



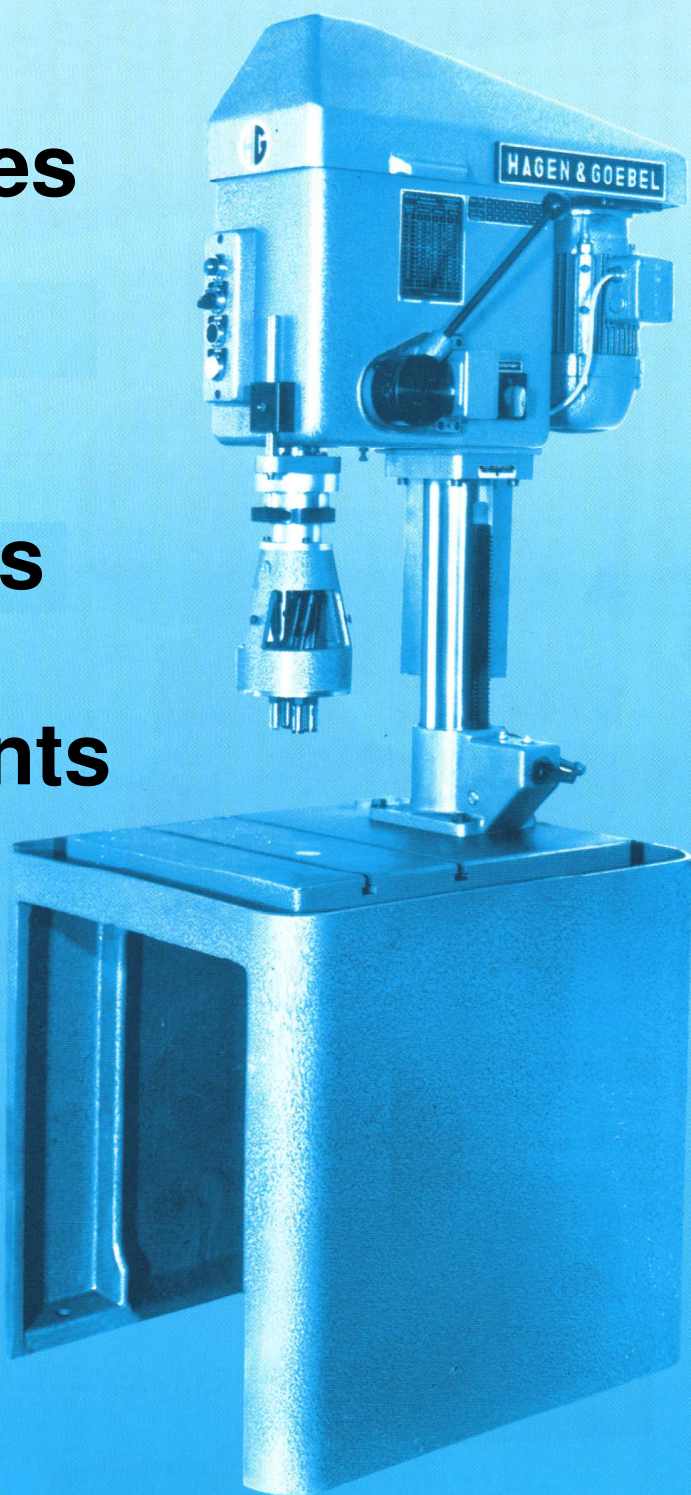
HAGEN & GOEBEL

Tapping machines

Machining units

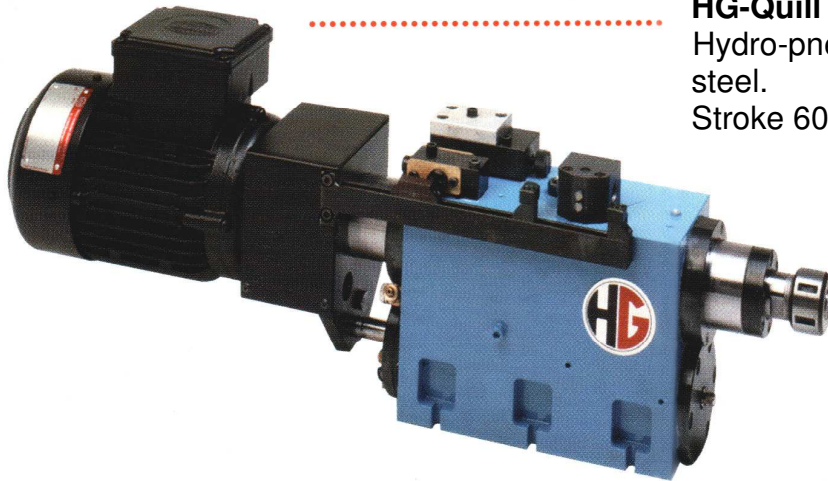
Special machines

Clamping elements

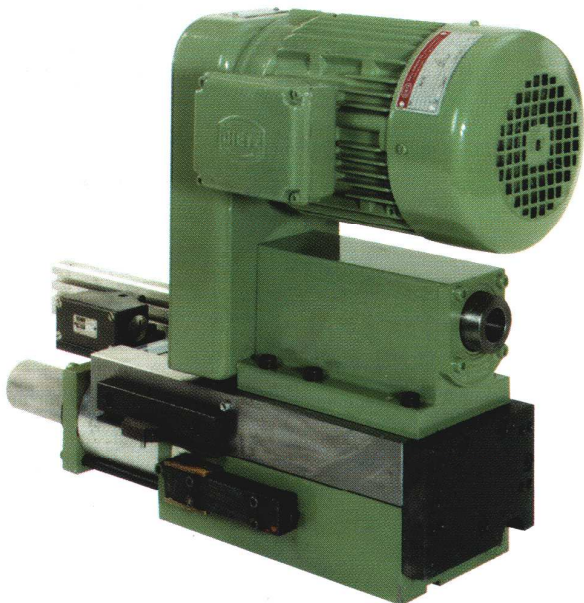


