



www.gunmak.com

## Quality

#### Quality - first class and certified

# Quality is the most significant aspect of our daily business.

Our manufacturing plant in Fröndenberg is certified according to ISO/TS 16949:2002 and DIN EN ISO 14001:2005 and complies to today's production standards.\_\_\_\_\_



# You can trust in us. Guaranteed.





# Our products are continually being developed , improved, and documented.

Besides standard testing methods as the check of shear- and tensile strength, we control for example the press-out-strength and the locking of the remaining mandrel part. We use the latest measuring equipment and testing method like automatic 100% sorting machines or the well known self developed and constructed process-control-system "DMSD" to guarantee the **highest level of production** 

The examination and documentation of every single production lot in all phases of the manufactoring process ensures the complete tracing back to the used basic material.



## Pneumatic-Hydraulic Tools for Blind Rivets

BZ 103 A Pneumatic-Hydraulic Tool



Thousandfold Approved – the latest version of the standard tool for reliable processing of blind rivets



For an optimized processing of our structural FERO<sup>\*</sup>BULB blind rivets the pneumatic-hydraulic tool **BZ 133A** is available on request.

This tool offers a **perfect adjustment** of the stroke (18 mm) and the working power (24.000 N) combined with adapted clamping jaws to the grooves of the mandrel. This guarantees powerful handling with reduced abrasion.



1



# Pneumatic-Hydraulic Tools for Blind Rivets

# The Strong Tool - even suitable for hight strength blind rivets



BZ 123 A Pneumatic-Hydraulic Tool with permanent and intervall mandrel exhaustion



2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
	Alt			um				
			Steel			1		
				s steel				
			Copper	alloys				
Content • 4 nosepieces • 1 set of clamping jaws				pressur	<b>e:</b> 5-7 bar	max.mandrel-ø: 4,8 mm		
				stroke:	<b>25</b> mm	air consumption:3,5 L		
<ul> <li>1 bottle hydraulic oil / incl. re-fill unit</li> </ul>				<b>noise:</b> < 75 dB	(A)(68,32)	working at 7 b	<b>power</b> ar: 18	700N
<ul> <li>2 mandrel collectors</li> </ul>				<mark>ہ</mark> 2,	34 kg	hose connection:		
special accessory available				C	E	G 1/4 inside, installati- on left or right side		

No. 320.123.000.000



ø 110 mm



## **Special Tool Options and Accessory**

BZ 102 / 103 Axial Pneumatic-Hydraulic Tool with permanent and intervall mandrel exhaustion

positions are available on request.



2,4	3,0	3,2	4,0	4,8	5,0	6,0	6,4	8,0
Aluminium								
	Steel					1		
Stainles		s steel						
	Copper	alloys		1				
2,1 kg hight		hight 3	65 mm	stroke	18 mm	max. mandrel-ø3,		3,8 mm
tensile force at				pressure		air consumption		
<b>7 bar</b> 11700 N		< 75 dB	(A)(68,32)	5-7 bar		2,4 litre		
						1 bottle	hydraulio	c oil
1 re-fill unit 1 mandrel collector								
hose connection ø 1/4" inside, installation left or right side								
options • balancer • mandrel conduction hose • mandrel conduction adapter • mandrel conduction box							-	

The new option for axial handling with the approved pneumatichydraulic tolls of the Honsel/VVG BZ-series.

#### No. 320.102.000.000/5

### **Rivet Angle Head for BZ Blind Rivet Tools**





No. 321.102.000.600

# For optimized handling we suggest the following accessory for all HONSEL-/VVG-Tools:



For undisturbed operation Honsel-/VVG-Tools need a continous, periodic maintenance. Make sure that for BZ-Tools clean and dry, for VNG-Tools clean and lubricated compressed air is available. We advise the use of filter pressure reducers (BZ) or compressed-air service units (VNG).

Compressed-air service unit (Pressure reducer/		
oil fog lubricator (VNG-Serie)	No.:	320 847 000 000
Pressure reducer (BZ-Series)	No.:	320 848 000 000

Additional accessory as for example balancer, spiral coiled tubes or compressors and spare parts, special nosepieces or useful special attachments are available on request.





