

TUBTARA®

Setting equipment

Hand tools to set blind rivet nuts



● DFS 307 T

Compact & practical hand tool for light duty assembly.

Capacity:

Alu: M3 - M6

Steel: M3 - M5



● DFS 311 T

Strong and reliable hand tool for heavy duty assembly in the field.

Capacity:

Steel & Alu: M6 - M12

Stainless steel: M6 - M10



● NM 1

Small hand tool for prototype work and repairs.

Capacity:

Steel & Alu: M4 - M12

Stainless steel: M4 - M6



● **DFS 309 T**

Heavy duty hand tool for field and low volume production use.
Push and pull mechanism.

Capacity:
All materials: M4 - M10

TUBTARA®

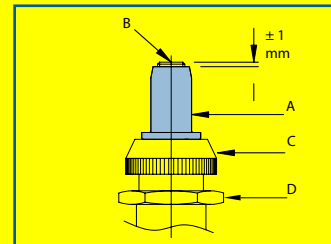
Technical information

● Setting method

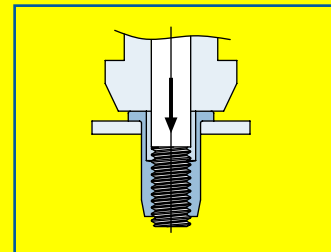
Select one of the Tubtara® blind rivet nuts out of our productrange and a setting tool adequate for the application. Take a test workpiece and drill an appropriate hole

Screw the Tubtara® (A) on the mandrel (B) of the setting tool. For an open version the mandrel should protrude about 1 mm, for a closed one until you feel resistance.

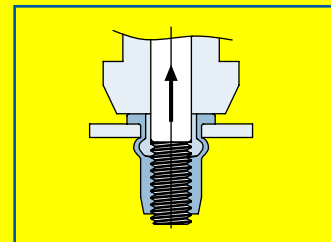
Screw the anvil (C) against the head of the Tubtara® and block it with the locking nut (D).



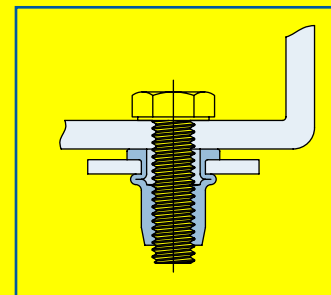
Introduce the Tubtara® mounted on the setting tool, into the hole of the workpiece.



Set the Tubtara®. The deformation chamber of the Tubtara® is now forming the counterhead on the underside of the workpiece (bulb). Unscrew the mandrel from the Tubtara®.

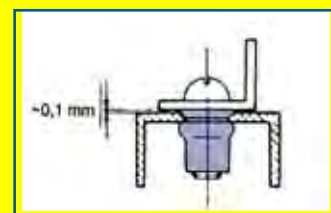


The Tubtara® is set. Now you can easily insert your bolt or screw to assemble a component.



● Countersunk heads

When you use a Tubtara® with a countersunk head, always countersink at 90° so that the head of the installed Tubtara® protrudes about 0,1 mm above your workpiece. This ensures direct contact with the assembled component.



Don't you have the possibility to countersink?
Use a low profile head!

● **General tolerances**

	Head form	Dimensions in mm	Dimensions in inches
D (head diameter)	Flat head Countersunk head Low profile head	± 0,35 0 -0,5 -0,15 +0,3	±.014 0 -.020 -.006 +.012
K (head thickness)	Flat head Countersunk head Low profile head	±0,15 0 +0,3 -0,05 +0,3	±.006 0 +.012 -.002 +.012
L (length)	General Stainless M10 shank 13 mm	±0,35 ±0,5	±.014 ±.020
Metric thread= 6H			
Shank size	General Splined shank M10 shank 12,4 mm	-0,02 -0,15 ±0,08 ±0,08	-.001 -.006 ±.003 ±.003

● **Material specification**

(subject to modification)

Aluminium: ALMG 2,5
 Steel: QST 34-3
 Stainless steel 304: 304 Cu
 Stainless steel 316: 316 Cu
 ...or equivalent.

● **Surface treatment**

on Tubtara® blind rivet nuts in steel

Zinktop

High-quality Cr^{VI} -free plating
 WEEE / ROHS compliant
 96 h white rust - 480 h red rust
 10µ±2µ

Zinc plated, yellow passivated

96 h white rust - 240 h red rust
 10µ±2µ

other surface treatments on request

● **Reach**

Please contact our Sales Department for all information.

Don't hesitate to contact us, if you need additional info.

Available from **MARYLAND METRICS**
 P.O. Box 261 Owings Mills, MD 21117 USA
 ph: (410)358-3130 (800)638-1830
 fx: (410)358-3142 (800)872-9329
 web: <http://mdmetric.com> email: sales@mdmetric.com

