

# Instructions for installation and operation

Drilling jig

For a later setting up of a measuring place



#### Dear customer,

Thank you very much for deciding in favour of the drilling jig for setting up a measuring place. Please read this instruction and installation manual carefully before installation and initiation and observe our notes. Only a careful observation of the described instructions and notes grants a proper function of the drilling jig and a riskless operation.

### 1 Contact

Advice

Sale

Service

Seminars

## **BEKO Technologies Corp.**

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Contact	.2
Safety	.4
Field of application	.5
Drilling after welding on a nozzle	.5
Drilling upon installation of a spot drilling collar	.6
Technical data	.7
Scope of delivery	.8
	Contact

## 2 Safety



#### Please check whether this manual corresponds with the instruments type.

Please observe all notes indicated in this instruction manual. It contains essential information which has to be observed during installation, operation and maintenance. Therefore this instruction manual has to be read categorically by the technician as well as by the responsible user / qualified personnel before installation, initiation and maintenance.

This instruction manual has to be available at the operation site of the drilling jig at any time. Regional respectively national regulations have to be observed in addition to this instruction

manual if necessary.

In case of any obscurities or questions with regards to this manual or to the instrument please contact BEKO Technologies Corp..



## Warning!

#### Compressed air!

Contact with quickly or abruptly escaping compressed air or bursting parts of the system may cause severe injuries or death.

#### Measures:

- Do not exceed the maximum operation pressure of 145 psig!
- Wear protective goggles!
- Only use pressure-tight installation material!
- Avoid persons or objects being hit by escaping compressed air!



## Warning!

#### Inadmissible operating parameters!

Undercutting respectively exceeding of limit values may cause danger to persons and material and may lead to functional and operational disturbances.

#### Measures:

- Make sure that the drilling jig is only operated within the admissible limit values.
- Careful observation of the performance data in connection with the application.

#### Further safety instructions:

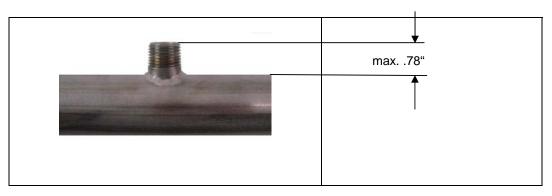
- Installation should only be carried out by authorized qualified persons
- Observe all safety regulations for works at compressed air carrying lines
- The drilling jig has to be mounted pressure-tightly
- Use slowly running drilling machine with corresponding safety installations
- National (safety) regulations have to be observed also during installation and operation

# 3 Field of application

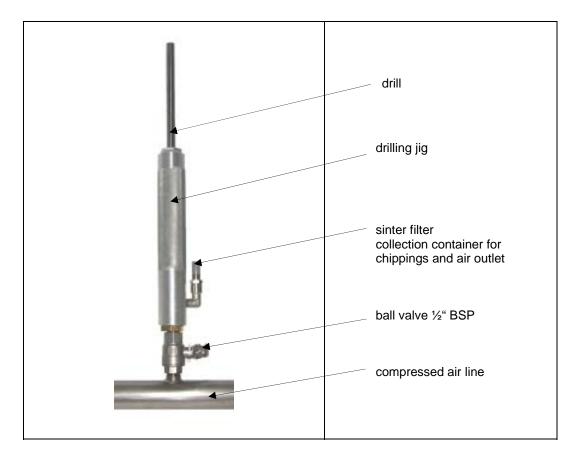
- The drilling jig is designed for the later setting up of a measuring place in a pressurized line. For the drilling under pressure we recommend two possibilities:
  - Welding of a 1/2" BSP nozzle for mounting a ball valve
  - Previous installation of a spot drilling collar with 1/2" BSP ball valve

# 4 Drilling after welding on a nozzle

1. Weld on the nozzle.



- 2. Mount the 1/2" ball valve pressure-tightly
- Screw-on the drilling jig pressure-tightly onto the ball valve. (If necessary remove existing chippings from the drilling jig)



- 4. Install drilling machine
- 5. Open ball valve
- Drill the hole with low speed level. Please observe during drilling: Pull back the drill shortly approx. every 10 seconds so that the chippings are fed to the collection container (sinter filter).
- 7. When the pipe is drilled through pull back the drill as far as it will go.
- 8. Close the ball valve
- 9. Disassemble drilling jig

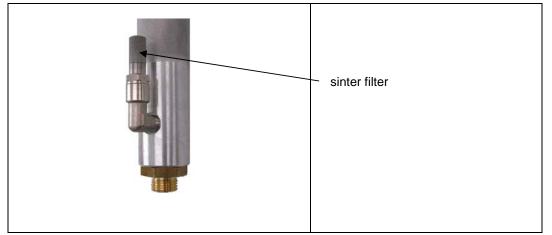
#### Before carrying out the next step please observe implicitly:

Wear protective goggles!

