PROMOTECH®

smart tools
for heavy tasks

PRO-55 TCT | ANNULAR CUTTER DRILLING MACHINE

CE

bsi ISO 9001 Quality Management Systems CERTIFIED
FM 37982

PRO-55 TCT featuring purpose designed motor and 2-speed gear box 320/640 rpm is optimized to provide appropriate speed for work with TCT cutters up to Φ 45 mm and twist drills up to Φ 16 mm. Rigid construction, optimized by means of FEA (finite element analysis) software extends tool life and enables depth of cut up to 75 mm.

Compact design along with innovative smart magnet with reduced weight make it a lightweight machine.

PRO-55 TCT provides maximum holding power on thin materials thanks to Magnetic Field Shape Control (MFSC). The drill protects both the machine and the operator from work on too thin workpiece by means of Magnetic Power Adhesion Control (MPAC). PRO-55 TCT is also equipped with Energy Saving Base (ESB) that uses only 50% of its power when motor is not running.

Features and benefits:

- Compact design with excellent ratio weight/power
- Purpose designed motor
- Motor Speeds 320/640 rpm (under load)
- Spindle equipped with Weldon ¾"
- Innovative smart magnet with reduced weight
- Rigid design to extend tool life
- Large stroke enables the use of long tools
- Motor cable with additional protective cover
- Magnetic Field Shape Control (MFSC) provides maximum holding power on thin materials
- Magnetic Power Adhesion Control (MPAC) detects adhesive force of electromagnetic base and protects both the machine and the operator from work on too thin workpiece
- Energy Saving Base (ESB) uses only 50% of its power when motor is not running



Core drill	Twist drill	Spindle	Depth of cut	Stroke	Speed	Power	Weight
max 45 mm	max 16 mm	19 mm (3/4") Weldon	max 75 mm	160 mm	320, 640 rpm	1100 W	15 kg

New mid-range drill family at your service

Promotech is introducing new family of drills that are designed for maximum milling/drilling performance.

Customers can choose from 6 models with various tool holders including:

- Thread 1/2"
- Weldon 19,05 mm (3/4")
- Morse Taper #2.

These new drills are optimized for work with HSS cutters, TCT cutters or twist drills.



PRO-16
Thread 1/2"
390/780 rpm



PRO-40
Weldon 3/4"
440 rpm



PRO-50
MT2
240/480 rpm



PRO-50 TCT
MT2
320/640 rpm



PRO-55
Weldon 3/4"
200/400 rpm



PRO-55 TCT
Weldon 3/4"
320/640 rpm

Best practices and new ideas

Replaceable spline at the end of armature shaft eliminates laborious and expensive armature maintenance



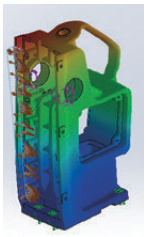
Motor based on well proven PRO-40 drive

Motor cable with additional protective cover

Increased stiffness of gearbox housing including ribs



Increased stiffness of drill body







Large stroke enables the use of long tools



A verified control system proved in PRO-40 / PRO-51

Drills PRO-16, new PRO-40, PRO-55 and PRO-55TCT use the same magnetic base as former PRO-40

Drills PRO-50 and PRO-50 TCT features higher magnetic base to ensure safety when working on thin workpieces or with largest possible tools

Drills will be delivered in dedicated plastic box

Increased productivity and extended tool life

The right choice of drilling machine for a specific application can increase process productivity and extend tool life, especially when drilling a large number of holes of the same size.

The design of the new drills is based on well proven electric motor successfully used for many years in the PRO-40 drilling machines.

Most of the components are common between the new models, which allows for flexibility in production, shorter delivery times and immediate response to market demand for specific versions of new drills.

All drills are equipped with smart electromagnetic bases including many advanced systems.

Magnetic power adhesion control module (MPAC) detects adhesive force and protects both the machine and the operator from work on too thin work pieces.

Magnetic field shape control system (MFSC) provides maximum holding power on thin materials.

Energy Saving Base (ESB) uses only 50% of its power when motor is not running.

Compact design allows the operator to drill very close to side wall and corners.



Drilling capacity up to 16 mm (0.63")
– *with cylindrical shank twist drill in use*
Drilling capacity up to 23 mm (0.91")
– *with MT2 shank twist drill in use*



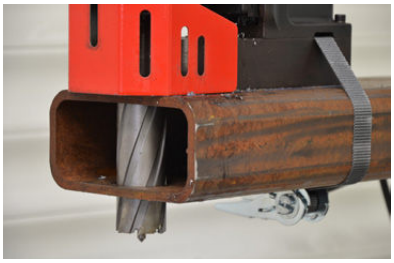
Out of position drilling

Features and benefits of new mid-range drill family:

- Wide selection of 6 models tailored to certain drilling applications
- Purpose designed motor proven for many years in the PRO-40 drill
- Heavy duty gear boxes optimized to match the appropriate speed of specific tools in use
- Innovative smart magnet with reduced weight
- Compact design with excellent ratio weight / power
- Various tool holders
- Rigid design to extend tool life
- Magnetic Field Shape Control (MFSC)
- Magnetic Power Adhesion Control (MPAC)
- Energy Saving Base (ESB)

