# Simply working better – handling systems from DSM



Daily recurring operations makes the tool with time heavier and heavier for the user – if you also considers the reaction torque and incorrect holding of the tool, a disorder of the hand-arm-shoulder system cannot be excluded. Preserve the health of your employees!

A torque support with weight compensation is essential for fatigue-free work in assembly. The additional control of the position of the tool enables cost-effective monitoring of complex tightening sequences in the manual assembly.





# Advanced handling – precise, reaction-free and clever

With the HST series, DSM offers advanced handling devices for the tasks and applications of manually guided and semi-automated assembly.

Equipped with absolute sensor technology and integrated positioning electronic, the HST handling stand extend the functionality of your tightening system.

The positioning electronic PoSys in conjunction with a higher-level control system check whether a defined sequence of operations is maintained.

No screw will be forgotten and even complex tightening sequences can be specified and monitored – or call up the corresponding sequence in your DSM control system via the screw position.



HST-40 | HST-40-XY
Up to 40 Nm
Tool weight max. 5 kg
Stroke Y: 300 mm Z: 400 mm



HST-150 | HST-150-XY Up to 150 Nm Tool weight max. 15 kg Stroke Y: 450 mm Z: 720 mm



HST-300 | HST-300-XY Up to 300 Nm Tool weight max. 30 kg Stroke Y: 600 mm Z: 850 mm

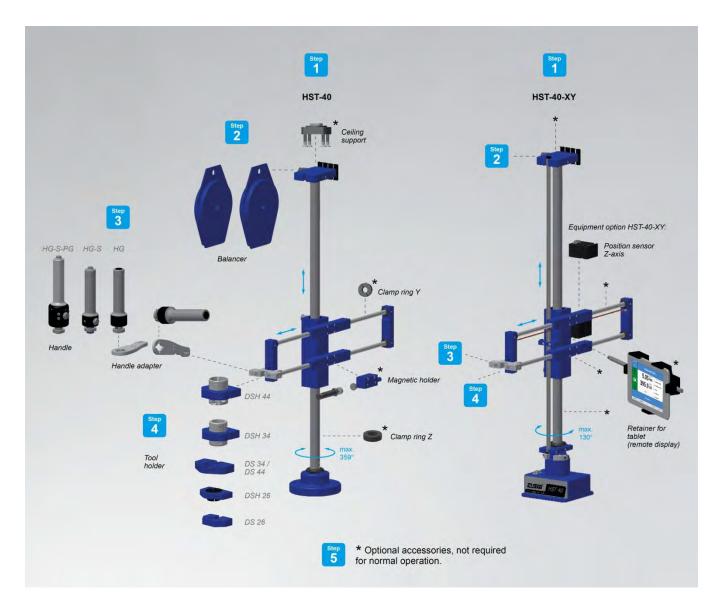


HST-600 | HST-600-XY

Up to 600 Nm

Tool weight max. 40 kg

Stroke Y: 550 mm Z: 750 mm



Precise, reaction-free and extremely light handling in the entire workspace. Absorption of all reaction forces and compensation of **torques up to 40 Nm**. Optimal smooth-running weight compensation with a maximum **tool weight of 5 kg**. Extensive range of equipment options for the models **HST-40** (without sensor) and **HST-40-XY** (with integrated position monitoring) available.

Use the following steps for the compilation of your handling stand to select the optimum components from the series HST 40 for you application.





#### Handling stand Version HST 40

Туре			HST-40	HST-40-XY
Absolute position sensor technology XY				✓
Positioning controller integrated in the pedestal				✓
Vertical stroke (Z)	[mm]		400	400
Horizontal stroke (Y)	[mm]		300	300
Swivel angle	[°]	max.	359	130
Reaction torque	[Nm]	up to max.	40	40
Tool weight	[kg]	max.	5	5
Height of vertical stand	[mm]		840	890
Length of horizontal arm (without tool holder)	[mm]		550	550
Weight horizontal arm	[kg]		2,5	2,5
Weight handling stand	[kg]		16	16
Article number			H-6002040	H-6002045

#### HST-40 | HST-40-XY - Robust designed handling stand

Pedestal with mounting holes, vertical stand with precision shaft, horizontal arm with precision double shaft as well as guides with smooth-running industrial bearings. Construction to accommodate torsion forces with fixing points for balancer and cable, prepared for the mounting of tool holder and handle.

#### HST-40-XY - Position monitoring of assembly tool

Fixed sequences have to be observed by a lot of applications of the hand-guided and the semi-automated assembly. Equipped with an XY sensor system (Z sensor optional) and with an position controller integrated in the pedestal, the HST-40-XY extends the functionality of your tightening system. The position electronic monitors in conjunction with a higher-level control system that the required sequence is observed. No screw will be forgotten – even complex tightening sequences can be specified and monitored. Or you select the corresponding sequence program on your DSM tightening control system via the screw position.

