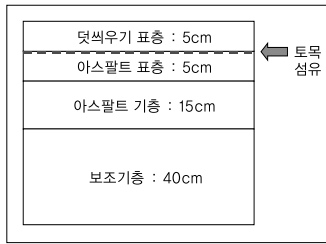




1.



2.

가
가
,
가

1970 . 1980

(Bushey, 1976; Button & Epps, 1986; Donnelly et al., 1976; Predoehl, 1989).

- 1. , (2) , 2001
 - 2. , (3) , 2002 : ()
- dylee@kict.re.kr

1975

(FHWA)

가

가



가

가

가

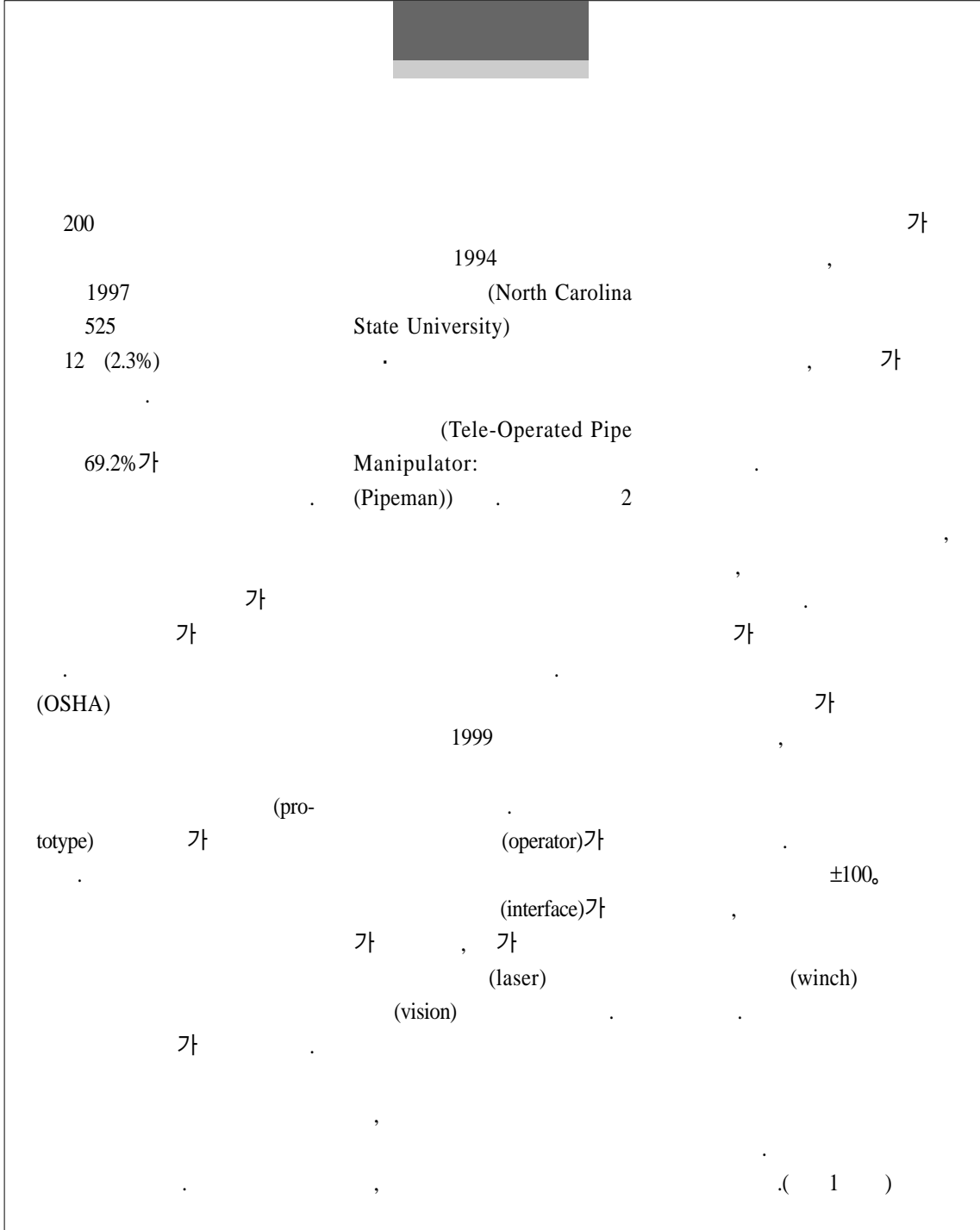
가

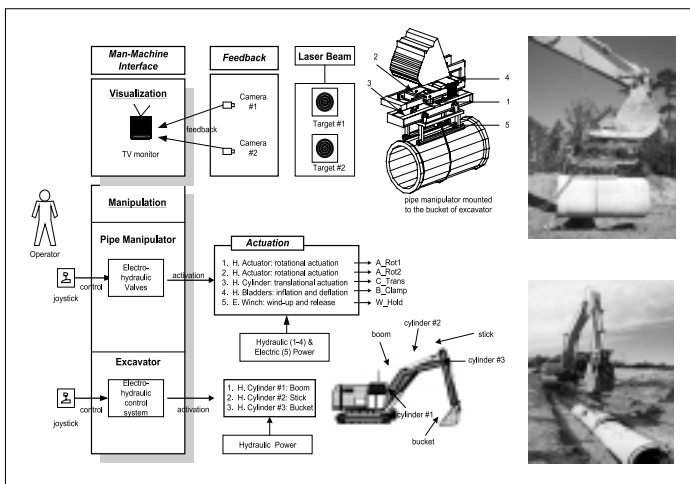
(trench:

가

가

가





1.

- H. Actuator(A_Rot1) :

(±100)

- H. Cylinder(C_Trans) :

가

- E. Winch :

가

가

가

가

1994

R&D

2000

2

1. Lee, Junbok, Comparative Performance Evaluation of Teleoperated Pipe Laying. Ph.D. Dissertation, Department of Civil Engineering, North Carolina State University, Raleigh, North Carolina, 1999.

2. (2), , 2002
: ()

jghan@kict.re.kr