

# TONISCO® CATALOG HOT TAPPING & LINE STOPPING EQUIPMENT



# J TONISCO®BABY





TONISCO® BABY
DN10 - DN25

#### **Description**

TONISCO® Hot tapping machines are designed for making connections to pipelines, tanks and plant piping without shutdown or interuptions to the system.

TONISCO® Baby hot tapping machine is manual or power-driven drilling machine designed for making small branches under pressure. It can be used for under pressure connections from DN10 (3/8") up to DN25 (1").

The Compact machine is designed to be used with ball valves that have weldable or threaded connections. TONISCO® Baby can be used with most of the standard ball valves (DN10-DN25) in the market. The equipment is delivered in a small case containing everything including the power unit that is needed to accomplish the hot tapping process.

All TONISCO® Hot Tapping Tools provide an efficient and economical way of making connections to mains for repairs, relocations or additions.

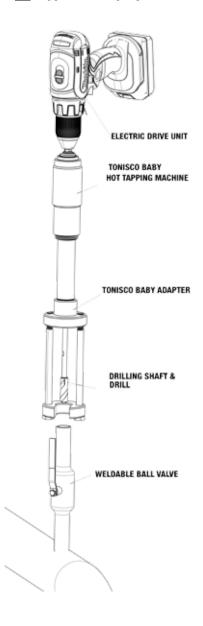
#### **Features**

Typical TONISCO® Baby Hot tapping system includes a Power unit, different sizes of drilling shafts with integrated drill bits and connecting adapters from DN 10 to DN 25. The connection adapters are chosen according the valves used for the hot tappings. Drilling diameters 9 - 14 mm can be carried out - depending on the opening of each valves. Beside a cordless, electric drive unit, any usual electric or pneumatic hand drill machine may be chosen to power the equipment. The equipment is delivered in a strong transport box.

The maximum allowed pressure while drilling is 25 Bar and the maximum temperature 160 °C. Depending on the material of the sealings drillings with TONISCO® Baby can be carried out to pipe lines containing various substances. Typical usage in disrict heating and cooling and nature Gas systems.

## TONISCO® BABY DN10 - DN25

#### Typical setup up



By choosing the right adapter the TONISCO® Baby hot tapping machine can be used with most of the standard valves equipped with threaded or welded connections





Quantity

# TONISCO BABY Hot Tapping Machine specifications

Branch Size:	DN10 - DN25
Drive unit:	Electric 220-240v / 50-60 Hz 1100 VA
Body material:	CuSn10-C-GC
Feed Unit material:	S355J2
Sealings:	EPDM (available also VITON)
Inspection:	Pressure test and construction inspection
Pressure test:	25 bar
Max. operating pressure:	25 bar
Max. operating temperature:	160°C (200°C with Viton sealings)

IONISCO BABA 2EI		
<b>for THREADED connections</b>		
DN10/15/20		
Item no. 1800.0010		



			400011010
Drive unit	Baby electric drive	1211.0005	1
Hot Tapping Machine	Baby feed unit	1855.0010	1
	Baby body unit	1837.0020	1
Adapters	Baby adapter DN10	1836.0351	1
	O-ring adapter DN10	1836.0352	1
	Baby adapter DN15	1836.0363	1
	O-ring adapter DN15	1836.0450	1
	Baby reducer DN20	1836.0460	1
	Sealing for reducer DN20	1836.0470	1
	Sealing for adapter DN15	1836.0480	1
	Sealing for adapter DN10	1836.0490	1
Drills	Drill DN10/9	1846.0409	1
	Drill DN 20/13	1846.0413	1
Tools	Adj. wrench	1850.0010	1
	Shaft wrench 7mm	1837.0500	1
	L-wrench 3mm	1213.0110	1
	Cutting Paste	1289.0010	1
	TONISCO sealant	1269.0010	1
Transport	Transport Box	1827.0010	1

Item no.









Item



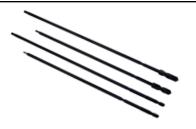


IONISCO® BABY SEI
for WELDABLE connections
DN15/20/25
Item no. 1800.0020



	Item	Item no.	Quantity
Drive unit	Baby electric drive	1211.0010	1
Hot Tapping Machine	Baby feed unit Baby body unit	1855.0010 1837.0020	1 1
Adapters	Adapter DN15/20 Baby Connecting screw Clam DN15/20 Baby Adapter DN25 Baby Clam DN25 Baby	1836.0150 1836.0209 1836.0204 1836.0250 1836.0254	1 2 1 1
Drills	Drill DN10/9 Drill DN 20/13	1846.0409 1846.0413	1 1
Tools	Adj. wrench Shaft wrench 7mm L-wrench 3mm Cutting Paste TONISCO sealant	1850.0010 1837.0500 1213.0110 1289.0010 1269.0010	1 1 1 1
Transport	Transport Box	1827.0010	1

#### **Baby Drills**



ILGIII	ILGIII IIV.
Drill DN10/9	1846.0409
Drill DN20/13	1846.0413
Drill DN10/9 Short	
Drill DN20/13 Short	

#### **Baby Threaded Adapters**



Item	Item no.
Baby adapter DN10	1837.0351
O-ring for adapter DN10	1837.0460
Sealing for adapter DN10	1837.0490
Baby adapter DN15	1837.0352
O-ring for adapter DN15	1837.0450
Sealing for adapter DN15	1837.0480
Baby reducer DN20	1837.0363
O-ring for reducer DN20	1837.0470





#### **Baby Weldable Adapters**

Nominal size	Item no.
Adapter DN15/20 Baby	1836.0150
Clam DN15/20 Baby	1836.0204
Adapter DN25 Baby	1836.0250
Clam DN25 Baby	1836.0254
O-ring for adapter DN15	1836.0152
O-ring for adapter DN20	1836.0202
O-ring for adapter DN25	1836 0252

#### **TONISCO Baby spare O-rings**



Item	Item no.
Bearing O-ring	1837.0430
Shaft O-ring	1837.0420
Body O-ring	1837.0440
Cover O-ring	1837.0410

#### **TONISCO Baby Tools**



ITEM	item no.
Adj. wrench	1850.0010
Shaft wrench 7mm	1837.0500
L-wrench 3mm	1213.0110

#### **TONISCO Sealant & Cutting Paste**



Itom	item no.
Cutting Paste	1289.0010
TONISCO sealant	1269.0010







#### Description

TONISCO® Hot tapping machines are designed for making connections to pipelines, tanks and plant piping without shutdown or interuptions to the system.

The lightweight and robust TONISCO® Jr. Hot Tapping Machine is equipment designed for making connections to pipelines, tanks and plant piping. By using TONISCO® Jr. Hot Tapping Machine it is possible to take new connections from DN20 to DN100.

TONISCO® Jr. Hot Tapping Machine is versatile and easy to operate. It has a full range capability of setting valves DN20 – DN100 by completing it with proper adapters. With suitable adapter TONISCO® Jr. can be used with flanged, threated or weldable connections. All the connections can be made without stopping the flow inside the mains up to the pressure of 60 bar.

All TONISCO <sup>®</sup> Hot Tapping Machines provide an efficient and economical way of making connections to mains for repairs, relocations or additions.

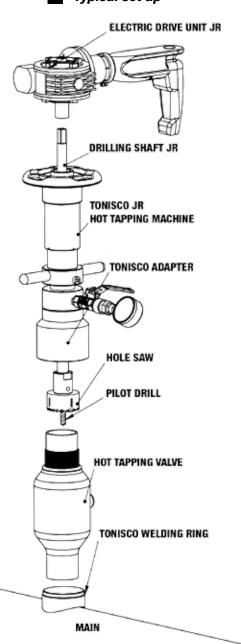
#### **Features**

TONISCO® Jr. Hot Tapping Machine can be used in temperature maximum of 200°C and pressure up to 60 bar. TONISCO® Jr. is equipped normally with electric drive unit. Other possible drive types are hand drive, pneumatic drive or hydraulic drive.

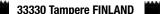
TONISCO® Jr. Hot Tapping Machine weighs only 5,5 kg. and it can be operated by one man. TONISCO® Jr. Hot Tapping Machine can be completed by wide range of hole saws, pilot drills and adapters to fit it with all mainline materials and substances.

By using TONISCO® Hot Tapping Machines it is possible to make pipeline alteration works in pressurized pipelines without shutdowns.

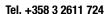
# TONISCO® Jr. Hot tapping machine Typical set up

















# TONISCO Jr. Hot Tapping Machine specifications

Branch Size:	DN20-DN100 (*up to DN150)
Drive unit:	Electric 220-240v / 50-60 Hz 1000 VA Pneumatic 6-7 bar / 1500 I / min Hydraulic
Body material:	42CrMo4
Feed Unit material:	S355J264
Sealings:	EPDM (Viton)
Inspection:	Pressure test and construction inspection
Pressure test:	60 bar
Max. operating pressure:	40 bar (60 bar with High Pressure version)
Max. operating temperature:	160°C (200°C with Viton sealings)
*with special adapters / Contact the sales	

TONISCO® Jr.		Item	Item no.	Quantity
BASIC SET	Electric drive Jr.	Electric drive Jr. compl.	1211.0000	1
	Base unit	Feed device Jr, compl. Jr. Body Complete	1226.0000 1228.0000	1 1
	Shaft and accessories	Drill Shaft 350/475 mm Gear Fastening Screw Shaft extension Socket Chuck for Hole-Saws 24- Chuck for hole saws >30 Magnet for JR./B30	1213.0010 1213.0100 1213.0090 1213.0070 1213.0060 1213.0240	1 1 1 1 1
C. F.E.	Pressure monitoring	Pressure Monitoring Set 40 bar Pressure relief hose w.	1273.0013 1264.0210	1 1
The same of the sa	Pilot drills	Pilot Drill Jr-HM norma	1213.0080	2
	Consumables	TONISCO Cut-paste TONISCO Sealant lubricant	1289.0010 1269.0020	1 1
	Operating tools	TONISCO wrench Allen key 4 mm Allen key 5 mm	1250.0170 1213.0110 1250.0020	2 1 1