Product programme

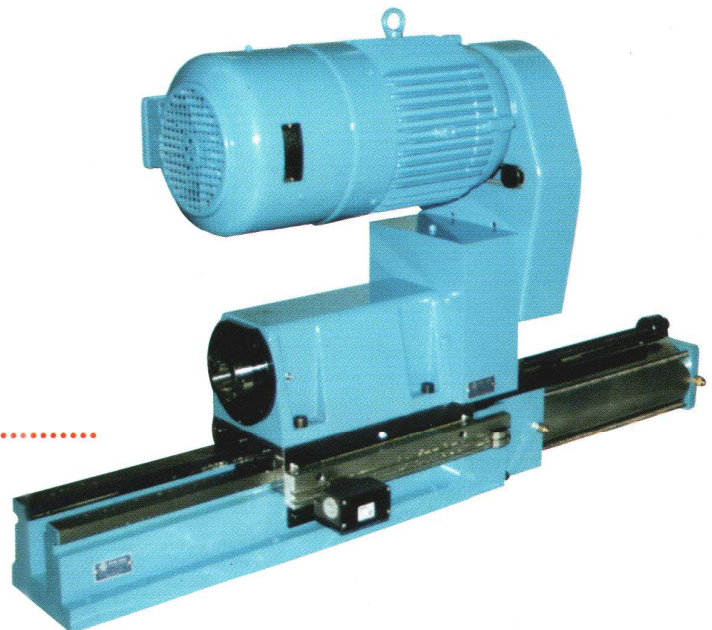
Machining units



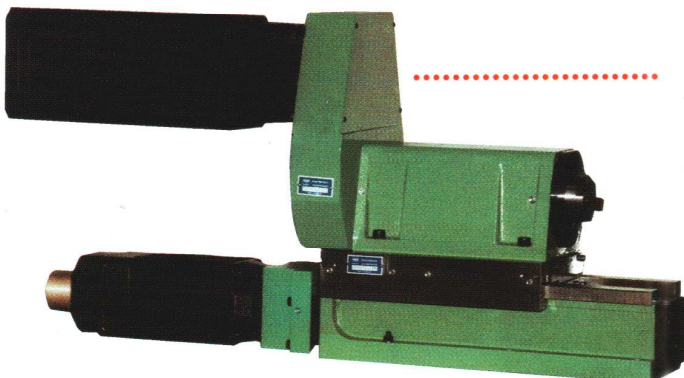
HG-Quill drilling unit P 08,
Hydro-pneumatic drilling unit to max. drill \varnothing 8 mm in steel.
Stroke 60 mm