#### Other features:

- · Absolute XY position measurement in the rotation axis and in the horizontal arm
- $\cdot\,$  Position input via teach-in, storage up to 200 positions
- · Position monitoring
- · Reporting of the stored positions "Pos reached"
- · Direct output mode as "XY position"
- · DSM software for programming and configuration of the positioning controller
- · USB interface for connection with the DSM application software, incl. USB cable
- · System bus interface for communication with the DSM tightening control system, power supply via control system or AC adapter
- · TCP/IP interface for communication with the DSM application software
- · Optional Profibus interface or Profinet interface for connection to a higher-level control system

<b>Handling stand HST-40-XY</b>
Equipment option

Туре		Article number
HST-40-Zsens	Position sensor Z-axis, incl. Y connection cable	H-6006012

# Positioning controller PoSys Equipment options

Туре	Article number
Evaluation unit with Profibus interface and TCP/IP interface	H-6009500
Evaluation unit with Profinet interface and TCP/IP interface	H-6009600
Evaluation unit with EtherCAT interface and TCP/IP interface	Available soon
BT module for the execution Profinet / EtherCAT, enables the communication with Bluetooth® devices	Available soon
AC adapter (plug-in power supply)* AC 230 V / 50 Hz   DC 24 V / 1 A	DSM-600611

 $<sup>\</sup>ensuremath{^{*}}$  For the use without DSM control system.

System bus Accessories	
Туре	Article number
System bus cable 2 m	MS-1003002
System bus cable 5 m	MS-1003005
System bus terminating resistor	MS-1003030
T-piece for system bus connection	DSM-200722

Handling balancer for version HST 40			
Туре	ldeal for DSM nutrunner	Weight counterbalance, load capacity adjustable	Article number
HBA-23,5-kg	DSH 26 / DS 26	from 2 kg up to 3,5 kg	H-6008004
HBA-58,5-kg	DSH 34 / DS 34 / DSH 44 / DS 44	from 5 kg up to 8,5 kg	H-6008009

When choosing a balancer, take into account the tool weight and the weight of the horizontal arm.



#### Handle

Туре		Article number
HG	Standard handle	H-6007805
HG-S	Handle with start button (double)	H-6007810
HG-S-PG	Handle with start button (double) and program switchover	H-6007815

Ergonomically formed handles for the precision guidance of the nutrunner. Versatile mounting possibilities via handle adapter. Execution with start button for the direct forwarding of the start signal to the control system. Handle version with turn-switch for switching between the pre-selected program and an alternative program.

Handle adapter for version HST 40		
Туре		Article number
HG-A-H40	Handle adapter kit HST 40	H-6007886

Standard adapter for the vertical and horizontal assembly of the handle (HG, HG-S, HG-S-PG). The installation can be made on the right side as well as on the left side of the tool holder.

Choose the cable depending on the use of the handle.

If you are using a nutrunner of the DS 34 or DS 44 series the connection to the DSM control unit occurs via the bus line of the DS nutrunner – the handle cable is plugged into the SB socket at the nutrunner. The cable is available in two different lengths suitable for the respective assembly situation.

Alternatively, the handle can be connected directly with the control system or with a higher-level control system. Corresponding cables for this can be found in the table below.

Handle cables for version HST 40				
Туре	Connection		Cable length	Article number
HG-K-DS34-44-160	from HG-S to DS 34 / DS 44		160 mm	H-6007940
HG-K-DS34-44-300	from HG-S to DS 34 / DS 44		300 mm	H-6007941
HG-K-24V-4.XX	from HG-S to Basic / Classic / Pro		5 m	H-6007905
HG-K-24V-5.XX	from HG-S to Pro 3G		5 m	H-6007910
HG-K-24-oK	from HG-S to	open cable ends	5 m	H-6007915
HGPG-K-DS34-44-160	from HG-S-PG to DS 34 / DS 44		160 mm	H-6007744
HGPG-K-DS34-44-300	from HG-S-PG to DS 34 / DS 44		300 mm	H-6007745
HGPG-K-24-oK	from HG-S-PG to	open cable ends	2 m	H-6007720



### Tool holder for version HST 40

Туре	Tool holder for	Article number
HWA-40-DS26	DS 26 nutrunner	H-6008426
HWA-40-DSH26	DSH 26 hand-held nutrunner	H-6008427
HWA-40-DS34/DS44	DS 34 / DS 44 nutrunner	H-6008434
HWA-40-DSH34	DSH 34 hand-held nutrunner	H-6008234
HWA-40-DSH44	DSH 44 hand-held nutrunner	H-6008244
HWA-40-Uni-36-42	36 - 42 mm clamping diameter, universal tool fitting	H-6008405