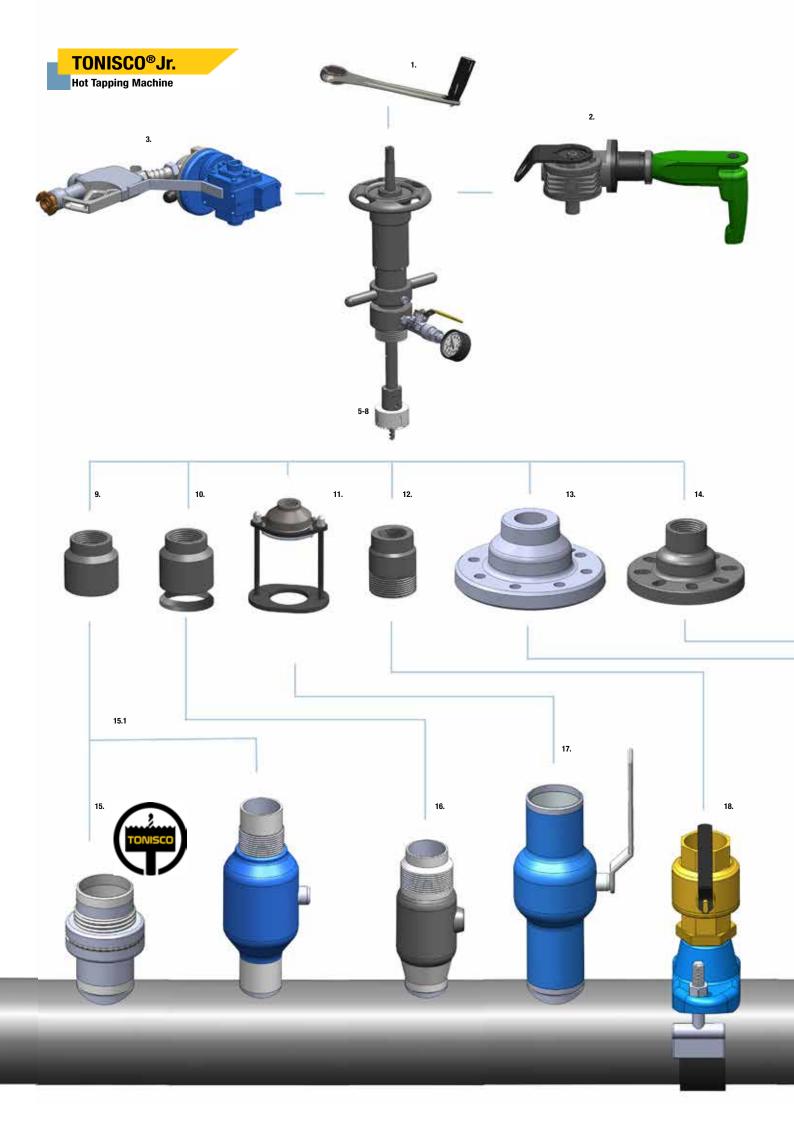




Shaft opening pin Jr/B30



1213.0040



## **Applications - Build your Own TONISCO® Jr.**

TONISCO® Hot tapping machines are designed completely according the needs of the customer. The Hot tapping machines are used in various different fields and in changing environments.

TONISCO®'s Team of engineers is constantly designing new features to the machines in order to find solutions that helps the customer to use the same basic TONISCO® Hot tapping machine with the valves that best fit the customers needs. The three core-foundations in TONISCO®'s designs are SAFETY, EASE of USE and FLEXIBILITY.

The Option-Chart in the left shows the basic principle of how to build your own TONISCO® Hot tapping machine. Everything starts from the Power unit. Choose the most suitable Power unit according to the circumstances where the machine is mostly used.

The Pneumatic and Hydraulic drive units are designed for ATEX-Environments. The Electric Drive unit is the most common choice because it's is extremely easy to operate and it can be attached to the normal 230 V electric network.

Basic TONISCO® Jr. Hot tapping machine can be used with various different

hot tapping valves simply by choosing the right Adapter. TONISCO® Jr. Adapters comes in three basic options for threaded, flanged and welded connections. The maximum operating pressure for the threaded Adapters is 60 bar and the Flanged adapters reach up to PN64. Also AISI standard flange Adapters are available.

TONISCO® Offers a wide range of different hole saws for every pipe material used in pressurized pipelines. Complete your own TONISCO® Jr. Hot tapping machine with the suitable Hole Saw Set and the hot tapping system is ready for use.

#### TONISCO® System - The Open-Source of Hot tapping

#### DRIVE UNIT OPTIONS FOR TONISCO® Jr.

- 1. Ratched Drive, Manual, for plastic pipes
- 2. Electric Drive Unit. For all materials
- 3. Pneumatic Drive Unit, ATEX-approved
- 4. Hydraulic Drive Unit\*

#### ADAPTER OPTIONS FOR TONISCO® Jr.

- 9. Adapters with Inner-threads, for TONISCO & VEXVE valves
- 10. Adapters with multi-threads, for DANFOSS Drilling valves
- 11. Adapters for ball valves with welded ends
- 12. Adapters with outer R (BSP) threads, for Ball valves with inner threads
- 12.1 Adapters with inner R (BSP) threads, for Ball valves with outer threads
- 13. Aluminium Adapters for flanged valves, PN10,16 (also AISI)
- 14. Steel Adapters for flanged valves, PN10,16,25,40,64 (also AISI)

#### HOLE SAW OPTIONS FOR TONISCO® Jr.

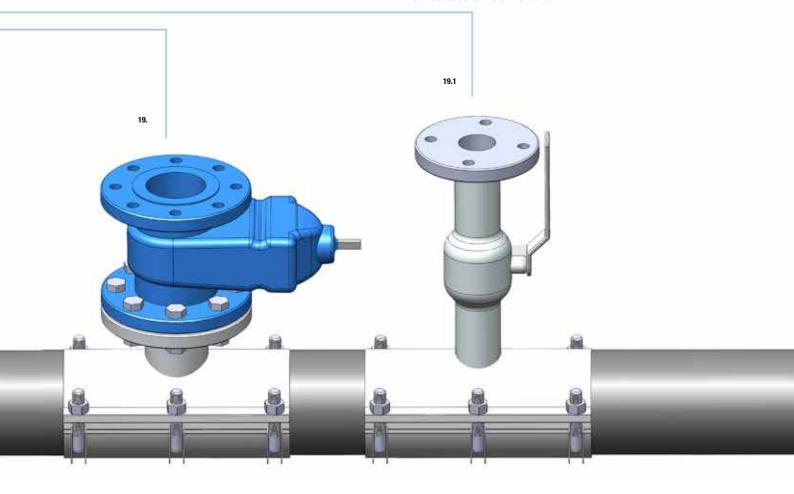
- 5. Bi-Metal (HSS) Hole Saws, Steel, Ductile and Cast Iron
- 6. Carbide Grit tooth (GE) Hole Saws, Concreted Pipes
- 7. Carbide tipped (HM) Hole Saws, PE, PVC and Clay Pipes
- 8. TONISCO® Hole Saws for other materials\*

#### EXAMPLES OF HOT TAPPING VALVES SUITABLE FOR TONISCO® Jr.

- 15. TONISCO® Hot Tapping valves DN20-DN100
- 15.1 VEXVE Hot tapping ball valves DN20-N100
- 16. DANFOSS Hot Tapping valves DN20-DN100
- 17. Weldable Ball valves with weld ends\*
- 18. R-Threaded Ball valves
- 19. Sluice, Gate and Ball valves with flanged connections (PN10,16,25,40,64)
- 19.1 Sluice, Gate and Ball valves with flanged connections (PN10,16,25,40)

Also available in other standards etc.

\*Contact sales for more information







TONISCO® Jr. is also available for weldable ball valves, flanged valves and valves with R(G) thread just by completing it with the suitable dapters

Adapters for TONISCO valves	Nominal size	ltem no.
	Adapter TONISCO DN20	1218.0200
	Adapter TONISCO DN25	1218.0250
	Adapter TONISCO DN32	1218.0320
	Adapter TONISCO DN40	1218.0400
	Adapter TONISCO DN50	1218.0500
	Adapter TONISCO DN65	1218.0650
	Adapter TONISCO DN80	1218.0800
	Adapter TONISCO DN100	1218.1000
Adapters for Danfoss Drilling valves	Nominal size	Item no.
	Danfoss Adapter DN20	1240.0200
	Danfoss Adapter ring DN25	1240.0250
	Danfoss Adapter DN32	1240.0320
	Danfoss Adapter ring DN40	1240.0400
	Danfoss Adapter DN50	1240.0500
	Danfoss Adapter DN65	1240.0650
	Danfoss Adapter DN80	1240.0800
	Danfoss Adapter DN100	1240.1000
Adapters with outer R (BSP) threads	Nominal size	Item no.
Adapters with outer R (BSP) threads	Nominal size Fastening Adapter 3/4 "	<b>Item no.</b> 1222.0200
Adapters with outer R (BSP) threads		
Adapters with outer R (BSP) threads	Fastening Adapter 3/4 "	1222.0200
Adapters with outer R (BSP) threads	Fastening Adapter 3/4 " Fastening Adapter 1 "	1222.0200 1222.0250
Adapters with outer R (BSP) threads	Fastening Adapter 3/4 " Fastening Adapter 1 " Fastening Adapter 11/2"	1222.0200 1222.0250 1222.0320
Adapters with outer R (BSP) threads	Fastening Adapter 3/4 " Fastening Adapter 1 " Fastening Adapter 11/2" Fastening Adapters 11/4"	1222.0200 1222.0250 1222.0320 1222.0400
Adapters with outer R (BSP) threads	Fastening Adapter 3/4 " Fastening Adapter 1 " Fastening Adapter 11/2" Fastening Adapters 11/4" Fastening Adapter 2 "	1222.0200 1222.0250 1222.0320 1222.0400 1222.0500
Adapters with outer R (BSP) threads	Fastening Adapter 3/4 " Fastening Adapter 1 " Fastening Adapter 11/2" Fastening Adapters 11/4" Fastening Adapter 2 " Fastening Adapter 21/2"	1222.0200 1222.0250 1222.0320 1222.0400 1222.0500 1222.0650
	Fastening Adapter 3/4 " Fastening Adapter 1 " Fastening Adapter 11/2" Fastening Adapters 11/4" Fastening Adapter 2 " Fastening Adapter 21/2" Fastening Adapter 3 "	1222.0200 1222.0250 1222.0320 1222.0400 1222.0500 1222.0650 1222.0800
	Fastening Adapter 3/4 " Fastening Adapter 1 " Fastening Adapter 11/2" Fastening Adapters 11/4" Fastening Adapter 2 " Fastening Adapter 21/2" Fastening Adapter 3 " Fastening Adapter 4 "	1222.0200 1222.0250 1222.0320 1222.0400 1222.0500 1222.0650 1222.0800 1222.1000
	Fastening Adapter 3/4 " Fastening Adapter 1 " Fastening Adapter 11/2" Fastening Adapters 11/4" Fastening Adapter 2 " Fastening Adapter 21/2" Fastening Adapter 3 " Fastening Adapter 4 "	1222.0200 1222.0250 1222.0320 1222.0400 1222.0500 1222.0650 1222.0800 1222.1000
	Fastening Adapter 3/4 " Fastening Adapter 1 " Fastening Adapter 11/2" Fastening Adapters 11/4" Fastening Adapter 2 " Fastening Adapter 21/2" Fastening Adapter 3 " Fastening Adapter 4 "  Nominal size Fastening Adapter 11/2"	1222.0200 1222.0250 1222.0320 1222.0400 1222.0500 1222.0650 1222.0800 1222.1000  Item no. 1244.0320
Adapters with outer R (BSP) threads  Adapters with inner R (BSP) threads	Fastening Adapter 3/4 " Fastening Adapter 1 " Fastening Adapter 11/2" Fastening Adapters 11/4" Fastening Adapter 2 " Fastening Adapter 21/2" Fastening Adapter 3 " Fastening Adapter 4 "  Nominal size Fastening Adapter 11/2" Fastening Adapter 11/4"	1222.0200 1222.0250 1222.0320 1222.0400 1222.0500 1222.0650 1222.0800 1222.1000  Item no. 1244.0320 1244.0400