Machining unit BF2 - H60/80
0,25 - 1,1 kW, MT 3 location
assembled to:
HG - Feed slide unit H 60
Hydropneumatic 1500 N at 60 Bar
Stroke 80/110/160 mm

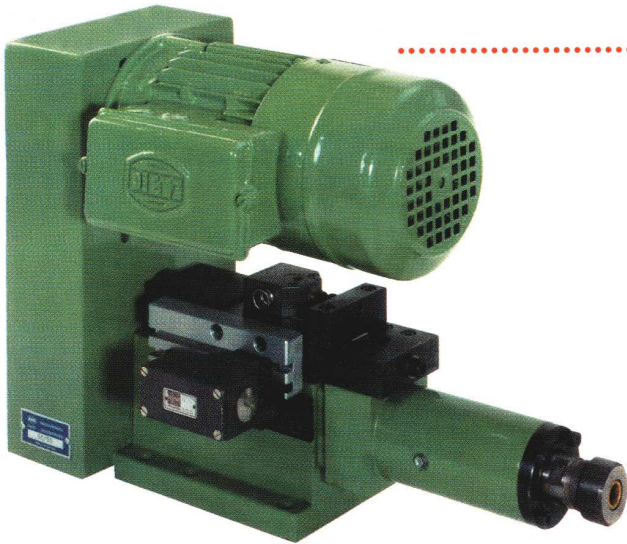


HG-Spindle unit BF 4 G
1,5 kW - 5,5 kW, SK 40 location
Drive 4 : 1 reduction assembled to:
HG -Feed slide unit H 160
hydropneumatic, 4000N at 6 bar,
Stroke 100 - 300 mm



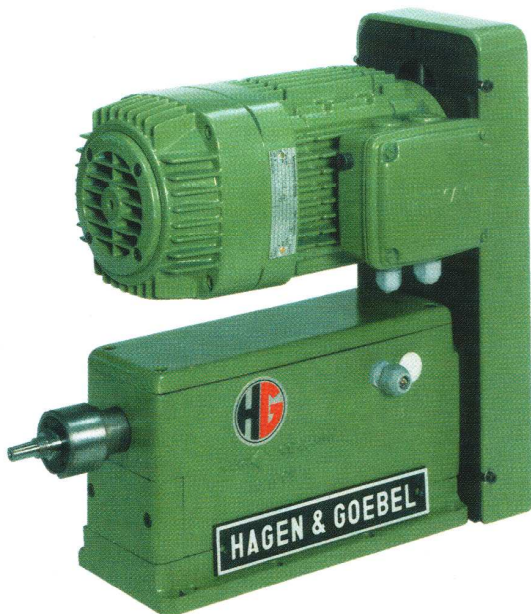
HG- CNC- programmable heavy duty-drilling- and threading unit GE 40 NM -CNC,
Drilling capacity $\frac{3}{4}$ 22 mm in steel, threading capacity M 16 in steel.
Stroke 200 mm

Threading units



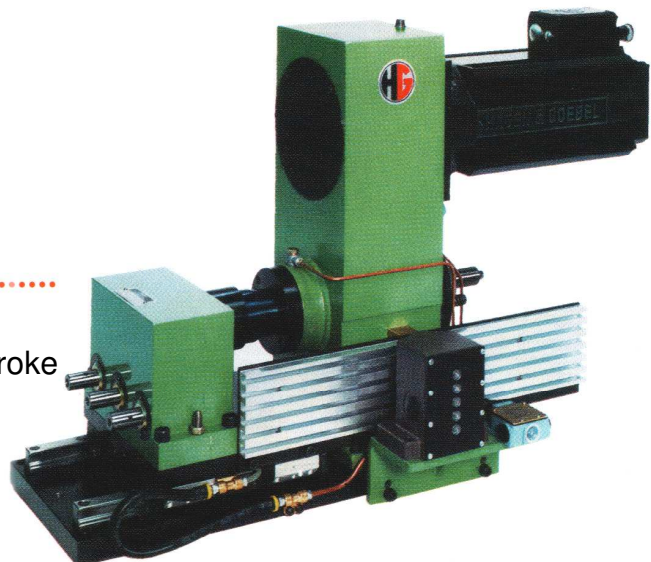
HG - Threading units with leadscrew cartridge feed,
M2 - M 30 in steel. Leadscrew feed to spindle
transmission $i = 1:2$
Stroke 50 / 80 mm