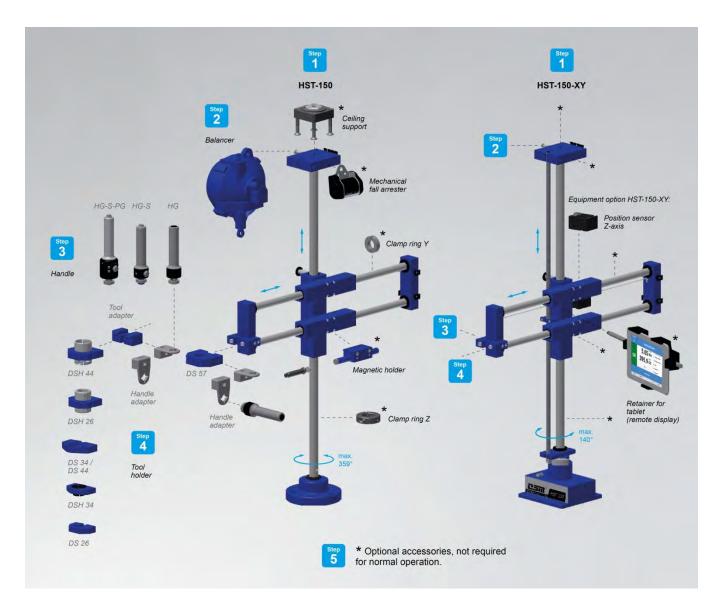
Customer-specific adaptations for non-DSM products are available upon request.

5 Handling stands HST Optional accessories	40	
Туре		Article number
HST-40-MH	Magnetic holder Magnetically holding device for the Y-axis to fix the nutrunner / tool in park position	H-6006405
HST-40-DA	Ceiling support Additional fixing of the handling stand via a pivoted support designed to improve the load carrying capacity	H-6006410
HST-40-KL-Y	Clamp ring for Y-axis Variable positionable limiter of the horizontal stroke for the fast reaching of the tool position	H-6006420
HST-40-KL-Z-150-KL-Y	Clamp ring for Z-axis  Variable positionable limiter of the vertical stroke  for the fast reaching of the tool position	H-6006430
HST-40-SWA*	Stops for swivel angle limitation (rotation axis) wo circle segments with rubber stops for the limitation of the swivel angle adjustable in steps of 30 degrees (min. 20° / max. 130°)	H-6006440
HST-FA	Retainer for tablet (remote display) Adjustable retainer for the remote display HMI 7" incl. assembly kit;	H-6006005

Accessories for individual adaptation of the handling stand for your application. Optional accessories are not required for normal operation.

Remote display only in conjunction with MultiPro 3G (BT module) usable

<sup>\*</sup> Standard on execution HST-40-XY.



Precise, reaction-free and extremely light handling in the entire workspace. Absorption of all reaction forces and compensation of **torques up to 150 Nm**. Optimal smooth-running weight compensation with a maximum **tool weight of 15 kg**. Extensive range of equipment options for the models **HST-150** (without sensor) and **HST-150-XY** (with integrated position monitoring) available.

Use the following steps for the compilation of your handling stand to select the optimum components from the series HST 150 for you application.





#### Handling stand Version HST 150

Туре			HST-150	HST-150-XY
Absolute position sensor technology XY				✓
Positioning controller integrated in the pedestal				✓
Vertical stroke (Z)	[mm]		720	720
Horizontal stroke (Y)	[mm]		450	450
Swivel angle	[°]	max.	359	140
Reaction torque	[Nm]	up to max.	150	150
Tool weight	[kg]	max.	15	15
Height of vertical stand	[mm]		1150	1200
Length of horizontal arm (without tool holder)	[mm]		800	800
Weight horizontal arm	[kg]		14	14
Weight handling stand	[kg]	·	35	35
Article number			H-6002150	H-6002155

#### HST-150 | HST-150-XY - Robust designed handling stand

Pedestal with mounting holes, vertical stand with precision shaft, horizontal arm with precision double shaft as well as guides with smooth-running industrial bearings. Construction to accommodate torsion forces with fixing points for balancer and cable, prepared for the mounting of tool holder and handle.

#### HST-150-XY - Position monitoring of assembly tool

Fixed sequences have to be observed by a lot of applications of the hand-guided and the semi-automated assembly. Equipped with an XY sensor system (Z sensor optional) and with an position controller integrated in the pedestal, the HST-150-XY extends the functionality of your tightening system. The position electronic monitors in conjunction with a higher-level control system that the required sequence is observed. No screw will be forgotten – even complex tightening sequences can be specified and monitored. Or you select the corresponding sequence program on your DSM tightening control system via the screw position.

