

# CN433

## Low Voltage System Drive ACS800 Application in Pulp & Paper and Case Study

### Course goal

The goal of this course is to teach students to start-up, adjust, operate, maintain and troubleshoot ACS800 multidrives.

### Participant profile

System drive engineer, system maintenance engineer, maintenance supervisor, maintenance manager.

### Learning objectives

Upon completion of this course the participants will be able to:

- Understand low voltage system drive
- Commission and tune ACS800 multidrives
- Operate and maintain ACS800 multidrives
- Understand communication between ACS800 with control section AC800M
- The drives' parameters adjustment with technology process in Pulp & Paper
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### Prerequisites

The student should have Basic knowledge of electronics , basic knowledge of drives, and P&P process. Experience in using PCs in the Windows environment

### Course type and methods

This is an instructor led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is hands-on lab

### Topics

- Reading and interpreting circuit diagrams
- ACS800 system application program
- Control panel functions
- DSU, TSU, ISU and Inverter hardware
- Converter and Supply unit commissioning
- Fault diagnostics and case study
- DriveWindow commissioning and maintenance
- tool operations
- Overview of process and manufacture characteristics in Pulp & Paper
- The drives' parameters adjustment with technology process in Pulp & Paper

### Course Duration

The duration is 5 days



Course Outline				
Day 1	Day 2	Day 3	Day 4	Day 5
Welcome	ACS800 Inverter Hardware	ACS800 System Application	Drive window	Fault diagnostics
Course overview	Circuit diagram	Control panel	Drive control with Fieldbus	Case study
low voltage system drive	ACS800 System Application	start-up and	exercise	ACS800 drives' parameters
Basic	Exercises	commissioning		adjustment in Paper
DSU		Exercises		
ISU		Q & A		
TSU				
Exercises				



ABB (China) Ltd.

ABB University Beijing Center

Post Code: 100015

Universal Plaza, 10 Jiuxianqiao Lu, Chaoyang District  
Beijing, P.R. China

Phone: +86 10 84566688/64233141

E-Mail: [abb-university.china@cn.abb.com](mailto:abb-university.china@cn.abb.com)

<https://new.abb.com/service/abb-university/china>

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# CN433S

## Low Voltage System Drive ACS880 Application in Pulp & Paper and Case Study

### Course goal

The goal of this course is to teach students to start-up, adjust, operate, maintain and troubleshoot ACS880 multidrives.

### Participant profile

System drive engineer, system maintenance engineer, maintenance supervisor, maintenance manager.

### Learning objectives

Upon completion of this course the participants will be able to:

- Understand low voltage system drive
- Commission and tune ACS880 multidrives
- Operate and maintain ACS880 multidrives
- Understand communication between ACS880 with control section AC800M
- The drives' parameters adjustment with technology process in Pulp & Paper
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### Prerequisites

The student should have Basic knowledge of electronics , basic knowledge of drives, and P&P process. Experience in using PCs in the Windows environment

### Course type and methods

This is an instructor led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is hands-on lab

### Topics

- Reading and interpreting circuit diagrams
- ACS800 system application program
- Control panel functions
- DSU, TSU, ISU and Inverter hardware
- Converter and Supply unit commissioning
- Fault diagnostics and case study
- DriveWindow commissioning and maintenance
- tool operations
- Overview of process and manufacture characteristics in Pulp & Paper
- The drives' parameters adjustment with technology process in Pulp & Paper

### Course Duration

The duration is 5 days



Course Outline				
Day 1	Day 2	Day 3	Day 4	Day 5
Welcome	ACS880 Inverter Hardware	ACS880 System Application	Drive window	Fault diagnostics
Course overview	Circuit diagram	Control panel	Drive control with Fieldbus	Case study
low voltage system drive	ACS800 System Application	start-up and	exercise	ACS880 drives' parameters
Basic	Exercises	commissioning		adjustment in Paper
DSU		Exercises		
ISU		Q & A		
TSU				
Exercises				



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Phone: +86 10 84566688/64233141

E-Mail: [abb-university.china@cn.abb.com](mailto:abb-university.china@cn.abb.com)

<https://new.abb.com/service/abb-university/china>

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# CN463

## Programming AC800M and Paper Drive

### Course goal

The goal of this course is to teach the students Programming controller AC800M and Paper Drive.

### Participant profile

System engineer, system maintenance engineer, System control engineer.

### Learning objectives

Upon completion of this course the participants will be able to:

- System 800xA architecture
- 800xA for paper
- AC800M Hardware
- Develop project specific libraries
- Configure AC800M hardware and I/O
- IEC 61131-3 programming language
- Control Modules
- Communication
- Understand Paper Drive and application program

### Prerequisites

Students shall know the fundamentals of working with Distributed Control Systems and have basic knowledge of IEC 61131-3 programming and of working with Microsoft Windows 7, Windows 10 or Windows Server 201x.

### Course type and methods

This is an instructor led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is hands-on lab

### Course Duration

The duration is 5 days

### Topics

- Overview of control system 800xA
- AC800M hardware and I/O
- programming with FBD and ST
- Control Modules
- Communication
- Task and memory
- Drive control with AC 800M
- PMC800 application



### Course Outline

Day 1	Day 2	Day 3	Day 4	Day 5
Course overview 800xA system architecture CBM Project and Application structures AC 800M Hardware	AC 800M Hardware Library for paper Variable and Data Type	Applications with Function Block Diagram (FBD) and Structured Text (ST) Memory and Task	Control Module Drive control with AC 800M PMC800 application	PMC800 application Communication

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