

# PROFIBUS

PC-based Engineer 가

POSCO Shear Line ,

Spare part

PC-based PLC

CAN

ETL , Sheet Controller ( VLC) Softlogic Visual Logic

Fieldbus PROFIBUS-DP

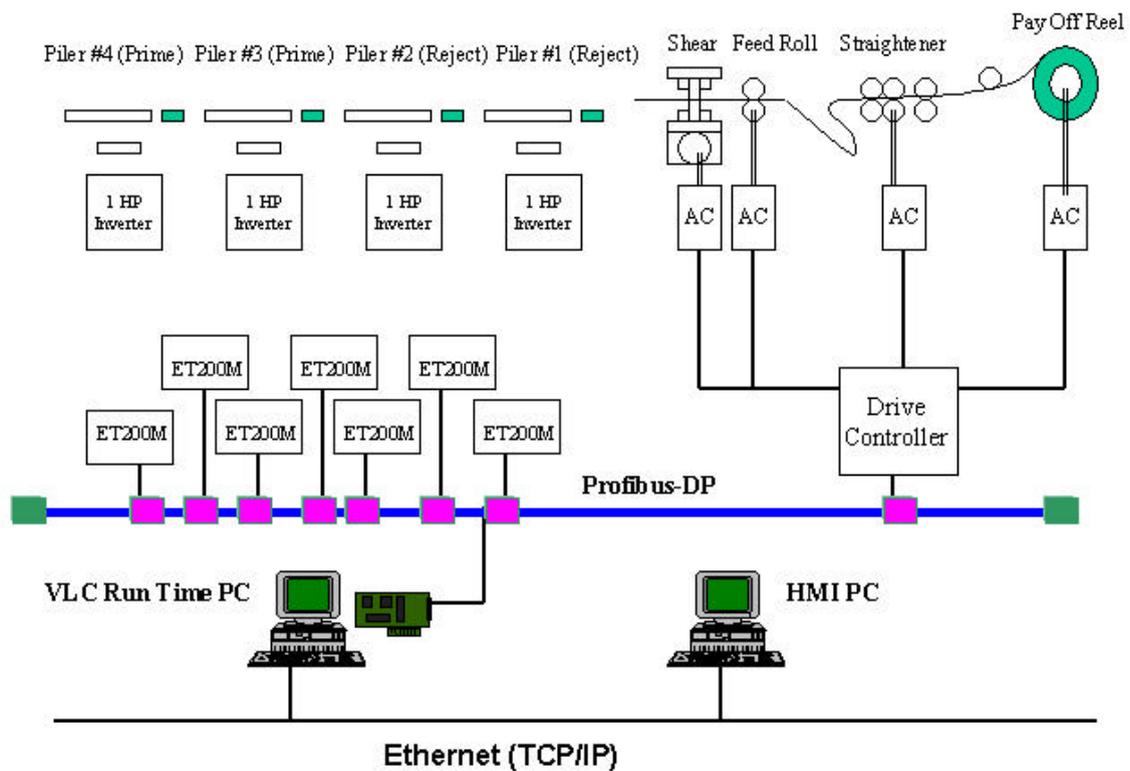
PLC 9

IO Panel

Troubleshooting Engineer Sensor Actuator 1 1

Culvert Cable

Profibus Remote IO Cable 2



POSCO ETL #2 Shear Line PC-Based Control Configuration

|            |                     |                |  |
|------------|---------------------|----------------|--|
|            | . PROFIBUS          | 12Mbps         |  |
| Real Time  |                     | 1msec          |  |
| Micro      |                     | 2msec          |  |
| Cycle Time |                     |                |  |
|            | AC Vector Drive     |                | 1.   |
| Controller |                     |                |  |
|            | 가                   |                | - PC-Based Control (Visual Logic Controller) |
| Shear Line | Line Speed          | 1200mm         | - Pentium II 450 MHz PC                      |
| Sheet      | +/-0.18mm           |                | - PROFIBUS - DP (12Mbps)                     |
|            | Remote IO node      |                | - 11 Node & 1026 I/O                         |
| Delay      |                     |                | - Coil Max speed : 137 mpm                   |
|            |                     |                | - Accuracy : +/- 0.18mm                      |
|            | Profibus            |                |  |
|            | VLC                 | Hard Real      | 2.   |
| Time OS가   |                     | General        |  |
| Flow Chart | High Level Language |                | - 30%  |
|            | 가 Sequence , PID,   |                | - Debugging                                  |
|            |                     | Debugging time |  |
|            |                     |                | - PROFIBUS Cabling                           |
| VLC        |                     |                | - Flow Chart                                 |
|            | Remote Node         | 가              |  |
|            | Fieldbus            | 가              | - HMI  |
|            |                     |                |  |
|            |                     |                | 가  |
|            |                     |                | Redundant                                    |
|            |                     |                |  |
|            | PC                  | Profibus-      | Paul Horr( )                                 |
| DP         |                     |                | Electronics Power Design, Inc. (EPD)         |
|            |                     |                |  |
|            |                     |                | Texas, Houston Electronics                   |
|            |                     |                | Power Design, Inc. (EPD)                     |
| Fieldbus   |                     |                | Belfast Global Marine                        |
|            |                     |                |  |
|            | PROFIBUS            | PC             | Glomar C. R.                                 |