#### Other features:

- · Absolute XY position measurement in the rotation axis and in the horizontal arm
- $\cdot\,$  Position input via teach-in, storage up to 200 positions
- · Position monitoring
- · Reporting of the stored positions "Pos reached"
- · Direct output mode as "XY position"
- · DSM software for programming and configuration of the positioning controller
- · USB interface for connection with the DSM application software, incl. USB cable
- System bus interface for communication with the DSM tightening control system, power supply via control system or AC adapter
- · TCP/IP interface for communication with the DSM application software
- · Optional Profibus interface or Profinet interface for connection to a higher-level control system

<b>Handling stand HST-150-XY</b>
<b>Equipment option</b>

Туре		Article number
HST-150-300-600-Zsens	Position sensor Z-axis, incl. Y connection cable	H-6006014

# Positioning controller PoSys Equipment options

Туре	Article number
Evaluation unit with Profibus interface and TCP/IP interface	H-6009500
Evaluation unit with Profinet interface and TCP/IP interface	H-6009600
Evaluation unit with EtherCAT interface and TCP/IP interface	Available soon
BT module for the execution Profinet / EtherCAT, enables the communication with Bluetooth® devices	Available soon
AC adapter (plug-in power supply)* AC 230 V / 50 Hz   DC 24 V / 1 A	DSM-600611

 $<sup>^{\</sup>star}$  For the use without DSM control system.

System bus Accessories	
Туре	Article number
System bus cable 2 m	MS-1003002
System bus cable 5 m	MS-1003005
System bus terminating resistor	MS-1003030
T-piece for system bus connection	DSM-200722

Handling balancer for version HST 150			
Туре	ldeal for DSM nutrunner	Weight counterbalance, load capacity adjustable	Article number
HBA-1522-kg	DSH 34 / DS 34 / DSH 44 / DS 44	from 15 kg up to 22 kg	H-6008022
HBA-2230-kg	DS 57	from 22 kg up to 30 kg	H-6008030

When choosing a balancer, take into account the tool weight and the weight of the horizontal arm.



#### Handle

Туре		Article number
HG	Standard handle	H-6007805
HG-S	Handle with start button (double)	H-6007810
HG-S-PG	Handle with start button (double) and program switchover	H-6007815

Ergonomically formed handles for the precision guidance of the nutrunner. Versatile mounting possibilities via handle adapter. Execution with start button for the direct forwarding of the start signal to the control system. Handle version with turn-switch for switching between the pre-selected program and an alternative program.

Handle adapter for version HST 150		
Туре		Article number
HG-A-H150-300-600	Handle adapter kit HST 150 / HST 300 / HST 600	H-6007885

Standard adapter for the vertical and horizontal assembly of the handle (HG, HG-S, HG-S-PG). The installation can be made on the right and the left side as well as on the front of the tool holder.

Choose the cable depending on the use of the handle.

If you are using a nutrunner of the DS 34, DS 44 or DS 57 series the connection to the DSM control unit occurs via the bus line of the DS nutrunner – the handle cable is plugged into the SB socket at the nutrunner. The cable is available in two different lengths suitable for the respective assembly situation.

Alternatively, the handle can be connected directly with the control system or with a higher-level control system. Corresponding cables for this can be found in the table below.

Handle cables for version HST 150				
Туре	Connection		Cable length	Article number
HG-K-DS34-44-160	from HG-S to DS 34 / DS 44		160 mm	H-6007940
HG-K-DS34-44-300	from HG-S to DS 34 / DS 44		300 mm	H-6007941
HG-K-DS57-80-300	from HG-S to DS 57 / DS 80		300 mm	H-6007959
HG-K-DS57-80-500	from HG-S to DS 57 / DS 80		500 mm	H-6007960
HG-K-24V-4.XX	from HG-S to Basic / Classic / Pro		5 m	H-6007905
HG-K-24V-5.XX	from HG-S to Pro 3G		5 m	H-6007910
HG-K-24-oK	from HG-S to	open cable ends	5 m	H-6007915
HGPG-K-DS34-44-160	from HG-S-PG to DS 34 / DS 44		160 mm	H-6007744
HGPG-K-DS34-44-300	from HG-S-PG to DS 34 / DS 44		300 mm	H-6007745
HGPG-K-24-oK	from HG-S-PG to	open cable ends	2 m	H-6007720
HGPG-K-DS57-80-300	from HG-S-PG to DS 57 / DS 80		300 mm	H-6007756
HGPG-K-DS57-80-500	from HG-S-PG to DS 57 / DS 80		500 mm	H-6007757



Туре	Tool holder for	Article number
HWA-150-DS57	DS 57 nutrunner	H-6008157

Tool holder adapter
for version HST 150

Туре		Article number
HWA-150-AD	Tool holder adapter HST 40 onto HST 150	H-6008415

Tool holder for version HST 40 (usable with adapter HWA-150-AD)		
Туре	Tool holder for	Article number
HWA-40-DS34/DS44	DS 34 / DS 44 nutrunner	H-6008434
HWA-40-DSH34	DSH 34 nutrunner	H-6008234
HWA-40-DSH44	DSH 44 nutrunner	H-6008244

Customer-specific adaptations for non-DSM products are available upon request.