HG - Threading units with leadscrew cartridge feed,
M3- M 42 in steel. Stroke 60 / 80 / 120 mm.
High frequency actuating cone brake motor



HG - Threading unit GE - 6,
to max. M6 in steel up to 140 threads / min with
leadscrew cartridge feed. Leadscrew feed
to spindle
 $i = 1:4$. Stroke 35 mm

HG - Threading unit, three spindles,
with 3 phase - Servo drive 50 NM, working stroke
120 mm, steplessly variable - separately
programmable for forward and return
from - 500 - 3000 rpm.

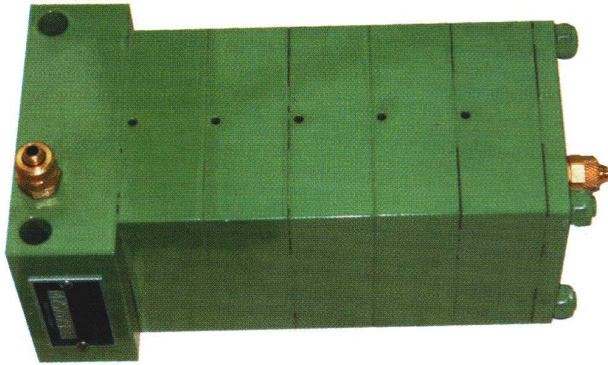
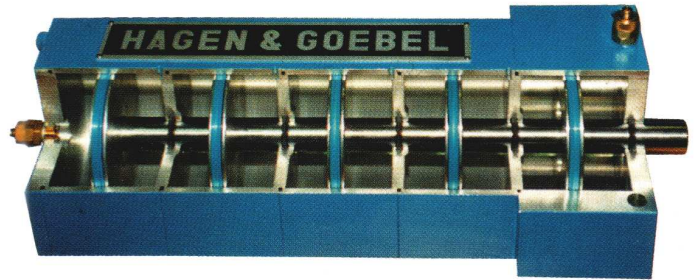


Clamping elements

HG - Multicylinder

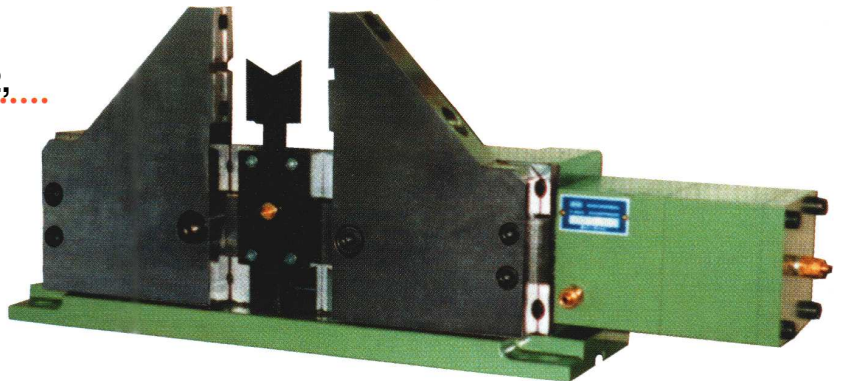
Compact pneumatic cylinder with the power of a hydraulic cylinder, various diameters, strokes (5, 12, 20, 30, 40 + 50 mm), feed power from 1150 N to 42,000 N at 6 bar.

Power requirements given by varying number of cells. For clamping, riveting, stamping, impacting, pressing etc.