. 750  
가

가

Luigs Glomar Jack Ryan ( (EMI)가

) 9,000 가

EPD Siemens SIMOREG @6RA24 DC

Glomar C.R. Luigs

Glomar Jack Ryan

Belfast

가

Global Marine Drilling

가

EPD

ABS(American Bureau of

HMI(human machine

Shipping) Class 3

interface)

가

PROFIBUS

Siemens S7-

가

가

400 S7-300

(PLC)

. 가 ,

ET-200

I/O

( 5,000 ),

ET-200

4 가

. EPD

75,000

PLC 가 , .

. SIMATIC OP 27 ,

가 , ,

(wellhead)

. Siemens . Siemens DC

Siemens PROFIBUS EPD

Siemens PROFIBUS EPD PROFIBUS

PROFIBUS OLM(Optical Link S7-400 I/O

Module) PROFIBUS 1.5Mbaud 가 ,

PROFIBUS EPD가 ,

Siemens S7 PLC SIMOREG 가 .

PROFIBUS

" " PROFIBUS

EPD PC .....

. Rayonier ,

가

Louisiana Houma Oil States- 7

Skagit/SMATCO Belfast (2,200 acre) 220,000

. EPD , Rayonier

Baxley Swainsboro Georgia

Limber City

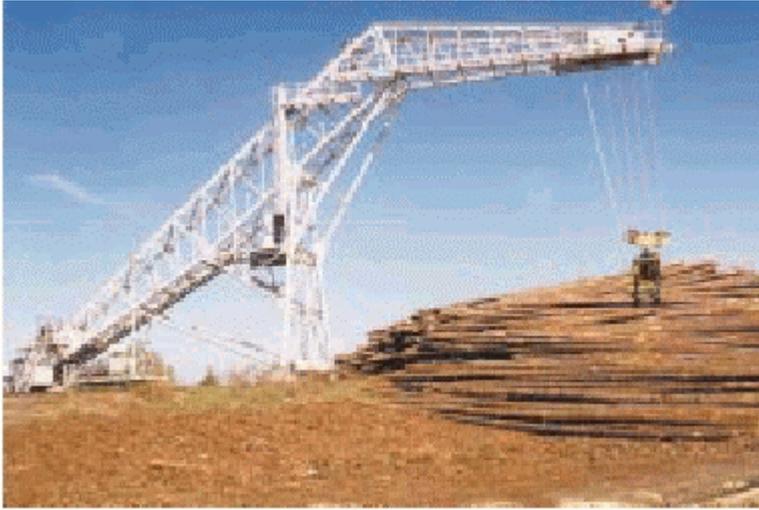
(collar) " .( ) .

" (HPR) 가

Rayonier

HPR

가 .



가  
 8'  
 20'  
 (Primary Breakdown)가  
 PC가

가  
 " "

PLC  
 Think & Do  
 PC  
 PROFIBUS , I/O,  
 Do  
 Think & MS Excel  
 Windows  
 가 가  
 Rayonier  
 가  
 가  
 (edge)  
 (trimmer saw)  
 가  
 (가 )  
 PC  
 가  
 가  
 ( )  
 " "  
 (GREEN SAW MILL)  
 , PC가  
 가



Rayonier

PROFIBUS

PC

. Ethernet

PC

가

PC

Rayonier

Think & Do

Canary

!

Labs

가

100 yard

PID

가

(spacer)

Baxley

가

가

가

가

Swainsboro

가

12-17

가

가

(

80%

).

