

# PROJECT PLANNING SHEET



HM/HT/HB/HD Linear Axis

### Customer data

Company: _____	Processed by: _____
Technical consultant: _____	Date: _____
Purchasing consultant: _____	Project name: _____

### Project plan

Quantity: _____	Period: _____
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### System data

Drive type:  Toothed belt  Ball screw  Rack and pinion  Linear motor  acc. to calculation

Stroke length X [mm]: \_\_\_\_\_ Repeatability [mm]: \_\_\_\_\_

### Operating data

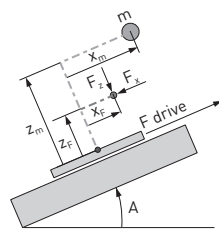
Cycles/hour: \_\_\_\_\_ Hours/day: \_\_\_\_\_ Days/year: \_\_\_\_\_

### Cycle (travel distance, process time, travel speed, acceleration and non-productive times (breaks, gripper timer etc.))

Path Nr.	Travel distance [mm]	Positioning $t_{pos}$ [s]	$v_{max}$ [m/s]	$a_{max}$ [m/s <sup>2</sup> ]	Break $t_{pause}$ [s]	Description of the operation or non-productive times
1						
2						
3						
4						
5						

### Axis positioning in space

Single and double axis



Angle A: \_\_\_\_\_ °

Moving Mass:

$m =$  \_\_\_\_\_ [kg]

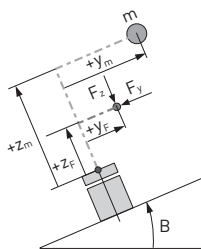
Centre of gravity of the moving mass m:

$x_m =$  \_\_\_\_\_ [mm]

$y_m =$  \_\_\_\_\_ [mm]

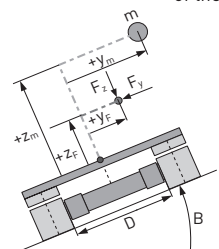
$z_m =$  \_\_\_\_\_ [mm]

Single axis HM/HT



Angle B: \_\_\_\_\_ °

Double axis HD (with a stiff connection of the carriages)



Distance between axes D: \_\_\_\_\_ mm

Angle B: \_\_\_\_\_ °

External forces:

$F_x =$  \_\_\_\_\_ [N]

$F_y =$  \_\_\_\_\_ [N]

$F_z =$  \_\_\_\_\_ [N]

Force transmission point:

$x_F =$  \_\_\_\_\_ [mm]

$y_F =$  \_\_\_\_\_ [mm]

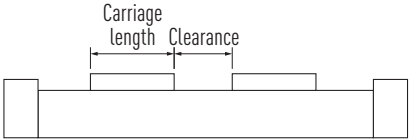
$z_F =$  \_\_\_\_\_ [mm]

Carriages are not connected or have a non-stiff connection (please add sketch and further information)

