

# Tools

## Lifting & Tightening (Including TU)

The line Tools & Accessories contains a set of tools that will enhance and/or simplify the handling of Metenova’s products.



NOTICE: Document intended for internal use only



ZG2, ZGP,  
ZF100, ZFM100,  
GMP50, SM60  
Lifting Tool



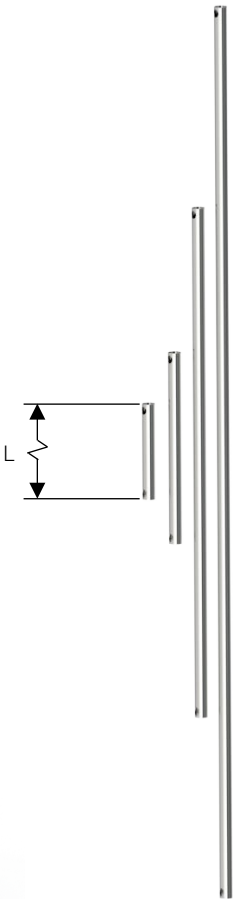
HP & HS  
Lifting Tool



Tightening Tool



HS Stator  
Tightening Tool



Extension Rod



ZG3 – ZG7  
GMP100 – GMP2000  
SM85, SM120  
Lifting Tool



ZG8 – ZG10  
GMP5000 – GMP20000  
SM120H, SM210  
Lifting Tool



ZF160, ZFM160  
Lifting Tool



Extension  
Socket Kit

### General Information

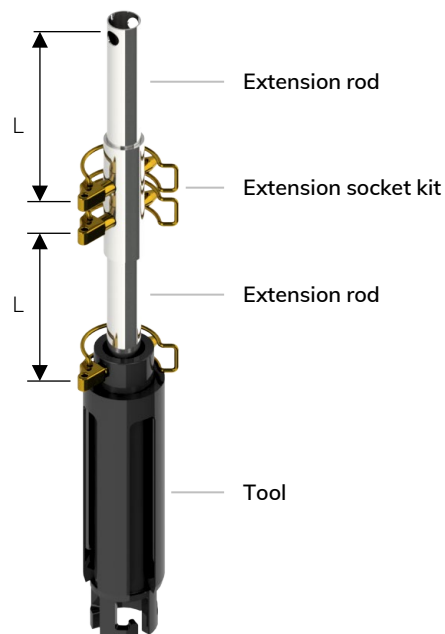
Material	Rods	Stainless Steel ASME TP 316L acc. to SA-479 & EN 1.4404 acc. to EN 10272
	Rod pins	Stainless Steel ASME 304 acc. to SA-479 & EN 1.4301 acc. to EN 10272
	Tool heads	Polyamide 30% glass fiber reinforced, Polyoxymethylene (POM) and/or Black Anodized Aluminum.
Packing and Marking		Items are individually packed and for traceability purposes marked with item & id no.
Quality Assurance		Metenovas Quality Assurance System ensures the quality and traceability at all stages of the process.

**Note:** When using tools with extensions, great care must be taken so that neither vessel nor product are damaged. This is done at your own risk, in case of uncertainty, tank entry is recommended.

DS-078 Tools Lifting Tightening\_add TU Rev 2

### Modular tool system

Possible to build together several extensions to reach down into deep vessel. Can even be used when the space above the vessel is limited since assembly and disassembly can be done when the tool system is lowered or taken out of the vessel.