Adapters for weld. ball valves (long end)	Nominal size	Item no.
	DN 25 ( PN 25 )	1236.0250
	DN 32 (PN 25)	1236.0320
	DN 40 (PN 25)	1236.0400
	DN 50 ( PN 25 )	1236.0500
	DN 65 (PN 25)	1236.0650
- 3	DN 80 ( PN 25 )	1236.0800
	DN 100 ( PN 25 )	1236.1000
	Adapter screw 220 ( DN32-DN50 )	1236.9001
	Adapter screw 260 ( DN50-DN80 )	1236.9002
	Adapter screw 280 ( DN80-DN100 )	1236.9003
	Adapter screw 350 ( DN100 )	1236.9004
Steel Adapters for flanged valves	Nominal size	Item no.
	DN 25 (PN 16 - 40)	1239.0250
	DN 40/32 ( PN 16 - 40 )	1239.0320
00	DN 50/40 (PN 16 - 40)	1239.0500
	DN 65 ( PN 16 - 40 )	1239.0650
0 1/4	DN 80 (PN 16 - 40 )	1239.0800
	DN 100 ( PN 16 - 40 )	1239.1000
Aluminium Adapters for flanged valves	Nominal size	Item no.
	DN 80 PN16	1233.0800
	DN 100 PN16	1233.1000
Hole Saw Chucks	ltem	itom no
Hole Saw Chucks	20 mm - 30 mm "A" 1/2 " UNF-thread	1213.0070
	32 mm - 95 mm "B" 1/2 " UNF-thread	1213.0060
	32 IIIII - 93 IIIII B 1/2 UNI -ulleau	1213.0000
Pilot Drills	Item	Item no.
	Short Pilot Drill (HM)	1213.0082
	Normal Pilot Drill (HM)	1213.0080

Long Pilot Drill (HM)

1213.0081





Bi-Metal (HSS) Hole Saws	Nominal size	diam./mm thread	Item no.
for Steel, Ductile and Cast Iron	DN 20 (3/4")	19 1/4 " UNF	1219.0190
	DN 20 (3/4")	20 1/4 " UNF	1219.0200
	DN 25 (1")	24 1/4 " UNF	1219.0240
	DN 32 ( 1 1/4")	27 1/4 " UNF	1219.0270
	DN 32 ( 1 1/4")	30 1/4 " UNF	1219.0300
	DN 32 ( 1 1/4")	32 5/8 " UNF	1219.0320
	DN 40 (1 1/2")	35 5/8 " UNF	1219.0350
	DN 40 ( 1 1/2")	38 5/8 " UNF	1219.0380
	DN 50 (2 ")	44 5/8 " UNF	1219.0440
	DN 65 ( 2 1/2")	48 5/8 " UNF	1219.0480
	DN 65 ( 2 1/2")	57 5/8 " UNF	1219.0570
	DN 80 (3 ")	64 5/8 " UNF	1219.0640
	DN 80 (3 ")	70 5/8 " UNF	1219.0700
	DN 100 ( 4 ")	89 5/8 " UNF	1219.0890
	DN 100 (4")	95 5/8 " UNF	1219.0950
Carbide Grit tooth (GE) Hole Saws	Nominal size	diam./mm thread	Item no.
or Concreted Pipes	DN 25 (1")	22 1/4 " UNF	1245.0220
	DN 25 (1")	24 1/4 " UNF	1245.0240
	DN 32 ( 1 1/4")	27 5/8 " UNF	1245.0270
	DN 32 (1 1/4")	29 5/8 " UNF	1245.0290
	DN 40 (1 1/2")	35 5/8 " UNF	1245.0350
	DN 50 (2")	38 5/8 " UNF	1245.0380
	DN 50 (2")	44 5/8 " UNF	1245.0440
	DN 65 (2 1/2")	57 5/8 " UNF	1245.0570
	DN 65 (2 1/2")	64 5/8 " UNF	1245.0640
	DN 80 (3")	68 5/8 " UNF	1245.0680
	DN 80 (3")	70 5/8 " UNF	1245.0700
	DN 100 (4")	83 5/8 " UNF	1245.0830
Carbide tipped (HM) Hole Saws	Nominal size	diam./mm thread	Item no.
or PE, PVC and Clay Pipes	DN 20 ( 3/4")	19 1/4 " UNF	1258.0190
	DN 25 (1")	24 1/4 " UNF	1258.0240
	DN 32 (1 1/4")	30 1/4 " UNF	1258.0300
	DN 40 (1 1/2")	35 5/8 " UNF	1258.0350
and the second	DN 50 (2")	38 5/8 " UNF	1258.0380
	DN 65 (2 1/2")	44 5/8 " UNF	1258.0570
	DN 80 (3 ")	64 5/8 " UNF	1258.0640
	D11 00 / 0    1		

DN 80 (3")

DN 100 (4")

68 5/8 " UNF

83 5/8 " UNF

1258.0680

1258.0830





**Special Drill 17 mm (HSS)** Item Item no.

> Drill bit for 3/4 " branching Special drill 17 mm (HSS) 1213.0172



#### **Electric Drive Unit**

1211.0000



Operationality: DN20 (3/4") - DN100 (4") \*220-240 V, 50...60 Hz Power:

1100 W

4,8 kg

(\*available also 110 V)

Weight: 4,8 kg

#### **Pneumatic Drive Unit**

1267.0000



Operationality: DN20 (3/4") - DN100 (4") Power: 1,3KW Air consumption: 1,8 m<sup>3</sup> / min 6 - 8 bar

**Ratchet Drive** Item Item no. 1214.0000

Weight:



TONISCO Jr. ratchet drive

**Shafts & Shaft extensions** Diameter 20 mm / 1/2" square



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350/475 mm	Norm. shaft	1213.0010
475/600 mm	RV/VX-shaft	1229.0050
650/775 mm	Long shaft	1229.0040
90 mm shaft extension	90 mm	1213.0030
180 mm shaft extension	180 mm	1213.0020
Shaft extension socket	70 mm	1213.0090
Gear fastening screw	M8X90	1213.0100

**Shaft Opener & Opening Pins** 



Item	Item no.
TONISCO Jr. Special wrench	1250.0170
TONISCO Jr. Opening Pin	1213.0040

**TONISCO Sealant & Cutting Paste** Item Item no.



TONISCO Cutting Paste	1289.0010
TONISCO sealant	1269.0010

**TONISCO System Oy** 

Kalkun kehätie 19

33330 Tampere FINLAND



Tel. +358 3 2611 724

www.tonisco.com



# TONISCO®B30 PTONISCO



DN40 (1 1/2") - DN200 (8") Hot Tappings



TONISCO®B30

#### Description

The lightweight and robust TONISCO® B30 Hot Tapping Machine is equipment designed for making connections to pipelines, tanks and plant piping. By using TONISCO® B30 Hot Tapping Machine it is possible to take new connections from DN40 to DN200. All the connections can be made without stopping the flow inside the mains up to the pressure of 60 bar.

TONISCO® B30 Hot Tapping Machine is versatile and easy

to operate. It has a full range capability of setting valves DN40 - DN200 by completing it with proper adapters. With suitable adapter TONISCO® B30 can be used in flanged, threated or weldable connections.

All TONISCO® Hot Tapping Machine provide an efficient and economical way of making connections to mains for repairs, relocations or additions.

#### **Features**

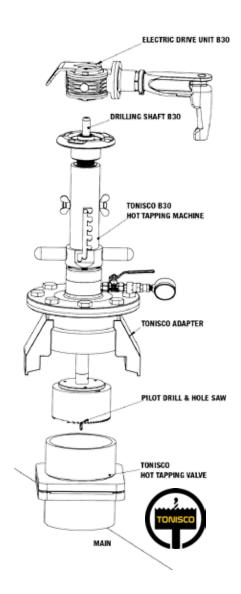
TONISCO® B30 Hot Tapping Machine can be used in temperature maximum of 200°C and pressure up to 60 bar. TONISCO® Jr. is equipped normally with electric drive unit. Other possible drive types are hand drive, pneumatic drive or hydraulic drive.

TONISCO® B30 Hot Tapping Machine weighs only 24 kg. and it can be operated by one man. TONISCO® B30 Hot Tapping Machine can be completed by wide range of hole saws, pilot drills and adapters to fit it with all mainline materials and substances.

By using TONISCO® Hot Tapping Machines it is possible to make pipeline alteration works in pressurized pipelines without shutdowns.