#### ca. 280 mm Rivdom appr. 240 mm (without battery) ca. 70 mm low weight, brilliant ergonomics and balance transparent mandrel collector LED lighted drill hole gummed handhold ---big, safe base powerful batteries HONSEL Germany Note: Picture above shows Rivdom with LI-ION battery -large- (321.400.000.021) Battery -standard-Battery -large-14,4V / 3,0 Ah 14,4V / 1,5 Ah Sturdy plasic case with metal locks in an attractive sales packaging Premium, compact quick-charger 2,4 3,0 8,0 3,2 4,0 4,8 5,0 6,0 6,4 Alumin Stainless stee Copper allovs • LI-ION battery -standard- (14,4V / 1,5 Ah) content max. mandrel-ø:3,4 mm ۶۲ kg No. 321.400.000.020 4 nosepieces • 1 mandrel collector working power: 9000 N 1,54 kg • LI-ION battery -large- (14,4V / 3,0 Ah) • 1 battery 14,4V / 1,5 Ah stroke: 21 mm • 1 quick-charger 14,4V No. 321.400.000.021 0,33 kg 1,5 Ah charging time 1,5 Ah: optional • battery 14,4V / 3,0 Ah 3,0 Ah 0,53 kg < 1 hour Rivdom quick-charger No. 321.400.000.001 Œ No. 320.400.000.000

#### THE NEW DIMENSION OF INDEPENDENT BLIND RIVET HANDLING

## **Special Machines and Tools**



Honsel Umformtechnik GmbH is a manufacturer of joining elements and delievers also, in its capacity as system supplier, riveting equipment and units.

The spectrum covers manually operated riveting units, partly automated solutions and fully automatic riveting systems.

On request, the riveting equipment can also be equipped with "DMSD" process monitoring or with the "Poka-Yoke" system.

Not only ready solutions are taken from the kit in order to meet the customer requests.

Also special machines are developed completely after customers' need.

On base of tested systems, customized solutions are developed. Also modernizations and expansions of existing installations are among the special performances.



Partly automated feeding system ALFOMATIC BZ 101 A



Rivet tool BZ 101 A Poka-Yoke

An integrated strain gauge measuring strip (DMS) for the force measurement and an integrated distance measuring system make it possible to record and check the entire force-distance curve of the setting process and if the correct number of rivets has been placed.

The process result of DMSD USB process monitoring is equipped with a Honsel control and will be displayed on a two-colored LED at the rivet tool.

A PC with the DMSD PC program is required to visualize the force-distance curves and adept them to the setting process. The current version of DMSD process monitoring is eqquipped

with an Siemens PLC S7 313C and a touch panel TP277. The force-distance curves have already been visualized by the touch panel.

Further possibilities are: switches on/of, the profibus, processing of a barcode, printing of labels and storage of the process data.





