

PROJECT PLANNING SHEET



7th Axis for robots

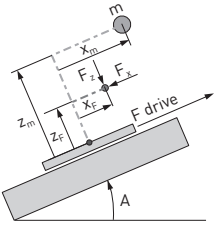
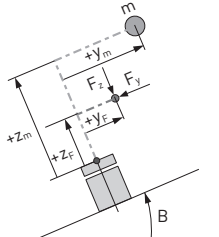
Customer data	
Company: _____	Processed by: _____
Technical consultant: _____	Date: _____
Purchasing consultant: _____	Project name: _____

Project plan	
Quantity: _____	Period: _____

System data	
Drive type:	<input type="checkbox"/> Toothed belt <input type="checkbox"/> Ball screw <input type="checkbox"/> According to sizing tool
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 ²]	Break t_{pause} [s]	Description of the operation or non-productive times
1						
2						
3						
4						
5						

Axis positioning in space	
Single axis  <p>Angle A: _____ °</p>	Payload on the robot: $m_N =$ [kg] Mass robot: $m_R =$ [kg] Centre of gravity of the moving mass m_{ges} : $x_m =$ [mm] $y_m =$ [mm] $z_m =$ [mm] External forces: $F_x =$ [N] $F_y =$ [N] $F_z =$ [N] Force transmission point: $x_F =$ [mm] $y_F =$ [mm] $z_F =$ [mm]
Single axle HT  <p>Angle B: _____ °</p>	

PROJECT PLANNING SHEET



7th Axis for robots

Robot adapter				
Manufacturer	Model			
Universal Robots	<input type="checkbox"/> UR3	<input type="checkbox"/> UR5	<input type="checkbox"/> UR10	<input type="checkbox"/> UR16
Techman	<input type="checkbox"/> TM5-700	<input type="checkbox"/> TM5-900	<input type="checkbox"/> TM12	<input type="checkbox"/> TM14
Others				

Options		
Feature	Standard	Option
Cover strip:	<input type="checkbox"/> C	<input type="checkbox"/> N
Limit switch:	<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:	<input type="checkbox"/> N	<input type="checkbox"/> A <input type="checkbox"/> D
Drive interface ¹⁾ :		
HT-B:	<input type="checkbox"/> N <input type="checkbox"/> C ²⁾	<input type="checkbox"/> L <input type="checkbox"/> R <input type="checkbox"/> G <input type="checkbox"/> H <input type="checkbox"/> F ²⁾ <input type="checkbox"/> E ²⁾
HT-S:	<input type="checkbox"/> N <input type="checkbox"/> C ²⁾	<input type="checkbox"/> S <input type="checkbox"/> L <input type="checkbox"/> R <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> D ²⁾ <input type="checkbox"/> E ²⁾ <input type="checkbox"/> G ²⁾ <input type="checkbox"/> H ²⁾
Motor/gearbox 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: _____
Gearbox H-B:	<input type="checkbox"/> N	<input type="checkbox"/> With assembled gearbox, type: _____ Gear transmission: _____ <input type="checkbox"/> Angular gear (see supplementary sheet for alignment) <input type="checkbox"/> With assembled gearbox according to calculation

¹⁾ For details, see order code in the 'Linear axes and axis systems HX' catalogue

²⁾ With energy chain

PROJECT PLANNING SHEET



7th Axis for robots

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)