#### TONISCO® B30 Hot tapping machine

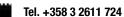
Typical setup up



By choosing the right adapter the TONISCO® B30 hot tapping machine can be used with most of the standard valves equipped with flanged, threaded, welded and clamp connections













# TONISCO B30 Hot Tapping Machine specifications

Branch Size:	DN40-DN200 (*up to DN250)
Drive unit:	Electric 220-240v / 50-60 Hz 1000 VA Pneumatic 6-7 bar / 1500 I / min Hydraulic
Body material:	42CrMo4
Feed Unit material:	S355J264
Sealings:	EPDM (Viton)
Inspection:	Pressure test and construction inspection
Pressure test:	60 bar
Max. operating pressure:	40 bar (60 bar with High Pressure version)
Max. operating temperature:	160°C (200°C with Viton sealings)
*with special adapters / Contact the sa	ales

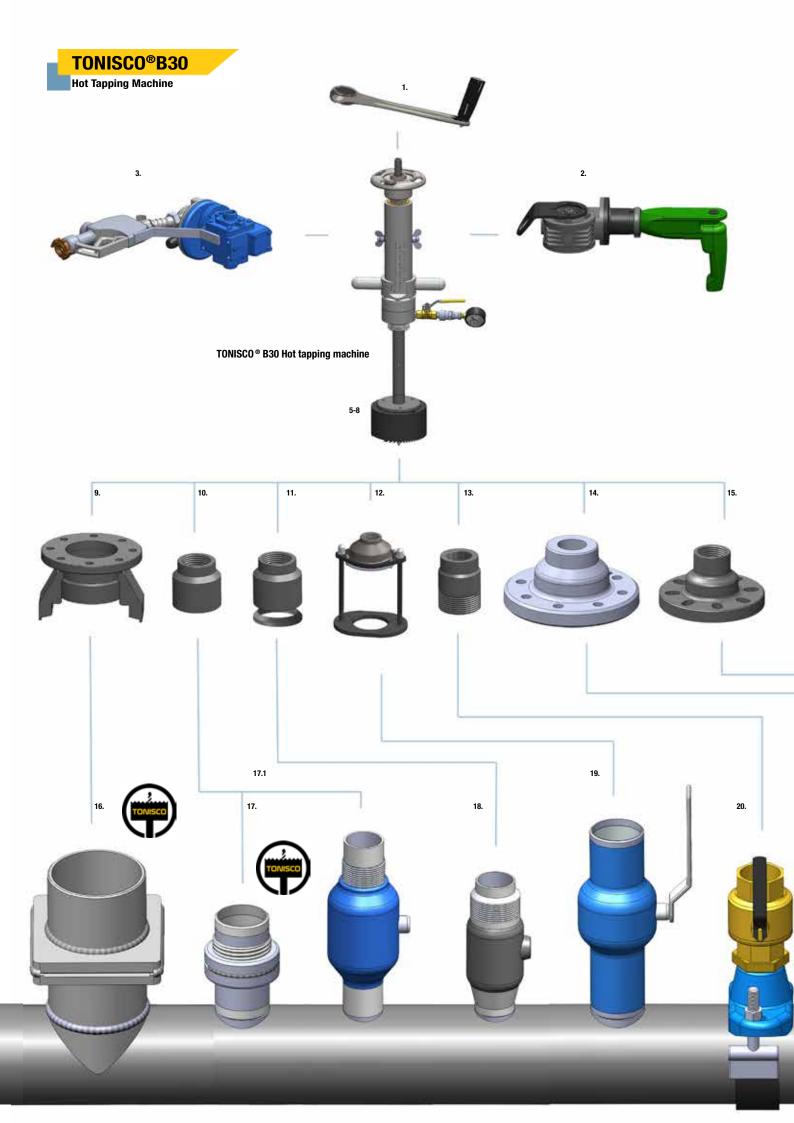
TONISCO® B30		Item	Item no.	Quantity
BASIC SET	Electric drive B30	Electric drive b30 compl	1411.0000	1
	Base unit	Feed device B30, compl. Body B30, complete	1455.0000 1437.0000	1 1
E	Shaft and accessories	Washer Base Shaft B30 Shaft extension B30 Shaft extension pusher Chuck B30 <102 mm Chuck B30 >102 mm Fastening screwv Adapter B30/B40	1446.0090 1446.0001 1446.0020 1446.0080 1446.0030 1446.0040 1446.0070 1450.0060	1 1 3 1 1 1 1
	Pressure monitoring	Press. monit. Set 40 bar Press. relief hose w.	1273.0013 1264.0210	1 1
	Pilot drills	Pilot Drill HM B30 long Pilot Drill HM B30	1446.0050 1446.0060	2 2
	Consumables	TONISCO Cut-paste TONISCO Sealan	1289.0010 1269.0020	1 1
	Operating tools	Wrench 30 mm TONISCO Wrench B30 Pipe wrench 13 mm Allen key 5 mm Allen key 4 mm Shaft opening pin Jr/B30 Shaft Brake B30 Magnet for Jr./B30 cent Magnet > 45 mm	1450.0070 1450.0170 1450.0050 1250.0020 1213.0110 1213.0040 1447.0120 1213.0240 1213.0241	1 2 1 1 5 1* 1
	Pilot drills  Consumables	Press. monit. Set 40 bar Press. relief hose w.  Pilot Drill HM B30 long Pilot Drill HM B30  TONISCO Cut-paste TONISCO Sealan  Wrench 30 mm TONISCO Wrench B30 Pipe wrench 13 mm Allen key 5 mm Allen key 4 mm Shaft opening pin Jr/B30 Shaft Brake B30 Magnet for Jr./B30 cent	1273.0013 1264.0210 1446.0050 1446.0060 1289.0010 1269.0020 1450.0070 1450.0050 1250.0020 1213.0110 1213.0040 1447.0120 1213.0240	











# **Applications - Build your Own TONISCO® B30**

TONISCO® Hot tapping machines are designed completely according the needs of the customer. The Hot tapping machines are used in various different fields and in changing environments.

TONISCO®'s Team of engineers is constantly designing new features to the machines in order to find solutions that helps the customer to use the same basic TONISCO® Hot tapping machine with the valves that best fit the customers needs. The three core-foundations in TONISCO®'s designs are SAFETY, EASE of USE and FLEXIBILITY.

The Option-Chart in the left shows the basic principle of how to build your own TONISCO® Hot tapping machine. Everything starts from the Power unit. Choose the most suitable Power unit according to the circumstances where the machine is mostly used.

The Pneumatic and Hydraulic drive units are designed for ATEX-Environments. The Electric Drive unit is the most common choice because it's is extremely easy to operate and it can be attached to the normal 230 V electric network.

Basic TONISCO® B30 Hot tapping machine can be used with various different

hot tapping valves simply by choosing the right Adapter. TONISCO® B30 Adapters comes in three basic options for threaded, flanged and welded connections. The maximum operating pressure for the threaded Adapters is 60 bar and the Flanged adapters reach up to PN64. Also AISI standard flange Adapters are available.

TONISCO® Offers a wide range of different hole saws for every pipe material used in pressurized pipelines. Complete your own TONISCO® B30 Hot tapping machine with the suitable Hole Saw Set and the hot tapping system is ready for use.

#### TONISCO® System - The Open-Source of Hot tapping

#### **DRIVE UNIT OPTIONS FOR TONISCO® B30**

- 1. Ratched Drive, Manual, for plastic pipes
- 2. Electric Drive Unit, For all materials
- 3. Pneumatic Drive Unit, ATEX-approved
- 4. Hydraulic Drive Unit\*

#### ADAPTER OPTIONS FOR TONISCO® B30

- 9. Adapters for TONISCO drilling valves >DN100
- 10. Adapters with Inner-threads, for TONISCO & VEXVE valves
- 11. Adapters with multi-threads, for DANFOSS Drilling valves
- 12. Adapters for ball valves with welded ends
- 13. Adapters with outer R (BSP) threads, for Ball valves with inner threads
- 14. Aluminium Adapters for flanged valves, PN10,16 (also AISI)
- 15. Steel Adapters for flanged valves, PN10,16,25,40,64 (also AISI)

#### **HOLE SAW OPTIONS FOR TONISCO® B30**

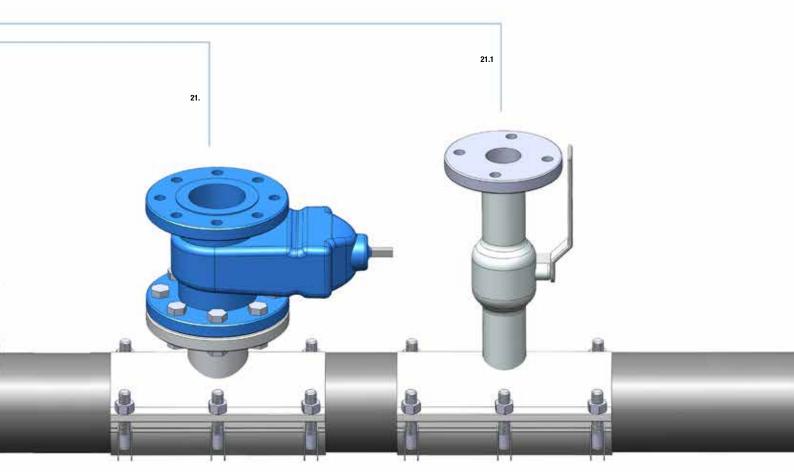
- 5. Bi-Metal (HSS) Hole Saws, Steel, Ductile and Cast Iron.
- 6. Carbide Grit tooth (GE) Hole Saws, Concreted Pipes
- 7. Carbide tipped (HM) Hole Saws, PE, PVC and Clay Pipes
- 8. TONISCO® Hole Saws for other materials\*

#### **EXAMPLES OF HOT TAPPING VALVES SUITABLE FOR TONISCO® B30**

- 16. TONISCO® Hot Tapping valves DN125-DN200
- 17. TONISCO® Hot Tapping valves DN20-DN100
- 17.1 VEXVE Hot tapping ball valves DN20-N100
- 18. DANFOSS Hot Tapping valves DN20-DN100
- 19. Weldable Ball valves with weld ends\*
- 20. R-Threaded Ball valves
- 21. Sluice, Gate and Ball valves with flanged connections (PN10,16,25,40,64)
- 21.1 Sluice, Gate and Ball valves with flanged connections (PN10,16,25,40)

Also available in other standards etc.

\*Contact sales for more information







#### TONISCO® B30 is also available for weldable ball valves, flanged valves and valves with R(G) thread just by completing it with the suitable dapters

TONISCO Adapters	Nominal size	Item no.
	Adapter DN 40	1218.0400
_	Adapter DN 50	1218.0500
	Adapter DN 65	1218.0650
	Adapter DN 80	1218.0800
	Adapter DN 100	1218.1000
	Adapter DN 125	1623.1250
	Adapter DN 150	1623.1500
	Adapter DN 200	1623.2000
	Adapter TONISCO B30/B40	1450.0060
	Claw + bolts	1623.0002
	Adapter Case S	1472.0020
	Adapter Case L	1472.0030

Adapters for Danfoss Drilling valves	Nominal size
	Danfoss Adapter DN50
	Danfoss Adapter DN65
	Danfoss Adapter DN80
	Danfoss Adapter DN100

Adapters with outer R (BSP) threads	Nominal size	Item no.
	Fastening Adapters 11/4"	1222.0400
	Fastening Adapter 2 "	1222.0500
	Fastening Adapter 21/2"	1222.0650
	Fastening Adapter 3 "	1222.0800
	Fastening Adapter 4 "	1222.1000

Adapters with inner R (BSP) threads	Nominal size	Item no.
	Fastening Adapter 11/4"	1244.0400
	Fastening Adapter 2 "	1244.0500
	Fastening Adapter 2 1/2 "	1244.0650
	Fastening Adapter 3 "	1244.0800
-		

