B002 维护及调试工具

单元描述:

欲将Sinumerik 828D CNC集成在机床上,必须使用软件工具。这些工具不仅能为机床制造商创建机床的PLC程序,还可以协助进行驱动配置。 包含维护工具在内的软件工具以DVD的形式提供,该DVD名为工具盒 DVD (Toolbox DVD),在交付范围之内。

工具盒中包含以下软件:

- PLC828编程工具(PLC用户程序)
- 调试工具(驱动配置)
- 配置数据(恢复卡映像)

RCS Commander虽然不包含在工具盒中,但却是某些调试/维护步骤所必需的。

单元目标:

在您完成本单元的学习之后,能够安装维护和调试Sinumerik 828D机床所必需的调试工具。

828D Sinumerik

B002



工具盒的安装

工具盒的内容:

- 配置数据:- 恢复卡映像。
- PLC828 编程工具:- 用于创建/载入/编辑PLC用户程序。
- -调试工具:-用于配置驱动。

安装过程

通过工具盒DVD中的"setup.exe"开始安装。







说明:-调试工具

828D控制系统使用Sinamics 驱动系统运行,因此应该选择"Solutionline"类型。如果控制系统也需要在Powerline系统上运行,之后可在NCU连接向导中修改此设置。

Select ¥ariant		X
	HMI should be installed as	
	C PowerLine SolutionLine	
	< <u>B</u> ack <u>N</u> ext > Canc	el



RCS Commander

RCS Commander允许828D控制系统与计算机之间的远程操作。 零件程序等数据可在远程计算机和控制系统之间进行传输。 该工具带有一个查看器,用于远程查看和修改控制系统的设置(取决于访问权限)。 该工具也可将映像写入CF卡,用于维护及调试任务。

RCS Commander软件并不包含在工具盒DVD中。

欲安装RCS Commander软件,请在RCS Commander DVD的根目录中找到"Setup.exe" 文件。双击该文件开始安装。

Name 🔺	Size	Туре	1	
release_note_RCS_Cmd.txt	31 KB	Text Document		双击 Setup.exe"
d setup.exe	14,820 KB	Application]←	文件,开始安装。

基本网络信息

为使计算机可以通过控制系统上的X127以太网端口进行通讯,必须了解一些设置。

应知道网络适配器的名称。 这可在计算机的"网络连接"区域中找到:-



在下例中,网络适配器为:-

"Marvell Yukon 88E8055 PCI-E Gigabit Ethernet Controller" 适配器类型会随计算机类型而改变。

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							(



<u>PLC 编程工具</u>

控制系统的X127和PG/PC之间必须用以太网网线连接。

打开编程工具后,选择左侧的"通讯"选项。







使用"NC Connect Wizard"配置网络设置。

安装软件时在桌面上创建了一个"SINUMERIK 840D" 文件夹,其中含有 "NC Connect Wizard" 快捷方式。



选择"840D solutionline" 选项, 然后选择 "Next" 按钮。

elect Control Model		SIEMEN
S-1	Control Models	
Select Contion Model	840D solutionline	Amara
	C 840D powerline	
	○ 840Di (any)	
	C 810D powerline	
	O VNCK (840D Virtual NC Kernel)	
	C Favorite Connection	
		840D solutionline
		×
	< Back Next >	Finish

选择 "Engineering Tools" 选项, 然后选择 "Next" 按钮。

Q NCU Connection Wizard			×
Select Port			SIEMENS
Select Control Model	 Engineering Tools (Recommended) 		
Select Port			
Cabling Help		X127	
Sami an	C FactoryNet (Advanced)		
Settings			
		X130	
	C MachineNet (Advanced)		
		X120	
	< Back Next >	Finish	Cancel
Next >			
110017			



显示连接/布线信息,根据PG/PC的网络适配器,使用交叉电缆或直通电缆。

Cabling Help		SIEMENS
Select Control Model Select Port Cabling Help Settings	Note: A crossover cable is required	
	PG or PC hosting SinuCom NC	X127 Einish Cancel

Advanced

X127有一个固定地址192.168.215.1。必要时将这个地址输入IP地址栏中。

NCU Connection Wizard Settings Provide Communications Settings		SIEMENS
Select Control Model	General Advanced X127: E	ngineering Tools (Recommended)
Select Port	IP Address Port	
Cabling Help		
Settings	NCK PLC Rack Slot 0 0 Communications Interface Communications Interface CP840	PG/PC Interface
	Save these settings as a favorite Name:	Reset Settings
	< Back Next>	inish Cancel