Rivet tool BZ 101 A DMSD USB



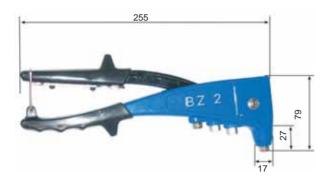
ANA CAL

#### **BZ 2**

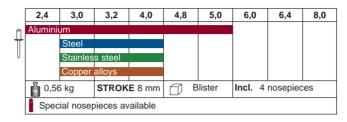
80

Hand Tool for Blind Rivets with opening spring

#### Good Ergonomics, Brilliant Transformation



250



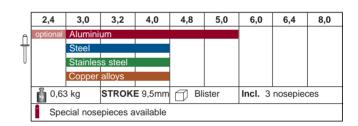
No. 310.002.000.000

BZ 44 Hand Tool for Blind Rivets with opening spring

ŝ

20





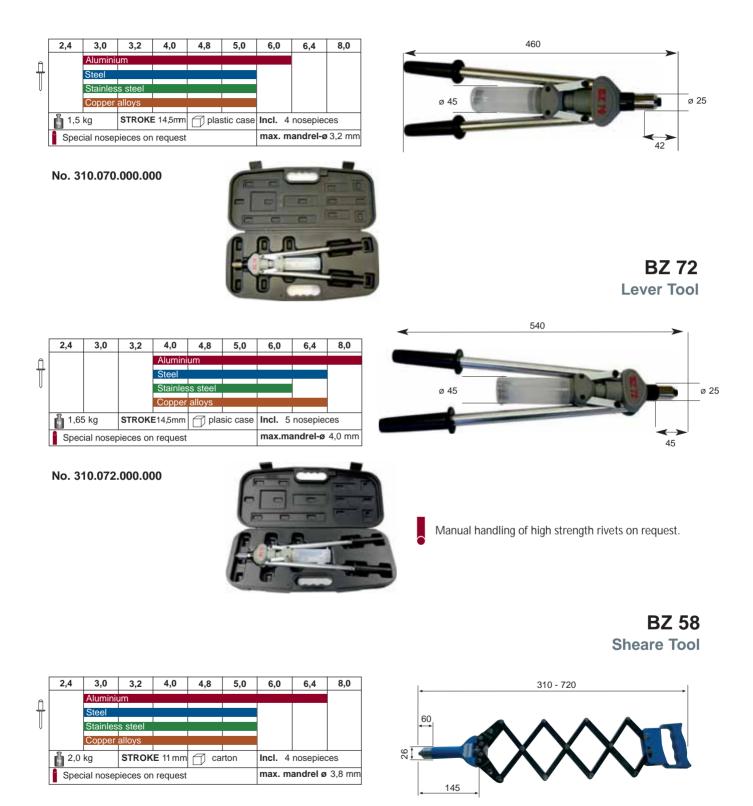




# Hand Tools for Blind Rivets



BZ 70 Lever Tool



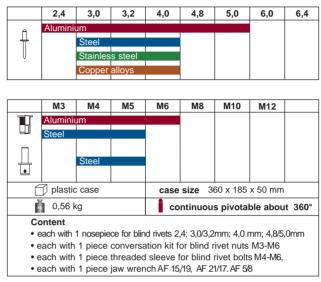
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#### Multi 1

Hand Tool for Blind Rivets, Blind Rivet Nuts and Blind Rivet Bolts



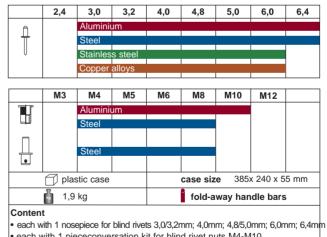


No. 310.100.000.000

#### Multi 5

Lever Tool for Blind Rivets, Blind Rivet Nuts and Blind Rivet Bolts





each with 1 piececonversation kit for blind rivet nuts M4-M10
each with 1 piece threaded sleeve for blind rivet bolts M4-M8,

each with 1 piece jaw wrench AF 15/19, AF 21/17. AF 5/8

No. 310.500.000.000



Perfect achievement of difficult to access rivet positions. Individually adapted frontsleeves according to customers demand.

## **Extended Front Sleeves**



## Adjustable Front Sleeves

For optimal adjustment of clampig jaws with special blind rivets or blind rivets with big mandrel diameter.



## Front Sleeves for the Assembly of Hand Tools into Stationary Installations

The tool can be installed for example in a table to with the help of two counter nuts on this front sleeve.



HONSEL-VVG supplies different possibilities to optimize the discharge of mandrels at a higher rivet emergence. Please ask for details.





Adapter for mandrel discharge



identification of mandrels



Trigger for foot control



Big size mandrel container



Boost of discharge

# **Special Accessory VNG-Series**



## Special Nosepieces and Mandrels

Unlimited possibilities.

We produce individual special nose pieces, special mandrels and bushes on customers demand for example as extended version, for coarse threads, UNC/UNF or internal riveting positions.



### **Extended Front Sleeves**

Perfect achievement of difficult to access rivet positions. Available for all VVG-tools on request.



### Nosepieces FERO-BOLT<sup>®</sup>Rivet

ø 4,8 mm 361.121.008.401 ø 6,4 mm 361.121.008.601



## **Extended Nosepieces (17 mm)**

#### BZ 103 A (and forerunner)

321.085.000.323 ø 3,2 ø 4.0 321.085.000.324 ø 4,8/5,0 321.085.000.325

321.120.000.324 ø 4,0 ø 4,8/5,0 321.120.000.325 ø 6.0 321.120.000.326 ø 6.4 321.120.000.327

BZ 123 A (and forerunner)

19.90€/ Stck.

#### Facade Nosepieces for 5 m **Blind Rivets**

Head 11 BZ 103 A (102 A, 101, 101 A, 11 A) Head 14 BZ 103 A (102 A, 101, 101 A, 11 A) Head 11 BZ 123 A (122A, 121 A) Head 14 BZ 123 A (122A, 121 A)

321.085.000.511 321.085.000.514 321.120.000.511 321.120.000.514

48.90€/ Stck.

#### **Special Nosepieces**



It is possible to develop and produce special nosepie-

Due to our big warehouse stock we can realize special

ces for every blind rivet type and dimension.

demands within short terms.

**CERTO<sup>®</sup>Nosepieces** 

321.070.000.240 ø 3,2 321.085.009.124 ø 4.0 ø 4,8/5,0 321.085.009.125



# General Accessory

#### Wind Deflector

Deflecting the exhaustion air in a special direction. For all BZ-tools with standard mandrel collector

No. 321.101.000.091

#### **Oil Re-fill Unit**



Adapter, bottle of hydraulic oil and syringe for re-fill of hydraulic oil in all pneumatic-hydraulic BZ- and VNG tools.

No. 321.101.006.467

## **Extended Mandrel Collector**

For the use of long blind rivets or blind rivets with longer mandrel.