Item no. 1240.0500 1240.0650 1240.0800 1240.1000





Adapters for weld. ball valves (long end)	Nominal size	Item no.
	DN 40 (PN 25)	1236.0400
	DN 50 (PN 25)	1236.0500
- a	DN 65 (PN 25)	1236.0650
	DN 80 (PN 25)	1236.0800
	DN 100 (PN 25)	1236.1000
	DN 125 (PN 25)	1636.1250
	DN 150 (PN 25)	1636.1500
	DN 200 (PN 25)	1636.2000
	Adapter screw 220 ( DN32-DN50 )	1236.9001
	Adapter screw 260 ( DN50-DN80 )	1236.9002
	Adapter screw 280 ( DN80-DN100 )	1236.9003
	Adapter screw 350 ( DN100 )	1236.9004
Steel Adapters for flanged valves	Nominal size	Item no.
	DN 40/32 PN16 ( PN 16 - 63 )	1239.0320
	DN 50/40 PN16 (PN 16 - 63)	1239.0500
	DN 65 PN16 ( PN 16 - 63 )	1239.0650
-	DN 80 PN16 ( PN 16 - 63 )	1239.0800
	DN 100 PN16 (PN 16 - 63)	1239.1000
2 2	DN 125 PN16 (PN 10 - 63)	1439.1250
	DN 150 PN16 (PN 10 - 63)	1439.1500
	DN 200 PN16 (PN 10 - 63)	1439.2000
	,	
Aluminium Adapters for flanged valves	Nominal size	ltem no.
	DN 80 PN16	1233.0800
	DN 100 PN16	1233.1000
	DN 150 PN16	1433.1500
	DN 200 PN10-16	1433.2000
Hole Saw Chucks	Item	Item no.
	30 mm - 102 mm 1/2 " UNF-thread	1446.0030
	103 mm - 200 mm 3X86	1446.0040
Pilot Drills	Item	Item no.
	Normal Pilot Drill (HM)	1446.0060
	Long Pilot Drill (HM)	1446.0050





Bi-Metal (HSS) Hole Saws	Nominal size	diam./mm thread	Item no.
for Steel, Ductile and Cast Iron	DN 40 ( 1 1/2")	32 5/8 " UNF	1219.0320
	DN 40 ( 1 1/2")	38 5/8 " UNF	1219.0380
	DN 50 (2")	44 5/8 " UNF	1219.0440
	DN 65 (21/2")	48 5/8 " UNF	1219.0480
4	DN 65 (21/2")	57 5/8 " UNF	1219.0570
- Additional and	DN 80 (3")	64 5/8 " UNF	1219.0640
	DN 80 (3 ")	70 5/8 " UNF	1219.0700
	DN 100 (4")	89 5/8 " UNF	1219.0890
	DN 100 ( 4 ")	95 5/8 " UNF	1219.0950
	DN 100 (4")	89 Ø45 / 3x86	1619.0890
	DN 100 ( 4" )	95 Ø45 / 3x86	1619.0950
	DN 125 (5")	114 Ø45 / 3x86	1619.1140
	DN 125 ( 5")	121 Ø45 / 3x86	1619.1210
	DN 150 (6")	140 Ø45 / 3x86	1619.1400
	DN 200 (8")	180 Ø45 / 3x86	1619.1800
Carbide Grit tooth (GE) Hole Saws	Nominal size	diam./mm thread	Item no.
or Concreted Pipes	DN 40 ( 1 1/2 " )	32 5/8 " UNF	1245.0320
	DN 40 (1 1/2 ")	35 5/8 " UNF	1245.0350
	DN 50 (2")	38 5/8 " UNF	1245.0380
	DN 50 (2")	44 5/8 " UNF	1245.0440
	DN 65 (21/2")	57 5/8 " UNF	1245.0570
	DN 65 (21/2"")	64 5/8 " UNF	1245.0640
	DN 80 (3")	68 5/8 " UNF	1245.0680
	DN 80 (3")	70 5/8 " UNF	1245.0700
	DN 100 (4")	83 5/8 " UNF	1245.0830
	DN 100 (4")	89 Ø45 / 3x86	1245.0890
	DN 100 (4")	95 Ø45 / 3x86	1245.0950
	DN 125 (5")	114 Ø45 / 3x86	1245.1140
	DN 125 (5")	121 Ø45 / 3x86	1245.1210
	DN 150 (6")	140 Ø45 / 3x86	1245.1400
	DN 200 (8")	180 Ø45 / 3x86	1245.1800
Carbide tipped (HM) Hole Saws	Nominal size	diam./mm thread	Item no.
for PE, PVC and Clay Pipes	DN 40 ( 1 1/2")	32 5/8 " UNF	1258. 0320
	DN 50 (2")	38 5/8 " UNF	1258.0380
	DN 65 (2 1/2")	44 5/8 " UNF	1258.0570
A CONTRACTOR OF THE PARTY OF TH	DN 80 (3 ")	64 5/8 " UNF	1258.0640
	DN 80 (3")	68 5/8 " UNF	1258.0680
	DN 100 (4")	83 5/8 " UNF	1258.0830





#### **Electric Drive Unit**

1411.0000



Operationality: DN40 (1 1/2 ") - DN200 (8 ")

\*220-240 V, 50...60 Hz Power:

1100 W

(\*available also 110 V)

Weight: 4,8 kg

**Pneumatic Drive Unit** 

1467.0000



DN40 (1 1/2 ") - DN200 (8 ") Operationality:

1,3KW Power: 1,8 m<sup>3</sup> / min Air consumption: 6 - 8 bar

4,8 kg Weight:

**Ratchet Drive** Item Item no.

TONISCO B30 ratchet drive 1414.0000

**Shafts & Shaft extensions** 

Diameter 30 mm



Туре	Specs.	item no.	
Base shaft	Norm. shaft	1446.0001	
Shaft extension	155mm	1446.0020	
Shaft extension socket	50 mm	1446.0080	
Gear fastening screw	M8X20	1446.0070	
Washer	DIN4409	1446.0090	

**Shaft brake** Item Item no.



TONISCO B30 Shaft brake 1447.0020

**Shaft Opener & Opening Pins** 



Item	Item no.
TONISCO B30 Special wrench	1450.0170
TONISCO Jr./B30 Opening Pin	1213.0040

**TONISCO Sealant & Cutting Paste** Item no. **Item** 



TONISCO Cutting Paste	1289.0010	
TONISCO sealant	1269.0010	



# TONISCO®B40 PTONISCO



DN100 (4") - DN500 (20") Hot Tappings



TONISCO®B40

#### Description

The lightweight and robust TONISCO® B40 Hot Tapping Machine is an equipment designed for making connections to pipelines, tanks and plant piping. By using TONISCO® B40 Hot Tapping Machine it is possible to make new connections from DN100 all the way up to DN500. The connections can be made without stopping the flow inside the mains up to the pressure of 60 bar.

TONISCO® B40 Hot Tapping Machine is versatile and easy to operate. It has a full range capability of setting valves DN100 - DN500 by completing it with proper adapters. With suitable adapter TONISCO® B40 can be used for flanged, threated or weldable connections.

All TONISCO® Hot Tapping Machines provide an efficient and economical way of making connections to mains for repairs, relocations or additions.

TONISCO®B40

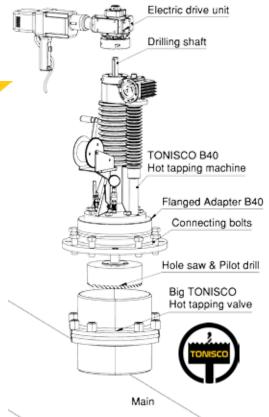
Typical setup up

#### **Features**

TONISCO® B40 Hot Tapping Machine can be used up to the temperature of 200°C and pressure up to the 60 bar. TONISCO® B40 is equipped normally with electric drive unit. Other possible drive types are hand drive, pneumatic drive or hydraulic drive.

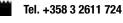
TONISCO® B40 Hot Tapping Machine weighs only 22 kg. and it can be operated by two men. TONISCO® B40 Hot Tapping Machine can be completed by wide range of hole saws, pilot drills and adapters to fit it with all mainline materials and substances.

By using TONISCO® Hot Tapping Machines it is possible to make pipeline alteration works in pressurized pipelines without shutdowns.



TONISCO System Oy Kalkun kehätie 19









# TONISCO B40 Hot Tapping Machine specifications

Branch Size:	DN 125 - DN 500
Drive unit:	Electric 220-240v / 50-60 Hz 1000 VA Pneumatic 6-7 bar / 1500 I / min Hydraulic
Body material:	AlSi10Mg
Feed Unit material:	AlSi10Mg
Sealings:	EPDM (Viton)
Inspection:	Pressure test and construction inspection
Pressure test:	60 bar
Max. operating pressure:	40 bar (60 bar with High Pressure version)
Max. operating temperature:	160°C (200°C with Viton sealings)

TONISCO® B40		Item	Item no.	Quantity
BASIC SET	Electric drive B40	Electric drive B40 compl	1635.0000	1
	Base unit	Feed device B40, compl. Body B40, complete	1626.0000 1628.0000	1
E_	Shaft and accessories	Washer Base shaft 695 mm Shaft extension 180 mm Shaft adjusting socket long Shaft screw, normal Chuck < 110 mm Hole saw screw, hexagon Chuck > 110 mm Hole saw screw, hexagon Chuck > 275mm Hole saw screw, hexagon	1666.0040 1666.0001 1666.0050 1666.0190 1666.0030 1666.0080 1666.0082 1666.0071 1666.0072 1666.0200 1666.0250	1 1 3 1 1 1 3 1 3 1 3
E	Pressure monitoring	Press. monit. Set 40 bar Press. relief hose w.	1273.0013 1264.0210	1 1
	Pilot drills	HSS Pilot drill Ø16mm HSS Pilot drill Ø20mm HSS Pilot drill Ø25mm	1666.0100 1666.0110 1666.0106	2 2 2*
	Consumables	TONISCO Cut-paste TONISCO Sealant	1289.0010 1269.0020	1 1
	Operating tools	Wrench 30 mm TONISCO Wrench B30 Pipe wrench 13 mm Allen key 5 mm Allen key 4 mm Shaft opening pin Jr/B30 Magnet > 45 mm	1450.0070 1450.0170 1450.0050 1250.0020 1213.0110 1213.0040 1213.0241	1 1 2 5 1 1
	* hot tapping sets bigger	than DN300		















# **Applications - Build your Own TONISCO® B40**

TONISCO® Hot tapping machines are designed completely according the needs of the customer. The Hot tapping machines are used in various different fields and in changing enviroments.

TONISCO®'s Team of engineers is constantly designing new features to the machines in order to find solutions that helps the customer to use the same basic TONISCO® Hot tapping machine with the valves that best fit the customers needs. The three core-foundations in TONISCO®'s designs are SAFETY, EASE of USE and FLEXIBILITY.

The Option-Chart in the left shows the basic principle of how to build your own TONISCO® Hot tapping machine. Everything starts from the Power unit. Choose the most suitable Power unit according to the circumstances where the machine is mostly

The Pneumatic and Hydraulic drive units are designed for ATEX-Environments. The Electric Drive unit is the most common choice because it's is extremely easy to operate and it can be attached to the normal 230 V electric network.