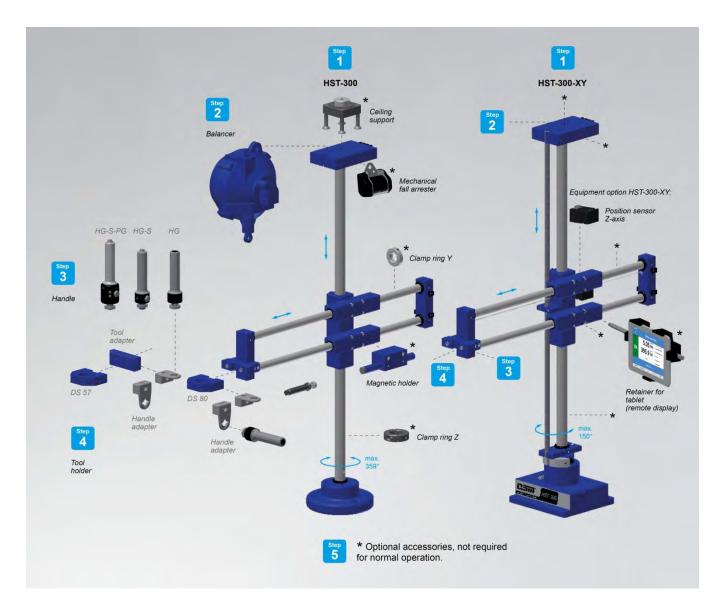


#### Handling stand HST 150 Optional accessories

Type		Article number
HST-150-MH	Magnetic holder Magnetically holding device for the Y-axis to fix the nutrunner / tool in park position	H-6006155
HST-150-DA	Ceiling support Additional fixing of the handling stand via a pivoted support designed to improve the load carrying capacity	H-6006105
HST-40-KL-Z-150-KL-Y	Clamp ring for Y-axis  Variable positionable limiter of the horizontal stroke  for the fast reaching of the tool position	H-6006430
HST-150-KL-Z-300-KL-Y	Clamp ring for Z-axis Variable positionable limiter of the vertical stroke for the fast reaching of the tool position	H-6006330
HST-150-300-FS	Mechanical fall arrester Fall protection for the horizontal arm to avoid damages in a case of defective of the weight counterbalance system	H-6006315
HST-150-SWA*	Stops for swivel angle limitation (rotation axis) Two circle segments with rubber stops for the limitation of the swivel angle adjustable in steps of 30 degrees (min. 20° / max. 140°)	H-6006415
HST-FA	Retainer for tablet (remote display) Adjustable retainer for the remote display HMI 7" incl. assembly kit; Remote display only in conjunction with MultiPro 3G (BT module) usable	H-6006005

Accessories for individual adaptation of the handling stand for your application. Optional accessories are not required for normal operation.

<sup>\*</sup> Standard on execution HST-150-XY.



Precise, reaction-free and extremely light handling in the entire workspace. Absorption of all reaction forces and compensation of **torques up to 300 Nm**. Optimal smooth-running weight compensation with a maximum **tool weight of 30 kg**. Extensive range of equipment options for the models **HST-300** (without sensor) and **HST-300-XY** (with integrated position monitoring) available.

Use the following steps for the compilation of your handling stand to select the optimum components from the series HST 300 for you application.





#### Handling stand Version HST 300

Туре			HST-300	HST-300-XY
Absolute position sensor technology XY				✓
Positioning controller integrated in the pedestal				✓
Vertical stroke (Z)	[mm]		850	850
Horizontal stroke (Y)	[mm]		600	600
Swivel angle	[°]	max.	359	150
Reaction torque	[Nm]	up to max.	300	300
Tool weight	[kg]	max.	30	30
Height of vertical stand	[mm]		1320	1390
Length of horizontal arm (without tool holder)	[mm]		980	980
Weight horizontal arm	[kg]		21	21
Weight handling stand	[kg]		60	60
Article number			H-6002157	H-6002156

#### HST-300 | HST-300-XY - Robust designed handling stand

Pedestal with mounting holes, vertical stand with precision shaft, horizontal arm with precision double shaft as well as guides with smooth-running industrial bearings. Construction to accommodate torsion forces with fixing points for balancer and cable, prepared for the mounting of tool holder and handle.