16%( )

550

가

가 21

30,000ft<sup>3</sup>

가

. 20HP

가

Swainsboro

가

6 가

68

(planer)

Toshiba

3000

PROFIBUS I/O

가

Think & Do

가

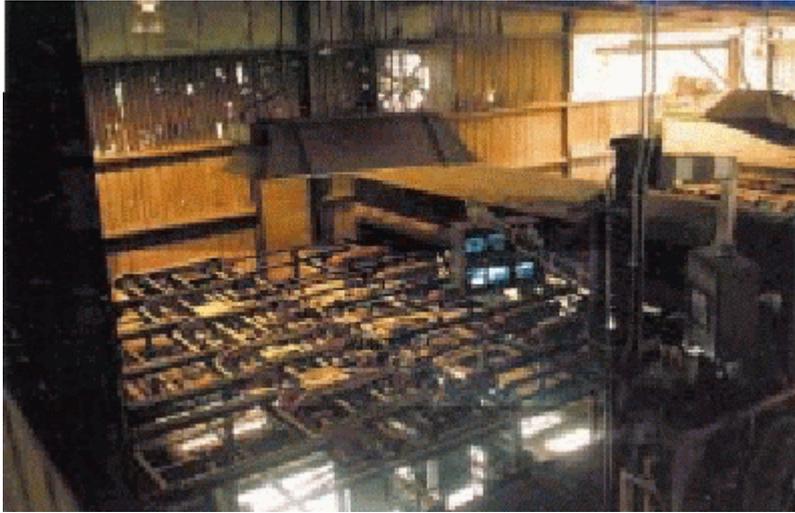
가

TCP가

PROFIBUS

가

100%



PLC 5

(

가

).

Think & Do  
Control

가

Dust Fire

Think & Do

Compaq DeskPro Pentium PC

Windows NT

4

10,000

18

가

Think & Do

3

120

).

가

(

PC

가

PC

PROFIBUS

. PC

가

Pentium PC가

PC

가

. 100MB Ethernet

Think & Do

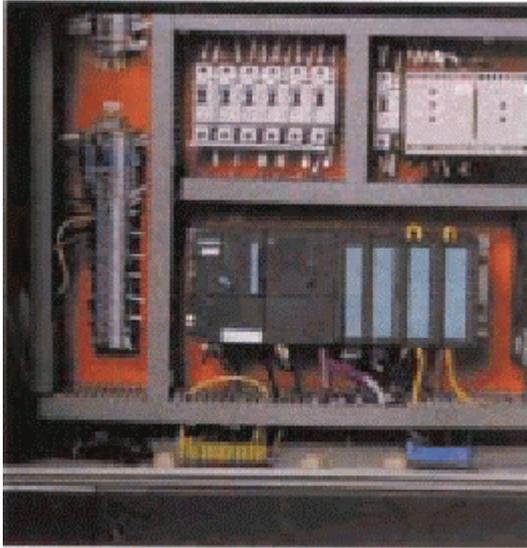
26

(stacker)

10

, , 가 (re-edge)





PROFIBUS(CP 342-5) AS-I  
 (CP 342-2)  
 SIMATIC S7-300

AS-interface

Seattle

가

Seattle

가 가

AS-i

SIMATIC

가

31

AS-I

AS-interface

(starter)

PROFIBUS

PLC

AS-interface

가



PLC

가

가

가

AS-interface

가

AS-i

S7-300

AS-I

"TrainSort"

(1 30 )

30

( )

SIMATIC S7-300

, PLC

. SIMATIC S7-300

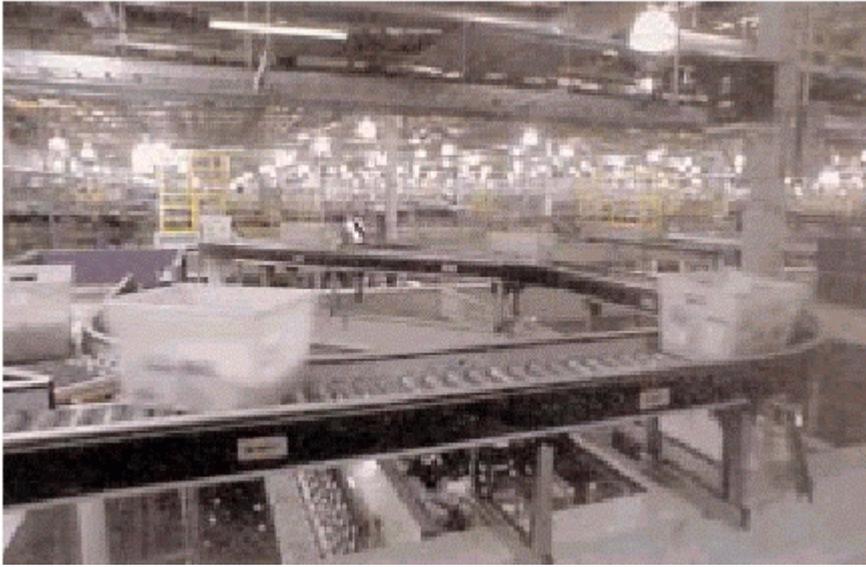
가

가

( 가 )

가

가



( )

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Seattle  
1 365 가

가

0

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가

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AS-I

Seattle

. r

PROFIBUS

AS-I