### Tools

Part #	Extension	Compatible with
ZG00016-05232	Extension socket kit	A kit for assembling more than one extension rod
ZG00016-00782	Extension rod L=150 mm	Extension rods can be used for all tightening tools and lifting tools for ZG, ZGP, ZF, ZFM and TU.
ZG00016-04513	Extension rod L=300 mm	
ZG00016-04775	Extension rod L=800 mm	
ZG00016-00726	Extension rod L=1400 mm	
	<b>Tightening tool</b> (For tightening torque specifications for each size, please refer to the User Manual)	
ZG00016-00866	ZG Tightening Tool, Male Post 18 mm, L=150 mm	ZG1 • ZG2 • ZG2P • HP2 • HS2
ZG00016-05382	ZG Tightening Tool, Male Post 32 mm, L=150 mm	ZG3 • ZG5 • ZG6 • ZG7 • ZG5P • ZG7P • HP5 • HS5
ZG00016-05381	ZG Tightening Tool, Male Post 40 mm, L=150 mm	ZG8 • ZG9 • ZG10 • HP8 • HS8
ZG53016-04377	ZG8 Tightening Tool with guide, Male Post 40 mm, L=150 mm	ZG8
ZG14016-04787	ZG9 Tightening Tool with guide, Male Post 40 mm, L=150 mm	ZG9
ZG24016-04788	ZG10 Tightening Tool with guide, Male Post 40 mm, L=150 mm	ZG10
ZG00016-06806	ZG11 Tightening Tool with guide, Male Post 48 mm, L=150 mm	ZGX11
TU00016-01801	TU Tightening Tool kit, Male Post 18 mm, L=150 mm	TU-GMP50 • TU-SM60
TU00016-05384	TU Tightening Tool kit, Male Post 32 mm, L=150 mm	TU-GMP100 • TU-GMP500 • TU-GMP1000 • TU-GMP2000 • TU-SM85 • TU-SM120
TU00016-05383	TU Tightening Tool kit, Male Post 40 mm, L=150 mm	TU-GMP5 000 • TU-GMP10 000 • TU-GMP20 000 • TU-SM120H • TU-SM210
	<b>Stator Tightening tool</b> (For tightening torque specifications for each size, please refer to the User Manual)	
HS51016-03805	HS2 Stator Tightening Tool, L=0 mm	HS2
HS52016-03627	HS5 Stator Tightening Tool, L=0 mm	HS5
HS53016-03920	HS8 Stator Tightening Tool, L=0 mm	HS8

## Tools

Part #	Lifting tool	Compatible with
ZG00016-00872	ZG Lifting Tool, Mix Head 18 mm, L=150 mm	ZG2 • TU-SM60
ZG00016-00779	ZG Lifting Tool, Mix Head 32 mm, L=150 mm	ZG3 • ZG5 • ZG6 • ZG7 • TU-GMP100 • TU-GMP500 • TU-GMP1000 • TU-GMP2000 • TU-SM85 • TU-SM120
ZG53016-04376	ZG8 Lifting tool, Mix Head, L=150 mm	ZG8 • TU-GMP5000
ZG14016-04785	ZG9 Lifting tool, Mix Head, L=150 mm	ZG9
ZG24016-04786	ZG10 Lifting tool, Mix Head, L=150 mm	ZG10
ZG51P016-04790	ZG2P Lifting Tool, Mix Head, L=150 mm	ZG2P
ZG52P016-05188	ZG5P Lifting Tool, Mix Head, L=150 mm	ZG5P
ZG23P016-04777	ZG7P Lifting Tool, Mix Head, L=150 mm	ZG7P
ZF12016-05174	ZF100 Lifting Tool, Mix Head, L=150 mm	ZF100
ZF16016-05175	ZF160 Lifting Tool, Mix Head, L=150 mm	ZF160
ZFM12016-06661	ZFM100 Lifting Tool, Mix Head, L=150 mm	ZFM100
ZFM12016-06664	ZFM160 Lifting Tool, Mix Head, L=150 mm	ZFM160
HP51016-05224	HP2 Lifting Tool, Mix Head, L=600 mm	HP2
HP52016-03620	HP5 Lifting Tool, Mix Head, L=800 mm	HP5
HS51016-05223	HS2 Lifting Tool, Rotor, L=600 mm	HS2
HS52016-04036	HS5 Lifting Tool, Rotor, L=800 mm	HS5
TU00016-07140	TU Lifting Tool, Mix Head, L=150 mm	TU-GMP50
TU00016-07178	TU Lifting Tool, Mix Head, L=150 mm	TU-GMP10000 • TU-SM120H/220
TU00016-07155	TU Lifting Tool, Mix Head, L=150 mm	TU-GMP20000 • TU-SM210/275

**Note:** The lifting tool ZGX11 is unavailable.  
Due to the heavy weight and the mounting distance, tank entry is required for the installation.