DRILLING

KALTENBACH DRILLING MACHINES

ADVANTAGES AT A GLANCE:

- Robust, low-vibration design prolongs machine and tool life
- Efficient drilling, contour-marking, centre-marking, counter-sinking and thread-cutting on all three drill axes simultaneously
- Powerful clamping system reliably holds material and reduces vibrations to prolong tool life
- Intelligent material measurement integrated into clamping system for greater process reliability
- Rapid/working feed concept for shorter idle times
- Servomotor and ball screw for high-precision drill axis positioning and feed control
- A saw can be incorporated to create a saw-drill combination



KDE 603 | 1003

Basic drilling machine for small businesses with simple drilling applications and relatively small machining requirements.

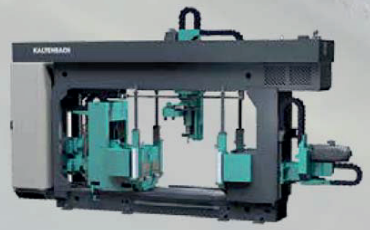
- Manual quick-change chuck and tool length measuring
- Tool-oriented processing minimises tool changes



KDM 615 | 1015

Fully automatic drilling machine for small and medium steel profiles for users with more extensive machining requirements.

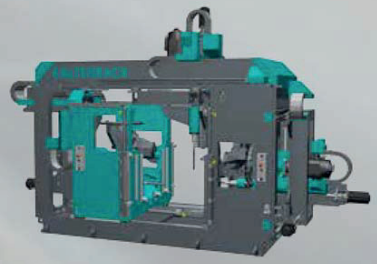
- Powerful drives and modern spindle construction for high-performance machining
- Automatic tool-change system with space for 5 tools per drilling axis
- Software macros for simple, fast programming when milling standard contours
- Carbide and solid carbide drills can be used to significantly reduce production times



KDL 1318 | 2118

Fully automatic drilling machine for medium and large steel profiles for users with more extensive machining requirements.

- Powerful drives and modern spindle construction
- Automatic tool-change system with space for 6 tools per drilling axis
- Software macros for simple, fast programming when milling standard contours
- Carbide and solid carbide drills can be used to significantly reduce production times



KDP 736 | 1036 | 1336

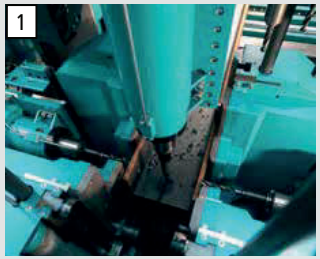
Fully automatic drilling machine for small, medium and large steel profiles for users with highly diverse machining requirements and large tonnages.

- Powerful drives and modern spindle designs ensure excellent machining results
- Additional feed axis traversing max. 500 mm and simultaneous sawing for boosting productivity by up to 50%
- Two spindle configurations optimised for milling and drilling operations
- Automatic tool-change system with space for 12 tools per drilling axis ensures short setup times and greater flexibility
- Software macros for simple, fast programming when milling standard contours
- Carbide and solid carbide drills can be used to significantly reduce production times

KDE 603 | 1003

THE SOLUTION FOR LIGHT TO MEDIUM-DUTY STEEL FABRICATION





Efficient drilling, contour-marking, centre-marking, counter-sinking and thread-cutting on all three drill axes.



Intelligent material measurement integrated into clamping system for greater process reliability.



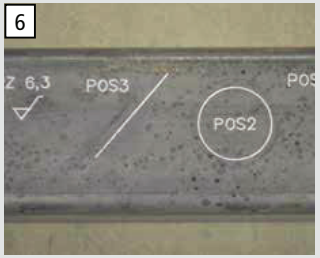
Quick-change chuck for simple, manual tool changes.



Swarf conveyor or swarf tray for convenient swarf removal.

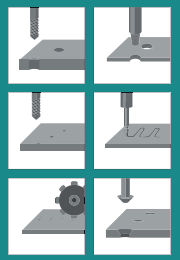


Servomotor and ball screw for exact drill axis positioning and feed control.



Contour marking of the material on up to four sides is possible in order to shorten downstream processes.

TECHNICAL DATA	KDE 603	KDE 1003
Working range max. [mm]	600 x 500	1000 x 500
Working range min. [mm]	50 x 5	50 x 5
Machining unit	3	3
Max. speed [rpm]	1600	1600
Max. torque [Nm]	146.7	176.7
Drive power per axis [kW]	5	5
Feed [mm/min]	1500	1500
Positioning - rapid advance [m/min]	11	11
Material transport speed [m/min]	30	30
Cooling	internal + external	internal + external
Drill type	HSS	HSS
Drill diameter [mm]	6 - 31.75	6 - 31.75
Machine weight [kg]	3500	3800
Machine dimensions (L x W x H) [mm]	3510 x 1500 x 2470	3910 x 1500 x 2470



"Our KALTENBACH machines have enabled us to increase our productivity. KALTENBACH's comprehensive package is perfect and totally reliable."