#### HST-300-XY - Position monitoring of assembly tool

Fixed sequences have to be observed by a lot of applications of the hand-guided and the semi-automated assembly. Equipped with an XY sensor system (Z sensor optional) and with an position controller integrated in the pedestal, the HST-300-XY extends the functionality of your tightening system. The position electronic monitors in conjunction with a higher-level control system that the required sequence is observed. No screw will be forgotten – even complex tightening sequences can be specified and monitored. Or you select the corresponding sequence program on your DSM tightening control system via the screw position.

#### Other features:

- · Absolute XY position measurement in the rotation axis and in the horizontal arm
- $\cdot\,$  Position input via teach-in, storage up to 200 positions
- · Position monitoring
- · Reporting of the stored positions "Pos reached"
- · Direct output mode as "XY position"
- · DSM software for programming and configuration of the positioning controller
- · USB interface for connection with the DSM application software, incl. USB cable
- · System bus interface for communication with the DSM tightening control system, power supply via control system or AC adapter
- · TCP/IP interface for communication with the DSM application software
- · Optional Profibus interface or Profinet interface for connection to a higher-level control system

<b>Handling stand HST-300-XY</b>
<b>Equipment option</b>

Туре		Article number
HST-150-300-600-Zsens	Position sensor Z-axis, incl. Y connection cable	H-6006014

# Positioning controller PoSys Equipment options

Туре	Article number
Evaluation unit with Profibus interface and TCP/IP interface	H-6009500
Evaluation unit with Profinet interface and TCP/IP interface	H-6009600
Evaluation unit with EtherCAT interface and TCP/IP interface	Available soon
BT module for the execution Profinet / EtherCAT, enables the communication with Bluetooth® devices	Available soon
AC adapter (plug-in power supply)* AC 230 V / 50 Hz   DC 24 V / 1 A	DSM-600611

 $<sup>^{\</sup>star}$  For the use without DSM control system.

System bus Accessories	
Туре	Article number
System bus cable 2 m	MS-1003002
System bus cable 5 m	MS-1003005
System bus terminating resistor	MS-1003030
T-piece for system bus connection	DSM-200722

Step 2	Handling balancer for version HST 300			
Туре		ldeal for DSM nutrunner	Weight counterbalance, load capacity adjustable	Article number
HBA-30-	40-kg	DS 57 / DS 80	from 30 kg up to 40 kg	H-6008040

When choosing a balancer, take into account the tool weight and the weight of the horizontal arm.



#### Handle

Туре		Article number
HG	Standard handle	H-6007805
HG-S	Handle with start button (double)	H-6007810
HG-S-PG	Handle with start button (double) and program switchover	H-6007815

Ergonomically formed handles for the precision guidance of the nutrunner. Versatile mounting possibilities via handle adapter. Execution with start button for the direct forwarding of the start signal to the control system. Handle version with turn-switch for switching between the pre-selected program and an alternative program.

Handle adapter for version HST 300		
Туре		Article number
HG-A-H150-300-600	Handle adapter kit HST 150 / HST 300 / HST 600	H-6007885

Standard adapter for the vertical and horizontal assembly of the handle (HG, HG-S, HG-S-PG). The installation can be made on the right and the left side as well as on the front of the tool holder.

Choose the cable depending on the use of the handle.

If you are using a nutrunner of the DS 57 or DS 80 series the connection to the DSM control unit occurs via the bus line of the DS nutrunner – the handle cable is plugged into the SB socket at the nutrunner. The cable is available in two different lengths suitable for the respective assembly situation.

Alternatively, the handle can be connected directly with the control system or with a higher-level control system. Corresponding cables for this can be found in the table below.

Handle cables for version HST 300				
Туре	Connection		Cable length	Article number
HG-K-DS57-80-300	from HG-S to DS 57 / DS 80		300 mm	H-6007959
HG-K-DS57-80-500	from HG-S to DS 57 / DS 80		500 mm	H-6007960
HG-K-24V-4.XX	from HG-S to Basic / Classic / Pro		5 m	H-6007905
HG-K-24V-5.XX	from HG-S to Pro 3G		5 m	H-6007910
HG-K-24-oK	from HG-S to	open cable ends	5 m	H-6007915
HGPG-K-24-oK	from HG-S-PG to	open cable ends	2 m	H-6007720
HGPG-K-DS57-80-300	from HG-S-PG to DS 57 / DS 80		300 mm	H-6007756
HGPG-K-DS57-80-500	from HG-S-PG to DS 57 / DS 80		500 mm	H-6007757

Туре	Tool holder for	Article number
HWA-300-DS80	DS 80 nutrunner	H-6008380

Tool holder adapter
for version HST 300

Туре		Article number
HWA-300-AD	Tool holder adapter HST 150 onto HST 300	H-6008153

Tool holder for version HST 150 (usable with adapter HWA-300-AD)		
Туре	Tool holder for	Article number
HWA-150-DS57	DS 57 nutrunner	H-6008157

Customer-specific adaptations for non-DSM products are available upon request.