Attach a compact cloth at the outlet of the ball valve before opening the ball valve for protection against out coming chippings.



- 10. Open the ball valve once again and blow out the chippings
- 11. Screw off the sinter filter from the lateral air outlet, take out the chippings and close the air outlet.



# 5 Drilling upon installation of a spot drilling collar

Installation of the spot drilling collar please see instruction manual "Spot drilling collars"



- 1. Install spot drilling collar according to mounting instructions
- 2. Mount 1/2" BSP ball valve pressure-tightly
- Screw the drilling jig pressure-tightly onto the ball valve. (remove any existing chippings from the drilling jig before doing so)

- 4. Install drilling machine
- 5. Open ball valve
- Drill the hole with low speed level. Please observe during drilling: Pull back the drill shortly approx. every 10 seconds so that the chippings are forwarded to the collection container (sinter filter).
- 7. When the pipe is drilled through pull back the drill as far as it will go.
- 8. Close the ball valve
- 9. Disassemble drilling jig

#### Before carrying out the next step please observe implicitly:

Wear protective goggles!

Attach a compact cloth at the outlet of the ball valve before opening the ball valve for protection against out coming chippings.



- 10. Open the ball valve once again and blow out the chippings
- 11. Screw off the sinter filter from the lateral air outlet, take out the chippings and close the air outlet

#### 6 Technical data

Diamatar of drill	540 <sup>#</sup> /42.0 mm
Diameter of drill	.512" (13.0 mm)
Length of drill	17.72" (450 mm)
Material of drill	HSS/ E
Max. operating pressure	145 psig
Dimensions	17.72" x 1.58" x 1.77" (450x40x45)mm
Housing material	AI

# 7 Scope of delivery

# Drilling jig

Drilling jig including drill Ø13

0530 1108

Spot Drilling Collar incl. ball valve ½" BSP, I/O				
For pipe outer diameters from – to	Order no.			
1.02" – 1.18" (026 – 030 mm)	0500 0447			
1.26" – 1.42" (032 – 036 mm)	0500 0446			
1.42" – 1.57" (036 – 040 mm)	0500 0448			
1.57" – 1.73" (040 – 044 mm)	0500 0449			
1.89" – 2.05" (048 – 052 mm)	0500 0450			
1.97" – 2.24" (050 – 057 mm)	0500 0451			
2.20" – 2.48" (056 – 063 mm)	0500 0452			
2.28" – 2.56" (058 – 065 mm)	0500 0453			
2.64" – 2.91" (067 – 074 mm)	0500 0454			
2.87" – 3.15" (073 – 080 mm)	0500 0455			
2.99" – 3.27" (076 – 083 mm)	0500 0456			
3.23" – 3.50" (082 – 089 mm)	0500 0457			
3.43" – 3.70" (087 – 094 mm)	0500 0458			
3.58" – 3.86" (091 – 098 mm)	0500 0459			
3.74" – 4.02" (095 – 102 mm)	0500 0460			
4.02" – 4.41" (102 – 112 mm)	0500 0461			
4.25" – 4.65" (108 – 118 mm)	0500 0462			
4.65" – 5.04" (118 – 128 mm)	0500 0463			
4.92" – 5.32" (125 – 135 mm)	0500 0464			
5.20" – 5.59" (132 – 142 mm)	0500 0465			
5.43" – 5.83" (138 – 148 mm)	0500 0466			
5.71" – 6.10" (145 – 155 mm)	0500 0467			
5.95" – 6.34" (151 – 161 mm)	0500 0468			
6.26" – 6.69" (159 – 170 mm)	0500 0469			
6.58" – 6.97" (167 – 177 mm)	0500 0470			
6.93" – 7.32" (176 – 186 mm)	0500 0471			
7.60 – 7.99" (193 – 203 mm)	0500 0472			
7.87" – 8.27" (200 – 210 mm)	0500 0473			
8.23" – 8.62" (209 – 219 mm)	0500 0474			
Other diameters on request				

Leak detector	
LD 300 leak detector	0601 0103
Telescope bar 3 x 120 cm	0530 0102

Notes

Notes

# С

Chippings7 Collection container for chippings7 Contact2
D
Diameter of drill7
Dimensions7
Drilling after welding on a nozzle5
Drilling upon installation of a spot drilling collar
F
Field of application5
Μ
Max. operating pressure7

0	
Outer pipe diameters 8	,
P	
Protective goggles7	,
S	
Safety instructions4	ŀ
Scope of delivery 8	,
Sinter filter7	,
Speed level7	,
т	
Technical data7	,
W	
Warning compressed air 4	ŀ



Technical changes and errors excepted. IM\_drilling\_jig\_EN\_V2\_01\_2009