# CITOBORMA 90

# HIGH PERFORMANCE DRILLING MACHINES



# WE CREATE A PROFESSIONAL IMPRESSION



## The new drilling machine generation.

The Nagel Citobormas are known world wide as the industry standard for twin or single spindle drills. The Citoborma 90 drills cover a wide range of applications and are remarkably user-friendly.

The standard version of the Citoborma 190 and 290 comes as a table top model. They are available with one spindle, two fixed spindles or two spindles with variable distance for any combination of holes to be drilled.



**Options** 

- To increase productivity all table top models can be upgrated to foot treadle operation or power stroke.
- 3 phase model available at no extra cost.
- Drill bit cooling for difficult material.

#### **Features**

- Unique quick release FlexoDrill° sliding table.
- Suitable for drilling paper, cardboard, plastic, textiles, leather etc.
- 6 preprogrammed hole patterns set-up within a second.
  - Additional tabulator bar with interchangeable stops for individual programs.
    Paper width up to 470 mm.
    - Throat depth up to 105 mm.
    - Smooth drilling process.

NAGEL CITOBORMA 290 AB.

# NAGEL CITOBORMA 290 B with treadle.



# The high comfort FlexoDrill° sliding table with remarkable features.

- Automatic release after each stroke.
- Large sliding distance and throat depth.
- Centres the paper stack.
- Left side stop is retractable to ensure smooth and fast access.
- Takes large formats.
- Individually programmed tabulator bars are interchangeable.
- Table can be fixed at any position if required.



For operator's convenience: The quick release FlexoDrill° sliding table.



#### NAGEL CITOBORMA twin-spindle 290

- Model Citoborma 290 B with two self-centering spindles that can vary in position between 45 – 160 mm. Allows any combination of holes to be drilled.
- Model Citoborma 290 with fixed centres 80 mm. Achieves the two hole pattern in one stroke.

table top.

Preprogrammed hole patterns: Set-up within a second.





# **Technical specifications**

| Model                         | 290 AB        | 290 B             | 290            | 190            |
|-------------------------------|---------------|-------------------|----------------|----------------|
| Number of drill heads         | 2             | 2                 | 2              | 1              |
| Max. pile height (mm)         | 60            | 60                | 60             | 60             |
| Max. paper width (mm)         | 470           | 470               | 470            | 470            |
| Max. throat depth (mm)        | 105           | 105               | 105            | 105            |
| Drill bit sizes (mm)          | 2 – 20        | 2 – 20            | 2 – 20         | 2 – 20         |
| Distance between centres (mm) | 45 – 160      | 45 – 160          | 80             | -              |
| Time/stroke (s)               | 3,3           | Operator speed    | Operator speed | Operator speed |
| Power stroke                  | Yes           | Option            | Option         | Option         |
| Foot treadle                  | -             | Option            | Option         | Option         |
| Certification                 | CE            | CE                | CE             | CE             |
| Power supply (V)              | 3 phase       | Single or 3 phase |                |                |
| Power consumption (kW)        | 0,7           | 0,5               | 0,5            | 0,5            |
| H x W x D net (cm)            | 158 x 64 x 60 | 73 x 64 x 60      | 70 x 64 x 60   | 70 x 64 x 60   |
| Weight, net (kg)              | 165           | 69                | 59             | 55             |
| H x W x D (cm) gross          | 165 x 80 x 80 | 80 x 80 x 80      | 80 x 80 x 80   | 80 x 80 x 80   |
| Weight, gross (kg)            | 195           | 90                | 80             | 75             |

# NAGEL-drill bits with colour-coding.

### Type 1 quality

- Green colour-coding.
- High-speed steel.
- Suitable for offset, copying and typing paper and board.
- Recommended for all manual drilling machines.
- Excellent value for money.

### **Drill bit care**

- Nagel-waxpaper.
- Nagel-drill sharpener.

### **Teflon quality**

- Blue colour-coding.
- Teflon-coated high-speed steel.
- Suitable for coated papers and board, plastic, films and rubber.



**NAGEL drill bits:** 2 – 35 mm diameter; 50 - 60 mm cutting length; options for special applications.

# **HD** quality

- Yellow colour-coding.
- High-speed steel with high-density special coating.
- Service life up to four times that of type 1.
- Suitable for art paper and illustration printing paper.
- Top performance in high volume applications.

#### Contact

**Ernst Nagel GmbH** Breitwiesenstraße 21 70565 Stuttgart Germany

Telephone domestic +49711-78078-0 Fax domestic +49711-78078-10

+49711-78078-20

Telephone Export +49711-78078-21 Fax Export

E-Mail sales@ernstnagel.com www.ernstnagel.com