#### Handling stand HST 300 Optional accessories

Туре		Article number
HST-300-MH	Magnetic holder Magnetically holding device for the Y-axis to fix the nutrunner / tool in park position	H-6006305
HST-300-600-DA	Ceiling support Additional fixing of the handling stand via a pivoted support designed to improve the load carrying capacity	H-6006310
HST-150-KL-Z-300-KL-Y	Clamp ring for Y-axis Variable positionable limiter of the horizontal stroke for the fast reaching of the tool position	H-6006330
HST-300-KL-Z-600-KL-YZ	Clamp ring for Z-axis Variable positionable limiter of the vertical stroke for the fast reaching of the tool position	H-6006340
HST-150-300-FS	Mechanical fall arrester Fall protection for the horizontal arm to avoid damages in a case of defective of the weight counterbalance system	H-6006315
HST-300-600-SWA*	Stops for swivel angle limitation (rotation axis) Two circle segments with rubber stops for the limitation of the swivel angle adjustable in steps of 30 degrees (min. 20° / max. 150°)	H-6006320
HST-FA	Retainer for tablet (remote display) Adjustable retainer for the remote display HMI 7" incl. assembly kit; Remote display only in conjunction with MultiPro 3G (BT module) usable	H-6006005

Accessories for individual adaptation of the handling stand for your application. Optional accessories are not required for normal operation.

<sup>\*</sup> Standard on execution HST-300-XY.



Precise, reaction-free and extremely light handling in the entire workspace. Absorption of all reaction forces and compensation of **torques up to 600 Nm**. Optimal smooth-running weight compensation with a maximum **tool weight of 40 kg**. Extensive range of equipment options for the models **HST-600** (without sensor) and **HST-600-XY** (with integrated position monitoring) available.

Use the following steps for the compilation of your handling stand to select the optimum components from the series HST 600 for you application.





#### Handling stand Version HST 600

Туре			HST-600	HST-600-XY
Absolute position sensor technology XY				✓
Positioning controller integrated in the pedestal				✓
Vertical stroke (Z)	[mm]		750	750
Horizontal stroke (Y)	[mm]		550	550
Swivel angle	[°]	max.	359	150
Reaction torque	[Nm]	up to max.	600	600
Tool weight	[kg]	max.	40	40
Height of vertical stand	[mm]		1320	1390
Length of horizontal arm	[mm]		1050	1050
Weight horizontal arm	[kg]		45	45
Weight handling stand	[kg]	<u>-</u>	90	90
Article number			H-6002600	H-6002605

#### HST-600 | HST-600-XY - Robust designed handling stand

Pedestal with mounting holes, vertical stand with precision shaft, horizontal arm with precision double shaft as well as guides with smooth-running industrial bearings. Construction to accommodate torsion forces with fixing points for balancer and cable, prepared for the mounting of tool holder and optional accessories.

#### HST-600-XY - Position monitoring of assembly tool

Fixed sequences have to be observed by a lot of applications of the hand-guided and the semi-automated assembly. Equipped with an XY sensor system (Z sensor optional) and with an position controller integrated in the pedestal, the HST-600-XY extends the functionality of your tightening system. The position electronic monitors in conjunction with a higher-level control system that the required sequence is observed. No screw will be forgotten – even complex tightening sequences can be specified and monitored. Or you select the corresponding sequence program on your DSM tightening control system via the screw position.

#### Other features:

- · Absolute XY position measurement in the rotation axis and in the horizontal arm
- $\cdot\,$  Position input via teach-in, storage up to 200 positions
- · Position monitoring
- · Reporting of the stored positions "Pos reached"
- · Direct output mode as "XY position"
- · DSM software for programming and configuration of the positioning controller
- · USB interface for connection with the DSM application software, incl. USB cable
- · System bus interface for communication with the DSM tightening control system, power supply via control system or AC adapter
- · TCP/IP interface for communication with the DSM application software
- · Optional Profibus interface or Profinet interface for connection to a higher-level control system

<b>Handling stand HST-600-XY</b>
Equipment option

Туре		Article number
HST-150-300-600-Zsens	Position sensor Z-axis, incl. Y connection cable	H-6006014

# Positioning controller PoSys Equipment options

Туре	Article number
Evaluation unit with Profibus interface and TCP/IP interface	H-6009500
Evaluation unit with Profinet interface and TCP/IP interface	H-6009600
Evaluation unit with EtherCAT interface and TCP/IP interface	Available soon
BT module for the execution Profinet / EtherCAT, enables the communication with Bluetooth® devices	Available soon
AC adapter (plug-in power supply)* AC 230 V / 50 Hz   DC 24 V / 1 A	DSM-600611

<sup>\*</sup> For the use without DSM control system.