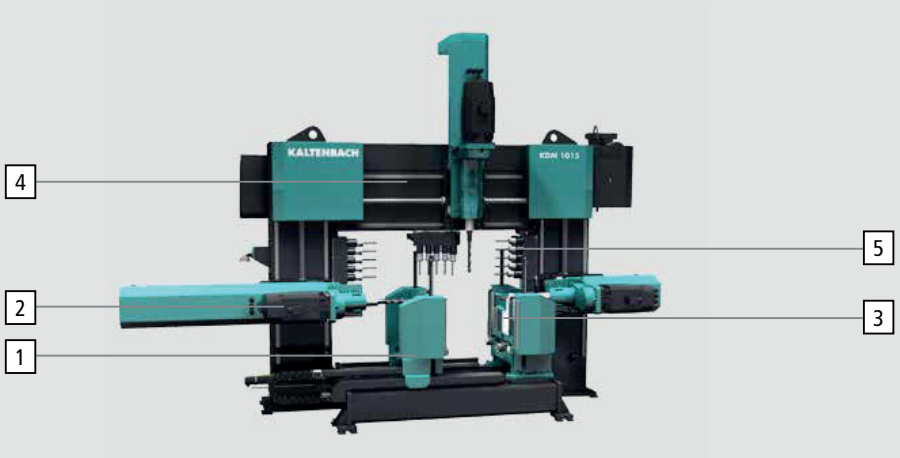
Heinz Hirt, managing director of
Hirt Schlosserei und Metallbau GmbH

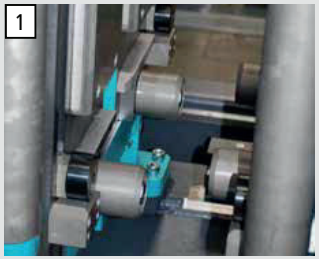


KDE 603 at Hirt Schlosserei und Metallbau GmbH.

KDM 615 | 1015

DYNAMIC PROCESSING FOR COMPLEX TASKS




1

Sturdy, low maintenance system for optimum material clamping and longer tool life.


2

Powerful drives and modern spindle construction for high-performance machining.


3

Tool length sensing with self-cleaning laser light barrier for low-maintenance operation plus high process reliability and short idle times.


4

Robust, low-vibration machine design for long service life and low maintenance and tool costs.

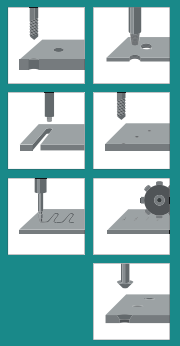

5

Automatic, reliable, low-maintenance tool changer with space for five tools per drilling axis.



Milling operations are easy to perform with macros and made more efficient through the use of KALTENBACH Power Tools.

TECHNICAL DATA	KDM 615	KDM 1015
Working range max. [mm]	600 x 500	1000 x 500
Working range min. [mm]	50 x 5	50 x 5
Machining unit	3	3
Max. speed [rpm]	2500	2500
Max. torque [Nm]	422	422
Drive power per axis [kW]	29.5	29.5
Feed [mm/min]	1500	1500
Positioning - rapid traverse [m/min]	11	11
Material transport speed [m/min]	30	30
Tool changer x magazine places	3 x 5	3 x 5
Cooling	internal + external	internal + external
Drill type	HSS, HM, VHM	HSS, HM, VHM
Drill diameter [mm]	6.8 - 50	6.8 - 50
Machine weight [kg]	6000	6500
Machine dimensions (L x W x H) [mm]	4570 x 1670 x 3750	5370 x 1670 x 3750





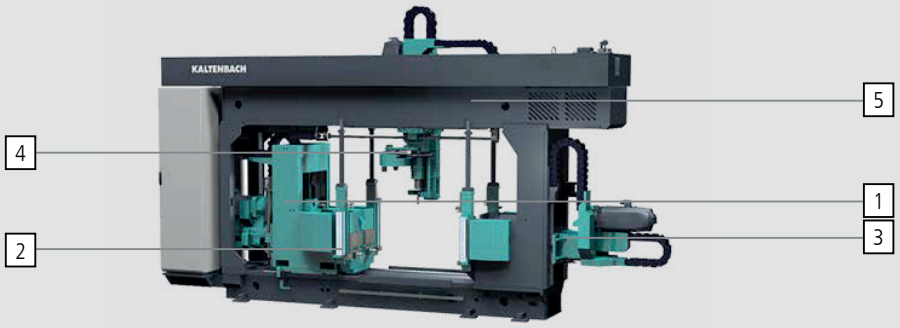
Drilling, thread-cutting, contour-marking, counter-sinking, milling of long holes and notches.