Basic TONISCO® B40 Hot tapping machine can be used with various different

hot tapping valves simply by choosing the right Adapter. TONISCO® B40 Adapters comes in three basic options for threaded, flanged and welded connections. The maximum operating pressure for the threaded Adapters is 60 bar and the Flanged adapters reach up to PN64. Also AISI standard flange Adapters are available.

TONISCO® Offers a wide range of different hole saws for every pipe material used in pressurized pipelines. Complete your own TONISCO® B40 Hot tapping machine with the suitable Hole Saw Set and the hot tapping system is ready for use.

#### TONISCO® System - The Open-Source of Hot tapping





#### TONISCO®B40

**Hot Tapping Machine** 



#### **DRIVE UNIT OPTIONS FOR TONISCO® B40**

1. Electric Drive unit for all materials 2. Pneumatic Drive unit for ATEX-environment\* 3. Hydraulic Drive unit

#### **ADAPTER OPTIONS FOR TONISCO® B40**

- 7. Adapters TONISCO Anbohrsperren DN125-DN250
- 8. Flanged Adapters TONISCO Anbohrsperren DN250-N500
- 9. Falnged Steel Adapters PN10,16,25,40,64 (also ANSI)

#### **SUITABLE VALVES WITH TONISCO® B40**

- 10. TONISCO ® Drilling valves DN125 DN250 11. TONISCO ® Drilling valves DN250 DN500
- 12. Sluice and Gate valves with flange PN10,16,25,40,64
- 13. Flanged ball valves PN10,16,25,40,64

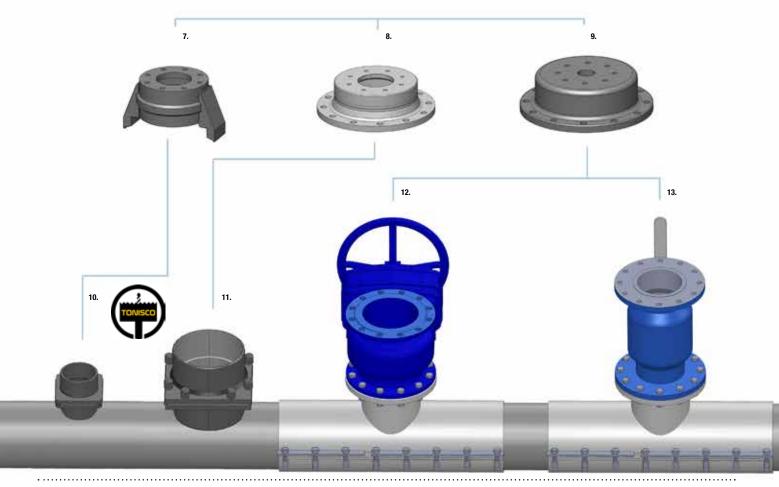
#### Available also in other standards \*Contact the sales



# TONISCO® B40 Hot Tapping Machine

#### **HOLE SAW OPTIONS FOR TONISCO® B40**

- 4. Bi-Metall (HSS) Hole saw, Steel, Ductile and Cast iron 5. Carbide Griit Edge (GE) Hole saw, Concreted pipes
- 6. TONISCO® Hole saws for other materials\*







1623.5000

#### **TONISCO adapters Nominal diameter** Item no. Connecting Claw + bolts 1623.0002 Adapter DN 125 compl. 1623.1250 Adapter DN 150 compl 1623.1500 Adapter DN 200 compl. 1623.2000 Adapter DN 250 compl. 1623.2500 Adapter DN 300 compl. 1623.3000 Adapter DN 350 compl. 1623.3500 Adapter DN 400 compl. 1623.4000

Adapter DN 500 compl.

Spare sealings for TONISCO adapters	Nominal diameter	Item no.
	Sealing DN 125	1623.1251
	Sealing DN 150	1623.1501
	Sealing DN 200	1623.2001
	Sealing DN 250	1623.2501
	Sealing DN 300	1623.3001
	Sealing DN 350	1623.3501
	Sealing DN 400	1623.4001
	Sealing DN 500	1623.5001





#### Flanged adapters (DIN)





Nominal diameter	Item no.
Adapter DN125 (PN16) DIN 2526	1641.1250
Adapter DN125 (PN40) DIN 2526	1641.1255
Adapter DN150 (PN16) DIN 2526	1641.1500
Adapter DN150 (PN40) DIN 2526	1641.1505
Adapter DN200 (PN16) DIN 2526	1641.2000
Adapter DN200 (PN6) DIN 2526	1641.2001
Adapter DN200 (PN10) DIN 2526	1641.2002
Adapter DN200 (PN25) DIN 2526	1641.2004
Adapter DN200 (PN40) DIN 2526	1641.2005
Adapter DN250 (PN16) DIN 2526	1641.2500
Adapter DN250 (PN6) DIN 2526	1641.2501
Adapter DN250 (PN10) DIN 2526	1641.2502
Adapter DN250 (PN25) DIN 2526	1641.2504
Adapter DN250 (PN40) DIN 2526	1641.2505
Adapter DN300 (PN16) DIN 2526	1641.3000
Adapter DN300 (PN6) DIN 2526	1641.3001
Adapter DN300 (PN10) DIN 2526	1641.3002
Adapter DN300 (PN25) DIN 2526	1641.3004
Adapter DN300 (PN40) DIN 2526	1641.3005
Adapter DN350 (PN16) DIN 2526	1641.3500
Adapter DN350 (PN6) DIN 2526	1641.3501
Adapter DN350 (PN10) DIN 2526	1641.3502
Adapter DN350 (PN25) DIN 2526	1641.3504
Adapter DN350 (PN40) DIN 2526	1641.3505
Adapter DN400 (PN16) DIN 2526	1641.4000
Adapter DN400 (PN6) DIN 2526	1641.4001
Adapter DN400 (PN10) DIN 2526	1641.4002
Adapter DN400 (PN25) DIN 2526	1641.4004
Adapter DN400 (PN40) DIN 2526	1641.4005
Adapter DN400 (PN16) DIN 2526	1641.5000
Adapter DN400 (PN6) DIN 2526	1641.5001
Adapter DN400 (PN10) DIN 2526	1641.5002
Adapter DN400 (PN25) DIN 2526	1641.5004
Adapter DN400 (PN40) DIN 2526	1641.5005





Florand adoptors (ANCI)	Naminal diameter	House we
Flanged adapters (ANSI)	Nominal diameter  Adapter ANSI B16.5 4 in 150	<b>Item no.</b> 1643.1000
	Adapter ANSI B16.5 4 in 300	1643.1001
	Adapter ANSI B16.5 4 in 600	1643.1002
	Adaptor Andre Bro. o Tim Goo	10 10.1002
of I by	Adapter ANSI B16.5 5 in 150	1643.1250
'i o i'	Adapter ANSI B16.5 5 in 300	1643.1251
	Adapter ANSI B16.5 5 in 600	1643.1252
	•	
	Adapter ANSI B16.5 6 in 150	1643.1500
	Adapter ANSI B16.5 6 in 300	1643.1501
	Adapter ANSI B16.5 6 in 600	1643.1502
	Adapter ANSI B16.5 8 in 150	1643.2000
	Adapter ANSI B16.5 8 in 300	1643.2001
	Adapter ANSI B16.5 8 in 600	1643.2002
	Adapter ANSI B16.5 10 in 150	1643.2500
	Adapter ANSI B16.5 10 in 300	1643.2501
	Adapter ANSI B16.5 10 in 600	1643.2502
	A L L ANGLEAGE 40 L 450	4040,0000
	Adapter ANSI B16.5 12 in 150	1643.3000
	Adapter ANSI B16.5 12 in 300	1643.3001
	Adapter ANSI B16.5 12 in 600	1643.3002
	Adapter ANSI B16.5 14 in 150	1643.3500
	Adapter ANSI B16.5 14 in 300	1643.3501
	Adapter ANSI B16.5 14 in 600	1643.3502
	Adapter ANSI B16.5 16 in 150	1643.4000
	Adapter ANSI B16.5 16 in 300	1643.4001
	Adapter ANSI B16.5 16 in 600	1643.4002
	Adapter ANSI B16.5 16 in 150	1643.5000
	Adapter ANSI B16.5 16 in 300	1643.5001
	Adapter ANSI B16.5 16 in 600	1643.5002





#### (VX) Adapters for weldable ball valves







NVIIIIIai ulailletei	item no.
VX Adapter DN125 red. compl.	1636.1250
VX Adapter DN150 red. compl.	1636.1500
VX Adapter DN200 red. compl.	1636.2000
VX Adapter DN250 red. compl.	1636.2500
VX Adapter DN300 red. compl.	1636.3000
VX Adapter DN350 red. compl.	1636.3500
VX Adapter DN400 red. compl.	1636.4000

#### **Spare sealings and screws**

for VX Adapters

Nominal diameter	Item no.
Sealing DN 125	1636.1251
Sealing DN 150	1636.1501
Sealing DN 200	1636.2001
Sealing DN 250	1636.2501
Sealing DN 300	1636.3001
Sealing DN 350	1636.3501
Sealing DN 400	1636.4001
Adapter screw DN125	1636.9001
Adapter screw DN150	1636.9002
Adapter screw DN200	1636.9003
Adapter screw DN250	1636.9004
Adapter screw DN300	1636.9005
Adapter screw DN350	1636.9006
Adapter screw DN400	1636.9007





Bi-Metal (HSS) Hole Saws	Nominal size	Item no.
for Steel, Ductile and Cast Iron pipes	H-saw HSS 89 mm / B40	1619.0890
	H-saw HSS 95 mm / B40	1619.0950
	H-saw HSS 114 mm / B40	1619.1140
	H-saw HSS 121 mm / B40	1619.1210
	H-saw HSS 140 mm / B40	1619.1400
	H-saw HSS 180 mm / B40	1619.1800
	H-saw HSS 220 mm / B40	1619.2200
	H-saw HSS 270 mm / B40	1619 2700



H-saw HSS 89 mm / B40	1619.0890
H-saw HSS 95 mm / B40	1619.0950
H-saw HSS 114 mm / B40	1619.1140
H-saw HSS 121 mm / B40	1619.1210
H-saw HSS 140 mm / B40	1619.1400
H-saw HSS 180 mm / B40	1619.1800
H-saw HSS 220 mm / B40	1619.2200
H-saw HSS 270 mm / B40	1619.2700
H-saw HSS 320 mm / B40	1619.3200
H-saw HSS 355 mm / B40	1619.3550
H-saw HSS 404 mm / B40	1619.4040
H-saw HSS 452 mm / B40	1619.4520
H-saw HSS 505 mm / B40	1619.5050
H-saw HSS 608 mm / B40	1619.6080
H-saw HSS 708 mm / B40	1619.7080