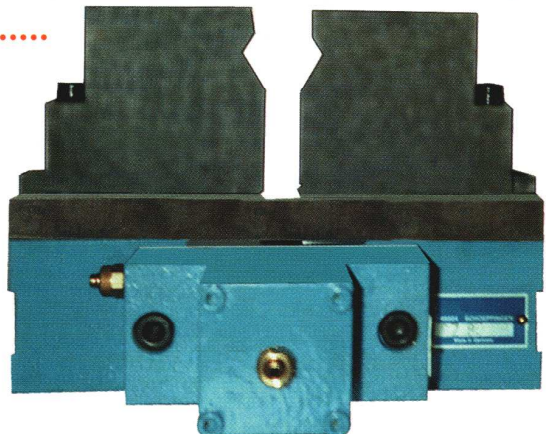
Centring clamping vice PZ 130 - M 90 / 2,

pneum. central clamping vice clamping pressure 15,000 N at 7 bar, clamping capacity \varnothing 6 mm - $\frac{3}{4}$ 100 mm, stroke per jaw max. 25

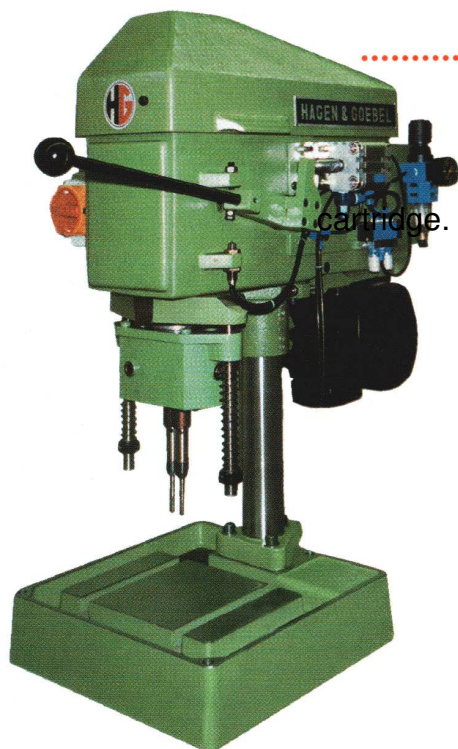


Pneum. centring clamping vice PZ 80 - M 50 / 2

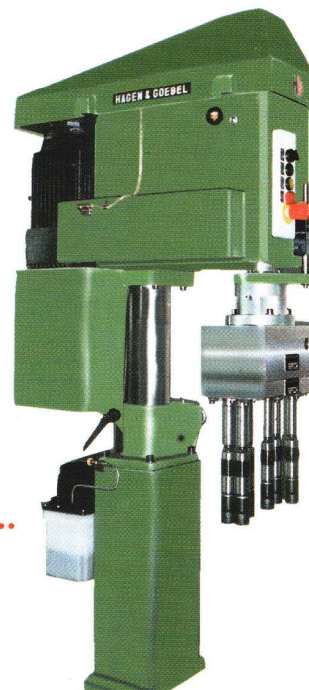
Clamping pressure 4,400 N at 7 bar, clamping capacity \varnothing 4 mm – \varnothing 62 mm. Stroke per jaw max 9 mm



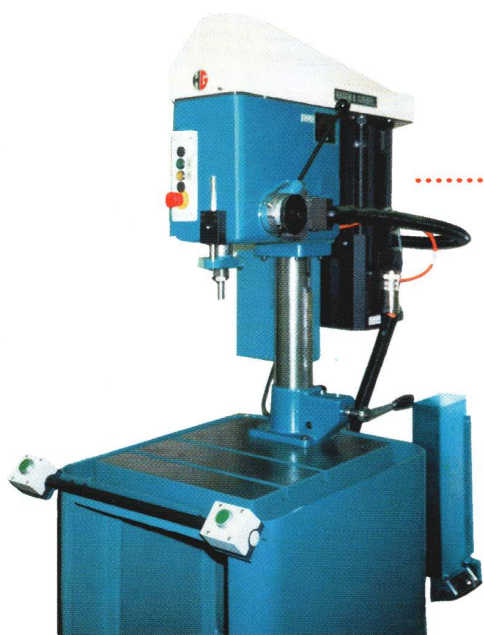
Tapping machines



HG - Tapping machine HG - 6 two spindles, to max 2 x M4 in steel. Reversing by double friction clutch, hand or pneumatically operated feed. Stroke 30 mm, with or without mounting leadscrew



HG - Tapping machine HG - 16 / 22 E six spindles, to max. 6 x M 8 in steel. Reversing by limit switch / brake motor (high frequency actuation) Leadscrew cartridge feed, stroke 80mm