TUBTARA®

● Mechanical characteristics

Can be used as a guidance for other versions

TYPE	Grip mm	ALUMINIUM			STEEL			STAINLESS STEEL 304 + 316		
		LOAD N	STROKE mm	THREAD N	LOAD N	STROKE mm	THREAD N	LOAD N	STROKE mm	THREAD N
M3 UPO 20	1	2000	2	3750	4000	2,5	> 5000			
	2	2600	1,5	3280	4750	2	> 5000			
M3 UPO 30	2	1850	1,5	3900	3700	2,5	> 5000			
	3	2050	1	3968	4750	2	> 5000			
M4 UPO 20	1							4900	2	> 9000
	2							5500	1,5	> 9000
M4 UPO 30	1	2100	3	5170	4300	2,5	> 8000			
	3	2430	1	4330	5650	1,5	> 8000			
M4 UPO 35	2							5500	2,6	> 9000
	3,5							6000	1,7	> 9000
M4 UPO 45	3	2050	2,75	4838	4200	2,5	> 8000			
	4,5	2875	1,5	4421	5000	1,5	> 8000			
M5 UPO 30	1	3050	3,5	5500	6150	3,5	12240	7500	3	> 15000
	3	3650	2	5000	7200	2,5	9600	8500	1,7	> 15000
M5 UPO 50	3							7500	4	> 15000
	5							8500	2	> 15000
M5 UPO 55	3	3000	3,5	6450	5750	4	11800			
	5,5	4300	1,5	5525	9650	2	10300			
M6 UPO 30	1	4500	3	11000	9400	4	21200	11850	4	> 24000
	3	5750	2	10000	12000	3	18500	14460	3	> 24000
M6 UPO 50	3							13500	4,5	> 24000
	5							15000	2,75	> 24000
M6 UPO 55	3	4500	3,5	11000	9000	3,5	22700			
	5,5	6100	1,75	10000	11000	2	19700			

Upset Load: Force (in Newton) necessary to deform the Tubtara® referred to in an adequate way.

Upset Stroke: Stroke (in mm) that should be set on the setting tool to give the Tubtara® referred to, the adequate deformation.

Ultimate Thread Strength: Surpassing this ultimate force (in Newton), the thread of the set Tubtara® will be pulled out.

Can be used as a guidance for other versions

TYPE	Grip mm	ALUMINIUM			STEEL			STAINLESS STEEL 304 + 316		
		LOAD N	STROKE mm	THREAD N	LOAD N	STROKE mm	THREAD N	LOAD N	STROKE mm	THREAD N
M6 UPO 80	5,5	4950	4,7	9160	8700	4	19900			
	8	5400	2	8200	11750	2,5	17200			
M8 UPO 30	1	5000	3	14900	11500	4	30400	14500	4,2	> 41000
	3	6600	2	14000	13750	2,5	26100	18000	2,8	> 41000
M8 UPO 55	3	5400	4	15500	11500	4	32500	14500	5,5	> 41000
	5,5	7400	2	11200	15500	2,5	31900	18500	3	> 41000
M8 UPO 80	5,5	5900	4	16100	10700	4	32400			
	8	7850	2	13600	14700	2,5	26500			
M10 UPO 30	1							14500	3,5	> 45000
	3							18500	2,5	> 45000
M10 UPO 35	1	6750	4	22100	13600	4,5	39600			
	3,5	9000	2,5	17700	17000	2,5	32400			
M10 UPO 50	3							14500	3,5	> 39500
	5							18500	2,5	> 37000
M10 UPO 60	3,5	9000	5	25250	14900	4	42300			
	6	13000	3	23000	17900	2,5	31700			
M10 SPO 35	1				13500	4,5	40500	19500	4,5	> 45000
	3,5				16100	2,5	36100	26500	3,5	> 45000
M10 SPO 60	3,5				15900	5,5	48000			
	6				20400	3	37500			
M12 UPO 40	1				19500	5,5	> 50000			
	4				25000	4	> 50000			
M12 UPO 70	4				19500	5,5	> 50000			
	7				25000	4	> 50000			

The mentioned values are average reference values only.

We strongly advise the customer to do his own tests in the proper material thickness and specific application.

TUBTARA®

● TUBTARA® with seal under the head (for productinfo see page 39)

Information about NBR O-Ring & compatibility with other products					
Shore Hardness	70 - 95	Aromatic Hydrocarbons	x	Lye	x
Hydraulic fluids	xxxx	Aliphatic Hydrocarbons	xxx	Chlorinated Hydrocarbons	x
Fuel Oils	xx	Water under 80°C	xxx	Ozone & Sunlight	x
Animal Oils	xxxx	Water over 80°C	x	Temperature range °C	-35 +120
Brake Fluid	-	Alcohols	xx	Electr. properties	-
Silicone & Grease	xx	Ketone	-	Compression sets	xxx
Gasoline	xxx	Acid (concentrated)	-	Flame resistance	No
Aromatic fluids up to 50 %	xx	Acid (diluted)	x		
Kerosene	xxx				

Key: xxxx very good --> x satisfactory - not suitable.

Storage: protect against UV-light; store in a dry and dark place (all boxes are marked)

Seals in other materials on request.

● Conversion table

Multiply	by	To get
millimeter (mm)	.03937	inch (in)
inch (in)	25,4	millimeter (mm)
kilogram (kg)	2,2046	pound (lb)
pound (lb)	0,4536	kilogram (kg)
Newton (N)	0,2248	pound-force (lbf)

DEJOND IS NOT LIABLE FOR ANY PRINTING ERRORS AND RESERVES THE RIGHT TO CHANGE ALL DATA CONTAINED IN THIS CATALOGUE WITHOUT PRIOR NOTICE

General conditions available on our website www.dejond.com

Any dispute will fall within the exclusive jurisdiction of the courts of Antwerp

Available from **MARYLAND METRICS**

P.O. Box 261 Owings Mills, MD 21117 USA

ph: (410)358-3130 (800)638-1830

fx: (410)358-3142 (800)872-9329

web: <http://mdmetric.com> email: sales@mdmetric.com