Carbide Grit toothed (GE) Hole Saws	Nominal size	Item no.
for Concreted pipes	H-saw GE 89 mm / B40	1645.0890
	LL 05 404 / D40	4045 4040



NVIIIIIai 5126	ILEIII IIU.
H-saw GE 89 mm / B40	1645.0890
H-saw GE 121 mm / B40	1645.1210
H-saw GE 140 mm / B40	1645.1400
H-saw GE 180 mm / B40	1645.1800
H-saw GE 220 mm / B40	1645.2200
H-saw GE 270 mm / B40	1645.2700
H-saw GE 320 mm / B40	1645.3200
H-saw GE 355 mm / B40	1645.3550
H-saw GE 404 mm / B40	1645.4040
H-saw GE 452 mm / B40	1645.4520
H-saw GE 505 mm / B40	1645.5050
H-saw GE 608 mm / B40	1645.6080
H-saw GE 708 mm / B40	1645.7080

Pilot Drills	Item	Item no.
	HSS Pilot drill Ø16mm	1666.0100
	HSS Pilot drill Ø20mm	1666.0110
	HSS Pilot drill Ø25mm	1666.0106





#### **Electric Drive Unit**

1611.0000



Operationality: DN100 (4 ") - DN500 (20 ")

Power: \*220-240 V, 50...60 Hz

1700 W

(\*available also 110 V)

Weight: 17 kg

#### **Pneumatic Drive Unit**

1667.0000



Operationality: DN100 (4 ") - DN500 (20 ")

Power: 2KW

Air consumption: 1,8 m<sup>3</sup> / min

6 - 8 bar

Weight: 15 kg

#### Shafts Item Item no.

Diameter 40 mm



Item	Item no.
Base shaft compl. 710/930mm	1666.0010
Shaft extension 180 mm	1666.0050
Shaft upper end 200/415 mm	1666.0160
Shaft lower end 610/680 mm	1666.0170
Shaft adjusting socket 95 mm	1666.0190
Shaft screw, normal	1666.0030
Washer	1666.0040

### Chucks Nominal diameter Item no.



11011111111 4111110101	10111 1101
Chuck < 110 mm	1666.0080
Hole saw screw, hexagon	1666.0082
Chuck screw	1666.0081
Chuck > 110 mm	1666.0070
Hole saw screw, hexagon	1666.0072
Chuck screw	1666.0071
Chuck > 275mm	1666.0200
Hole saw screw, hexagon	1666.0250
Chuck screw	1666.0251

#### Chuck & Shaft openers



Item	Item no.
Chuck opener B40	1650.0020
Shaft key	1650.0030
Opening pin	1650.0040





TONISCO delivers its own and its Partners hot tapping Valves and other hot tapping Components. When ordering all the hot tapping parts from TONISCO the Customer knows that they will get the best solutions and parts for their work environment. Also small deliveries are accepted with competitive prices.



TONISCO® Hot tapping valves are ideal for making under pressure outlets to District Heating and Cooling pipe lines

- Weld ends on both End
- Easy and Safe Threaded connection to TONISCO Hot tapping machines
- Applicable for underground installations Easy to insulate

# VEXVE Hot Tapping Ball valves



VEXVE Hot tapping valves for under pressure connections to District Heating and Cooling pipe lines

- Weld ends on both End
- Easy and Safe Threaded connection to TONISCO Hot tapping machines
- Applicable for underground installations

#### NAVAL Hot Tapping Ball valves



NAVAL Hot tapping valves for under pressure connections to District Heating and Cooling pipe lines

- Weld ends on both End
- Easy and Safe Threaded connection to TONISCO Hot tapping machines
- Applicable for underground installations

# DANFOSS Hot Tapping Ball valves



DANFOSS Hot tapping valves for under pressure connections to District Heating and Cooling pipe lines.

- Weld ends on both End
- Easy and Safe Threaded connection to TONISCO Hot tapping machines
- Applicable for underground installations

Nominal size/size	Product no.
DN 20 ( PN 25 )	1220.0200
DN 25 (PN 25)	1220.0250
DN 32 (PN 25)	1220.0320
DN 40 (PN 25)	1220.0400
DN 50 (PN 25)	1220.0500
DN 65 (PN 25)	1220.0650
DN 80 (PN 25)	1220.0800
DN 100 ( PN 25 )	1220.1000
DN 125 ( PN 25 )	1624.1250
DN 150 (PN 25)	1624.1500
DN 200 ( PN 25 )	1624.2000
DN 250 ( PN 25 )	1624.2500
DN 300 (PN 16)	1624.3000
DN 350 (PN 16)	1624.3500
DN 400 (PN 16)	1624.4000
DN 500 (PN 16)	1624.5000
DN 600 (PN 16)	1624.6000

Nominal size/size	Product no.
DN 20 ( PN 40 )	1243.0200
DN 25 (PN 40)	1243.0250
DN 32 (PN 40)	1243.0320
DN 40 (PN 40)	1243.0400
DN 50 (PN 40)	1243.0500
DN 65 (PN 25)	1243.0650
DN 80 (PN 25)	1243.0800
DN 100 (PN 25)	1243.1000

Nominal size/size	Product no.
DN 20 ( PN 40 )	1243.0201
DN 25 (PN 40)	1243.0251
DN 32 (PN 40)	1243.0321
DN 40 (PN 40)	1243.0401
DN 50 (PN 40)	1243.0501
DN 65 (PN 25)	1243.0651
DN 80 (PN 25)	1243.0801
DN 100 (PN 25)	1243.1001

Nominal size/size	Product no.
DN 15 (PN 40)	1242.0150
DN 20 ( PN 40 )	1242.0200
DN 25 (PN 40)	1242.0250
DN 32 (PN 40)	1242.0320
DN 40 (PN 40)	1242.0400
DN 50 (PN 40)	1242.0500
DN 65 (PN 25)	1242.0650
DN 80 (PN 25)	1242.0800
DN 100 (PN 25)	1242.1000



# **Hot Tapping saddles & Components**

FAST DELIVERY - COMPETITIVE PRICES





TONISCO delivers its own and its Partners hot tapping saddles and other hot tapping Components. When ordering all the hot tapping parts from TONISCO the Customer knows that they will get the best solutions and parts for their work environment. Also small deliveries are accepted with competitive prices.

#### **Flanged Saddles** T-Hot Tapping saddles



Flanged T-saddle for Metal and PEH-pipe Hot tappings

- Flanges PN10/16
- Stainless steel body (AISI 304 ja 316 on request)
- Sealings EPDM, Drinking water/EPDM-HT/NBR/VITON
- Water, Waste water and Cooling systems

Nominal size/size	Product no.
108-128 X 500 DN80 EPDM 304	9910.100FL80
159-179 X 500 DN80 EPDM 304	9910.150FL80
159-179 X 500 DN100 EPDM 304	9910.150FL100
210-230 X 500 DN80 EPDM 304	9910.200FL80
210-230 X 500 DN100 EPDM 304	9910.200FL100
310-330 X 500 DN80 EPDM 304	9910.300FL80
310-330 X 500 DN100 EPDM 304	9910.300FL100
310-330 X 500 DN150 EPDM 304	9910.300FL150
310-330 X 500 DN200 EPDM 304	9910.300FL200
420-440 X 500 DN80 EPDM 304	9910.400FL80
420-440 X 500 DN100 EPDM 304	9910.400FL100
420-440 X 500 DN150 EPDM 304	9910.400FL150
420-440 X 500 DN200 EPDM 304	9910.400FL200
* Also all the other sizes are available on request	

#### **Threaded Saddles** Threaded saddle, SS



Stainless steel Hot tapping Saddle with threaded outlet for Metal pipes

- Threded outlets 1"-2 1/2"
- Stainless steel body (AISI 304 ja 316 on request)
- Sealings EPDM, Drinking water/EPDM-HT/NBR/VITON
- Water, Waste water and Cooling systems

Nominal size/size	Product no.
88-110 X 300 1" EPDM 304	9920.80TH25
88-110 X 300 1 1/4" EPDM 304	9920.80TH32
88-110 X 300 2" EPDM 304	9920.80TH50
108-128 X 300 1" EPDM 304	9920.100TH25
108-128 X 300 2" EPDM 304	9920.100TH50
158-180 X 300 1" EPDM 304	9920.150TH25
158-180 X 300 2" EPDM 304	9920.150TH50
210-230 X 300 1" EPDM 304	9920.200TH25
210-230 X 300 2" EPDM 304	9920.200TH50
314-335 X 400 1" EPDM 304	9920.300TH25
420-440 X 400 2" EPDM 304	9920.400TH50
* Also all the other sizes are available on request	

#### **Threaded Saddles** Threaded saddle, Universal



Hot tapping Saddle with threaded outlet for Cast Iron, Steel and cement

- Threded outlets 1"-2"
- Sealings EPDM, Drinking water/EPDM-HT/NBR/VITON
- Water, Waste water and Cooling systems

Nominal size/size	Product no.
DN50 - 1"	9930.50TH25
DN50 - 1 1/4"	9930.50TH32
DN65 - 1"	9930.65TH25
DN65 - 1 1/4"	9930.65TH32
DN80 - 1"	9930.80TH25
DN80 - 1 1/2"	9930.80TH40
DN100 - 1"	9930.100TH25
DN100 - 2"	9930.100TH50
DN150 - 2"	9930.150TH50
DN200 - 2"	9930.200TH50
DN250 - 2"	9930.250TH50
* Also all the other sizes are available on request	

Also other Hot tapping components and sizes upon Request.

**TONISCO System Oy** 

33330 Tampere FINLAND



Tel. +358 3 2611 724

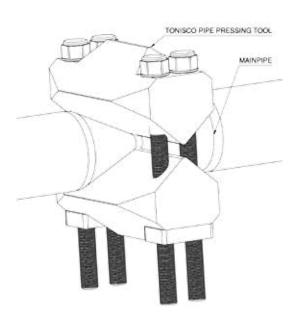








# TONISCO® PS150 Typical Setting



TONISCO® PS
DN40, DN80, DN 125, DN150

#### **Description**

TONISCO® PIPE SQUEEZERS are desinged to situations, when a part of the pressurized pipe network is forced to be isolated from service because of a leak or alteration work. By using TONISCO® PS interruption or interference of the process can be avoided. The best results are achieved when TONISCO® PIPE SQUEZERS are used together with other TONISCO® hot tapping tools.

TONISCO® PIPE
SQUEEZERS consists from two
machined pressing Jaws made from
machined and tempered Steel. The
Jaws are connected with strong bolts
that are machined from one solid steel
bar. The robust design and the use of
strong simple materials and designs
ensures that the TONISCO® PS will
work just the way they are intended —
every time.