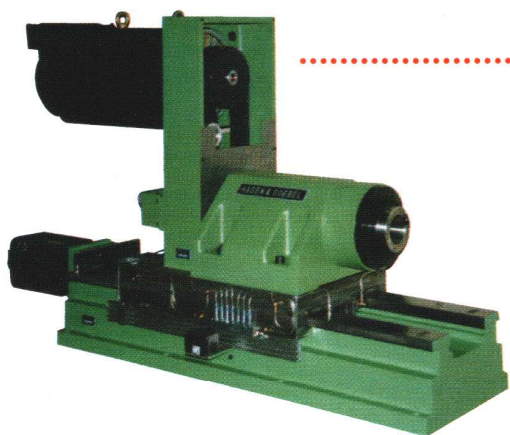
HG - Tapping machine HG - 16 / 22 E of single or multi-spindle design, to max 4 x M10 in steel. Reversing by 3 phase-servo drive 14kW, high frequency actuation. Cutting speeds $V = 60 \text{ m/min}$.

HG - 40 NM - CNC

CNC programmable high duty tapping and drilling machine, single or multi-spindle, with round table and safety guarding to CE.



Special design units

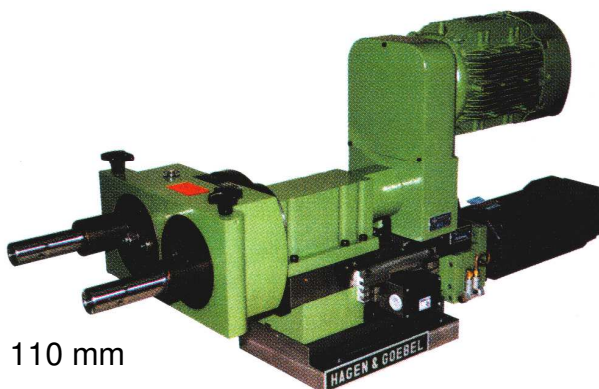


Machining unit, BF 5 - H 400 / me / 600

Feed power 25KN, stroke 600 mm,
drive power 30 Kw at 100% ED

HG - Spindle unit BF 3,

1,5 kW drive power Spindle speed 450 rpm
assembled to feed slide H75/me/110 with
AC servo motor feed power Approx. 5000 N Stroke 110 mm
with adjustable two spindle head
adjustable in the range of 51 - 219 mm



Drilling and milling unit BF 5,

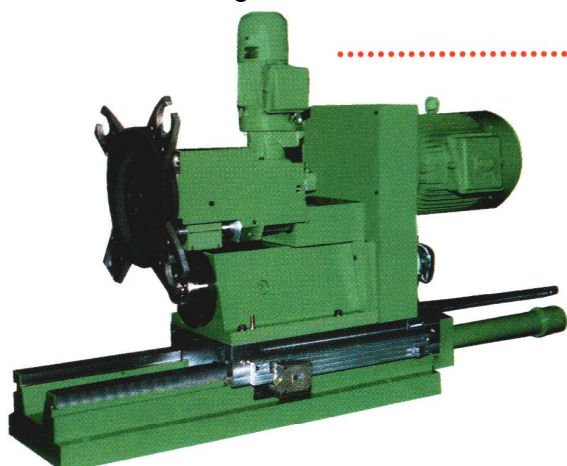
- Drive power 7,5 kW
- Spindle nose SK 50 DIN 69871
- Automatic hydraulic tool clamping

Slide unit H 300 / hy 50 / 400

- Hydraulic feed, max 12,000 H at 60 bar
- Limit switch control rail with 4 tracks