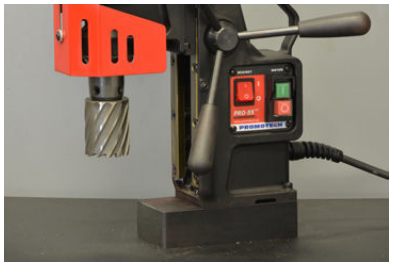


Milling capacity up to 55 mm (2.17")
Depth of cut up to 75 mm (3")



Starting point of milling up to 50 mm (2")
below a level of a drill base

Possible tool configurations of PRO-55 TCT



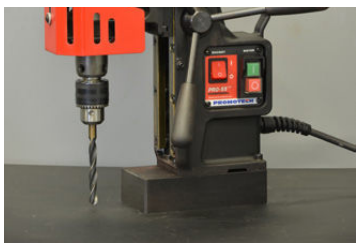
HSS cutters up to Φ 40 mm



TCT cutters up to Φ 45 mm



Starting point of drilling up to 50 mm below level of a drill base with 100 mm long cutter





Adapter 3/4" x 1/2" 20 UNF, Drilling chuck 1/2" 20 UNF
Twist drills up Φ 11.8 mm (DIN 338)



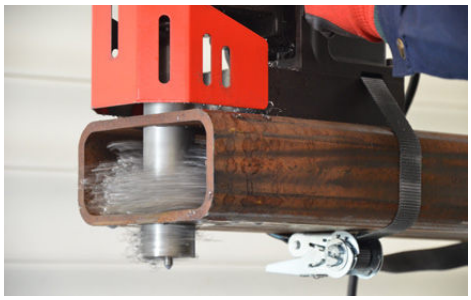


Adapter 3/4" x 1/2" 20 UNF, Drilling chuck 1/2" 20 UNF
Twist drills up Φ 16.0 mm (DIN 1897)

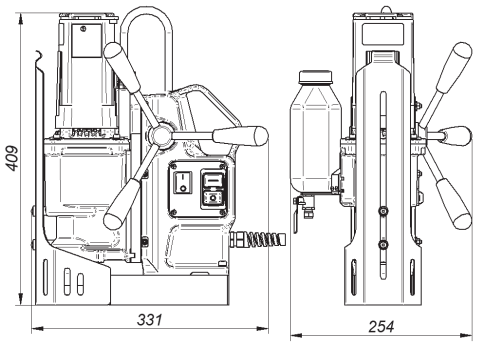
PRO-55 TCT TECHNICAL SPECIFICATION	
Motor Speeds (under load)	320/640 rpm
Power	1100 W
Weight	15 kg (33.1 lbs)
Max milling capacity TCT/HSS	45/40 mm (1.77"/1.57")
Max drilling capacity	16 mm (0.63")
Stroke	160 mm (6.3")
Max depth of cut	75 mm (2.95")
Voltage	1~ 220–240 V, 50–60 Hz 1~ 110–120 V, 50–60 Hz
MFSC (Magnetic Field Shape Control)	yes
MPAC (Magnetic Power Adhesion Control)	yes
ESB (Energy Saving Base)	yes
Magnetic clamping force (surface with the thickness of 25 mm and roughness Ra = 1.25)	1009 kgf (9900 N)
Magnet base dimensions	84 × 168 × 41.5 (mm) 3.3 × 6.6 × 1.6 (")
Min. work piece thickness	6 mm (1/4")
Spindle	19 mm (3/4") Weldon
Tool holder	19 mm (3/4") Weldon
Product Code 220–240 V, 50–60 Hz	WRT-0716-10-20-00-0
Product Code 110–120 V, 50–60 Hz	WRT-0716-10-10-00-0



Milling capacity up to 45 mm (1.77")
Depth of cut up to 75 mm (3")



Starting point of milling up to 50 mm (2")
below a level of a drill base



Standard shipping set:

- Drilling machine
- Plastic box
- Handle (3pcs)
- Safety strap
- Cooling system
- 2.5 mm hex wrench
- 5 mm hex wrench
- 5 mm hex wrench with a handle
- 8 mm combination wrench
- Operator's manual

Selected additional accessories:

- PDS-0110-03-00-01-0 — Pipe attachment DMP 251 for pipes with diameters of 80–250 mm (3–10")
- PDS-0111-03-00-01-0 — Pipe attachment DMP 501 for pipes with diameters of 150–500 mm (6–20")
- TRZ-000027 — Adapter Weldon 3/4" x 1/2" 20 UNF
- UCW-000059 — Drilling chuck 1/2" 20 UNF x 1.5–13 mm
- UCW-000061 — Drilling chuck 1/2" 20 UNF x 3–16 mm
- UKL-0440-16-00-00-0 — Pressure cooling system
- PDS-0587-10-00-00-0 — Vacuum pad
- AGR-0541-10-20-00-0 (230 V CEE) — Vacuum pump
- AGR-0541-10-10-00-0 (115 V UK) — Vacuum pump
- ZSP-0587-11-00-00-0 — Compressed air ejector



Pipe attachment
DMP 251



Pipe attachment
DMP 501



Adapter Weldon
3/4" x 1/2"



Drilling
chuck



Pressure
cooling system



Vacuum pad



Vacuum pump



Compressed
air ejector

All information is subject to change without notice. 23.03

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