设置一个合适的名称用以保存连接设置,不要修改任何其他的设置。选择"Finish"以完成任务。

Save th	nese settings as a favorite
Name:	828D X127 Connection

Finish

必须核对PG/PC接口设置以确保软件可进行通讯。在PG/PC的"控制面板"中核对这些设置。

在"控制面板"中选择并打开"Set PG/PC Interface"程序。

Name 🔺		Comments		
Memory Card Parame	eter Assignmen	Set the Memory Car		
Mouse		Customize your mo		
eeNero BurnRights		Configure CD/DVD		
Network Connections	5	Connects to other c		
🔮 Network Setup Wizar	ď	Launch the Network		
📕 Nokia Connection Ma	nager	Configure which co		
bold Phone and Modem O	ptions	Configure your tele		
🗠 Power Options		Configure energy-s		
🝓 Printers and Faxes		Shows installed prin		
🙆 QuickTime		Configures QuickTi		
🌒 Realtek HD Sound Ef	fect Manager	Realtek HD Audio C		
🧕 Regional and Langua	ge Options	Customize settings		
Scanners and Camer	as	Add, remove, and c		
🚰 Scheduled Tasks		Schedule computer		
💔 Security Center	_	View your current s		
🔣 Set PG/PC Interface		Configuration of yo		
Sounds and Audio De	vices	Change the sound s		
💕 Speech	Configuration of your :	5iemens communications i	nterfaces	
😼 System		See information abo		
📲 Taskbar and Start Me	enu	Customize the Start		
🥭 Trend Micro Updates		Download the latest		
😫 User Accounts		Change user accou		
📑 Windows CardSpace		Manage Informatio		
🞯 Windows Firewall		Configure the Wind		
😻 Wireless Link		Configure infrared f		
端 Wireless Network Sel	tup Wizard	Set up or add to a		

选择接入点和网络适配器。

Set PG/PC Interface	
Access Path LLDP	
Access Point of the Application: SINUMERIK_CP (SINUMERIK 7xx)> TCP/IP -> Marvell Yuk	用鼠标选择下拉菜单。
(Standard for SINUMERIK 7xx) Interface Parameter Assignment Used: TCP/IP -> Marvell Yukon 88E8055	选择 "SINUMERIK_CP (SINUMERIK 7xx)"
Diagnostics PLC802(PPI) Diagnostics Diagnostics	接入点选项。
Image: Copy of the copy o	选择用于连接PG/PC和 控制系统的网络适配 器。对于不同品牌/型号 的PG/PC,其网络适配 器也会不同
Add/Remove: Select OK Cancel Help	

用一根以太网网线连接计算机和控制系统的X127端口。通过"StartUp Tool"快捷方式 运行调试工具.



该软件将打开以下界面: -

itart-up	CHAN1			Jog	MPF0 Program aborted			
	nei leset				ROV			
Machine	e configurati	ion						
NCK				Drive		Motor		7
Index	Name	Туре	Drive	Identifie	er	Туре	Channel	Change
1	MX1	Lin	2	SERVO	_3.3:3	SRM	CHAN1	
2	MY1	Lin	3	SERVO	_3.3:4	SRM	CHAN1	Reset
3	MZ1	Lin	4	SERVO	_3.3:5	SRM	CHAN1	(po)
4	MSP1	Sp	1	SERVO	_3.3:2	ARM	CHAN1	_
5	MA1	Rot	5	SERVO	_3.3:6	SRM	CHAN1	Changeov inch
								Passwor
Curren	t access lev	el: Manufa	ct.					
							—	Details
Machir			Drivo				\geq	Optimiz
data	N N	C s	system		HMI			test
ਤ ਦੇ ਸ਼ੁਰੂ ਮ						• 4h m		
お 安ル	区出软件	一則,按	ΓPC	G/PC	键盘上的F1	0,然后	丹 按\$7键	EXII 。
E	XIT							

RCS Commander

双击PG/PC桌面上的"RCS Commander" 图标。



安装完成后首次打开程序时,需要指定一个密码用于加密。

Assigning password		<u>? ×</u>
Here a password must be assi connection data to be saved.	gned which is used to encrypt the	
Password:	•••••	
Confirm password:	•••••	
	OK Cano	el OK

弹出一个对话框,在该对话框中选择连接。

对话框中有一个默认连接,专门用于连接控制系统的X127端口(IP地址 192.168.215.1)。

选择连接		? 🛛
诸在此处选择您需	要的连接。	
可用连接:	直接连接@192.16	8.215.1
~控制系统信息 —		
控制系统IP:	192.168.215.1	端口: 22
控制系统名称:	无法进行 - 直接连接	
远程显示的IP:	192.168.215.1	端 5900
	连接	

登录时,需要根据访问级别使用密码:-

更改登录		? 🛛
您可以在这里更改当	当前的登录。	
登录:	制造商	×
密码: 或者	制造商 服务 用户	
密钥文件:		
		正常放弃

访问级别决定了可以通过RCS Commander访问到的数据。

连接

以"制造商"登录时,将拥有最高访问权限。以"用户"登录时,将拥有最有限的访问权限。

选择需要的登录用户并输入密码。

更改登录	? 🗙	密码: -
您可以在这里更改当	前的登录。	制造商-SUNRISE
登录:	制造商	服务-EVENING
密码:	•••••	用户-CUSTOMER
或者 密钥文件:		
	正常	

OZRZ MDC 机质	末数据采集OZR 在线连接 RC	Z DNC 程序传输系统7/29 S Commander	ROZRZ 智能刀补
	在短暂的等待后,R(夹,这表示连接成功	CS Commander程序窗口的下半部分将显	示控制系统的数据文件
	RCS Commander	ັ I Ming TEQL	
	文件编辑外观电路远程控制	」外观 盤助 ■ 🖻 🕒 🕒 註 ⅲ 🎖 😢	
	PC的文件系统 田 ← C:\	文件夹 E:\ Backup data DydateCard.txt	
	E:\ Backup data	i identify.txt keys.txt	
		Iab_value_mil_080508.pte MODIFY.PTE	
		screen802dsl.bmp	
	注册为: 制造商 直接连接 (IP: 192.168.215.1)	控制系统类 SINUMERIK 828D 文件夹 /card	
	System CF-Card Addon	Compared and the second s	
		install keys	
	em_i	siemens system	
	user NC数据	a user	
	Contraction of the second seco		
	F1帮助键	且按注按	@192.168.215.1