System bus Accessories	
Туре	Article number
System bus cable 2 m	MS-1003002
System bus cable 5 m	MS-1003005
System bus terminating resistor	MS-1003030
T-piece for system bus connection	DSM-200722

Step 2	Handling balancer set for version HST 600			
Туре	ldeal for DSM nutrunner	Weight counterbalance, load capacity adjustable	Quantity	Article number
HBA-30	40-kg DS 80	from 30 kg up to 40 kg	2	H-6008050

When choosing a balancer, take into account the tool weight and the weight of the horizontal arm.



#### Handle

Туре		Article number
HG	Standard handle	H-6007805
HG-S	Handle with start button (double)	H-6007810
HG-S-PG	Handle with start button (double) and program switchover	H-6007815

Ergonomically formed handles for the precision guidance of the nutrunner. Versatile mounting possibilities via handle adapter. Execution with start button for the direct forwarding of the start signal to the control system. Handle version with turn-switch for switching between the pre-selected program and an alternative program.

Handle adapter for version HST 600		
Туре		Article number
HG-A-H150-300-600	Handle adapter kit HST 150 / HST 300 / HST 600*	H-6007885
HG-A-H600-hor	Handle adapter kit HST 600**	H-6007889

<sup>\*</sup> Adapter for the vertical assembly / \*\* Adapter for the horizontal assembly of the handle (HG, HG-S, HG-S-PG). The installation can be made on the right side as well as on the left side of the tool holder.

Choose the cable depending on the use of the handle.

If you are using a nutrunner of the DS 80 series the connection to the DSM control unit occurs via the bus line of the DS nutrunner – the handle cable is plugged into the SB socket at the nutrunner. The cable is available in two different lengths suitable for the respective assembly situation.

Alternatively, the handle can be connected directly with the control system or with a higher-level control system. Corresponding cables for this can be found in the table below.

Handle cable for version HST 600				
Туре	Connection		Cable length	Article number
HG-K-DS57-80-300	from HG-S to DS 57 / DS 80		300 mm	H-6007959
HG-K-DS57-80-500	from HG-S to DS 57 / DS 80		500 mm	H-6007960
HG-K-24V-4.XX	from HG-S to Basic / Classic / Pro		5 m	H-6007905
HG-K-24V-5.XX	from HG-S to Pro 3G		5 m	H-6007910
HG-K-24-oK	from HG-S to	open cable ends	5 m	H-6007915
HGPG-K-24-oK	from HG-S-PG to	open cable ends	2 m	H-6007720
HGPG-K-DS57-80-300	from HG-S-PG to DS 57 / DS 80		300 mm	H-6007756
HGPG-K-DS57-80-500	from HG-S-PG to DS 57 / DS 80		500 mm	H-6007757



Туре

Tool holder for DS 80 nutrunner, permanently connected with HST 600

Customer-specific adaptations for non-DSM products are available upon request.

5 Handling stand Optional access		
Туре		Article number
HST-600-MH	Magnetic holder Magnetically holding device for the Y-axis to fix the nutrunner / tool in park position	H-6006605
HST-300-600-DA	Ceiling support Additional fixing of the handling stand via a pivoted support designed to improve the load carrying capacity	H-6006310
HST-300-KL-Z-600-KL-YZ	Clamp ring for Y-axis Variable positionable limiter of the horizontal stroke for the fast reaching of the tool position	H-6006340
HST-300-KL-Z-600-KL-YZ	Clamp ring for Z-axis Variable positionable limiter of the vertical stroke for the fast reaching of the tool position	H-6006340
HST-300-600-SWA*	Stops for swivel angle limitation (rotation axis) Two circle segments with rubber stops for the limitation of the swivel angle adjustable in steps of 30 degrees (min. 20° / max. 150°)	H-6006320
HST-FA	Retainer for tablet (remote display)  Adjustable retainer for the remote display HMI 7" incl. assembly kit;  Remote display only in conjunction with MultiPro 3G (BT module) usable	H-6006005

Accessories for individual adaptation of the handling stand for your application. Optional accessories are not required for normal operation.

<sup>\*</sup> Standard on execution HST-600-XY.