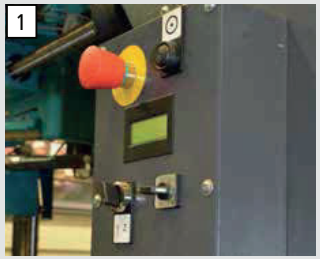


KDM 615 at Stahl- und Anlagenbau Schädlich GmbH.

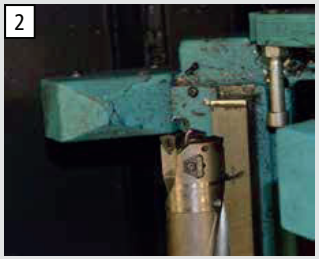
KDL 1318 | 2118

HIGH-PERFORMANCE FOR HEAVY-DUTY STEEL FABRICATION AND STEEL SERVICE CENTRES

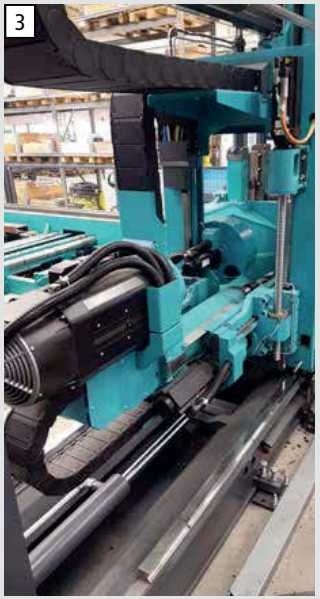



1

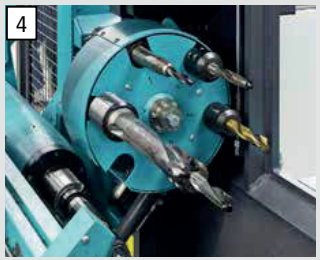
Tool change operation for simple and secure change of tools.


2

Tool length sensing with self-cleaning laser light barrier for low-maintenance operation plus high process reliability and short idle times.


3

Machining axis with powerful drives travels with clamping device for greater rigidity and stability.


4

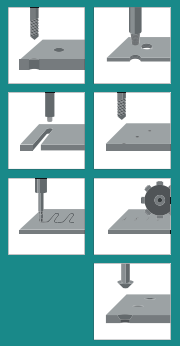
Automatic, reliable, low-maintenance tool changer with space for six tools per drilling axis.



5

Robust design for long machine life.

TECHNICAL DATA	KDL 1318	KDL 2118
Working range max. [mm]	1300 x 500	2100 x 700
Working range min. [mm]	60 x 10	60 x 10
Machining unit	3	3
Max. speed [rpm]	2500	2500
Max. torque [Nm]	544	544
Drive power per axis [kW]	34.5	34.5
Feed [mm/min]	2000	2000
Positioning - rapid traverse [m/min]	15	15
Material transport speed [m/min]	30	30
Tool changer x magazine places	3 x 6	3 x 6
Cooling	internal + external	internal + external
Drill type	HSS, carbide, solid carbide	HSS, carbide, solid carbide
Drill diameter [mm]	6.8 - 50	6.8 - 50
Machine weight [kg]	11600	14500
Machine dimensions (L x W x H) [mm]	6260 x 1190 x 3700	7750 x 1190 x 4000