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Options		
Feature	Standard	Option
Carriage length:	<input type="checkbox"/> S	<input type="checkbox"/> E <sup>3)</sup> <input type="checkbox"/> L <sup>1)</sup> <input type="checkbox"/> M <sup>1)</sup> <input type="checkbox"/> H <sup>5)</sup> <input type="checkbox"/> acc. to calculation
Second Carriage:	<input type="checkbox"/> No	<input type="checkbox"/> Yes, light expanse <sup>1)</sup> : _____ mm 
Cover strip HM-B/HD:	<input type="checkbox"/> N	<input type="checkbox"/> C
Cover strip HM-S/HT:	<input type="checkbox"/> C	<input type="checkbox"/> N
Limit switch <sup>2)</sup> :	<input type="checkbox"/> A	<input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> N
Distance measuring system H-S/H-B <sup>2)</sup> :	<input type="checkbox"/> N	<input type="checkbox"/> A <input type="checkbox"/> D
Distance measuring system HT-L <sup>2)</sup> :	<input type="checkbox"/> A	<input type="checkbox"/> B <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> H <input type="checkbox"/> T <input type="checkbox"/> R <input type="checkbox"/> S
Spindle support H-S:	<input type="checkbox"/> N	<input type="checkbox"/> Yes, quantity: _____ <input type="checkbox"/> acc. to calculation
Drive interface <sup>2)</sup> :		
HM-B:	<input type="checkbox"/> N	<input type="checkbox"/> Right <input type="checkbox"/> Left
HM-S:		<input type="checkbox"/> Straight <input type="checkbox"/> Belt drive, right <input type="checkbox"/> Belt drive, left <input type="checkbox"/> Belt drive, top <input type="checkbox"/> Belt drive, bottom
HT-B/HB-B:	<input type="checkbox"/> N <input type="checkbox"/> C <sup>4)</sup>	<input type="checkbox"/> L <input type="checkbox"/> R <input type="checkbox"/> G <input type="checkbox"/> H <input type="checkbox"/> F <sup>4)</sup> <input type="checkbox"/> E <sup>4)</sup>
HT-S:	<input type="checkbox"/> N <input type="checkbox"/> C <sup>4)</sup>	<input type="checkbox"/> S <input type="checkbox"/> L <input type="checkbox"/> R <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> D <sup>4)</sup> <input type="checkbox"/> E <sup>4)</sup> <input type="checkbox"/> G <sup>4)</sup> <input type="checkbox"/> H <sup>4)</sup>
HT-L:		<input type="checkbox"/> L <input type="checkbox"/> R <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> A <sup>4)</sup> <input type="checkbox"/> B <sup>4)</sup> <input type="checkbox"/> C <sup>4)</sup> <input type="checkbox"/> D <sup>4)</sup>
HB-R:	<input type="checkbox"/> S	<input type="checkbox"/> D <sup>4)</sup>
HD:	<input type="checkbox"/> N	<input type="checkbox"/> Right <input type="checkbox"/> Left
Motor/ motor gear adapter H-B/H-S:	<input type="checkbox"/> N	<input type="checkbox"/> With adapter for motor, type: _____ Manufacturer _____ <input type="checkbox"/> With adapter for Neugart gearbox, type: _____
Gears H-B:	<input type="checkbox"/> N	<input type="checkbox"/> With assembled gearbox, type: _____ Gear transmission: _____ <input type="checkbox"/> Angular gear (for alignment see supplementary sheet) <input type="checkbox"/> With assembled gearbox acc. to calculation
Delivery state HD:	<input type="checkbox"/> Partly mounted	<input type="checkbox"/> Mounted

<sup>1)</sup> Not applicable for HT/HB

<sup>2)</sup> For details please refer to the order code in the catalogue „Linear Axes and Axis Systems HX“

<sup>3)</sup> Only for HM040B

<sup>4)</sup> With energy chain

<sup>5)</sup> Only for HM120B and HD4

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Accessories	
<input type="checkbox"/> HIWIN servo motor	Break <input type="checkbox"/> With motor brake <input type="checkbox"/> Without motor brake Encoder <input type="checkbox"/> 23 bit absolute singleturn <input type="checkbox"/> 23 bit absolute multiturn
<input type="checkbox"/> HIWIN servo drive	Interface <input type="checkbox"/> EtherCAT CoE <input type="checkbox"/> PROFINET <input type="checkbox"/> Step-direction/+-10V <input type="checkbox"/> _____
<input type="checkbox"/> Motor cable	<input type="checkbox"/> 3m <input type="checkbox"/> 5m <input type="checkbox"/> 10m <input type="checkbox"/> _____
<input type="checkbox"/> Encoder cable	<input type="checkbox"/> 3m <input type="checkbox"/> 5m <input type="checkbox"/> 10m <input type="checkbox"/> _____
<input type="checkbox"/> Extension cable for limit switches	<input type="checkbox"/> 3m <input type="checkbox"/> 5m <input type="checkbox"/> 7m <input type="checkbox"/> 10m <input type="checkbox"/> 15m
<input type="checkbox"/> Further cables	<input type="checkbox"/> USB parameterisation cable <input type="checkbox"/> E/A-cable <input type="checkbox"/> STO-cable, 3m
<input type="checkbox"/> Mains filter	
<input type="checkbox"/> Nuts	Quantity: _____ VPE (10 pcs.)
<input type="checkbox"/> Clamping profiles	Quantity: _____ VPE (4 pcs.)
<input type="checkbox"/> Centering sleeve	Quantity: _____ VPE (10 pcs.)
<input type="checkbox"/> Nut cover, 2m	Quantity: _____ VPE (5 pcs.)
<input type="checkbox"/> Cover for drive block	Quantity: _____ pcs.
<input type="checkbox"/> Shaft journal	Quantity: _____ pcs.

Application (Sector, machine, application, ambient conditions, sketch)