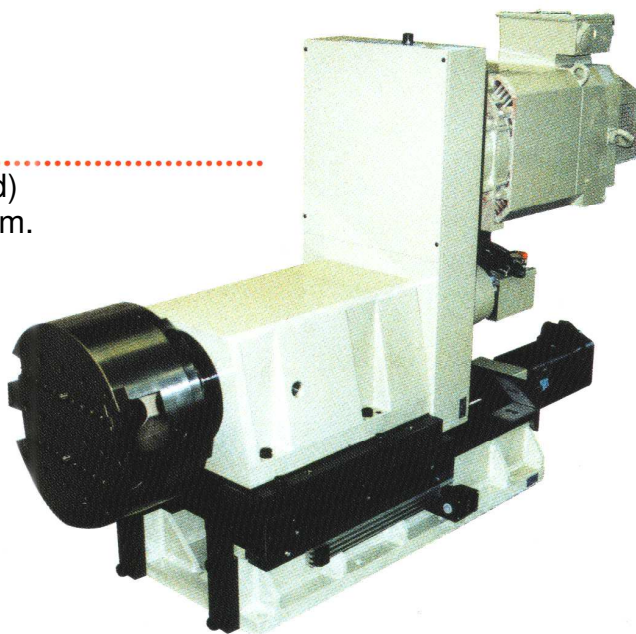
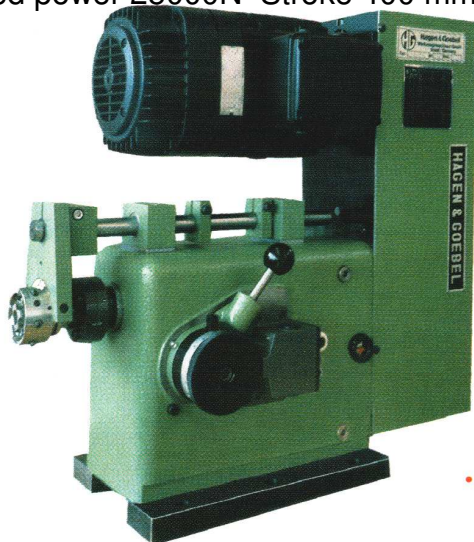
Tool changer

- Drive by AC gear motor and Sinuid drive
- 4 Tool positions for tools SK 50 DIN 69871
- Change stroke by pneumatic cylinder



Spindle unit BF 6

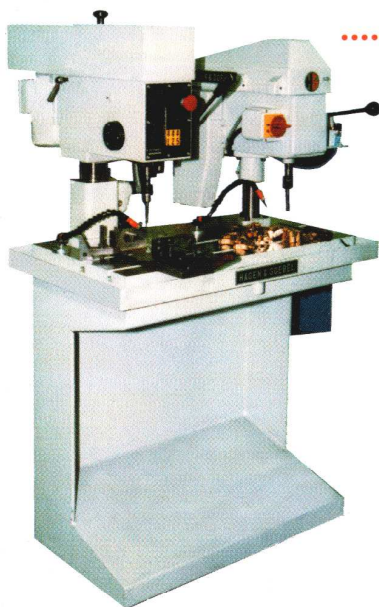
with facing stroke capability (Komet Facing Head)
30 kW drive power Spindle speeds 250 - 2500 rpm.
Assembled to Feed slide H 480/me/400
Feed power 25000N Stroke 400 mm



Tapping unit GE - 16 with Thread cutting head,

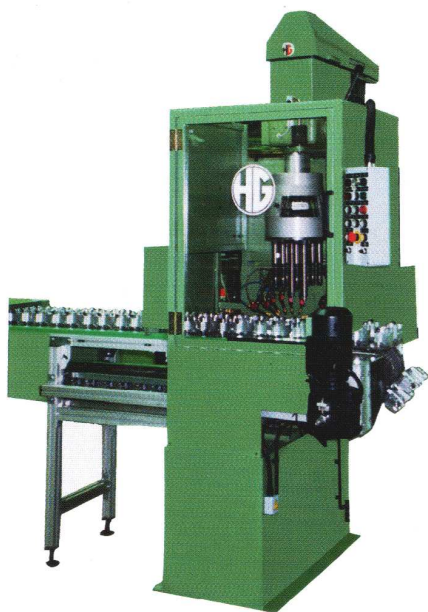
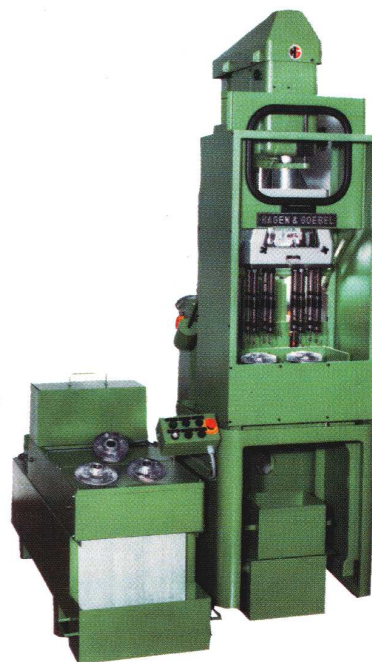
Leadscrew cartridge feed, capacity: M 10, M 16,
R3/8" - threading in hard PVC, cutting speed
V = 35 m/min