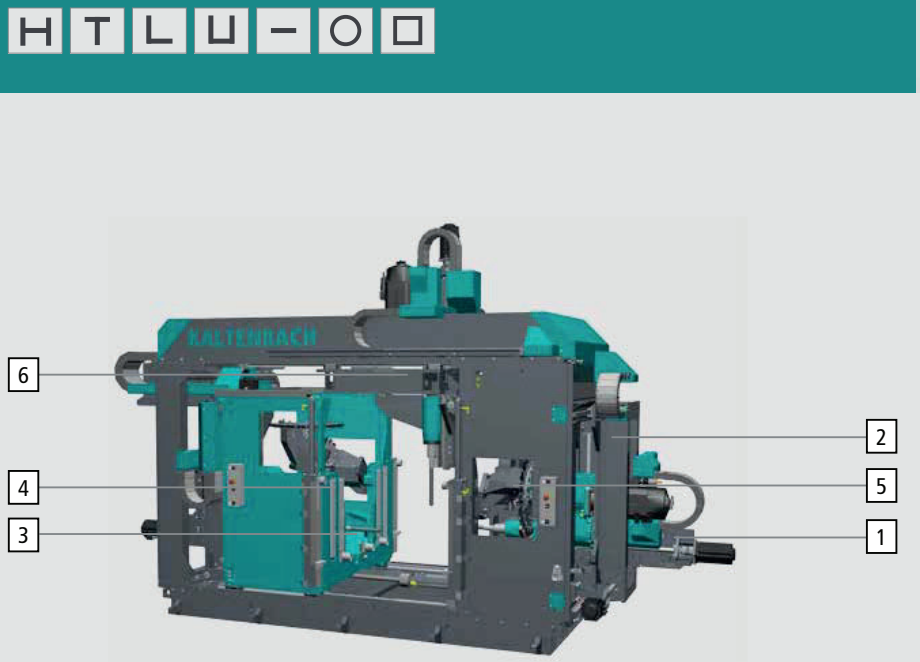
Handles particularly large and heavy profiles with ease.



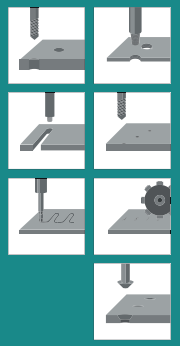
KDL 1318 at China Construction Second Engineering Bureau Co., Ltd.

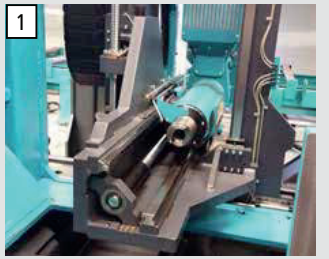
KDP 736 | 1036 | 1336

PRODUCTIVE, PARALLEL, VERSATILE MACHINING

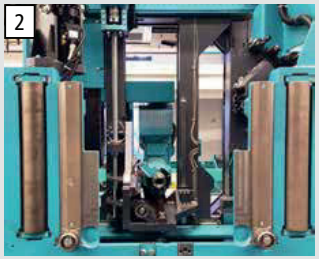


TECHNICAL DATA	KDP 736	KDP 1036	KDP 1336
Working range max. [mm]	750 x 600	1030 x 600	1330 x 600
Working range min. [mm]	50 x 5	50 x 5	50 x 5
Machining unit	3	3	3
Max. speed [rpm]	3500 (5150)	3500 (5150)	3500 (5150)
Max. torque [Nm]	544 (368)	544 (368)	544 (368)
Drive power per axis [kW]	34.5	34.5	34.5
Feed [mm/min]	2000	2000	2000
Positioning - rapid traverse [m/min]	22	22	22
Material transport speed [m/min]	30	30	30
Tool changer x magazine places	3 x 12	3 x 12	3 x 12
Cooling	internal + external	internal + external	internal + external
Drill diameter [mm]	6.8 - 50	6.8 - 50	6.8 - 50
Machine weight [kg]	12900	13200	13500
Machine dimensions (L x W x H) [mm]	6260 x 2100 x 3900	6560 x 2100 x 3900	6860 x 2100 x 3900




1

Powerful drill drive with gearbox for very high torques; ideal for the very latest drilling tool technologies and large diameters.


2

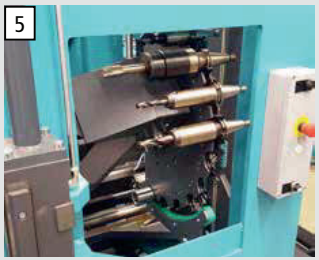
Drilling axes mounted directly on machine portal and clamping device ensure short traversing distances for shorter processing times and low-vibration machining.


3

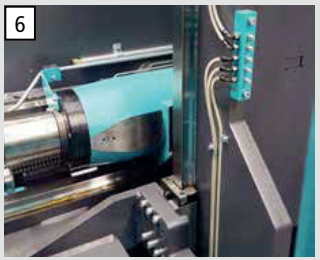
Additional feed axis traversing max. 500 mm in material flow direction so that a workpiece can be machined from all three sides simultaneously and independently.


4

Powerful clamping system based on a combination of rollers and clamping jaws to reduce vibrations and shorten throughput times.


5

Large tool-changer with space for 12 tools per drilling axis to ensure short setup and tool-change times plus a good selection of tools.


6

Readily accessible centralised lubrication point for quick and simple maintenance.



Powerful parallel machining for drilling, countersinking, thread-cutting, milling, contour marking and centre-marking.



KDP 1336 in the KALTENBACH Technology Centre.