No.321 221 000 065

#### Stroke Locking Ring

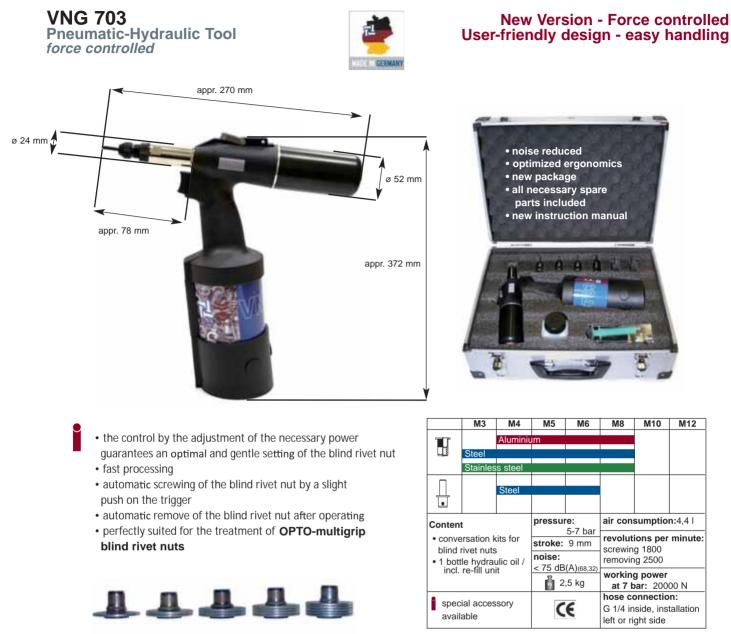
To avoid unintentional shifting of the stroke.



VNG 701: No. 321 701 000 080 VNG 801/802/903: No. 321 801 000 080



## Pneumatic-Hydraulic Tools for Blind Rivet Nuts and Blind Rivet Bolts



No. 320.703.000.000



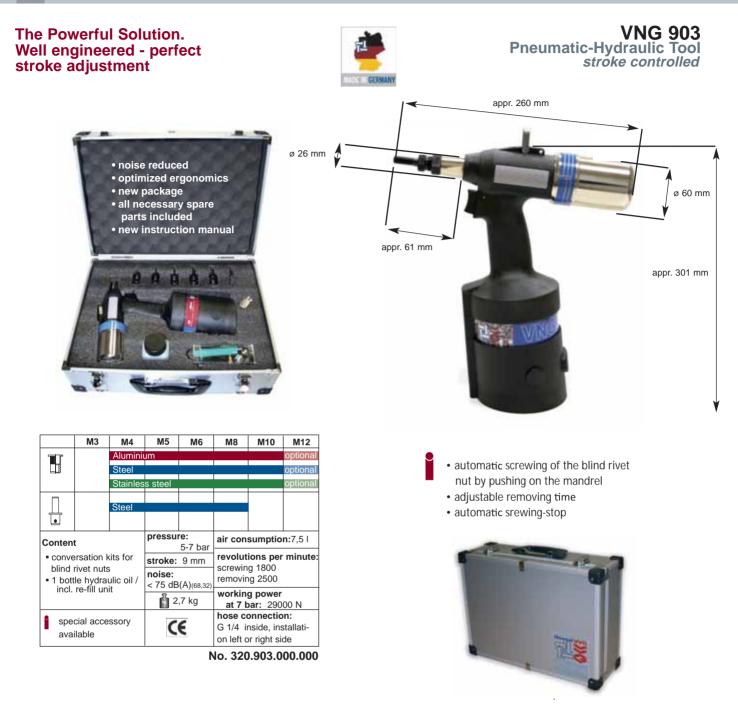
#### VNG 753 Pneumatic-Hydraulic Tool

 Special tool with extra big stroke for processing of SFM-PL folding blind rivet nuts

For details about this tool and the handling please contact our country representations or the VVG sales team.



## Pneumatic-Hydraulic Tools for Blind Rivet Nuts and Blind Rivet Bolts



#### Big Stroke Tool for Folding Blind Rivet Nuts

	M3	M4	M5	M6	M8	M10	M12
				Steel			
hose connection: G 1/4 inside, installati- on left or right side			press	sure: 5-7 bar	air consumption: revolutions per minut		
			strok		screwing 1800 U/min. removing 2500 U/min.		
			Я М	2,9 kg	working power (7 bar): 19000 N		

No. 320.753.000.000



# **Special Machines and Tools**







Rivet component Riwo BZ 121 A

Special nose pieces, extended front sleeves and different angular heads are prepared for badly accessible prefabricated parts. For the industrial application, the torn-off mandrel will be suctioned off automatically in a big mandrel container after the riveting process.

