thanks to the special care reserved to the inside components.

MAIN STRONG POINTS:

By the introduction of **DCM DIE COUPLING MACHINE®** in your company you can eliminate risks of injury, discomfort and relevant costs, combining the easy use with safety and elimination of noise pollution.

1) SAFETY

-The incautious use of a hammer for the compression of die plate and mandrel may cause serious damages to hands and particularly to fingers. The most frequent case is arm tendonitis.

- **DCM DIE COUPLING MACHINE®** guarantees an ideal safety degree during assembly operations, thanks to the protections, installed all around the table, and to the opening on the frontal loading side, provided with safety limit switch.

-Noise pollution: completely defeated thanks to the elimination of the traditional hammer and to the silent strength produced by the swinging disc.



2) ERGONOMICS

The operator's physical strain is considerably reduced thanks to the work run by the machine, which applies a pressure of various tons.

3) PERFORMANCES

The appliance allows to couple easily and properly die plate and mandrel. The machine is produced in a welded, tempered tubular steel structure, duly dimensioned to resist to the tightening stress. It is equipped with a fixed table and a movable desk. When the die cap is compressed against the mandrel, the package leans in a parallel and uniform way against the rigid thrust bearing bosses. Therefore die plate and mandrel cracking primings are completely eliminated, particularly when mandrels have very reduced dimensions and are fragile, due to the vibrations caused by hammer blows.

DCM DIE COUPLING MACHINE® : OPERATING INSTRUCTIONS

The following operations are valid to couple porthole dies.

- 1) Press the button to open the protective casing.
- 2) Introduce by hand the die, aided by the balls of the movable table, up to the piston centre.
- 3) Close again the casing and press the start button.
- 4) The hydraulic unit starts running. The cylinder descends and applies the strength needed for the closure. All happens only if the button is kept pressed, otherwise the machine blocks automatically and immediately.
- 5) As soon as the die is coupled, press the button "lift cylinder".
- 6) Open again the casing: the assembled die is ready to be picked up from any of the four sides, according to the machine arrangement.



TECHNICAL SPECIFICATIONS FOR STANDARD DCM DIE COUPLING MACHINE®		
	DCM 420	DCM 530
Tightening power	20 t	30 t
Maximum die diameter	420 mm	530 mm
Movable die supporting table	550x700 mm	730x930mm
Power absorbed	3 KW	4 KW
Hydraulic unit	20 litres	50 litres
Approximate total weight	Kg 1500	Kg 1700
Maximum overall length	mm1020x900x1970	mm1240x1100x2000

The machine is available with tightening strength of 20 or 30 t.

Upon request it is possible to modify the porthole loading and unloading according to the extruder's needs.

Supporting structure in welded, tempered tubular steel, with 4 columns Ø 100.

Hydraulic cylinder Ø 100 x 200 mm.

Push button panel positioned at ideal height.

Swinging disc for die adjustment.

Protection casing in aluminium profiles and PVC GLASS with manual movement and safety limit switch.

Low voltage electric equipment in a cabinet onboard machine.

The machine is supplied in compliance with CE standards.

DCM DIE SPLITTING MACHINE® : a CO.M.P.ES. S.p.A. trademark

Compes reserves the right to apply without prior notification any technical modification deemed necessary or as a function of specific requests

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