Special design tapping machines



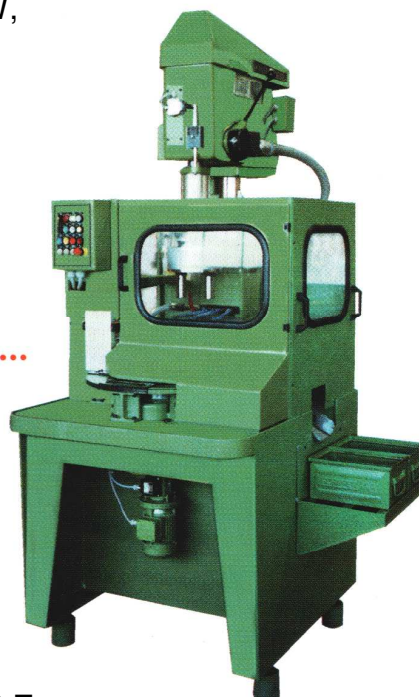
..... **Hand actuated HG - drilling and tapping machines, B 8 N / HG 6,**
of single spindle design to
drill $\frac{3}{4}$ 6 mm and
tap M 6 both in steel

**HG - tapping machine
HG - 22 E 8 spindles,**
to machine two
light alloy flanges in
one pass, each 4 x M 10, in
two work piece fixtures,
encased in
Safety guards with safety door to CE



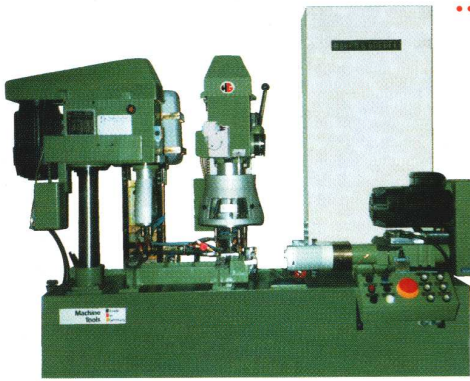
**HG - tapping machine
HG - 22 E 12 spindle**
..... with 3 phase Servo drive 8 kW,
12 x thread forming M 6,
4 work pieces per load

**HG - Tapping machine
HG - 16 E,**
multi spindle tapping M 8
in steel, with 6 station indexing table
and machine safety guarding



**HG - thread
cutting machine GE - 16 / 22 E,**
..... Special spindle and release mechanism
for thread cutting head, rapid approach
with pneum. actuation
Centring chuck with capacity of
max. M22 thread in steel

Special machines



HG - tapping machines

Special design

HG - 8 E / G6 / 50,

Vertical and horizontal machining, multi spindle to bore and tap sheet metal chassis

HG - thread forming machine

HG - 22 E / 4 - station indexing table,

with 3 phase Servo drive for 4 x M 10 in steel, cutting speed $V = 60 \text{ m / min}$, with automatic ejection mechanism and torque monitoring



HG - 4 - Station -

indexing table machine to drill and tap,

with toothed drive pulleys supplied to spindle units BE 4, feed slide H 160 / V 100 100 mm stroke, also tapping machine HG - 16 E, both machining heads each equipped with a 4 spindle head, capacity: approx. 320 parts / hour Machine safety guards to CE

HG - CNC - programmable

4 - station indexing table machine,

to drill / counter bore and thread form to capacity, equipped with thread forming machine HG - 40 NM - CNC, also slide unit with linear guides, ball screw unit with 3 phase servo drive, stroke 600 mm. Machine safety guarding to CE



HG - Tapping automatic

2 x HG - 22 E with

4 - station indexing table,

with 2 multi spindle heads to machine computer housings



Hagen & Goebel Werkzeugmaschinen GmbH

Sälzer Weg 3 · 59494 Soest · Telephone ++49-(0)2921-590160 · Telefax ++49-(0)2921-590166

Internet: www.hagengoebel.de

E-Mail: kontakt@hagengoebel.de