The fully automatic rivet feeding system, the process automation and the process monitoring are important components for the full automatic processing of blind rivets, special rivets, blind rivet nuts, blind rivet bolts and expander plugs.

Besides the component delivery, also complete rivet machines are realized after customized requests.



Double riveting machine



Rivet nuts component Riwo VNG 802 DMSD





Work on the rivet appliance in standing

# Hand Tools for Blind Rivet Nuts and Blind Rivet Bolts

#### VNG 255

Hand Tool with Assortment



	M3	M4	M5	M6	M8	M10	M12			
		Aluminium								
		Steel								
		Stainles	s steel							
		Steel								
•										
0,9	0,9 kg					case size 325 x 250 x 50 mm				
content	content					assortment				
<ul> <li>each w</li> </ul>	/ith 1 piec	ce convers	sation kit f	or blind	• 25 pieces each blind rivet nuts					
1	uts M4, N	, ,			Universal M4, M5;					
<ul> <li>each w</li> </ul>	vith 1 pie	ece threa	ded slee	eve for	<ul> <li>50 pieces blind rivet nuts</li> </ul>					
blind r	ivet bolts	s M4, M5,			Universal M6;					
<ul> <li>each with 1 piece jaw wrench</li> </ul>					• 25 pieces each blind rivet bolts					
AF 22,AF 24,					M4x2010 and M5x2010					
<ul> <li>1 piece hex head wrench AF 6</li> </ul>										
continuous pivotable about 360°										

No. 310.255.000.000

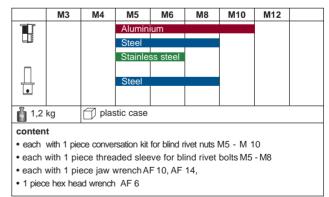
Possible positions to work



## VNG 371

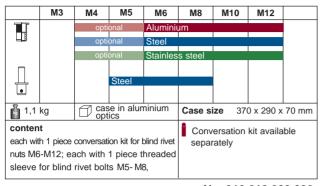
Lever tool





No. 310.371.000.000

#### VNG 612 Hand Tool

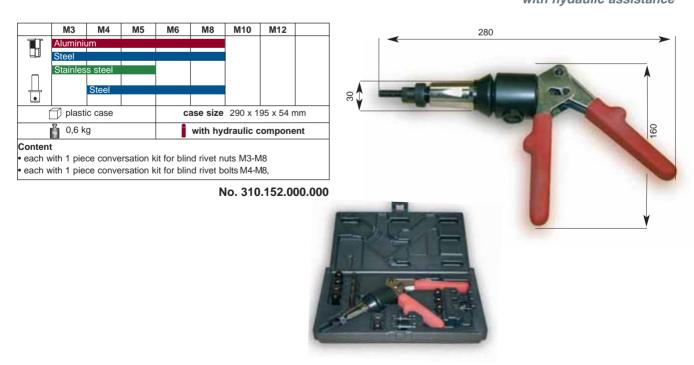


No. 310.612.000.000



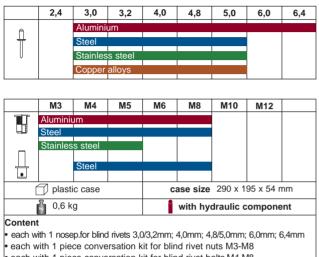


VNG 152 Hand Tool with hydaulic assistance



#### Multi 151

Hand Tool for Blind Rivet Nuts, Blind Rivet Bolts and Blind Rivets with hydaulic assistance



each with 1 piece conversation kit for blind rivet bolts M4-M8,

No. 310.151.000.000



#### VNG 152 is now available as MULTI 151 too!

Besides its outstanding positive properties in setting blind rivet nuts, this tool is able to operate blind rivets as well.

## **Honsel References - Worldwide**



TEAM AUTOMOTIVE

To satisfy the high and fast moving requirements of OEMs and their suppliers with special rivet technology and individual cold formed parts is the target of Honsel for a long time.

The main focus lays on optimizing the processes by development, manufacturing and worldwide just-intime delivery of new innovative products and modern solutions. The "TEAM AUTOMOTIVE" is the central point in the company connecting all departments and people who are involved in your project. With this team our customers have a single contact to reach a fast coordination for a successful corporate development work.

Additionally an integrated ecological and quality policy is a MUST as well as the technical support and assistance on location.









GÜNMAK ENDÜSTRİYEL ALET POMPA VE OTOMASYON SİSTEMLERİ SAN. VE TİC. A.Ş.

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