TONISCO® PIPE SQUEEZERS comes in four different models, Small, Medium Large and X-Large. The pressing range covered starts from DN20 and goes all the way up to DN150. PIPE SQUEEZERS are named after the largest operating diameter as follows; PIPE SQUEEZER DN40 (Small), PIPE SQUEEZER DN80 (Medium), PIPE SQUEEZER DN125 (Large), PIPE SQUEEZER DN150 (X-Large).

- SMALL (DN40)19,00 Kg
- MEDIUM (DN80) 32,00 Kg
- LARGE (DN125) 62,00 Kg
- XL (DN150) 70,00 Kg

TONISCO® PIPE SQUEEZER sets can always be adjusted to customer needs. The basic set comes with all manual tools. The set can be completed with Electrical or Pneumatical Drive Unit and other accessories.





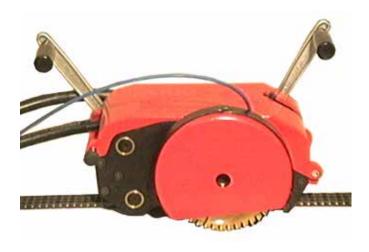
TONISCO® PS SPECIFICATIONS	Height	Lenght	Jaws	Total weight	Item no.	
PS 150	405 mm	350 mm	46 kg	70 kg	6100.1500	
PS 125	390 mm	305 mm	43 kg	60 kg	6100.1250	
PS 80	367 mm	150 mm	16 kg	36 kg	6100.0800	
PS 40	178 mm	127 mm	10 kg	30 kg	6100.0400	
TONISCO® PS	Item.	l	Material/Type	Item r	10.	
Structure & Materials	Upper Jaw		355JR	6111.1	500	
	Washer	Washer DIN126		6113.1	6113.1510	
	Screw	Screw 42CrMo4 / DIN912		6113.1560		
	Lower Jaw	Lower Jaw S355JR		6111.1510		
	Nut Plate	Nut Plate 42CrMo4		6111.1520		
PS Rachet Set DN150	Item			Item r	10.	
Item no. 6100.0030	Socket 46 mi	m 3/4"		6115.0	6115.0040	
	Racthet 3/4"			6115.0	6115.0070	
	Extension 3/4	Extension 3/4"			6115.0080	
PS Rachet Set DN40-DN125	Item			Item r	10.	
tem no. 6100.0020	Socket 36 mi	Socket 36 mm 3/4"			050	
	Racthet 3/4"			6115.0	6115.0070	
	Extension 3/4"			6115.0	6115.0080	
PS Torque Multiplier Set	Item			ltem r	10.	
Item no. 6100.0040	Torque Multip	lier		6115.0	020	
	Extension Bar			6115.0030		
	Adapter 3/4"	Adapter 3/4" - 1"			6115.0090	
PS Electric Unit	Item			Item r	10.	
Item no. 6100.0050 *alternative / contact sales	Electric Drive	unit B30		1411.00	000	
"alternative / Contact Sales	Drive adapter	Drive adapter 3/4"			010	
	Secondary Shaft Set			6115.02	200	
	*Pneumatic Drive unit B30			1467.00	1467.0000	
PS Accessories DN40 - DN125	Item			ltem r	10.	
Item no. 6100.0010	Transport Box	Small		6115.0°	100	
	EP-grease			6113.00	090	
	Allen key 5mr	Allen key 5mm			1250.0020	
PS Accessories DN150	Item			Item r	10.	
Item no. 6100.0015	Transport Box	Large		6115.01	110	
	EP-grease			6113.00	6113.0090	
	Allen key 5mm			1250.00	020	



# TONISCO®PS2000 Hydraulic pipe cutter for steel & Cast iron pipelines DN150 - DN1400









#### TONISCO®PS2000 DN150 - DN1400

#### **Description**

The hydraulically operated TONISCO® PS2000 pipe cutter device has been developed mainly to accomplish accurate big diameter pipe cutting on-site. The pipe which shall be cut is not necessary to empty in advance - the cutter is capable of cutting the pipe filled with water or some other liquid - in fact the cutting is possible even totally under water. The limiting factor is rather the operator then the equipment.

The hydraulics of TONISCO® PS2000 offers high torque therefore the cutting speed of the cutting blade is low, with right setup no sparks occurs while cutting pipe lines of various materials. Pipes holding flammable fluids or gases can be cut and the low rpm means long lasting cutting blades.

#### **Features**

TONISCO® PS2000 cuts all kinds of pipes. By simply choosing the right saw blade plastic pipes can be cut as well as cast iron, ductile and steel pipes of various qualities. The hydraulic drive offers many advantages cutting is fast and simple, the attaching method is accurate using a rigid wide steel chain, which is easy to extend and guarantees a straight cut.

The driving force of the cutter is pressurized hydraulic oil The pressure level is only modest. Best way to ensure the perfect cut everytime is to equip the cutter with a separate, electric or combustion engine powered TONISCO® hydraulic power unit.

#### Basic information

■ WEIGHT: 12,00 Kg ■ MEDIUM: Water & Gas ■ RANGE: DN150-DN1400

With TONISCO® PS2000 Also a pre-cutted chamfer can be made simoultanesly using a special cutting blade. The chamfer makes it easy to carry on the line by welding after the pipe is cut.





#### TONISCO® PS2000 Machine specifications



Item no. PS200.0000

Cutting Range:	DN150-DN1400
Drive unit:	Hydraulic
Body material:	Steel S355J2
Blade size:	180 mm (Diameter)
RPM Machine:	700-900 rpm
RPM Blade:	350-450 rpm
Working Pressure:	100 bar
Max. operating pressure:	140 bar
Max. operating flow:	30 L/min
Max. wall thickness:	45,00 mm

# TONISCO® PS2000 Hydraulic Drive unit Machine specifications



Item no. HYAG.0030 Item no. HYAG.0042

Motor:	22 Hp
Volume:	50 L, 60 L
Body material:	Aluminium
Size & Weight:	1200X800X950(mm), 197 Kg, 240 Kg
Max. operating pressure:	140 bar
Max. operating flow:	30 L/min/, 42 L/min
Working Pressure:	100 bar
Connections:	3/8" TEMA

## TONISCO® PS2000 Complete



TONISCO System Oy is over 45-year old Finnish company specialized in hot tapping and line stopping. TONISCO has a wide range of hot tapping equipment for various needs. TONISCO customers can attach new branches to existing pressurized pipeline networks without stopping the flow and processes connected to them. Hot tapping with TONISCO is safe, cost effective and environmental friendly way to make variations to pipeline networks without interrupting the network. Hot tapping saves a lot of time, environment and last but not least a customer's wallet.

#### **TONISCO Hot tapping -process**

TONISCO hot tapping process starts always from the needs of customer. Together with TONISCO specialists customers can find the best way to execute the alteration work for the pressurized pipeline network without stopping the flow. Hot tapping can be used in *district heating and cooling networks, water distribution and waste water networks, building maintenance services, gas and oil networks and in process plants.* 

#### **TONISCO Technology**

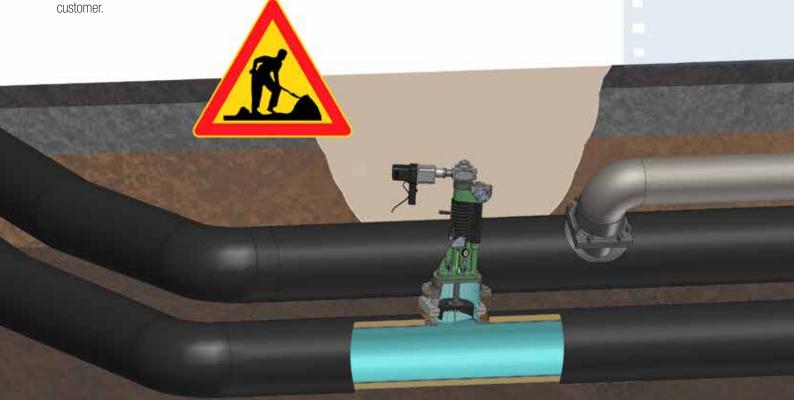
By using TONISCO technology it is possible to make branches from DN10 to DN700. Pipeline materials can vary from plastic and composite to stainless steel. TONISCO hot tapping equipment are modified to fit almost all the standard valves and hot tapping components there are in the market. That is one of the reasons why TONISCO is considered the most flexible partner there is on the field of hot tapping. All our effort in research and development of TONISCO technology is made in order to save money of the

#### **TONISCO Service**

TONISCO offers hot tapping service in over 20 countries. TONISCO's drilling crew consists of well-trained drilling experts and the latest technology to execute hot tapping on time and cost effectively. Size of the new branch can vary from DN10 to DN700. TONISCO drilling crew is devoted to "zero error principle". By choosing TONISCO Service customer can be sure that hot tapping process meets always highest quality standards.

#### **TONISCO Customers**

TONISCO has a wide customer base. TONISCO offers lots of services to both public and private sectors. Customer can be a big energy provider or a local contractor who has a need for hot tapping. Where there is a need to keep networks operational there is TONISCO.





#### **TONISCO Service offers:**

Hot tapping Line stopping Pipe cutting Pipe squeezing

#### for pipeline networks in:

District heating and cooling
Water and sewage
Building maintenance services
Gas distribution
Process Plants industry
Petrochemical industry
and more...

#### **TONISCO Service is used for:**

Connecting new customers to district heating, cooling, water or gas networks

Connecting new processes to pipe network in plants Adding new components like valves, sensors and pumping stations to pipe networks

Expanding the pipe networks coverage Repairing or changing parts of the pipe networks

All maintenance, alternation or repairs can be made without interrupting the flow and operation of the mainline up to 60 bar of pressure.

Contact the sales in order to keep your process going!

+358 (0) 3 2611 724 sales@tonisco.com





- TONISCO System Oy
  Kalkun kehätie 19
- **33330 Tampere**
- ## FINLAND
- 🟙 Tel. +358 3 611 724
- sales@tonisco.com
- www.tonisco.com

TONISCO System Oy is a Finnish company originally established in 1969. During the past four decades TONISCO has been developing underpressure pipeline maintenace tools for customers. TONISCO Hot Tapping Team has made new connections to existing pipelines for customers such as water, steam and heat supplying companies, waste water treatment companies as well as the suppliers of gas. Besides these pipelines, TONISCO Hot Tapping technique is also frequently used in most of the process- chemical- and petrochemical plants

Whenever there is a need for underpressure branch in a pipeline, the operator of the network may contact the TONISCO office by phone or via E-mail. TONISCO technicians will gather all essential facts about the case and choose the proper components and methods for the under pressure connection in question, and - if so agreed - they will also carry out the actual branching. Normally the whole planning and branching work will not take more than one or two working days

